



**Hewlett Packard**  
Enterprise

# HPE Comware 7

## NETCONF XML API Reference

# Contents

ACL.....	1
ACL/Groups.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
ACL/NamedGroups.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
ACL/PfilterApply .....	3
XML structure.....	3
Table description.....	3
Columns.....	4
ACL/ZonePairPfilterApply .....	4
XML structure.....	5
Table description.....	5
Columns.....	5

# ACL

## ACL/Groups

This table contains ACL information.

## XML structure

```
<ACL>
  <Groups>
    <Group>
      <GroupType></GroupType>
      <GroupID></GroupID>
      <CountClear></CountClear>
    </Group>
  </Groups>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li><li>3—MAC.</li><li>4—User-defined.</li></ul>	N/A
GroupID	ACL number.	Index	Unsigned integer. Value range: 2000 to 5999.	The value range depends on the GroupType column. <ul style="list-style-type: none"><li>2000 to 5999 if GroupType is 1.</li><li>2000 to 3999 if GroupType is 2.</li></ul>
CountClear	Resets counters.	N/A	This column must be empty.	N/A

# ACL/NamedGroups

This table contains named ACL information.

## XML structure

```
<ACL>
  <NamedGroups>
    <Group>
      <GroupType></GroupType>
      <GroupIndex></GroupIndex>
      <CountClear></CountClear>
    </Group>
  </NamedGroups>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	NamedGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4.</li><li>• 2—IPv6.</li><li>• 3—MAC.</li><li>• 4—User-defined.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 2000 to 5999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .  The value range depends on the GroupType column. <ul style="list-style-type: none"> <li>2000 to 3999 if GroupType is <b>1</b>.</li> <li>2000 to 3999 if GroupType is <b>2</b>.</li> <li>4000 to 4999 if GroupType is <b>3</b>.</li> <li>5000 to 5999 if GroupType is <b>4</b>.</li> </ul>
CountClear	Resets counters.	N/A	This column must be empty.	N/A

## ACL/PfilterApply

This table contains packet filter application information.

### XML structure

```

<ACL>
  <PfilterApply>
    <Pfilter>
      <AppObjType></AppObjType>
      <AppObjIndex></AppObjIndex>
      <AppDirection></AppDirection>
      <AppAclType></AppAclType>
      <AppAclGroup></AppAclGroup>
      <CountClear></CountClear>
    </Pfilter>
  </PfilterApply>
</ACL>

```

### Table description

Item	Description
Feature name	ACL
Table name	PfilterApply
Table type	Multi-instance table
Row name	Pfilter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppObjType	Type of the application object.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—VLAN.</li> <li>3—Global.</li> </ul>	N/A
AppObjIndex	Index of the application object.	Index	Unsigned integer. Value range: 0 to 4294967295.	The value depends on the AppObjType column. <ul style="list-style-type: none"> <li>Interface index if AppObjType is 1.</li> <li>VLAN ID in the range of 1 to 4094 if AppObjType is 2.</li> <li>The value is 0 if AppObjType is 3.</li> </ul>
AppDirection	Application direction.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
AppAcIType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> <li>3—Ethernet frame header ACL.</li> <li>4—User-defined ACL.</li> <li>5—ACL with the default action.</li> </ul>	<ul style="list-style-type: none"> <li>Type 5 is a special ACL.</li> </ul>
AppAcIGroup	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits valued 0 or in the range of 2000 to 5999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> . The value range depends on the AppAcIType column. <ul style="list-style-type: none"> <li>2000 to 3999 if AppAcIType is 1.</li> <li>2000 to 3999 if AppAcIType is 2.</li> <li>4000 to 4999 if AppAcIType is 3.</li> <li>5000 to 5999 if AppAcIType is 4.</li> <li>0 if AppAcIType is 5.</li> </ul>
CountClear	Resets counters.	N/A	This column must be empty.	N/A

## ACL/ZonePairPfilterApply

This table contains packet filter application information for zone-pair.

## XML structure

```
<ACL>
  <ZonePairPfilterApply>
    <Pfilter>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <AclType></AclType>
      <AclGroup></AclGroup>
      <Clear></Clear>
    </Pfilter>
  </ZonePairPfilterApply>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	ZonePairPfilterApply
Table type	Multi-instance table
Row name	Pfilter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZone	Name of the source zone.	Index	String, case insensitive. <ul style="list-style-type: none"><li>Length: 1 to 31 characters.</li></ul>	Cannot contain midline( - ).
DestZone	Name of the destination zone.	Index	String, case insensitive. <ul style="list-style-type: none"><li>Length: 1 to 31 characters.</li></ul>	Cannot contain midline( - ).
AclType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"><li><b>1</b>—IPv4 ACL.</li><li><b>2</b>—IPv6 ACL.</li><li><b>3</b>—Ethernet frame header ACL.</li></ul>	Type 3 is not supported in the current software version, and is reserved for future support.
AclGroup	ACL name or number.	Index	<ul style="list-style-type: none"><li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li><li><b>ACL number:</b> An unsigned integer in the range of 2000 to 5999.</li></ul>	An ACL name must start with an English letter and cannot be all. The value range depends on the AppAclType column. <ul style="list-style-type: none"><li>2000 to 5999 if AppAclType is <b>1</b>.</li><li>2000 to 3999 if AppAclType is <b>2</b>.</li></ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Resets counters.	N/A	This column must be empty.	N/A

# Contents

ACL.....	1
ACL/Groups.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
ACL/NamedGroups.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
ACL/Intervals.....	4
XML structure.....	4
Table description.....	5
Columns.....	5
ACL/IPv4BasicRules.....	5
XML structure.....	5
Table description.....	6
Columns.....	6
ACL/IPv4NamedBasicRules.....	8
XML structure.....	8
Table description.....	9
Columns.....	9
ACL/IPv6BasicRules.....	10
XML structure.....	11
Table description.....	11
Columns.....	11
ACL/IPv6NamedBasicRules.....	13
XML structure.....	13
Table description.....	14
Columns.....	14
ACL/IPv4AdvanceRules.....	16
XML structure.....	16
Table description.....	18
Columns.....	18
ACL/IPv4NamedAdvanceRules.....	27
XML structure.....	27
Table description.....	29
Columns.....	30
ACL/IPv6AdvanceRules.....	38
XML structure.....	38
Table description.....	40
Columns.....	40
ACL/IPv6NamedAdvanceRules.....	46
XML structure.....	46
Table description.....	48
Columns.....	48
ACL/MACRules.....	54
XML structure.....	54
Table description.....	55
Columns.....	56
ACL/MACNamedRules.....	59
XML structure.....	59
Table description.....	60
Columns.....	60
ACL/FilterIgnoreAction.....	63
XML structure.....	63
Table description.....	63
Columns.....	63

ACL/PfilterDefAction .....	64
XML structure .....	64
Table description .....	64
Columns .....	64
ACL/PfilterApply .....	64
XML structure .....	65
Table description .....	65
Columns .....	65
ACL/UserRules .....	66
XML structure .....	66
Table description .....	68
Columns .....	68
ACL/UserNamedRules .....	73
XML structure .....	73
Table description .....	75
Columns .....	75
ACL/ZonePairPfilterApply .....	81
XML structure .....	81
Table description .....	81
Columns .....	82

# ACL

## ACL/Groups

This table contains ACL information.

## XML structure

```
<ACL>
  <Groups>
    <Group>
      <GroupType></GroupType>
      <GroupID></GroupID>
      <MatchOrder></MatchOrder>
      <Step></Step>
      <Name></Name>
      <Description></Description>
    </Group>
  </Groups>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	ACL type	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4.</li><li>• 2—IPv6.</li><li>• 3—MAC.</li><li>• 4—User-defined.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number	Index	Unsigned integer. Value range: 2000 to 5999.	The value range depends on the GroupType column. <ul style="list-style-type: none"> <li>2000 to 5999 if GroupType is <b>1</b>. <ul style="list-style-type: none"> <li>IPv4 basic ACL: 2000 to 2999.</li> <li>IPv4 advanced ACL: 3000 to 3999.</li> <li>Ethernet frame header ACL: 4000 to 4999.</li> <li>User-defined ACL: 5000 to 5999.</li> </ul> </li> <li>2000 to 3999 if GroupType is <b>2</b>. <ul style="list-style-type: none"> <li>IPv6 basic ACL: 2000 to 2999.</li> <li>IPv6 advanced ACL: 3000 to 3999.</li> </ul> </li> </ul>
MatchOrder	Order in which the rules are sorted	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Config (default). In this order, rules are sorted in ascending order of rule ID.</li> <li><b>2</b>—Auto. In this order, rules are sorted in depth-first order.</li> </ul>	The match order can only be modified for ACLs that do not contain any rules. The match order can only be <b>config</b> for user-defined ACLs.
Step	ACL rule numbering step	N/A	Unsigned integer. Value range: 1 to 20. Default: 5.	The rule numbering step for user-defined ACLs can only be 5.
Name	ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters. The string must start with an English letter.	This column cannot be modified.
Description	ACL description	N/A	String, case-sensitive. Length: 1 to 127 characters.	By default, an ACL has no description.

## ACL/NamedGroups

This table contains named ACL information.

### XML structure

```

<ACL>
  <NamedGroups>
    <Group>
      <GroupType></GroupType>

```



```

    <GroupCategory></GroupCategory>
    <GroupIndex></GroupIndex>
    <MatchOrder></MatchOrder>
    <Step></Step>
    <Name></Name>
    <Description></Description>
  </Group>
</NamedGroups>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	NamedGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	ACL type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> <li>3—MAC.</li> <li>4—User-defined.</li> </ul>	N/A
GroupCategory	ACL Category	Index	Enumeration: <ul style="list-style-type: none"> <li>0—invalid.</li> <li>1—basic.</li> <li>2—advanced.</li> </ul>	The value range depends on the GroupType column. <ul style="list-style-type: none"> <li>1 to 2 if GroupType is <b>1 or 2</b>. <ul style="list-style-type: none"> <li>basic ACL: 1.</li> <li>advanced ACL: 2.</li> </ul> </li> <li>0 if GroupType is 3 or 4.</li> </ul>
GroupIndex	ACL name or number	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 2000 to 5999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> . The GroupIndex cannot be specified as an ACL name in GET operations for an ACL created by specifying both a number and a name. The value range depends on the GroupType column. <ul style="list-style-type: none"> <li>2000 to 3999 if GroupType is <b>1</b>. <ul style="list-style-type: none"> <li>IPv4 basic ACL: 2000 to 2999.</li> <li>IPv4 advanced ACL: 3000 to 3999.</li> </ul> </li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>2000 to 3999 if GroupType is <b>2</b>. <ul style="list-style-type: none"> <li>IPv6 basic ACL: 2000 to 2999.</li> <li>IPv6 advanced ACL: 3000 to 3999.</li> </ul> </li> <li>4000 to 4999 if GroupType is <b>3</b>. <ul style="list-style-type: none"> <li>Ethernet frame header ACL: 4000 to 4999.</li> </ul> </li> <li>5000 to 5999 if GroupType is <b>4</b>. User-defined ACL: 5000 to 5999.</li> </ul>
MatchOrder	Order in which the rules are sorted	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Config (default). In this order, rules are sorted in ascending order of rule ID.</li> <li><b>2</b>—Auto. In this order, rules are sorted in depth-first order.</li> </ul>	The match order can only be modified for ACLs that do not contain any rules. The match order can only be <b>config</b> for user-defined ACLs.
Step	ACL rule numbering step	N/A	Unsigned integer. Value range: 1 to 20. Default: 5.	The rule numbering step for user-defined ACLs can only be 5.
Name	ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters. The string must start with an English letter.	This column cannot be modified.
Description	ACL description	N/A	String, case-sensitive. Length: 1 to 127 characters.	By default, an ACL has no description.

## ACL/Intervals

This table contains ACL interval information.

## XML structure

```

<ACL>
  <Intervals>
    <Interval>
      <IntervalType></IntervalType>
      <IntervalValue></IntervalValue>
    </Interval>
  </Intervals>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	Intervals
Table type	Multi-instance table
Row name	Interval
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IntervalType	The type of the interval	Index	Enumeration: <ul style="list-style-type: none"><li>1—logging.</li><li>2—trap.</li></ul>	The type of the interval specified for generating packet filtering logs or traps. You cannot create, merge, or replace an interval when there is an effective interval of a different type.
IntervalValue	The value of the interval	N/A	Unsigned integer. Value range: 5 to 1440.	It must be a multiple of 5.

## ACL/IPv4BasicRules

This table contains information about IPv4 basic ACL rules.

## XML structure

```
<ACL>
  <IPv4BasicRules>
    <Rule>
      <GroupID></GroupID>
      <RuleID></RuleID>
      <Action></Action>
      <SrcAny></SrcAny>
      <SrcIPv4>
        <SrcIPv4Addr></SrcIPv4Addr>
        <SrcIPv4Wildcard></SrcIPv4Wildcard>
      </SrcIPv4>
      <SrcObjectGroup></SrcObjectGroup>
      <Fragment></Fragment>
      <TimeRange></TimeRange>
```

```

    <VRF></VRF>
    <Counting></Counting>
    <Logging></Logging>
    <Comment></Comment>
  </Rule>
</IPv4BasicRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv4BasicRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 2000 to 2999.	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses (default).</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	This column must be configured together with the <b>SrcIPv4</b> column.

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• SrcIPv4Addr.</li> <li>• SrcIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column. The two members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the SrcAny column cannot both be configured.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Matches only non-first fragments.</li> <li>• <b>false</b>—Matches both fragments and non-fragments (default).</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Counts the rule matches.</li> <li>• <b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.  When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.

## ACL/IPv4NamedBasicRules

This table contains information about namd IPv4 basic ACL rules.

### XML structure

```

<ACL>
  <IPv4NamedBasicRules>
    <Rule>
      <GroupIndex></GroupIndex>
      <RuleID></RuleID>
      <Action></Action>
      <SrcAny></SrcAny>
      <SrcIPv4>
        <SrcIPv4Addr></SrcIPv4Addr>
        <SrcIPv4Wildcard></SrcIPv4Wildcard>
      </SrcIPv4>
      <SrcObjectGroup></SrcObjectGroup>
      <Fragment></Fragment>
      <TimeRange></TimeRange>
      <VRF></VRF>
      <Counting></Counting>
      <Logging></Logging>
      <Comment></Comment>
    </Rule>
  </IPv4NamedBasicRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv4NamedBasicRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 2000 to 2999.</li> </ul>	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Deny.</li> <li><b>2</b>—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses (default).</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	This column must be configured together with the <b>SrcIPv4</b> column.
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column.  The two members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the SrcAny column cannot both be configured.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments (default).</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule. When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.

## ACL/IPv6BasicRules



This table contains information about IPv6 basic ACL rules.

## XML structure

```
<ACL>
  <IPv6BasicRules>
    <Rule>
      <GroupID></GroupID>
      <RuleID></RuleID>
      <Action></Action>
      <SrcAny></SrcAny>
      <SrcIPv6>
        <SrcIPv6Addr></SrcIPv6Addr>
        <SrcIPv6Prefix></SrcIPv6Prefix>
      </SrcIPv6>
      <SrcObjectGroup></SrcObjectGroup>
      <RoutingTypeAny></RoutingTypeAny>
      <RoutingTypeValue></RoutingTypeValue>
      <Fragment></Fragment>
      <TimeRange></TimeRange>
      <VRF></VRF>
      <Counting></Counting>
      <Logging></Logging>
      <Comment></Comment>
    </Rule>
  </IPv6BasicRules>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	IPv6BasicRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 2000 to 2999.	You must create an ACL first before you create, merge, or replace rules for it.

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IPv6 addresses (default).</li> <li><b>false</b>—Matches the specified source IPv6 address.</li> </ul>	This column must be configured together with the <b>SrcIPv6</b> column.
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr.</li> <li>SrcIPv6Prefix.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column.  The two members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObject Group	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the <b>SrcAny</b> column cannot both be configured.
RoutingTypeAny	Whether a rule matches any types of routing header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of routing header.</li> <li><b>false</b>—Matches the specified type of routing header (default).</li> </ul>	This column and the <b>RoutingTypeValue</b> column cannot both be configured.
RoutingTypeValue	Routing header type.	N/A	Unsigned integer. Value range: 0 to 255.	This column and the <b>RoutingTypeAny</b> column cannot both be configured.
Fragment	Whether a rule matches only	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	non-first fragments.		fragments. <ul style="list-style-type: none"> <li><b>false</b>—Matches both fragments and non-fragments (default).</li> </ul>	
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.  When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.

## ACL/IPv6NamedBasicRules

This table contains information about named IPv6 basic ACL rules.

### XML structure

```

<ACL>
  <IPv6NamedBasicRules>
    <Rule>
      <GroupIndex></GroupIndex>
      <RuleID></RuleID>
      <Action></Action>
      <SrcAny></SrcAny>
      <SrcIPv6>
        <SrcIPv6Addr></SrcIPv6Addr>
        <SrcIPv6Prefix></SrcIPv6Prefix>
      </SrcIPv6>
      <SrcObjectGroup></SrcObjectGroup>
      <RoutingTypeAny></RoutingTypeAny>
    </Rule>
  </IPv6NamedBasicRules>
</ACL>

```

```

    <RoutingTypeValue></RoutingTypeValue>
    <Fragment></Fragment>
    <TimeRange></TimeRange>
    <VRF></VRF>
    <Counting></Counting>
    <Logging></Logging>
    <Comment></Comment>
  </Rule>
</IPv6NamedBasicRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv6NamedBasicRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 2000 to 2999.</li> </ul>	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Deny.</li> <li><b>2</b>—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IPv6 addresses (default).</li> <li><b>false</b>—Matches the specified source IPv6 address.</li> </ul>	This column must be configured together with the <b>SrcIPv6</b> column.
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr.</li> <li>SrcIPv6Prefix.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column. The two members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObject Group	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the SrcAny column cannot both be configured.
RoutingTypeAny	Whether a rule matches any types of routing header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of routing header.</li> <li><b>false</b>—Matches the specified type of routing header (default).</li> </ul>	This column and the <b>RoutingTypeValue</b> column cannot both be configured.
RoutingTypeValue	Routing header type.	N/A	Unsigned integer. Value range: 0 to 255.	This column and the <b>RoutingTypeAny</b> column cannot both be configured.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments (default).</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			rule matches (default).	
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.  When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.

## ACL/IPv4AdvanceRules

This table contains information about IPv4 advanced ACL rules.

### XML structure

```

<ACL>
  <IPv4AdvanceRules>
    <Rule>
      <GroupID></GroupID>
      <RuleID></RuleID>
      <Action></Action>
      <ProtocolType></ProtocolType>
      <SrcAny></SrcAny>
      <SrcIPv4>
        <SrcIPv4Addr></SrcIPv4Addr>
        <SrcIPv4Wildcard></SrcIPv4Wildcard>
      </SrcIPv4>
      <SrcObjectGroup></SrcObjectGroup>
      <DstAny></DstAny>
      <DstIPv4>
        <DstIPv4Addr></DstIPv4Addr>
        <DstIPv4Wildcard></DstIPv4Wildcard>
      </DstIPv4>
      <DstObjectGroup></DstObjectGroup>
      <ECN></ECN>
      <DSCP></DSCP>
      <DSCPRange>
        <StartDSCP></StartDSCP>
        <EndDSCP></EndDSCP>
      </DSCPRange>
      <Precedence></Precedence>
      <TOS></TOS>
    </Rule>
  </IPv4AdvanceRules>
</ACL>

```

```

<SrcPort>
  <SrcPortOp></SrcPortOp>
  <SrcPortValue1></SrcPortValue1>
  <SrcPortValue2></SrcPortValue2>
</SrcPort>
<DstPort>
  <DstPortOp></DstPortOp>
  <DstPortValue1></DstPortValue1>
  <DstPortValue2></DstPortValue2>
</DstPort>
<TcpFlag>
  <ACK></ACK>
  <FIN></FIN>
  <PSH></PSH>
  <RST></RST>
  <SYN></SYN>
  <URG></URG>
</TcpFlag>
<Established></Established>
<ICMP>
  <ICMPType></ICMPType>
  <ICMPCode></ICMPCode>
</ICMP>
<Fragment></Fragment>
<TimeRange></TimeRange>
<VRF></VRF>
<QoSLocalID></QoSLocalID>
<EncapType></EncapType>
<InProtocolType></InProtocolType>
<VxlanID></VxlanID>
<InSrcAny></InSrcAny>
<InSrcIPv4>
  <InSrcIPv4Addr></InSrcIPv4Addr>
  <InSrcIPv4Wildcard></InSrcIPv4Wildcard>
</InSrcIPv4>
<InDstAny></InDstAny>
<InDstIPv4>
  <InDstIPv4Addr></InDstIPv4Addr>
  <InDstIPv4Wildcard></InDstIPv4Wildcard>
</InDstIPv4>
<InSrcPort>
  <InSrcPortOp></InSrcPortOp>
  <InSrcPortValue1></InSrcPortValue1>
  <InSrcPortValue2></InSrcPortValue2>
</InSrcPort>
<InDstPort>
  <InDstPortOp></InDstPortOp>
  <InDstPortValue1></InDstPortValue1>

```

```

        <InDstPortValue2></InDstPortValue2>
    </InDstPort>
    <InEstablished></InEstablished>
    <Counting></Counting>
    <Logging></Logging>
    <Comment></Comment>
    <GreValue></GreValue>
    <Options></Options>
    <FragmentType></FragmentType>
    <Ttl>
        <TtlOp></TtlOp>
        <TtlValue1></TtlValue1>
        <TtlValue2></TtlValue2>
    </Ttl>
    <PktLength>
        <PktLengthOp></PktLengthOp>
        <PktLengthValue1></PktLengthValue1>
        <PktLengthValue2></PktLengthValue2>
    </PktLength>
</Rule>
</IPv4AdvanceRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv4AdvanceRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 3000 to 3999.	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering



Column name	Column description	Column type	Data type and restrictions	Remarks
				step to the current highest rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv4 protocols.	You cannot specify a protocol type when you remove or delete a rule.  You must specify a protocol type or an encapsulation type when you replace a rule, or when you merge or create a rule that does not exist.
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses (default).</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	The VXLAN encapsulation supports this column.  This column must be configured together with the <b>SrcIPv4</b> column.
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column. The two members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the <b>SrcAny</b> column cannot both be configured.
DstAny	Whether a rule matches any destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IP addresses (default).</li> <li><b>false</b>—Matches the specified destination IP address.</li> </ul>	The VXLAN encapsulation supports this column.  This column must be configured together with the <b>DstIPv4</b> column.

Column name	Column description	Column type	Data type and restrictions	Remarks
DstIPv4	Destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv4Addr.</li> <li>DstIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>DstAny</b> column. The two members must both be specified.
DstIPv4Addr	Destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv4Wildcard	Wildcard mask for the destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstObject Group	Destination object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the DstAny column cannot both be configured.
ECN	ECN flag.	N/A	Unsigned integer. Value range: 0 to 3.	ECN and TOS cannot be specified together.
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
DSCPRange	DSCP priority range.	Data structure	Members include: <ul style="list-style-type: none"> <li>StartDSCP</li> <li>EndDSCP</li> </ul>	DSCP and DSCPRange cannot be specified together.
StartDSCP	Start DSCP priority of a DSCP priority range.	N/A	Unsigned integer. Value range: 0 to 63.	The end DSCP must be greater than start DSCP.
EndDSCP	End DSCP priority of a DSCP priority range.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
Precedence	IP precedence.	N/A	Unsigned integer. Value range: 0 to 7.	The DSCP priority and the IP precedence cannot both be specified.
TOS	ToS preference.	N/A	Unsigned integer. Value range: 0 to 15.	The DSCP priority and the ToS precedence cannot both be specified.
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols and the VXLAN encapsulation support this column. The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	
SrcPortValue1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPortValue2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When SrcPortOp is 5, the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstPortOp.</li> <li>DstPortValue1.</li> <li>DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
DstPortValue1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPortValue2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When DstPortOp is 5, the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
TcpFlag	TCP flags.	Data structure.	Members include: <ul style="list-style-type: none"> <li>ACK.</li> <li>FIN.</li> <li>PSH.</li> <li>RST.</li> <li>SYN.</li> <li>URG.</li> </ul>	N/A
ACK	ACK flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—ACK flag is not set.</li> <li>1—ACK flag is set.</li> </ul>	Only the TCP protocol supports this column.
FIN	FIN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—FIN flag is not set.</li> <li>1—FIN flag is set.</li> </ul>	Only the TCP protocol supports this column.
PSH	PSH flag in a TCP	N/A	Unsigned integer.	Only the TCP protocol

Column name	Column description	Column type	Data type and restrictions	Remarks
	packet.		Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—PSH flag is not set.</li> <li>1—PSH flag is set.</li> </ul>	supports this column.
RST	RST flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—RST flag is not set.</li> <li>1—RST flag is set.</li> </ul>	Only the TCP protocol supports this column.
SYN	SYN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—SYN flag is not set.</li> <li>1—SYN flag is set.</li> </ul>	Only the TCP protocol supports this column.
URG	URG flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—URG flag is not set.</li> <li>1—URG flag is set.</li> </ul>	Only the TCP protocol supports this column.
Established	Whether a rule matches flags indicating the established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches the flags.</li> <li>false—Ignores the flags.</li> </ul>	Only the TCP protocol supports this column.  On a router, the rule matches TCP connection packets with the ACK or RST flag set. On a switch, the availability and usage of this column depend on the device model.  This column and the <b>TcpFlag</b> column cannot both be configured.
ICMP	ICMP messages.	N/A	Members include: <ul style="list-style-type: none"> <li>ICMPType.</li> <li>ICMPCode.</li> </ul>	The members must both be specified.
ICMPType	Type of ICMP messages.	N/A	Unsigned integer. Value range: 0 to 255.	Only the ICMP protocol supports this column.
ICMPCode	Code of ICMP messages.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 indicates that no ICMP message code is specified.	Only the ICMP protocol supports this column.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches only non-first fragments.</li> <li>false—Matches both fragments and non-fragments (default).</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
VRF	VRF.	N/A	String, case-sensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 31 characters.	
QoSLocalID	Local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A
EncapType	Encapsulation type.	N/A	Members include: <ul style="list-style-type: none"> <li>VXLAN encapsulation.</li> <li>GRE encapsulation.</li> <li>IPINIP encapsulation.</li> </ul>	<p>You cannot specify an encapsulation type when you remove or delete a rule.</p> <p>If you specify an encapsulation type you must specify an inner protocol when you replace a rule, or when you merge or create a rule that does not exist.</p>
InProtocolType	Inner protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv4 protocols.	<p>You cannot specify an inner protocol type when you remove or delete a rule.</p> <p>If you specify an inner protocol type, you must specify an encapsulation type when you replace a rule, or when you merge or create a rule that does not exist.</p>
VxlanID	VXLAN ID.	N/A	Unsigned integer Value range: 0 to 16777215	Only the VXLAN encapsulation supports this column.
InSrcAny	Whether a rule matches any inner source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any inner source IP addresses (default).</li> <li><b>false</b>—Matches the specified inner source IP address.</li> </ul>	This column must be configured together with the <b>InSrcIPv4</b> column.
InSrcIPv4	Inner source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcIPv4Addr.</li> <li>InSrcIPv4Wildcard.</li> </ul>	<p>Only the VXLAN encapsulation supports this column.</p> <p>This column must be configured together with the <b>InSrcAny</b> column.</p> <p>The two members must both be specified.</p>
InSrcIPv4Addr	Inner source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>This column is available when the <b>InSrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InSrcAny</b> column is <b>true</b>.</p>
InSrcIPv4 Wildcard	Wildcard mask for the inner source IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>InSrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InSrcAny</b> column is <b>true</b>.</p>
InDstAny	Whether a rule matches any inner destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any inner destination IP addresses (default).</li> <li><b>false</b>—Matches the specified inner destination IP address.</li> </ul>	This column must be configured together with the <b>InDstIPv4</b> column.
InDstIPv4	Inner destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstIPv4Addr.</li> <li>InDstIPv4Wildcard.</li> </ul>	<p>Only the VXLAN encapsulation supports this column.</p> <p>This column must be configured together with the <b>InDstAny</b> column.</p> <p>The two members must both be specified.</p>
InDstIPv4 Addr	Inner destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>This column is available when the <b>InDstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InDstAny</b> column is <b>true</b>.</p>
InDstIPv4 Wildcard	Wildcard mask for the inner destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>InDstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InDstAny</b> column is <b>true</b>.</p>
InSrcPort	Inner source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcPortOp.</li> <li>InSrcPortValue1.</li> </ul>	Only the TCP and UDP inner protocols support this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>InSrcPortValue2.</li> </ul>	The members must be all specified.
InSrcPortOp	Inner source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
InSrcPortValue1	Start inner source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InSrcPortValue2	End inner source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When InSrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end inner source port is not available.
InDstPort	Inner destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstPortOp.</li> <li>InDstPortValue1.</li> <li>InDstPortValue2.</li> </ul>	Only the TCP and UDP inner protocols support this column.  The members must be all specified.
InDstPortOp	Inner destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
InDstPortValue1	Start inner destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InDstPortValue2	End inner destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When InDstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end inner destination port is not available.
InEstablished	Whether a rule matches flags indicating the inner established	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches the flags.</li> <li><b>false</b>—Ignores the</li> </ul>	Only the TCP inner protocol supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
	status of a TCP connection.		flags.	
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.  When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.
GreValue	Config a gre value.	N/A	Hexadecimal string. Length: 1 to 8 characters. Value range: 0 to FFFFFFFF.	Only the GRE protocol supports this column.
Options	IP options.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Options.</li> <li><b>false</b>—Not options, default.</li> </ul>	Only when the ProtocolType value is 256, and then the table can support this column.
Fragment Type	Check fragment packet type.	N/A	Unsigned integer. Value range: 0 to 3. <ul style="list-style-type: none"> <li><b>0</b>—First-fragment.</li> <li><b>1</b>—Non-fragment.</li> <li><b>2</b>—Non-or-first-fragment.</li> <li><b>3</b>—Any-fragment.</li> </ul>	N/A
Ttl	Whether a rule matches TTL.	Data structure	Members include: <ul style="list-style-type: none"> <li>TtlOp.</li> <li>TtlValue1.</li> <li>TtlValue2.</li> </ul>	N/A
TtlOp	TTL operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—lt (lower than).</li> <li><b>2</b>—eq (equal to).</li> <li><b>3</b>—gt (greater than).</li> <li><b>4</b>—neq (not equal to).</li> <li><b>5</b>—range (inclusive range).</li> </ul>	N/A
TtlValue1	Start TTL value.	N/A	Unsigned integer. Value range: 1 to 255.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
TtlValue2	End TTL value.	N/A	Unsigned integer. Value range: 1 to 256.	When the TtlOp is 5, the value range is 1 to 255. Otherwise, it can only be 256. The value 256 indicates that the end TTL value is not available.
PktLength	Whether a rule matches packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li>PktLengthOp.</li> <li>PktLengthValue1.</li> <li>PktLengthValue2.</li> </ul>	N/A
PktLengthOp	Packet length operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
PktLengthValue1	Start packet length value.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PktLengthValue2	End packet length value.	N/A	Unsigned integer. Value range: 0 to 65536.	When the PktLengthOp is 5, the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the packet length value is not available.

## ACL/IPv4NamedAdvanceRules

This table contains information about named IPv4 advanced ACL rules.

### XML structure

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</ACL>

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```

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```

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  <InDstIPv4Wildcard></InDstIPv4Wildcard>
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</ACL>

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## Table description

Item	Description
Feature name	ACL
Table name	IPv4NamedAdvanceRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 3000 to 3999.</li> </ul>	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Deny.</li> <li><b>2</b>—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv4 protocols.	You cannot specify a protocol type when you remove or delete a rule.  You must specify a protocol type or an encapsulation type when you replace a rule, or when you merge or create a rule that does not exist.
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses (default).</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	The VXLAN encapsulation supports this column.  This column must be configured together with the <b>SrcIPv4</b> column.
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column.  The two members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObject Group	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the SrcAny column cannot both be configured.
DstAny	Whether a rule matches any destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IP addresses (default).</li> <li><b>false</b>—Matches the specified destination IP address.</li> </ul>	The VXLAN encapsulation supports this column. This column must be configured together with the <b>DstIPv4</b> column.
DstIPv4	Destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv4Addr.</li> <li>DstIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>DstAny</b> column. The two members must both be specified.
DstIPv4Addr	Destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv4Wildcard	Wildcard mask for the destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstObject Group	Destination object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the DstAny column cannot both be configured.
ECN	ECN flag.	N/A	Unsigned integer. Value range: 0 to 3.	ECN and TOS cannot be specified together.
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
DSCPRange	DSCP priority range.	Data structure	Members include: <ul style="list-style-type: none"> <li>StartDSCP</li> <li>EndDSCP</li> </ul>	DSCP and DSCPRange cannot be specified together.
StartDSCP	Start DSCP priority of a DSCP priority range.	N/A	Unsigned integer. Value range: 0 to 63.	The end DSCP must be greater than start DSCP.
EndDSCP	End DSCP priority of a DSCP priority range.	N/A	Unsigned integer. Value range: 0 to 63.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Precedence	IP precedence.	N/A	Unsigned integer. Value range: 0 to 7.	The DSCP priority and the IP precedence cannot both be specified.
TOS	ToS preference.	N/A	Unsigned integer. Value range: 0 to 15.	The DSCP priority and the ToS precedence cannot both be specified.
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols and the VXLAN encapsulation support this column. The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
SrcPortValue1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPortValue2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstPortOp.</li> <li>DstPortValue1.</li> <li>DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
DstPortValue1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPortValue2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
TcpFlag	TCP flags.	Data	Members include:	N/A

Column name	Column description	Column type structure.	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• ACK.</li> <li>• FIN.</li> <li>• PSH.</li> <li>• RST.</li> <li>• SYN.</li> <li>• URG.</li> </ul>	
ACK	ACK flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—ACK flag is not set.</li> <li>• <b>1</b>—ACK flag is set.</li> </ul>	Only the TCP protocol supports this column.
FIN	FIN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—FIN flag is not set.</li> <li>• <b>1</b>—FIN flag is set.</li> </ul>	Only the TCP protocol supports this column.
PSH	PSH flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—PSH flag is not set.</li> <li>• <b>1</b>—PSH flag is set.</li> </ul>	Only the TCP protocol supports this column.
RST	RST flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—RST flag is not set.</li> <li>• <b>1</b>—RST flag is set.</li> </ul>	Only the TCP protocol supports this column.
SYN	SYN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—SYN flag is not set.</li> <li>• <b>1</b>—SYN flag is set.</li> </ul>	Only the TCP protocol supports this column.
URG	URG flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—URG flag is not set.</li> <li>• <b>1</b>—URG flag is set.</li> </ul>	Only the TCP protocol supports this column.
Established	Whether a rule matches flags indicating the established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Matches the flags.</li> <li>• <b>false</b>—Ignores the flags.</li> </ul>	Only the TCP protocol supports this column.  On a router, the rule matches TCP connection packets with the ACK or RST flag set. On a switch, the availability and usage of this column depend on the device model.  This column and the <b>TcpFlag</b> column cannot both be configured.
ICMP	ICMP messages.	N/A	Members include: <ul style="list-style-type: none"> <li>• ICMPType.</li> <li>• ICMPCode.</li> </ul>	The members must both be specified.
ICMPType	Type of ICMP messages.	N/A	Unsigned integer. Value range: 0 to 255.	Only the ICMP protocol supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
ICMPCode	Code of ICMP messages.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 indicates that no ICMP message code is specified.	Only the ICMP protocol supports this column.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments (default).</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
QoSLocalID	Local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A
EncapType	Encapsulation type.	N/A	Members include: <ul style="list-style-type: none"> <li>VXLAN encapsulation.</li> <li>GRE encapsulation.</li> <li>IPINIP encapsulation.</li> </ul>	You cannot specify an encapsulation type when you remove or delete a rule.  If you specify an encapsulation type, you must specify an inner protocol when you replace a rule, or when you merge or create a rule that does not exist.
InProtocolType	Inner protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv4 protocols.	You cannot specify an inner protocol type when you remove or delete a rule.  If you specify an inner protocol type, you must specify an encapsulation type when you replace a rule, or when you merge or create a rule that does not exist.
VxlanID	VXLAN ID.	N/A	Unsigned integer Value range: 0 to 16777215	Only the VXLAN encapsulation supports this column.
InSrcAny	Whether a rule matches any inner	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any</li> </ul>	This column must be configured together with



Column name	Column description	Column type	Data type and restrictions	Remarks
	source IP addresses.		inner source IP addresses (default). <ul style="list-style-type: none"> <li><b>false</b>—Matches the specified inner source IP address.</li> </ul>	the <b>InSrcIPv4</b> column.
InSrcIPv4	Inner source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcIPv4Addr.</li> <li>InSrcIPv4Wildcard.</li> </ul>	Only the VXLAN encapsulation supports this column.  This column must be configured together with the <b>InSrcAny</b> column.  The two members must both be specified.
InSrcIPv4 Addr	Inner source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.  This column is available when the <b>InSrcAny</b> column is <b>false</b> .  It must be empty when the <b>InSrcAny</b> column is <b>true</b> .
InSrcIPv4 Wildcard	Wildcard mask for the inner source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0.  This column is available when the <b>InSrcAny</b> column is <b>false</b> .  It must be empty when the <b>InSrcAny</b> column is <b>true</b> .
InDstAny	Whether a rule matches any inner destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any inner destination IP addresses (default).</li> <li><b>false</b>—Matches the specified inner destination IP address.</li> </ul>	This column must be configured together with the <b>InDstIPv4</b> column.
InDstIPv4	Inner destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstIPv4Addr.</li> <li>InDstIPv4Wildcard.</li> </ul>	Only the VXLAN encapsulation supports this column.  This column must be configured together with the <b>InDstAny</b> column.  The two members must both be specified.
InDstIPv4 Addr	Inner destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.  This column is available

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>when the <b>InDstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InDstAny</b> column is <b>true</b>.</p>
InDstIPv4 Wildcard	Wildcard mask for the inner destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>InDstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InDstAny</b> column is <b>true</b>.</p>
InSrcPort	Inner source port information.	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>InSrcPortOp.</li> <li>InSrcPortValue1.</li> <li>InSrcPortValue2.</li> </ul>	<p>Only the TCP and UDP inner protocols support this column.</p> <p>The members must be all specified.</p>
InSrcPort Op	Inner source port operator.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
InSrcPortValue1	Start inner source port.	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 65535.</p>	N/A
InSrcPortValue2	End inner source port.	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 65536.</p>	<p>When InSrcPortOp is <b>5</b>, the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end inner source port is not available.</p>
InDstPort	Inner destination port information.	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>InDstPortOp.</li> <li>InDstPortValue1.</li> <li>InDstPortValue2.</li> </ul>	<p>Only the TCP and UDP inner protocols support this column.</p> <p>The members must be all specified.</p>
InDstPort Op	Inner destination port operator.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			range).	
InDstPortValue1	Start inner destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InDstPortValue2	End inner destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When InDstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end inner destination port is not available.
InEstablished	Whether a rule matches flags indicating the inner established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches the flags.</li> <li><b>false</b>—Ignores the flags.</li> </ul>	Only the TCP inner protocol supports this column.
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.  When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.
GreValue	Config a gre value.	N/A	Hexadecimal string. Length: 1 to 8 characters. Value range: 0 to FFFFFFFF.	Only the GRE protocol supports this column.
Options	IP options.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Options.</li> <li><b>false</b>—Not options, default.</li> </ul>	Only when the ProtocolType value is 256, and then the table can support this column.
Fragment Type	Check fragment packet type.	N/A	Unsigned integer. Value range: 0 to 3. <ul style="list-style-type: none"> <li><b>0</b>—First-fragment.</li> <li><b>1</b>—Non-fragment.</li> <li><b>2</b>—Non-or-first-fragment.</li> <li><b>3</b>—Any-fragment.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Ttl	Whether a rule matches TTL.	Data structure	Members include: <ul style="list-style-type: none"> <li>TtlOp.</li> <li>TtlValue1.</li> <li>TtlValue2.</li> </ul>	N/A
TtlOp	TTL operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
TtlValue1	Start TTL value.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
TtlValue2	End TTL value.	N/A	Unsigned integer. Value range: 1 to 256.	When the TtlOp is 5, the value range is 1 to 255. Otherwise, it can only be 256. <b>The value 256 indicates that the end TTL value is not available.</b>
PktLength	Whether a rule matches packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li>PktLengthOp.</li> <li>PktLengthValue1.</li> <li>PktLengthValue2.</li> </ul>	N/A
PktLength Op	Packet length operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
PktLength Value1	Start packet length value.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PktLength Value2	End packet length value.	N/A	Unsigned integer. Value range: 0 to 65536.	When the PktLengthOp is 5, the value range is 0 to 65535. Otherwise, it can only be 65536. <b>The value 65536 indicates that the packet length value is not available.</b>

## ACL/IPv6AdvanceRules

This table contains information about IPv6 advanced ACL rules.

### XML structure

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```

<IPv6AdvanceRules>
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    <RuleID></RuleID>
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      <SrcIPv6Prefix></SrcIPv6Prefix>
    </SrcIPv6>
    <SrcObjectGroup></SrcObjectGroup>
    <DstAny></DstAny>
    <DstIPv6>
      <DstIPv6Addr></DstIPv6Addr>
      <DstIPv6Prefix></DstIPv6Prefix>
    </DstIPv6>
    <DstObjectGroup></DstObjectGroup>
    <ECN></ECN>
    <DSCP></DSCP>
    <FlowLabel></FlowLabel>
    <RoutingTypeAny></RoutingTypeAny>
    <RoutingTypeValue></RoutingTypeValue>
    <SrcPort>
      <SrcPortOp></SrcPortOp>
      <SrcPortValue1></SrcPortValue1>
      <SrcPortValue2></SrcPortValue2>
    </SrcPort>
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      <DstPortValue1></DstPortValue1>
      <DstPortValue2></DstPortValue2>
    </DstPort>
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      <FIN></FIN>
      <PSH></PSH>
      <RST></RST>
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      <URG></URG>
    </TcpFlag>
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      <ICMP6Code></ICMP6Code>
    </ICMP6>
    <Fragment></Fragment>
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  </Rule>
</IPv6AdvanceRules>

```

```

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<VRF></VRF>
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<Logging></Logging>
<Comment></Comment>
<GreValue></GreValue>
<Options></Options>
<FragmentType></FragmentType>
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  <TtlValue1></TtlValue1>
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  <PktLengthOp></PktLengthOp>
  <PktLengthValue1></PktLengthValue1>
  <PktLengthValue2></PktLengthValue2>
</PktLength>
</Rule>
</IPv6AdvanceRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv6AdvanceRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 3000 to 3999.	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher

Column name	Column description	Column type	Data type and restrictions	Remarks
				multiple of the numbering step to the current highest rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule. You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv6 protocols.	You cannot specify a protocol type when you remove or delete a rule. You must specify a protocol type when you replace a rule, or when you merge or create a rule that does not exist.
SrcAny	Whether a rule matches any source IPv6 addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IPv6 addresses (default).</li> <li><b>false</b>—Matches the specified source IPv6 address.</li> </ul>	This column must be configured together with the <b>SrcIPv6</b> column.
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr.</li> <li>SrcIPv6Prefix.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column. The two members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the <b>SrcAny</b> column cannot both be configured.
DstAny	Whether a rule matches any destination IPv6 addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IPv6 addresses (default).</li> <li><b>false</b>—Matches the specified destination IPv6 address.</li> </ul>	This column must be configured together with the <b>DstIPv6</b> column.

Column name	Column description	Column type	Data type and restrictions	Remarks
DstIPv6	Destination IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv6Addr.</li> <li>DstIPv6Prefix.</li> </ul>	This column must be configured together with the <b>DstAny</b> column. The two members must both be specified.
DstIPv6Addr	Destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv6Prefix	Length of the destination IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstObjectGroup	Destination object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the DstAny column cannot both be configured.
ECN	ECN flag.	N/A	Unsigned integer. Value range: 0 to 3.	N/A
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
FlowLabel	Flow label value in an IPv6 packet header.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
RoutingTypeAny	Whether a rule matches any types of routing header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of routing header.</li> <li><b>false</b>—Matches the specified type of routing header (default).</li> </ul>	This column and the <b>RoutingTypeValue</b> column cannot both be configured.
RoutingTypeValue	Routing header type.	N/A	Unsigned integer. Value range: 0 to 255.	This column and the <b>RoutingTypeAny</b> column cannot both be configured.
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—lt (lower than).</li> <li><b>2</b>—eq (equal to).</li> <li><b>3</b>—gt (greater than).</li> <li><b>4</b>—neq (not equal to).</li> <li><b>5</b>—range (inclusive range).</li> </ul>	N/A
SrcPortValue	Start source port.	N/A	Unsigned integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
1			Value range: 0 to 65535.	
SrcPortValue 2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• DstPortOp.</li> <li>• DstPortValue1.</li> <li>• DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—lt (lower than).</li> <li>• <b>2</b>—eq (equal to).</li> <li>• <b>3</b>—gt (greater than).</li> <li>• <b>4</b>—neq (not equal to).</li> <li>• <b>5</b>—range (inclusive range).</li> </ul>	N/A
DstPortValue 1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPortValue 2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
TcpFlag	TCP flags.	Data structure.	Members include: <ul style="list-style-type: none"> <li>• ACK.</li> <li>• FIN.</li> <li>• PSH.</li> <li>• RST.</li> <li>• SYN.</li> <li>• URG.</li> </ul>	N/A
ACK	ACK flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—ACK flag is not set.</li> <li>• <b>1</b>—ACK flag is set.</li> </ul>	Only the TCP protocol supports this column.
FIN	FIN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—FIN flag is not set.</li> <li>• <b>1</b>—FIN flag is set.</li> </ul>	Only the TCP protocol supports this column.
PSH	PSH flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—PSH flag is not set.</li> <li>• <b>1</b>—PSH flag is set.</li> </ul>	Only the TCP protocol supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
RST	RST flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—RST flag is not set.</li> <li>1—RST flag is set.</li> </ul>	Only the TCP protocol supports this column.
SYN	SYN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—SYN flag is not set.</li> <li>1—SYN flag is set.</li> </ul>	Only the TCP protocol supports this column.
URG	URG flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—URG flag is not set.</li> <li>1—URG flag is set.</li> </ul>	Only the TCP protocol supports this column.
Established	Whether a rule matches flags indicating the established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches the flags.</li> <li>false—Ignores the flags.</li> </ul>	Only the TCP protocol supports this column. On a router, the rule matches TCP connection packets with the ACK or RST flag set. On a switch, the availability and usage of this column depend on the device model. This column and the <b>TcpFlag</b> column cannot both be configured.
ICMP6	ICMPv6 messages.	N/A	Members include: <ul style="list-style-type: none"> <li>ICMP6Type.</li> <li>ICMP6Code.</li> </ul>	The members must both be specified.
ICMP6Type	Type of ICMPv6 messages.	N/A	Unsigned integer. Value range: 0 to 255.	Only the ICMPv6 protocol supports this column.
ICMP6Code	Code of ICMPv6 messages.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 indicates that no ICMPv6 message code is specified.	Only the ICMPv6 protocol supports this column.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches only non-first fragments.</li> <li>false—Matches both fragments and non-fragments (default).</li> </ul>	N/A
HopTypeAny	Whether a rule matched any types of Hop-by-Hop Options header.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches any types of Hop-by-Hop Options header.</li> <li>false—Matches the specified type of Hop-by-Hop Options header (default).</li> </ul>	This column and the <b>HopTypeValue</b> column cannot both be configured.
HopTypeValu	Type of	N/A	Unsigned integer.	This column and the

Column name	Column description	Column type	Data type and restrictions	Remarks
e	Hop-by-Hop Options header.		Value range: 0 to 255.	<b>HopTypeAny</b> column cannot both be configured.
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
QoSLocalID	Local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.  When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.
GreValue	Config a gre value.	N/A	Hexadecimal string. Length: 1 to 8 characters. Value range: 0 to FFFFFFFF.	Only the GRE protocol supports this column.
Options	IP options.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Options.</li> <li><b>false</b>—Not options, default.</li> </ul>	Only when the ProtocolType value is 256, and then the table can supports this column.
FragmentType	Check fragment packet type.	N/A	Unsigned integer. Value range: 0 to 3. <ul style="list-style-type: none"> <li><b>0</b>—First-fragment.</li> <li><b>1</b>—Non-fragment.</li> <li><b>2</b>—Non-or-first-fragment.</li> <li><b>3</b>—Any-fragment.</li> </ul>	N/A
Ttl	Whether a rule matches TTL.	Data structure	Members include: <ul style="list-style-type: none"> <li>TtlOp.</li> <li>TtlValue1.</li> <li>TtlValue2.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TtlOp	TTL operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
TtlValue1	Start TTL value.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
TtlValue2	End TTL value.	N/A	Unsigned integer. Value range: 1 to 256.	When the TtlOp is 5, the value range is 1 to 255. Otherwise, it can only be 256. <b>The value 256 indicates that the end TTL value is not available.</b>
PktLength	Whether a rule matches packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li>PktLengthOp.</li> <li>PktLengthValue1.</li> <li>PktLengthValue2.</li> </ul>	N/A
PktLengthOp	Packet length operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
PktLengthValue1	Start packet length value.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PktLengthValue2	End packet length value.	N/A	Unsigned integer. Value range: 0 to 65536.	When the PktLengthOp is 5, the value range is 0 to 65535. Otherwise, it can only be 65536. <b>The value 65536 indicates that the packet length value is not available.</b>

## ACL/IPv6NamedAdvanceRules

This table contains information about named IPv6 advanced ACL rules.

### XML structure

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      <Action></Action>
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</ACL>

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<SrcIPv6>
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  <URG></URG>
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</ICMP6>
<Fragment></Fragment>
<HopTypeAny></HopTypeAny>
<HopTypeValue></HopTypeValue>
<TimeRange></TimeRange>
<VRF></VRF>
<QoSLocalID></QoSLocalID>
<Counting></Counting>

```

```

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<Comment></Comment>
<GreValue></GreValue>
<Options></Options>
<FragmentType></FragmentType>
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  <TtlValue1></TtlValue1>
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</PktLength>
</Rule>
</IPv6NamedAdvanceRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv6NamedAdvanceRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 3000 to 3999.</li> </ul>	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest

Column name	Column description	Column type	Data type and restrictions	Remarks
				rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv6 protocols.	You cannot specify a protocol type when you remove or delete a rule.  You must specify a protocol type when you replace a rule, or when you merge or create a rule that does not exist.
SrcAny	Whether a rule matches any source IPv6 addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IPv6 addresses (default).</li> <li><b>false</b>—Matches the specified source IPv6 address.</li> </ul>	This column must be configured together with the <b>SrcIPv6</b> column.
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr.</li> <li>SrcIPv6Prefix.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column.  The two members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the <b>SrcAny</b> column cannot both be configured.
DstAny	Whether a rule matches any destination IPv6 addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IPv6 addresses (default).</li> <li><b>false</b>—Matches the specified destination IPv6 address.</li> </ul>	This column must be configured together with the <b>DstIPv6</b> column.

Column name	Column description	Column type	Data type and restrictions	Remarks
DstIPv6	Destination IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv6Addr.</li> <li>DstIPv6Prefix.</li> </ul>	This column must be configured together with the <b>DstAny</b> column. The two members must both be specified.
DstIPv6Addr	Destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv6Prefix	Length of the destination IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstObjectGroup	Destination object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column and the DstAny column cannot both be configured.
ECN	ECN flag.	N/A	Unsigned integer. Value range: 0 to 3.	N/A
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
FlowLabel	Flow label value in an IPv6 packet header.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
RoutingTypeAny	Whether a rule matches any types of routing header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of routing header.</li> <li><b>false</b>—Matches the specified type of routing header (default).</li> </ul>	This column and the <b>RoutingTypeValue</b> column cannot both be configured.
RoutingTypeValue	Routing header type.	N/A	Unsigned integer. Value range: 0 to 255.	This column and the <b>RoutingTypeAny</b> column cannot both be configured.
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—lt (lower than).</li> <li><b>2</b>—eq (equal to).</li> <li><b>3</b>—gt (greater than).</li> <li><b>4</b>—neq (not equal to).</li> <li><b>5</b>—range (inclusive range).</li> </ul>	N/A
SrcPortValue	Start source port.	N/A	Unsigned integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
1			Value range: 0 to 65535.	
SrcPortValue 2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstPortOp.</li> <li>DstPortValue1.</li> <li>DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—lt (lower than).</li> <li><b>2</b>—eq (equal to).</li> <li><b>3</b>—gt (greater than).</li> <li><b>4</b>—neq (not equal to).</li> <li><b>5</b>—range (inclusive range).</li> </ul>	N/A
DstPortValue 1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPortValue 2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
TcpFlag	TCP flags.	Data structure.	Members include: <ul style="list-style-type: none"> <li>ACK.</li> <li>FIN.</li> <li>PSH.</li> <li>RST.</li> <li>SYN.</li> <li>URG.</li> </ul>	N/A
ACK	ACK flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—ACK flag is not set.</li> <li><b>1</b>—ACK flag is set.</li> </ul>	Only the TCP protocol supports this column.
FIN	FIN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—FIN flag is not set.</li> <li><b>1</b>—FIN flag is set.</li> </ul>	Only the TCP protocol supports this column.
PSH	PSH flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—PSH flag is not set.</li> <li><b>1</b>—PSH flag is set.</li> </ul>	Only the TCP protocol supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
RST	RST flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—RST flag is not set.</li> <li><b>1</b>—RST flag is set.</li> </ul>	Only the TCP protocol supports this column.
SYN	SYN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—SYN flag is not set.</li> <li><b>1</b>—SYN flag is set.</li> </ul>	Only the TCP protocol supports this column.
URG	URG flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—URG flag is not set.</li> <li><b>1</b>—URG flag is set.</li> </ul>	Only the TCP protocol supports this column.
Established	Whether a rule matches flags indicating the established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches the flags.</li> <li><b>false</b>—Ignores the flags.</li> </ul>	Only the TCP protocol supports this column.  On a router, the rule matches TCP connection packets with the ACK or RST flag set. On a switch, the availability and usage of this column depend on the device model.  This column and the <b>TcpFlag</b> column cannot both be configured.
ICMP6	ICMPv6 messages.	N/A	Members include: <ul style="list-style-type: none"> <li>ICMP6Type.</li> <li>ICMP6Code.</li> </ul>	The members must both be specified.
ICMP6Type	Type of ICMPv6 messages.	N/A	Unsigned integer. Value range: 0 to 255.	Only the ICMPv6 protocol supports this column.
ICMP6Code	Code of ICMPv6 messages.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 indicates that no ICMPv6 message code is specified.	Only the ICMPv6 protocol supports this column.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments (default).</li> </ul>	N/A
HopTypeAny	Whether a rule matched any types of Hop-by-Hop Options header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of Hop-by-Hop Options header.</li> <li><b>false</b>—Matches the specified type of Hop-by-Hop Options header (default).</li> </ul>	This column and the <b>HopTypeValue</b> column cannot both be configured.
HopTypeValu	Type of	N/A	Unsigned integer.	This column and the

Column name	Column description	Column type	Data type and restrictions	Remarks
e	Hop-by-Hop Options header.		Value range: 0 to 255.	<b>HopTypeAny</b> column cannot both be configured.
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
QoSLocalID	Local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.  When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.
GreValue	Config a gre value.	N/A	Hexadecimal string. Length: 1 to 8 characters. Value range: 0 to FFFFFFFF.	Only the GRE protocol supports this column.
Options	IP options.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Options.</li> <li><b>false</b>—Not options, default.</li> </ul>	Only when the ProtocolType value is 256, and then the table can supports this column.
FragmentType	Check fragment packet type.	N/A	Unsigned integer. Value range: 0 to 3. <ul style="list-style-type: none"> <li><b>0</b>—First-fragment.</li> <li><b>1</b>—Non-fragment.</li> <li><b>2</b>—Non-or-first-fragment.</li> <li><b>3</b>—Any-fragment.</li> </ul>	N/A
Ttl	Whether a rule matches TTL.	Data structure	Members include: <ul style="list-style-type: none"> <li>TtlOp.</li> <li>TtlValue1.</li> <li>TtlValue2.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TtlOp	TTL operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
TtlValue1	Start TTL value.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
TtlValue2	End TTL value.	N/A	Unsigned integer. Value range: 1 to 256.	When the TtlOp is 5, the value range is 1 to 255. Otherwise, it can only be 256. <b>The value 256 indicates that the end TTL value is not available.</b>
PktLength	Whether a rule matches packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li>PktLengthOp.</li> <li>PktLengthValue1.</li> <li>PktLengthValue2.</li> </ul>	N/A
PktLengthOp	Packet length operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
PktLengthValue1	Start packet length value.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PktLengthValue2	End packet length value.	N/A	Unsigned integer. Value range: 0 to 65536.	When the PktLengthOp is 5, the value range is 0 to 65535. Otherwise, it can only be 65536. <b>The value 65536 indicates that the packet length value is not available.</b>

## ACL/MACRules

This table contains information about Ethernet frame header ACL rules.

### XML structure

```

<ACL>
  <MACRules>
    <Rule>
      <GroupID></GroupID>
      <RuleID></RuleID>
      <Action></Action>
    
```

```

<SrcMACAddr>
  <SrcMACAddress></SrcMACAddress>
  <SrcMACMask></SrcMACMask>
</SrcMACAddr>
<DstMACAddr>
  <DstMACAddress></DstMACAddress>
  <DstMACMask></DstMACMask>
</DstMACAddr>
<COS></COS>
<Protocol>
  <ProtocolType></ProtocolType>
  <ProtocolTypeMask></ProtocolTypeMask>
</Protocol>
<LSAP>
  <LSAPType></LSAPType>
  <LSAPTypeMask></LSAPTypeMask>
</LSAP>
<EncapType></EncapType>
<VxlanID></VxlanID>
<InSrcMACAddr>
  <InSrcMACAddress></InSrcMACAddress>
  <InSrcMACMask></InSrcMACMask>
</InSrcMACAddr>
<InDstMACAddr>
  <InDstMACAddress></InDstMACAddress>
  <InDstMACMask></InDstMACMask>
</InDstMACAddr>
<InProtocol>
  <InProtocolType></InProtocolType>
  <InProtocolTypeMask></InProtocolTypeMask>
</InProtocol>
<TimeRange></TimeRange>
<Counting></Counting>
<Comment></Comment>
</Rule>
</MACRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	MACRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 4000 to 4999.	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
SrcMACAddr	Information about the source MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcMACAddress.</li> <li>SrcMACMask.</li> </ul>	The VXLAN encapsulation supports this column.  The members must both be specified.
SrcMACAddress	Source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
SrcMACMask	Mask of the source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff-ff.
DstMACAddr	Information about the destination MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstMACAddress.</li> <li>DstMACMask.</li> </ul>	The VXLAN encapsulation supports this column.  The members must both be specified.
DstMACAddress	Destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
DstMACMask	Mask of the destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff-ff.
COS	802.1p priority.	N/A	Unsigned integer. Value range: 0 to 7.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Protocol	Link layer protocol.	Data structure	Members include: <ul style="list-style-type: none"> <li>ProtocolType.</li> <li>ProtocolTypeMask.</li> </ul>	The VXLAN encapsulation supports this column. The members must both be specified. This column and the <b>LSAP</b> column cannot both be configured.
ProtocolType	Type of the link layer protocol.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	Values of link layer protocol types are assigned by IANA.
ProtocolTypeMask	Mask of the link layer protocol type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
LSAP	LSAP.	Data structure	Members include: <ul style="list-style-type: none"> <li>LSAPType.</li> <li>LSAPTypeMask.</li> </ul>	The members must both be specified. This column and the <b>Protocol</b> column cannot both be configured.
LSAPType	Type of LSAP.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
LSAPTypeMask	Mask of the LSAP type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
EncapType	Encapsulation type.	N/A	Members include: <ul style="list-style-type: none"> <li>VXLAN encapsulation.</li> <li>GRE encapsulation.</li> <li>IPINIP encapsulation.</li> </ul>	N/A
VxlanID	VXLAN ID.	N/A	Unsigned integer Value range: 0 to 16777215	Only the VXLAN encapsulation supports this column.
InSrcMACAddress	Information about the inner source MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcMACAddress.</li> <li>InSrcMACMask.</li> </ul>	Only the VXLAN encapsulation supports this column. The members must both be specified.
InSrcMACAddress	Inner source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
InSrcMACMask	Mask of the inner source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff-ff.

Column name	Column description	Column type	Data type and restrictions	Remarks
InDstMACAddr	Information about the inner destination MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstMACAddress.</li> <li>InDstMACMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.
InDstMACAddress	Inner destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
InDstMACMask	Mask of the inner destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff-ff.
InProtocol	Inner link layer protocol.	Data structure	Members include: <ul style="list-style-type: none"> <li>ProtocolType.</li> <li>ProtocolTypeMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.
InProtocolType	Type of the inner link layer protocol.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	Values of inner link layer protocol types are assigned by IANA.
InProtocolTypeMask	Mask of the inner link layer protocol type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.  When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.



# ACL/MACNamedRules

This table contains information about Named Ethernet frame header ACL rules.

## XML structure

```
<ACL>
  <MACNamedRules>
    <Rule>
      <GroupIndex></GroupIndex>
      <RuleID></RuleID>
      <Action></Action>
      <SrcMACAddr>
        <SrcMACAddress></SrcMACAddress>
        <SrcMACMask></SrcMACMask>
      </SrcMACAddr>
      <DstMACAddr>
        <DstMACAddress></DstMACAddress>
        <DstMACMask></DstMACMask>
      </DstMACAddr>
      <COS></COS>
      <Protocol>
        <ProtocolType></ProtocolType>
        <ProtocolTypeMask></ProtocolTypeMask>
      </Protocol>
      <LSAP>
        <LSAPType></LSAPType>
        <LSAPTypeMask></LSAPTypeMask>
      </LSAP>
      <EncapType></EncapType>
      <VxlanID></VxlanID>
      <InSrcMACAddr>
        <InSrcMACAddress></InSrcMACAddress >
        <InSrcMACMask></InSrcMACMask>
      </InSrcMACAddr>
      <InDstMACAddr>
        <InDstMACAddress></InDstMACAddress>
        <InDstMACMask></InDstMACMask>
      </InDstMACAddr>
      <InProtocol>
        <InProtocolType></InProtocolType>
        <InProtocolTypeMask></InProtocolTypeMask>
      </InProtocol>
      <TimeRange></TimeRange>
      <Counting></Counting>
      <Comment></Comment>
    </Rule>
  </MACNamedRules>
```

</ACL>

## Table description

Item	Description
Feature name	ACL
Table name	MACNamedRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"><li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li><li><b>ACL number:</b> String of digits in the range of 4000 to 4999.</li></ul>	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest rule ID, starting from 0.
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"><li><b>1</b>—Deny.</li><li><b>2</b>—Permit.</li></ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
SrcMACAddr	Information about the source MAC address.	Data structure	Members include: <ul style="list-style-type: none"><li>SrcMACAddress.</li><li>SrcMACMask.</li></ul>	The VXLAN encapsulation supports this column.  The members must both be specified.
SrcMACAddress	Source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
SrcMACMask	Mask of the source MAC	N/A	Six groups of two hexadecimal digits,	Example: ff-ff-ff-ff-ff-ff.

Column name	Column description	Column type	Data type and restrictions	Remarks
	address.		hyphen-separated.	
DstMACAddr	Information about the destination MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstMACAddress.</li> <li>DstMACMask.</li> </ul>	The VXLAN encapsulation supports this column. The members must both be specified.
DstMACAddress	Destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
DstMACMask	Mask of the destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff.
COS	802.1p priority.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
Protocol	Link layer protocol.	Data structure	Members include: <ul style="list-style-type: none"> <li>ProtocolType.</li> <li>ProtocolTypeMask.</li> </ul>	The VXLAN encapsulation supports this column. The members must both be specified. This column and the <b>LSAP</b> column cannot both be configured.
ProtocolType	Type of the link layer protocol.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	Values of link layer protocol types are assigned by IANA.
ProtocolTypeMask	Mask of the link layer protocol type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
LSAP	LSAP.	Data structure	Members include: <ul style="list-style-type: none"> <li>LSAPType.</li> <li>LSAPTypeMask.</li> </ul>	The members must both be specified. This column and the <b>Protocol</b> column cannot both be configured.
LSAPType	Type of LSAP.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
LSAPTypeMask	Mask of the LSAP type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
EncapType	Encapsulation type.	N/A	Members include: <ul style="list-style-type: none"> <li>VXLAN encapsulation.</li> <li>GRE encapsulation.</li> <li>IPINIP encapsulation.</li> </ul>	N/A
VxlanID	VXLAN ID.	N/A	Unsigned integer	Only the VXLAN encapsulation supports

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 16777215	this column.
InSrcMACAddr	Information about the inner source MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcMACAddress.</li> <li>InSrcMACMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.
InSrcMACAddress	Inner source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
InSrcMACMask	Mask of the inner source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff-ff.
InDstMACAddr	Information about the inner destination MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstMACAddress.</li> <li>InDstMACMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.
InDstMACAddress	Inner destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
InDstMACMask	Mask of the inner destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff-ff.
InProtocol	Inner link layer protocol.	Data structure	Members include: <ul style="list-style-type: none"> <li>ProtocolType.</li> <li>ProtocolTypeMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.
InProtocolType	Type of the inner link layer protocol.	N/A	Hexadecimal string.  Length: 1 to 4 characters.  Value range: 0 to FFFF.	Values of inner link layer protocol types are assigned by IANA.
InProtocolTypeMask	Mask of the inner link layer protocol type.	N/A	Hexadecimal string.  Length: 1 to 4 characters.  Value range: 0 to FFFF.	N/A
TimeRange	Time range.	N/A	String, case-insensitive.	It cannot be the word <b>all</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 32 characters. The string must start with an English letter.	
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.  When the <b>MatchOrder</b> column is <b>2</b> , you can modify only the comment for a rule.

## ACL/PfilterIgnoreAction

This table contains information about the ignoring packet filter permit action.

### XML structure

```

<ACL>
  <PfilterIgnoreAction>
    <IgnoreAction></IgnoreAction>
  </PfilterIgnoreAction>
</ACL>

```

### Table description

Item	Description
Feature name	ACL
Table name	PfilterIgnoreAction
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IgnoreAction	Whether to	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	ignore the packet filter permit action.		<ul style="list-style-type: none"> <li>• <b>true</b>—Ignore the packet filter permit action.</li> <li>• <b>false</b>—Not ignore the packet filter permit action (default).</li> </ul>	

## ACL/PfilterDefAction

This table contains information about the default global packet filter actions.

### XML structure

```

<ACL>
  <PfilterDefAction>
    <DefaultAction></DefaultAction>
  </PfilterDefAction>
</ACL>

```

### Table description

Item	Description
Feature name	ACL
Table name	PfilterDefAction
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
DefaultAction	Default packet filter action	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Permit (default).</li> <li>• <b>2</b>—Deny.</li> </ul>

## ACL/PfilterApply

This table contains information about packet filter application.

## XML structure

```
<ACL>
  <PfilterApply>
    <Pfilter>
      <AppObjType></AppObjType>
      <AppObjIndex></AppObjIndex>
      <AppDirection></AppDirection>
      <AppAclType></AppAclType>
      <AppAclGroup></AppAclGroup>
      <HardCount></HardCount>
      <InnerEncap></InnerEncap>
      <ShareMode></ShareMode>
    </Pfilter>
  </PfilterApply>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	PfilterApply
Table type	Multi-instance table
Row name	Pfilter
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppObjType	Type of the application object.	Index	Enumeration: <ul style="list-style-type: none"><li>1—Interface.</li><li>2—VLAN.</li><li>3—Global.</li></ul>	Support for the specified type depends on the device model.
AppObjIndex	Index of the application object.	Index	Unsigned integer. Value range: 0 to 4294967295.	The value depends on the AppObjType column. <ul style="list-style-type: none"><li>Interface index if AppObjType is 1.</li><li>VLAN ID in the range of 1 to 4094 if AppObjType is 2.</li><li>The value is 0 if AppObjType is 3.</li></ul>
AppDirection	Application direction.	Index	Enumeration: <ul style="list-style-type: none"><li>1—Inbound.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>2</b>—Outbound.</li> </ul>	
AppAcIType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—IPv4 ACL.</li> <li><b>2</b>—IPv6 ACL.</li> <li><b>3</b>—MAC ACL.</li> <li><b>4</b>—User-defined ACL.</li> <li><b>5</b>—ACL with the default action.</li> </ul>	<ul style="list-style-type: none"> <li>Type 5 is a special ACL.</li> </ul>
AppAcIGroup	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits valued 0 or in the range of 2000 to 5999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> . The value range depends on the AppAcIType column. <ul style="list-style-type: none"> <li>2000 to 3999 if AppAcIType is <b>1</b>.</li> <li>2000 to 3999 if AppAcIType is <b>2</b>.</li> <li>4000 to 4999 if AppAcIType is <b>3</b>.</li> <li>5000 to 5999 if AppAcIType is <b>4</b>.</li> <li>0 if AppAcIType is <b>5</b>.</li> </ul>
HardCount	Whether to count rule matches in hardware for the ACL.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—enable.</li> <li><b>2</b>—disable.</li> </ul>	Support for this function depends on the device model. Global default action and VLAN default action do not support this function.
InnerEncap	Match the inner packet information of encapsulation packets.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—None (default).</li> <li><b>1</b>—VXLAN.</li> </ul>	Support for this function depends on the device model. This column cannot be modified.
ShareMode	Whether to apply the ACL in sharing mode.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Apply the ACL in sharing mode.</li> <li><b>false</b>—Do not apply the ACL in sharing mode (default).</li> </ul>	Support for this function depends on the device model. This column cannot be modified.

## ACL/UserRules

This table contains information about user-defined ACL rules.

### XML structure

```

<ACL>
  <UserRules>
    <Rule>

```



```

<GroupID></GroupID>
<RuleID></RuleID>
<Action></Action>
<L2Rule>
  <L2RuleString></L2RuleString>
  <L2RuleMask></L2RuleMask>
  <L2Offset></L2Offset>
</L2Rule>
<IPv4Rule>
  <IPv4RuleString></IPv4RuleString>
  <IPv4RuleMask></IPv4RuleMask>
  <IPv4Offset></IPv4Offset>
</IPv4Rule>
<IPv6Rule>
  <IPv6RuleString></IPv6RuleString>
  <IPv6RuleMask></IPv6RuleMask>
  <IPv6Offset></IPv6Offset>
</IPv6Rule>
<L4Rule>
  <L4RuleString></L4RuleString>
  <L4RuleMask></L4RuleMask>
  <L4Offset></L4Offset>
</L4Rule>
<L5Rule>
  <L5RuleString></L5RuleString>
  <L5RuleMask></L5RuleMask>
  <L5Offset></L5Offset>
</L5Rule>
<UdfFormat></UdfFormat>
<ProtocolType></ProtocolType>
<IPv6ProtocolType></IPv6ProtocolType>
<SrcAny></SrcAny>
<SrcIPv4>
  <SrcIPv4Addr></SrcIPv4Addr>
  <SrcIPv4Wildcard></SrcIPv4Wildcard>
</SrcIPv4>
<SrcIPv6>
  <SrcIPv6Addr></SrcIPv6Addr>
  <SrcIPv6Prefix></SrcIPv6Prefix>
</SrcIPv6>
<DstAny></DstAny>
<DstIPv4>
  <DstIPv4Addr></DstIPv4Addr>
  <DstIPv4Wildcard></DstIPv4Wildcard>
</DstIPv4>
<DstIPv6>
  <DstIPv6Addr></DstIPv6Addr>
  <DstIPv6Prefix></DstIPv6Prefix>

```

```

    </DstIPv6>
    <SrcPort>
      <SrcPortOp></SrcPortOp>
      <SrcPortValue1></SrcPortValue1>
      <SrcPortValue2></SrcPortValue2>
    </SrcPort>
    <DstPort>
      <DstPortOp></DstPortOp>
      <DstPortValue1></DstPortValue1>
      <DstPortValue2></DstPortValue2>
    </DstPort>
    <DSCP></DSCP>
    <TimeRange></TimeRange>
    <Counting></Counting>
    <Comment></Comment>
  </Rule>
</UserRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	UserRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 5000 to 5999.	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest rule ID, starting from 0.
Action	Action on packets matching the	N/A	Enumeration: • 1—Deny.	You cannot specify an action when you remove or delete a rule.

Column name	Column description	Column type	Data type and restrictions	Remarks
	rule.		<ul style="list-style-type: none"> <li>2—Permit.</li> </ul>	You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
L2Rule	Specifies that the offset is relative to the beginning of the Layer 2 frame header.	Data structure	Members include: <ul style="list-style-type: none"> <li>L2RuleString.</li> <li>L2RuleMask.</li> <li>L2Offset.</li> </ul>	The members must all be specified.
L2RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
L2RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.
L2Offset	Offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
IPv4Rule	Specifies that the offset is relative to the beginning of the IPv4 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4RuleString.</li> <li>IPv4RuleMask.</li> <li>IPv4Offset.</li> </ul>	The members must all be specified.
IPv4RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
IPv4RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.
IPv4Offset	Offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
IPv6Rule	Specifies that the offset is relative to the beginning of the IPv6 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv6RuleString.</li> <li>IPv6RuleMask.</li> <li>IPv6Offset.</li> </ul>	The members must all be specified.
IPv6RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
IPv6RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.
IPv6Offset	Specifies an offset in bytes after which the	N/A	Unsigned integer. Value range: 0 to the	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	match operation begins.		device-specific upper limit.	
L4Rule	Specifies that the offset is relative to the beginning of the Layer 4 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>L4RuleString.</li> <li>L4RuleMask.</li> <li>L4Offset.</li> </ul>	The members must all be specified.
L4RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
L4RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.
L4Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
L5Rule	Specifies that the offset is relative to the beginning of the payload.	Data structure	Members include: <ul style="list-style-type: none"> <li>L5RuleString.</li> <li>L5RuleMask.</li> <li>L5Offset.</li> </ul>	This column is available when the ProtocolType is specified. The members must all be specified.
L5RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
L5RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.
L5Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
UdfFormat	User-defined packet format.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IFA packet.</li> <li>2—Raw ip packet.</li> <li>3—VXLAN packet.</li> </ul>	This column is available when the ProtocolType is specified.
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv4 protocols.	You cannot specify a protocol type when you remove or delete a rule.
IPv6ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv6 protocols.	You cannot specify a protocol type when you remove or delete a rule.
SrcAny	Whether a rule matches any	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches any</li> </ul>	This column is available when the ProtocolType is

Column name	Column description	Column type	Data type and restrictions	Remarks
	source IP addresses.		source IP addresses (default). <ul style="list-style-type: none"> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	specified. This column must be configured together with the <b>SrcIPv4</b> or <b>SrcIPv6</b> column.
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column. The two members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr.</li> <li>SrcIPv6Prefix.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column. The two members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
DstAny	Whether a rule matches any destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IP addresses (default).</li> <li><b>false</b>—Matches the specified destination IP address.</li> </ul>	This column is available when the ProtocolType is specified. This column must be configured together with the <b>DstIPv4</b> or <b>DstIPv6</b> column.
DstIPv4	Destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv4Addr.</li> <li>DstIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>DstAny</b> column. The two members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
DstIPv4Addr	Destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv4Wildcard	Wildcard mask for the destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv6	Destination IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv6Addr.</li> <li>DstIPv6Prefix.</li> </ul>	This column must be configured together with the <b>DstAny</b> column. The two members must both be specified.
DstIPv6Addr	Destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv6Prefix	Length of the destination IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
SrcPortValue 1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPortValue 2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.

Column name	Column description	Column type	Data type and restrictions	Remarks
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstPortOp.</li> <li>DstPortValue1.</li> <li>DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
DstPortValue 1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPortValue 2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	This column is available when the ProtocolType is specified.
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.

## ACL/UserNamedRules

This table contains information about named user-defined ACL rules.

### XML structure

```

<ACL>
  <UserNamedRules>
    <Rule>
      <GroupIndex></GroupIndex>

```

```

<RuleID></RuleID>
<Action></Action>
<L2Rule>
  <L2RuleString></L2RuleString>
  <L2RuleMask></L2RuleMask>
  <L2Offset></L2Offset>
</L2Rule>
<IPv4Rule>
  <IPv4RuleString></IPv4RuleString>
  <IPv4RuleMask></IPv4RuleMask>
  <IPv4Offset></IPv4Offset>
</IPv4Rule>
<IPv6Rule>
  <IPv6RuleString></IPv6RuleString>
  <IPv6RuleMask></IPv6RuleMask>
  <IPv6Offset></IPv6Offset>
</IPv6Rule>
<L4Rule>
  <L4RuleString></L4RuleString>
  <L4RuleMask></L4RuleMask>
  <L4Offset></L4Offset>
</L4Rule>
<L5Rule>
  <L5RuleString></L5RuleString>
  <L5RuleMask></L5RuleMask>
  <L5Offset></L5Offset>
</L5Rule>
<UdfFormat></UdfFormat>
<ProtocolType></ProtocolType>
<IPv6ProtocolType></IPv6ProtocolType>
<SrcAny></SrcAny>
<SrcIPv4>
  <SrcIPv4Addr></SrcIPv4Addr>
  <SrcIPv4Wildcard></SrcIPv4Wildcard>
</SrcIPv4>
<SrcIPv6>
  <SrcIPv6Addr></SrcIPv6Addr>
  <SrcIPv6Prefix></SrcIPv6Prefix>
</SrcIPv6>
<DstAny></DstAny>
<DstIPv4>
  <DstIPv4Addr></DstIPv4Addr>
  <DstIPv4Wildcard></DstIPv4Wildcard>
</DstIPv4>
<DstIPv6>
  <DstIPv6Addr></DstIPv6Addr>
  <DstIPv6Prefix></DstIPv6Prefix>
</DstIPv6>

```



```

<SrcPort>
  <SrcPortOp></SrcPortOp>
  <SrcPortValue1></SrcPortValue1>
  <SrcPortValue2></SrcPortValue2>
</SrcPort>
<DstPort>
  <DstPortOp></DstPortOp>
  <DstPortValue1></DstPortValue1>
  <DstPortValue2></DstPortValue2>
</DstPort>
<DSCP></DSCP>
<TimeRange></TimeRange>
<Counting></Counting>
<Comment></Comment>
</Rule>
</UserNamedRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	UserNamedRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 5000 to 5999.</li> </ul>	You must create an ACL first before you create, merge, or replace rules for it.
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65535. The value 65535 is an invalid rule ID.	If you set this column to 65535, the system automatically assigns a new rule ID. This rule ID is the nearest higher multiple of the numbering step to the current highest rule ID, starting from 0.

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	You cannot specify an action when you remove or delete a rule.  You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
L2Rule	Specifies that the offset is relative to the beginning of the Layer 2 frame header.	Data structure	Members include: <ul style="list-style-type: none"> <li>L2RuleString.</li> <li>L2RuleMask.</li> <li>L2Offset.</li> </ul>	The members must all be specified.
L2RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
L2RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.
L2Offset	Offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
IPv4Rule	Specifies that the offset is relative to the beginning of the IPv4 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4RuleString.</li> <li>IPv4RuleMask.</li> <li>IPv4Offset.</li> </ul>	The members must all be specified.
IPv4RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
IPv4RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.
IPv4Offset	Offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
IPv6Rule	Specifies that the offset is relative to the beginning of the IPv6 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv6RuleString.</li> <li>IPv6RuleMask.</li> <li>IPv6Offset.</li> </ul>	The members must all be specified.
IPv6RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
IPv6RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv6Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
L4Rule	Specifies that the offset is relative to the beginning of the Layer 4 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>L4RuleString.</li> <li>L4RuleMask.</li> <li>L4Offset.</li> </ul>	The members must all be specified.
L4RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
L4RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.
L4Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
L5Rule	Specifies that the offset is relative to the beginning of the payload.	Data structure	Members include: <ul style="list-style-type: none"> <li>L5RuleString.</li> <li>L5RuleMask.</li> <li>L5Offset.</li> </ul>	This column is available when the ProtocolType is specified.  The members must all be specified.
L5RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number.
L5RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	The length must be an even number, and equal to that of the match pattern string.
L5Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
UdfFormat	User-defined packet format.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IFA packet.</li> <li>2—Raw ip packet.</li> <li>3—VXLAN packet.</li> </ul>	This column is available when the ProtocolType is specified.
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256.	You cannot specify a protocol type when you remove or delete a rule.

Column name	Column description	Column type	Data type and restrictions	Remarks
			The value 256 represents all IPv4 protocols.	
IPv6ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256.  The value 256 represents all IPv6 protocols.	You cannot specify a protocol type when you remove or delete a rule.
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses (default).</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	This column is available when the ProtocolType is specified.  This column must be configured together with the <b>SrcIPv4</b> or <b>SrcIPv6</b> column.
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>SrcAny</b> column.  The two members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr.</li> </ul> SrcIPv6Prefix.	This column must be configured together with the <b>SrcAny</b> column.  The two members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the

Column name	Column description	Column type	Data type and restrictions	Remarks
				<b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer.  Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
DstAny	Whether a rule matches any destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IP addresses (default).</li> <li><b>false</b>—Matches the specified destination IP address.</li> </ul>	This column is available when the ProtocolType is specified.  This column must be configured together with the <b>DstIPv4</b> or <b>DstIPv6</b> column.
DstIPv4	Destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv4Addr.</li> <li>DstIPv4Wildcard.</li> </ul>	This column must be configured together with the <b>DstAny</b> column.  The two members must both be specified.
DstIPv4Addr	Destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.  This column is available when the <b>DstAny</b> column is <b>false</b> .  It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv4Wildcard	Wildcard mask for the destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0.  This column is available when the <b>DstAny</b> column is <b>false</b> .  It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv6	Destination IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv6Addr.</li> </ul> DstIPv6Prefix.	This column must be configured together with the <b>DstAny</b> column.  The two members must both be specified.
DstIPv6Addr	Destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.  This column is available when the <b>DstAny</b> column is <b>false</b> .  It must be empty when the

Column name	Column description	Column type	Data type and restrictions	Remarks
				<b>DstAny</b> column is <b>true</b> .
DstIPv6Prefix	Length of the destination IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>DstAny</b> column is <b>false</b> .  It must be empty when the <b>DstAny</b> column is <b>true</b> .
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
SrcPortValue 1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPortValue 2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstPortOp.</li> <li>DstPortValue1.</li> <li>DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
DstPortValue 1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DstPortValue 2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	This column is available when the ProtocolType is specified.
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches (default).</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	A comment can only be configured for an existing rule.

## ACL/ZonePairPfilterApply

This table contains information about packet filter application for zone-pair.

### XML structure

```

<ACL>
  <ZonePairPfilterApply>
    <Pfilter>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <AclType></AclType>
      <AclGroup></AclGroup>
    </Pfilter>
  </ZonePairPfilterApply>
</ACL>

```

### Table description

Item	Description
Feature name	ACL

Table name	ZonePairPfilterApply
Table type	Multi-instance table
Row name	Pfilter
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZone	Name of the source zone.	Index	String, case insensitive. Length: 1 to 31 characters.	Cannot contain midline( - ).
DestZone	Name of the destination zone.	Index	String, case insensitive. Length: 1 to 31 characters.	Cannot contain midline( - ).
AcIType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 ACL.</li> <li>2—IPv6 ACL.</li> <li>3—Ethernet frame header ACL.</li> </ul>	Type 3 is not supported in the current software version, and is reserved for future support.
AcIGroup	ACL name or number.	Index	<ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> An unsigned integer in the range of 2000 to 5999.</li> </ul>	<p>An ACL name must start with an English letter and cannot be all.</p> <p>The value range depends on the AppAcIType column.</p> <ul style="list-style-type: none"> <li>2000 to 5999 if AppAcIType is 1.</li> <li>2000 to 3999 if AppAcIType is 2.</li> </ul>



# Contents

ACL.....	1
ACL/Base.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
ACL/Capability.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
ACL/Groups.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
ACL/NamedGroups.....	5
XML structure.....	5
Table description.....	5
Columns.....	5
ACL/Intervals.....	7
XML structure.....	7
Table description.....	7
Columns.....	7
ACL/IPv4BasicRules.....	8
XML structure.....	8
Table description.....	8
Columns.....	9
ACL/IPv4NamedBasicRules.....	10
XML structure.....	10
Table description.....	11
Columns.....	11
ACL/IPv6BasicRules.....	13
XML structure.....	13
Table description.....	13
Columns.....	14
ACL/IPv6NamedBasicRules.....	15
XML structure.....	15
Table description.....	16
Columns.....	16
ACL/IPv4AdvanceRules.....	18
XML structure.....	18
Table description.....	20
Columns.....	21
ACL/IPv4NamedAdvanceRules.....	29
XML structure.....	29
Table description.....	31
Columns.....	32
ACL/IPv6AdvanceRules.....	40
XML structure.....	40
Table description.....	42
Columns.....	42
ACL/IPv6NamedAdvanceRules.....	49
XML structure.....	49
Table description.....	51
Columns.....	51
ACL/MACRules.....	57
XML structure.....	57
Table description.....	58
Columns.....	59

ACL/MACNamedRules	61
XML structure	61
Table description	62
Columns	63
ACL/PfilterDefAction	65
XML structure	65
Table description	66
Columns	66
ACL/PfilterIgnoreAction	66
XML structure	66
Table description	66
Columns	67
ACL/PfilterApply	67
XML structure	67
Table description	67
Columns	68
ACL/PfilterGroupRunInfo	69
XML structure	69
Table description	69
Columns	70
ACL/PfilterRuleRunInfo	71
XML structure	71
Table description	72
Columns	72
ACL/PfilterStatisticSum	73
XML structure	73
Table description	74
Columns	74
ACL/UserRules	75
XML structure	75
Table description	76
Columns	76
ACL/UserNamedRules	83
XML structure	83
Table description	85
Columns	85
ACL/ZonePairPfilterApply	91
XML structure	91
Table description	92
Columns	92
ACL/ZonePairPfilterRules	92
XML structure	92
Table description	93
Columns	93

# ACL

## ACL/Base

This table contains ACL base table.

### XML structure

```
<ACL>
  <Base>
    <ProcessingStatus></ProcessingStatus>
  </Base>
</ACL>
```

### Table description

Item	Description
Feature name	ACL
Table name	Base
Table type	Single-instance table
Row name	N/A
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions
ProcessingStatus	ACL processing status	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Processing.</li><li>2—Idle.</li></ul>

## ACL/Capability

This table contains ACL capability information, and it is used to obtain custom ACL parameters.

### XML structure

```
<ACL>
  <Capability>
    <UserAclL2>
      <L2MaxOffset></L2MaxOffset>
      <L2MaxLen></L2MaxLen>
    </UserAclL2>
  </Capability>
</ACL>
```

```

<UserAclL4>
  <L4MaxOffset></L4MaxOffset>
  <L4MaxLen></L4MaxLen>
</UserAclL4>
<UserAclIPv4>
  <IPv4MaxOffset></IPv4MaxOffset>
  <IPv4MaxLen></IPv4MaxLen>
</UserAclIPv4>
<UserAclIPv6>
  <IPv6MaxOffset></IPv6MaxOffset>
  <IPv6MaxLen></IPv6MaxLen>
</UserAclIPv6>
</Capability>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	Capability
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
UserAclL2	Custom Layer 2 frame header parameters for user-defined ACL rules	Data structure	Members include: <ul style="list-style-type: none"> <li>L2MaxOffset.</li> <li>L2MaxLen.</li> </ul>
L2MaxOffset	Maximum offset relative to the beginning of the Layer 2 frame header	N/A	Unsigned integer. Value range: 0 to 254.
L2MaxLen	Maximum length of the match pattern string	N/A	Unsigned integer. Value range: 0 to 254.
UserAclL4	Custom Layer 4 header parameters for user-defined ACL rules	Data structure	Members include: <ul style="list-style-type: none"> <li>L4MaxOffset.</li> <li>L4MaxLen.</li> </ul>
L4MaxOffset	Maximum offset relative to the beginning of the Layer 4 header	N/A	Unsigned integer. Value range: 0 to 254.
L4MaxLen	Maximum length of the match pattern string	N/A	Unsigned integer. Value range: 0 to 254.

Column name	Column description	Column type	Data type and restrictions
UserAclIPv4	Custom IPv4 header parameters for user-defined ACL rules	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4MaxOffset.</li> <li>IPv4MaxLen.</li> </ul>
IPv4MaxOffset	Maximum offset relative to the beginning of the IPv4 header	N/A	Unsigned integer. Value range: 0 to 254.
IPv4MaxLen	Maximum length of the match pattern string	N/A	Unsigned integer. Value range: 0 to 254.
UserAclIPv6	Custom IPv6 header parameters for user-defined ACL rules	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv6MaxOffset.</li> <li>IPv6MaxLen.</li> </ul>
IPv6MaxOffset	Maximum offset relative to the beginning of the IPv6 header	N/A	Unsigned integer. Value range: 0 to 254.
IPv6MaxLen	Maximum length of the match pattern string	N/A	Unsigned integer. Value range: 0 to 254.

## ACL/Groups

This table displays ACL information.

## XML structure

```

<ACL>
  <Groups>
    <Group>
      <GroupType></GroupType>
      <GroupID></GroupID>
      <MatchOrder></MatchOrder>
      <Step></Step>
      <Name></Name>
      <Description></Description>
      <RuleNum></RuleNum>
    </Group>
  </Groups>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	Groups
Table type	Multi-instance table
Row name	Group

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	ACL type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6. 3—MAC.</li> <li>4—User-defined.</li> </ul>	N/A
GroupID	ACL number	Index	Unsigned integer. Value range: 2000 to 5999.	The value range depends on the GroupType column. <ul style="list-style-type: none"> <li>2000 to 5999 if GroupType is 1. <ul style="list-style-type: none"> <li>IPv4 basic ACL: 2000 to 2999.</li> <li>IPv4 advanced ACL: 3000 to 3999.</li> <li>Ethernet frame header ACL: 4000 to 4999.</li> <li>User-defined ACL: 5000 to 5999.</li> </ul> </li> <li>2000 to 3999 if GroupType is 2. <ul style="list-style-type: none"> <li>IPv6 basic ACL: 2000 to 2999.</li> <li>IPv6 advanced ACL: 3000 to 3999.</li> </ul> </li> </ul>
MatchOrder	Order in which the rules are sorted	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Config. In this order, rules are sorted in ascending order of rule ID.</li> <li>2—Auto. In this order, rules are sorted in depth-first order.</li> </ul>	N/A
Step	ACL rule numbering step	N/A	Unsigned integer. Value range: 1 to 20.	N/A
Name	ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	ACL description	N/A	String, case-sensitive. Length: 1 to 127 characters.	By default, an ACL has no description.
RuleNum	Number of rules in the ACL	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

# ACL/NamedGroups

This table displays named ACL information.

## XML structure

```
<ACL>
  <NamedGroups>
    <Group>
      <GroupType></GroupType>
      <GroupCategory></GroupCategory>
      <GroupIndex></GroupIndex>
      <MatchOrder></MatchOrder>
      <Step></Step>
      <Name></Name>
      <Description></Description>
      <RuleNum></RuleNum>
      <GroupNum></GroupNum>
    </Group>
  </NamedGroups>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	NamedGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	ACL type	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4.</li><li>• 2—IPv6.</li><li>• 3—MAC.</li><li>• 4—User-defined.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupCategory	ACL Category	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—invalid.</li> <li>• <b>1</b>—basic.</li> <li>• <b>2</b>—advanced.</li> </ul>	The value range depends on the GroupType column. <ul style="list-style-type: none"> <li>• 1 to 2 if GroupType is <b>1 or 2</b>. <ul style="list-style-type: none"> <li>◦ basic ACL: 1.</li> <li>◦ advanced ACL: 2.</li> </ul> </li> <li>• 0 if GroupType is 3 or 4.</li> </ul>
GroupIndex	ACL name or number	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li>• <b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li>• <b>ACL number:</b> String of digits in the range of 2000 to 5999.</li> </ul>	The GroupIndex cannot be specified as an ACL name in GET operations for an ACL created by specifying both a number and a name. The value range depends on the GroupType column. <ul style="list-style-type: none"> <li>• 2000 to 3999 if GroupType is <b>1</b>. <ul style="list-style-type: none"> <li>◦ IPv4 basic ACL: 2000 to 2999.</li> <li>◦ IPv4 advanced ACL: 3000 to 3999.</li> </ul> </li> <li>• 2000 to 3999 if GroupType is <b>2</b>. <ul style="list-style-type: none"> <li>◦ IPv6 basic ACL: 2000 to 2999.</li> <li>◦ IPv6 advanced ACL: 3000 to 3999.</li> </ul> </li> <li>• 4000 to 4999 if GroupType is <b>3</b>. <ul style="list-style-type: none"> <li>◦ Ethernet frame header ACL: 4000 to 4999.</li> </ul> </li> <li>• 5000 to 5999 if GroupType is <b>4</b>.</li> </ul> User-defined ACL: 5000 to 5999.
MatchOrder	Order in which the rules are sorted	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Config. In this order, rules are sorted in ascending order of rule ID.</li> <li>• <b>2</b>—Auto. In this order, rules are sorted in depth-first order.</li> </ul>	N/A
Step	ACL rule numbering step	N/A	Unsigned integer. Value range: 1 to 20.	N/A
Name	ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Description	ACL description	N/A	String, case-sensitive. Length: 1 to 127 characters.	By default, an ACL has no description.
RuleNum	Number of rules in the ACL	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
GroupNum	Number of ACLs.	N/A	Unsigned integer.	N/A

## ACL/Intervals

This table contains ACL interval information.

## XML structure

```

<ACL>
  <Intervals>
    <Interval>
      <IntervalType></IntervalType>
      <IntervalValue></IntervalValue>
    </Interval>
  </Intervals>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	Intervals
Table type	Multi-instance table
Row name	Interval
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IntervalType	The type of the interval	Index	Enumeration: <ul style="list-style-type: none"> <li>1—logging.</li> <li>2—trap.</li> </ul>	The type of the interval specified for generating packet filtering logs or traps.
IntervalValue	The value of the interval	N/A	Unsigned integer. Value range: 5 to 1440.	It must be a multiple of 5.

# ACL/IPv4BasicRules

This table contains IPv4 basic ACL rule information.

## XML structure

```
<ACL>
  <IPv4BasicRules>
    <Rule>
      <GroupID></GroupID>
      <RuleID></RuleID>
      <Action></Action>
      <SrcAny></SrcAny>
      <SrcIPv4>
        <SrcIPv4Addr></SrcIPv4Addr>
        <SrcIPv4Wildcard></SrcIPv4Wildcard>
      </SrcIPv4>
      <SrcObjectGroup></SrcObjectGroup>
      <Fragment></Fragment>
      <TimeRange></TimeRange>
      <VRF></VRF>
      <Counting></Counting>
      <Logging></Logging>
      <Comment></Comment>
      <Status></Status>
      <Count></Count>
      <MatchIndex></MatchIndex>
    </Rule>
  </IPv4BasicRules>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	IPv4BasicRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 2000 to 2999.	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses.</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	N/A
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	The two members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments.</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A

## ACL/IPv4NamedBasicRules

This table contains named IPv4 basic ACL rule information.

### XML structure

```

<ACL>
  <IPv4NamedBasicRules>
    <Rule>
      <GroupIndex></GroupIndex>
      <RuleID></RuleID>
      <Action></Action>
      <SrcAny></SrcAny>
      <SrcIPv4>
        <SrcIPv4Addr></SrcIPv4Addr>
        <SrcIPv4Wildcard></SrcIPv4Wildcard>
      </SrcIPv4>
      <SrcObjectGroup></SrcObjectGroup>
      <Fragment></Fragment>
      <TimeRange></TimeRange>
      <VRF></VRF>
      <Counting></Counting>
      <Logging></Logging>
      <Comment></Comment>
    </Rule>
  </IPv4NamedBasicRules>
</ACL>

```

```

    <Status></Status>
    <Count></Count>
    <MatchIndex></MatchIndex>
    <RuleNum></RuleNum>
  </Rule>
</IPv4NamedBasicRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv4NamedBasicRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 2000 to 2999.</li> </ul>	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Deny.</li> <li><b>2</b>—Permit.</li> </ul>	N/A
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses.</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	N/A
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	The two members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments.</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNum	Number of rules in the ACL.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## ACL/IPv6BasicRules

This table contains IPv6 basic ACL rule information.

### XML structure

```

<ACL>
  <IPv6BasicRules>
    <Rule>
      <GroupID></GroupID>
      <RuleID></RuleID>
      <Action></Action>
      <SrcAny></SrcAny>
      <SrcIPv6>
        <SrcIPv6Addr></SrcIPv6Addr>
        <SrcIPv6Prefix></SrcIPv6Prefix>
      </SrcIPv6>
      <SrcObjectGroup></SrcObjectGroup>
      <RoutingTypeAny></RoutingTypeAny>
      <RoutingTypeValue></RoutingTypeValue>
      <Fragment></Fragment>
      <TimeRange></TimeRange>
      <VRF></VRF>
      <Counting></Counting>
      <Logging></Logging>
      <Comment></Comment>
      <Status></Status>
      <Count></Count>
      <MatchIndex></MatchIndex>
    </Rule>
  </IPv6BasicRules>
</ACL>

```

### Table description

Item	Description
Feature name	ACL
Table name	IPv6BasicRules
Table type	Multi-instance table
Row name	Rule

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 2000 to 2999.	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IPv6 addresses.</li> <li><b>false</b>—Matches the specified source IPv6 address.</li> </ul>	N/A
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Address.</li> <li>SrcIPv6Prefix.</li> </ul>	The members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
RoutingTypeAny	Whether a rule matches any types of routing header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of routing header.</li> <li><b>false</b>—Matches the specified type of routing header.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
RoutingTypeValue	Routing header type.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments.</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A

## ACL/IPv6NamedBasicRules

This table contains named IPv6 basic ACL rule information.

### XML structure

```

<ACL>
  <IPv6NamedBasicRules>
    <Rule>
      <GroupIndex></GroupIndex>
      <RuleID></RuleID>
      <Action></Action>
      <SrcAny></SrcAny>
    </Rule>
  </IPv6NamedBasicRules>
</ACL>

```

```

<SrcIPv6>
  <SrcIPv6Addr></SrcIPv6Addr>
  <SrcIPv6Prefix></SrcIPv6Prefix>
</SrcIPv6>
<SrcObjectGroup></SrcObjectGroup>
<RoutingTypeAny></RoutingTypeAny>
<RoutingTypeValue></RoutingTypeValue>
<Fragment></Fragment>
<TimeRange></TimeRange>
<VRF></VRF>
<Counting></Counting>
<Logging></Logging>
<Comment></Comment>
<Status></Status>
<Count></Count>
<MatchIndex></MatchIndex>
<RuleNum></RuleNum>
</Rule>
</IPv6NamedBasicRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv6NamedBasicRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 2000 to 2999.</li> </ul>	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches any source IPv6 addresses.</li> <li>false—Matches the specified source IPv6 address.</li> </ul>	N/A
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Address.</li> <li>SrcIPv6Prefix.</li> </ul>	The members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
RoutingTypeAny	Whether a rule matches any types of routing header.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches any types of routing header.</li> <li>false—Matches the specified type of routing header.</li> </ul>	N/A
RoutingTypeValue	Routing header type.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches only non-first fragments.</li> <li>false—Matches both fragments and non-fragments.</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A
RuleNum	Number of rules in the ACL.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## ACL/IPv4AdvanceRules

This table contains IPv4 advanced ACL rule information.

### XML structure

```

<ACL>
  <IPv4AdvanceRules>
    <Rule>
      <GroupID></GroupID>
      <RuleID></RuleID>
      <Action></Action>
      <ProtocolType></ProtocolType>
      <SrcAny></SrcAny>
      <SrcIPv4>
        <SrcIPv4Addr></SrcIPv4Addr>
        <SrcIPv4Wildcard></SrcIPv4Wildcard>
      </SrcIPv4>
      <SrcObjectGroup></SrcObjectGroup>
      <DstAny></DstAny>
      <DstIPv4>
        <DstIPv4Addr></DstIPv4Addr>

```

```

    <DstIPv4Wildcard></DstIPv4Wildcard>
</DstIPv4>
<DstObjectGroup></DstObjectGroup>
<ECN></ECN>
<DSCP></DSCP>
<DSCPRange>
    <StartDSCP></StartDSCP>
    <EndDSCP></EndDSCP>
</DSCPRange>
<Precedence></Precedence>
<TOS></TOS>
<SrcPort>
    <SrcPortOp></SrcPortOp>
    <SrcPortValue1></SrcPortValue1>
    <SrcPortValue2></SrcPortValue2>
</SrcPort>
<DstPort>
    <DstPortOp></DstPortOp>
    <DstPortValue1></DstPortValue1>
    <DstPortValue2></DstPortValue2>
</DstPort>
<TcpFlag>
    <ACK></ACK>
    <FIN></FIN>
    <PSH></PSH>
    <RST></RST>
    <SYN></SYN>
    <URG></URG>
</TcpFlag>
<Established></Established>
<ICMP>
    <ICMPType></ICMPType>
    <ICMPCode></ICMPCode>
</ICMP>
<Fragment></Fragment>
<TimeRange></TimeRange>
<VRF></VRF>
<QoSLocalID></QoSLocalID>
<EncapType></EncapType>
<InProtocolType></InProtocolType>
<VxlanID></VxlanID>
<InSrcAny></InSrcAny>
<InSrcIPv4>
    <InSrcIPv4Addr></InSrcIPv4Addr>
    <InSrcIPv4Wildcard></InSrcIPv4Wildcard>
</InSrcIPv4>
<InDstAny></InDstAny>
<InDstIPv4>

```

```

    <InDstIPv4Addr></InDstIPv4Addr>
    <InDstIPv4Wildcard></InDstIPv4Wildcard>
</InDstIPv4>
<InSrcPort>
    <InSrcPortOp></InSrcPortOp>
    <InSrcPortValue1></InSrcPortValue1>
    <InSrcPortValue2></InSrcPortValue2>
</InSrcPort>
<InDstPort>
    <InDstPortOp></InDstPortOp>
    <InDstPortValue1></InDstPortValue1>
    <InDstPortValue2></InDstPortValue2>
</InDstPort>
<InEstablished></InEstablished>
<Counting></Counting>
<Logging></Logging>
<Comment></Comment>
<GreValue></GreValue>
<Options></Options>
<FragmentType></FragmentType>
<Status></Status>
<Count></Count>
<MatchIndex></MatchIndex>
<Ttl>
    <TtlOp></TtlOp>
    <TtlValue1></TtlValue1>
    <TtlValue2></TtlValue2>
</Ttl>
<PktLength>
    <PktLengthOp></PktLengthOp>
    <PktLengthValue1></PktLengthValue1>
    <PktLengthValue2></PktLengthValue2>
</PktLength>
</Rule>
</IPv4AdvanceRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv4AdvanceRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 3000 to 3999.	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv4 protocols.	N/A
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses.</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	N/A
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	The members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DstAny	Whether a rule matches any destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IP addresses (default).</li> <li><b>false</b>—Matches the specified destination IP address.</li> </ul>	The VXLAN encapsulation supports this column. This column must be configured together with the <b>DstIPv4</b> column.

Column name	Column description	Column type	Data type and restrictions	Remarks
DstIPv4	Destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv4Addr.</li> <li>DstIPv4Wildcard.</li> </ul>	The members must both be specified.
DstIPv4Addr	Destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv4Wildcard	Wildcard mask for the destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstObjectGroup	Destination object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
ECN	ECN flag.	N/A	Unsigned integer. Value range: 0 to 3.	ECN and TOS cannot be specified together.
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
DSCPRange	DSCP priority range.	Data structure	Members include: <ul style="list-style-type: none"> <li>StartDSCP</li> <li>EndDSCP</li> </ul>	DSCP and DSCPRange cannot be specified together.
StartDSCP	Start DSCP priority of a DSCP priority range.	N/A	Unsigned integer. Value range: 0 to 63.	The end DSCP must be greater than start DSCP.
EndDSCP	End DSCP priority of a DSCP priority range.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
Precedence	IP precedence.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
TOS	ToS preference.	N/A	Unsigned integer. Value range: 0 to 15.	N/A
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.



Column name	Column description	Column type	Data type and restrictions	Remarks
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
SrcPortValue 1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPortValue 2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstPortOp.</li> <li>DstPortValue1.</li> <li>DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
DstPortValue 1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPortValue 2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
TcpFlag	TCP flags.	Data structure	Members include: <ul style="list-style-type: none"> <li>ACK.</li> <li>FIN.</li> <li>PSH.</li> <li>RST.</li> <li>SYN.</li> <li>URG.</li> </ul>	N/A
ACK	ACK flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—ACK flag is not set.</li> <li>1—ACK flag is set.</li> </ul>	Only the TCP protocol supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
FIN	FIN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—FIN flag is not set.</li> <li>1—FIN flag is set.</li> </ul>	Only the TCP protocol supports this column.
PSH	PSH flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—PSH flag is not set.</li> <li>1—PSH flag is set.</li> </ul>	Only the TCP protocol supports this column.
RST	RST flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—RST flag is not set.</li> <li>1—RST flag is set.</li> </ul>	Only the TCP protocol supports this column.
SYN	SYN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—SYN flag is not set.</li> <li>1—SYN flag is set.</li> </ul>	Only the TCP protocol supports this column.
URG	URG flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>0—URG flag is not set.</li> <li>1—URG flag is set.</li> </ul>	Only the TCP protocol supports this column.
Established	Whether a rule matches flags indicating the established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches the flags.</li> <li>false—Ignores the flags.</li> </ul>	Only the TCP protocol supports this column.  On a router, the rule matches TCP connection packets with the ACK or RST flag set. On a switch, the availability and usage of this column depend on the device model.
ICMP	ICMP messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>ICMPType.</li> <li>ICMPCode.</li> </ul>	The members must both be specified.
ICMPType	Type of ICMP messages.	N/A	Unsigned integer. Value range: 0 to 255.	Only the ICMP protocol supports this column.
ICMPCode	Code of ICMP messages.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 indicates that no ICMP message code is specified.	Only the ICMP protocol supports this column.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Matches only non-first fragments.</li> <li>false—Matches both fragments and non-fragments.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeRange	Time range.	N/A	String, case-insensitive. Length: 0 to 32 characters.	N/A
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
QoSLocalID	Local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A
EncapType	Encapsulation type.	N/A	Members include: <ul style="list-style-type: none"> <li>VXLAN encapsulation.</li> <li>GRE encapsulation.</li> <li>IPINIP encapsulation.</li> </ul>	N/A
InProtocolType	Inner protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv4 protocols.	Only the VXLAN encapsulation supports this column.
VxlanID	VXLAN ID	N/A	Unsigned integer Value range: 0 to 16777215	Only the VXLAN encapsulation supports this column.
InSrcAny	Whether a rule matches any inner source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any inner source IP addresses.</li> <li><b>false</b>—Matches the specified inner source IP address.</li> </ul>	N/A
InSrcIPv4	Inner source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcIPv4Addr.</li> <li>InSrcIPv4Wildcard.</li> </ul>	Only the VXLAN encapsulation supports this column.  The two members must both be specified.
InSrcIPv4Addr	Inner source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.  This column is available when the <b>InSrcAny</b> column is <b>false</b> .  It must be empty when the <b>InSrcAny</b> column is <b>true</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
InSrcIPv4Wildcard	Wildcard mask for the inner source IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>InSrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InSrcAny</b> column is <b>true</b>.</p>
InDstAny	Whether a rule matches any inner destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any inner destination IP addresses.</li> <li><b>false</b>—Matches the specified inner destination IP address.</li> </ul>	N/A
InDstIPv4	Inner destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstIPv4Addr.</li> <li>InDstIPv4Wildcard.</li> </ul>	<p>Only the VXLAN encapsulation supports this column.</p> <p>The two members must both be specified.</p>
InDstIPv4Addr	Inner destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>This column is available when the <b>InDstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InDstAny</b> column is <b>true</b>.</p>
InDstIPv4Wildcard	Wildcard mask for the inner destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>InDstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InDstAny</b> column is <b>true</b>.</p>
InSrcPort	Inner source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcPortOp.</li> <li>InSrcPortValue1.</li> <li>InSrcPortValue2.</li> </ul>	<p>Only the TCP and UDP inner protocols support this column.</p> <p>The members must be all specified.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
InSrcPortOp	Inner source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
InSrcPortValue1	Start inner source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InSrcPortValue2	End inner source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When InSrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end inner source port is not available.
InDstPort	Inner destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstPortOp.</li> <li>InDstPortValue1.</li> <li>InDstPortValue2.</li> </ul>	Only the TCP and UDP inner protocols support this column.  The members must be all specified.
InDstPortOp	Inner destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
InDstPortValue1	Start inner destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InDstPortValue2	End inner destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When InDstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end inner destination port is not available.
InEstablished	Whether a rule matches flags indicating the inner established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches the flags.</li> <li><b>false</b>—Ignores the flags.</li> </ul>	Only the TCP inner protocol supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
GreValue	Config a gre value.	N/A	Hexadecimal string. Length: 1 to 8 characters. Value range: 0 to FFFFFFFF.	Only the GRE protocol supports this column.
Options	IP options.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Options.</li> <li><b>false</b>—Not options, default.</li> </ul>	Only when the ProtocolType value is 256, and then the table can support this column.
FragmentType	Check fragment packet type.	N/A	Unsigned integer. Value range: 0 to 3. <ul style="list-style-type: none"> <li><b>0</b>—First-fragment.</li> <li><b>1</b>—Non-fragment.</li> <li><b>2</b>—Non-or-first-fragment.</li> <li><b>3</b>—Any-fragment.</li> </ul>	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A
Ttl	Whether a rule matches TTL.	Data structure	Members include: <ul style="list-style-type: none"> <li>TtlOp.</li> <li>TtlValue1.</li> <li>TtlValue2.</li> </ul>	N/A
TtlOp	TTL operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—lt (lower than).</li> <li><b>2</b>—eq (equal to).</li> <li><b>3</b>—gt (greater than).</li> <li><b>4</b>—neq (not equal to).</li> <li><b>5</b>—range (inclusive range).</li> </ul>	N/A
TtlValue1	Start TTL value.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 1 to 255.	
TtlValue2	End TTL value.	N/A	Unsigned integer. Value range: 1 to 256.	When the TtlOp is 5, the value range is 1 to 255. Otherwise, it can only be 256. <b>The value 256 indicates that the end TTL value is not available.</b>
PktLength	Whether a rule matches packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li>PktLengthOp.</li> <li>PktLengthValue1.</li> <li>PktLengthValue2.</li> </ul>	N/A
PktLengthOp	Packet length operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
PktLengthValue1	Start packet length value.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PktLengthValue2	End packet length value.	N/A	Unsigned integer. Value range: 0 to 65536.	When the PktLengthOp is 5, the value range is 0 to 65535. Otherwise, it can only be 65536. <b>The value 65536 indicates that the packet length value is not available.</b>

## ACL/IPv4NamedAdvanceRules

This table contains named IPv4 advanced ACL rule information.

### XML structure

```

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      <RuleID></RuleID>
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        <SrcIPv4Wildcard></SrcIPv4Wildcard>
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  </IPv4NamedAdvanceRules>
</ACL>

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```

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  <InSrcIPv4Wildcard></InSrcIPv4Wildcard>

```



```

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</ACL>

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## Table description

Item	Description
Feature name	ACL
Table name	IPv4NamedAdvanceRules
Table type	Multi-instance table

Item	Description
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 3000 to 3999.</li> </ul>	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Deny.</li> <li><b>2</b>—Permit.</li> </ul>	N/A
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv4 protocols.	N/A
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses.</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	N/A
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	The members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DstAny	Whether a rule matches any destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IP addresses.</li> <li><b>false</b>—Matches the specified destination IP address.</li> </ul>	N/A
DstIPv4	Destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv4Addr.</li> <li>DstIPv4Wildcard.</li> </ul>	The members must both be specified.
DstIPv4Addr	Destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv4Wildcard	Wildcard mask for the destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstObjectGroup	Destination object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
ECN	ECN flag.	N/A	Unsigned integer. Value range: 0 to 3.	ECN and TOS cannot be specified together.
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
DSCPRange	DSCP priority range.	Data structure	Members include: <ul style="list-style-type: none"> <li>StartDSCP</li> <li>EndDSCP</li> </ul>	DSCP and DSCPRange cannot be specified together.
StartDSCP	Start DSCP priority of a DSCP priority range.	N/A	Unsigned integer. Value range: 0 to 63.	The end DSCP must be greater than start DSCP.
EndDSCP	End DSCP priority of a DSCP priority range.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
Precedence	IP precedence.	N/A	Unsigned integer. Value range: 0 to 7.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TOS	ToS preference.	N/A	Unsigned integer. Value range: 0 to 15.	N/A
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• SrcPortOp.</li> <li>• SrcPortValue1.</li> <li>• SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—lt (lower than).</li> <li>• 2—eq (equal to).</li> <li>• 3—gt (greater than).</li> <li>• 4—neq (not equal to).</li> <li>• 5—range (inclusive range).</li> </ul>	N/A
SrcPortValue 1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPortValue 2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• DstPortOp.</li> <li>• DstPortValue1.</li> <li>• DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—lt (lower than).</li> <li>• 2—eq (equal to).</li> <li>• 3—gt (greater than).</li> <li>• 4—neq (not equal to).</li> <li>• 5—range (inclusive range).</li> </ul>	N/A
DstPortValue 1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPortValue 2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.

Column name	Column description	Column type	Data type and restrictions	Remarks
TcpFlag	TCP flags.	Data structure	Members include: <ul style="list-style-type: none"> <li>• ACK.</li> <li>• FIN.</li> <li>• PSH.</li> <li>• RST.</li> <li>• SYN.</li> <li>• URG.</li> </ul>	N/A
ACK	ACK flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—ACK flag is not set.</li> <li>• <b>1</b>—ACK flag is set.</li> </ul>	Only the TCP protocol supports this column.
FIN	FIN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—FIN flag is not set.</li> <li>• <b>1</b>—FIN flag is set.</li> </ul>	Only the TCP protocol supports this column.
PSH	PSH flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—PSH flag is not set.</li> <li>• <b>1</b>—PSH flag is set.</li> </ul>	Only the TCP protocol supports this column.
RST	RST flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—RST flag is not set.</li> <li>• <b>1</b>—RST flag is set.</li> </ul>	Only the TCP protocol supports this column.
SYN	SYN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—SYN flag is not set.</li> <li>• <b>1</b>—SYN flag is set.</li> </ul>	Only the TCP protocol supports this column.
URG	URG flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—URG flag is not set.</li> <li>• <b>1</b>—URG flag is set.</li> </ul>	Only the TCP protocol supports this column.
Established	Whether a rule matches flags indicating the established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Matches the flags.</li> <li>• <b>false</b>—Ignores the flags.</li> </ul>	Only the TCP protocol supports this column.  On a router, the rule matches TCP connection packets with the ACK or RST flag set. On a switch, the availability and usage of this column depend on the device model.
ICMP	ICMP messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>• ICMPType.</li> <li>• ICMPCode.</li> </ul>	The members must both be specified.
ICMPType	Type of ICMP messages.	N/A	Unsigned integer. Value range: 0 to 255.	Only the ICMP protocol supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
ICMPCode	Code of ICMP messages.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 indicates that no ICMP message code is specified.	Only the ICMP protocol supports this column.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments.</li> </ul>	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 0 to 32 characters.	N/A
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
QoSLocalID	Local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A
EncapType	Encapsulation type.	N/A	Members include: <ul style="list-style-type: none"> <li>VXLAN encapsulation.</li> <li>GRE encapsulation.</li> <li>IPINIP encapsulation.</li> </ul>	N/A
InProtocolType	Inner protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv4 protocols.	Only the VXLAN encapsulation supports this column.
VxlanID	VXLAN ID.	N/A	Unsigned integer Value range: 0 to 16777215	Only the VXLAN encapsulation supports this column.
InSrcAny	Whether a rule matches any inner source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any inner source IP addresses.</li> <li><b>false</b>—Matches the specified inner source IP address.</li> </ul>	N/A
InSrcIPv4	Inner source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcIPv4Addr.</li> <li>InSrcIPv4Wildcard.</li> </ul>	Only the VXLAN encapsulation supports this column.  The two members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
InSrcIPv4Addr	Inner source IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>This column is available when the <b>InSrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InSrcAny</b> column is <b>true</b>.</p>
InSrcIPv4Wildcard	Wildcard mask for the inner source IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>InSrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InSrcAny</b> column is <b>true</b>.</p>
InDstAny	Whether a rule matches any inner destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any inner destination IP addresses.</li> <li><b>false</b>—Matches the specified inner destination IP address.</li> </ul>	N/A
InDstIPv4	Inner destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstIPv4Addr.</li> <li>InDstIPv4Wildcard.</li> </ul>	<p>Only the VXLAN encapsulation supports this column.</p> <p>The two members must both be specified.</p>
InDstIPv4Addr	Inner destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>This column is available when the <b>InDstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InDstAny</b> column is <b>true</b>.</p>
InDstIPv4Wildcard	Wildcard mask for the inner destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>InDstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>InDstAny</b> column is <b>true</b>.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
InSrcPort	Inner source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcPortOp.</li> <li>InSrcPortValue1.</li> <li>InSrcPortValue2.</li> </ul>	Only the TCP and UDP inner protocols support this column.  The members must be all specified.
InSrcPortOp	Inner source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
InSrcPortValue1	Start inner source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InSrcPortValue2	End inner source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When InSrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end inner source port is not available.
InDstPort	Inner destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstPortOp.</li> <li>InDstPortValue1.</li> <li>InDstPortValue2.</li> </ul>	Only the TCP and UDP inner protocols support this column.  The members must be all specified.
InDstPortOp	Inner destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
InDstPortValue1	Start inner destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InDstPortValue2	End inner destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When InDstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end inner destination port is not available.



Column name	Column description	Column type	Data type and restrictions	Remarks
InEstablished	Whether a rule matches flags indicating the inner established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches the flags.</li> <li><b>false</b>—Ignores the flags.</li> </ul>	Only the TCP inner protocol supports this column.
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
GreValue	Config a gre value.	N/A	Hexadecimal string. Length: 1 to 8 characters. Value range: 0 to FFFFFFFF.	Only the GRE protocol supports this column.
Options	IP options.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Options.</li> <li><b>false</b>—Not options, default.</li> </ul>	Only when the ProtocolType value is 256, and then the table can support this column.
FragmentType	Check fragment packet type.	N/A	Unsigned integer. Value range: 0 to 3. <ul style="list-style-type: none"> <li><b>0</b>—First-fragment.</li> <li><b>1</b>—Non-fragment.</li> <li><b>2</b>—Non-or-first-fragment.</li> <li><b>3</b>—Any-fragment.</li> </ul>	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A
RuleNum	Number of rules in the ACL.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Ttl	Whether a rule matches TTL.	Data structure	Members include: <ul style="list-style-type: none"> <li>TtlOp.</li> <li>TtlValue1.</li> <li>TtlValue2.</li> </ul>	N/A
TtlOp	TTL operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
TtlValue1	Start TTL value.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
TtlValue2	End TTL value.	N/A	Unsigned integer. Value range: 1 to 256.	When the TtlOp is 5, the value range is 1 to 255. Otherwise, it can only be 256. <b>The value 256 indicates that the end TTL value is not available.</b>
PktLength	Whether a rule matches packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li>PktLengthOp.</li> <li>PktLengthValue1.</li> <li>PktLengthValue2.</li> </ul>	N/A
PktLengthOp	Packet length operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
PktLengthValue1	Start packet length value.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PktLengthValue2	End packet length value.	N/A	Unsigned integer. Value range: 0 to 65536.	When the PktLengthOp is 5, the value range is 0 to 65535. Otherwise, it can only be 65536. <b>The value 65536 indicates that the packet length value is not available.</b>

## ACL/IPv6AdvanceRules

This table contains IPv6 advanced ACL rule information.

### XML structure

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```

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    <RuleID></RuleID>
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    <SrcObjectGroup></SrcObjectGroup>
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      <DstIPv6Prefix></DstIPv6Prefix>
    </DstIPv6>
    <DstObjectGroup></DstObjectGroup>
    <ECN></ECN>
    <DSCP></DSCP>
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    <RoutingTypeValue></RoutingTypeValue>
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      <SrcPortValue2></SrcPortValue2>
    </SrcPort>
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      <DstPortValue2></DstPortValue2>
    </DstPort>
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      <SYN></SYN>
      <URG></URG>
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</IPv6AdvanceRules>

```

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<Logging></Logging>
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</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv6AdvanceRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 3000 to 3999.	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv6 protocols.	N/A
SrcAny	Whether a rule matches any source IPv6 addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IPv6 addresses.</li> <li><b>false</b>—Matches the specified source IPv6 address.</li> </ul>	N/A
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr.</li> <li>SrcIPv6Prefix.</li> </ul>	The two members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DstAny	Whether a rule matches any destination IPv6 addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IPv6 addresses.</li> <li><b>false</b>—Matches the specified destination IPv6 address.</li> </ul>	N/A
DstIPv6	Destination IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv6Addr.</li> <li>DstIPv6Prefix.</li> </ul>	The two members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
DstIPv6Addr	Destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv6Prefix	Length of the destination IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstObjectGroup	Destination object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
ECN	ECN flag.	N/A	Unsigned integer. Value range: 0 to 3.	N/A
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
FlowLabel	Flow label value in an IPv6 packet header.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
RoutingTypeAny	Whether a rule matches any types of routing header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of routing header.</li> <li><b>false</b>—Matches the specified type of routing header.</li> </ul>	N/A
RoutingTypeValue	Routing header type.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—lt (lower than).</li> <li><b>2</b>—eq (equal to).</li> <li><b>3</b>—gt (greater than).</li> <li><b>4</b>—neq (not equal to).</li> <li><b>5</b>—range (inclusive range).</li> </ul>	N/A
SrcPortValue1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcPortValue2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• DstPortOp.</li> <li>• DstPortValue1.</li> <li>• DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—lt (lower than).</li> <li>• <b>2</b>—eq (equal to).</li> <li>• <b>3</b>—gt (greater than).</li> <li>• <b>4</b>—neq (not equal to).</li> <li>• <b>5</b>—range (inclusive range).</li> </ul>	N/A
DstPortValue1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPortValue2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
TcpFlag	TCP flags.	Data structure	Members include: <ul style="list-style-type: none"> <li>• ACK.</li> <li>• FIN.</li> <li>• PSH.</li> <li>• RST.</li> <li>• SYN.</li> <li>• URG.</li> </ul>	N/A
ACK	ACK flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—ACK flag is not set.</li> <li>• <b>1</b>—ACK flag is set.</li> </ul>	Only the TCP protocol supports this column.
FIN	FIN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—FIN flag is not set.</li> <li>• <b>1</b>—FIN flag is set.</li> </ul>	Only the TCP protocol supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
PSH	PSH flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—PSH flag is not set.</li> <li><b>1</b>—PSH flag is set.</li> </ul>	Only the TCP protocol supports this column.
RST	RST flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—RST flag is not set.</li> <li><b>1</b>—RST flag is set.</li> </ul>	Only the TCP protocol supports this column.
SYN	SYN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—SYN flag is not set.</li> <li><b>1</b>—SYN flag is set.</li> </ul>	Only the TCP protocol supports this column.
URG	URG flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li><b>0</b>—URG flag is not set.</li> <li><b>1</b>—URG flag is set.</li> </ul>	Only the TCP protocol supports this column.
Established	Whether a rule matches flags indicating the established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches the flags.</li> <li><b>false</b>—Ignores the flags.</li> </ul>	Only the TCP protocol supports this column. On a router, the rule matches TCP connection packets with the ACK or RST flag set. On a switch, the availability and usage of this column depend on the device model.
ICMP6	ICMPv6 messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>ICMP6Type.</li> <li>ICMP6Code.</li> </ul>	The members must both be specified.
ICMP6Type	Type of ICMPv6 messages.	N/A	Unsigned integer. Value range: 0 to 255.	Only the ICMPv6 protocol supports this column.
ICMP6Code	Code of ICMPv6 messages.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 indicates that no ICMPv6 message code is specified.	Only the ICMPv6 protocol supports this column.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
HopTypeAny	Whether a rule matched any types of Hop-by-Hop Options header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of Hop-by-Hop Options header.</li> <li><b>false</b>—Matches the specified type of Hop-by-Hop Options header.</li> </ul>	N/A
HopTypeValue	Type of Hop-by-Hop Options header.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 0 to 32 characters.	N/A
VRF	VRF.	N/A	String, case-sensitive. Length: 0 to 31 characters.	N/A
QoSLocalID	Local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
GreValue	Config a gre value.	N/A	Hexadecimal string. Length: 1 to 8 characters. Value range: 0 to FFFFFFFF.	Only the GRE protocol supports this column.
Options	IP options.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Options.</li> <li><b>false</b>—Not options.</li> </ul>	Only when the ProtocolType value is 256, and then the table can support this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
FragmentType	Check fragment packet type.	N/A	Unsigned integer. Value range: 0 to 3. <ul style="list-style-type: none"> <li>0—First-fragment.</li> <li>1—Non-fragment.</li> <li>2—Non-or-first-fragment.</li> <li>3—Any-fragment.</li> </ul>	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Active.</li> <li>2—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A
Ttl	Whether a rule matches TTL.	Data structure	Members include: <ul style="list-style-type: none"> <li>TtlOp.</li> <li>TtlValue1.</li> <li>TtlValue2.</li> </ul>	N/A
TtlOp	TTL operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
TtlValue1	Start TTL value.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
TtlValue2	End TTL value.	N/A	Unsigned integer. Value range: 1 to 256.	When the TtlOp is 5, the value range is 1 to 255. Otherwise, it can only be 256. The value 256 indicates that the end TTL value is not available.
PktLength	Whether a rule matches packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li>PktLengthOp.</li> <li>PktLengthValue1.</li> <li>PktLengthValue2.</li> </ul>	N/A
PktLengthOp	Packet length operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			range).	
PktLengthValue 1	Start packet length value.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PktLengthValue 2	End packet length value.	N/A	Unsigned integer. Value range: 0 to 65536.	When the PktLengthOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536 <b>The value 65536 indicates that the packet length value is not available.</b>

## ACL/IPv6NamedAdvanceRules

This table contains named IPv6 advanced ACL rule information.

### XML structure

```

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  <IPv6NamedAdvanceRules>
    <Rule>
      <GroupIndex></GroupIndex>
      <RuleID></RuleID>
      <Action></Action>
      <ProtocolType></ProtocolType>
      <SrcAny></SrcAny>
      <SrcIPv6>
        <SrcIPv6Addr></SrcIPv6Addr>
        <SrcIPv6Prefix></SrcIPv6Prefix>
      </SrcIPv6>
      <SrcObjectGroup></SrcObjectGroup>
      <DstAny></DstAny>
      <DstIPv6>
        <DstIPv6Addr></DstIPv6Addr>
        <DstIPv6Prefix></DstIPv6Prefix>
      </DstIPv6>
      <DstObjectGroup></DstObjectGroup>
      <ECN></ECN>
      <DSCP></DSCP>
      <FlowLabel></FlowLabel>
      <RoutingTypeAny></RoutingTypeAny>
      <RoutingTypeValue></RoutingTypeValue>
      <SrcPort>
        <SrcPortOp></SrcPortOp>
        <SrcPortValue1></SrcPortValue1>
        <SrcPortValue2></SrcPortValue2>
      </SrcPort>
      <DstPort>

```

```

        <DstPortOp></DstPortOp>
        <DstPortValue1></DstPortValue1>
        <DstPortValue2></DstPortValue2>
    </DstPort>
    <TcpFlag>
        <ACK></ACK>
        <FIN></FIN>
        <PSH></PSH>
        <RST></RST>
        <SYN></SYN>
        <URG></URG>
    </TcpFlag>
    <Established></Established>
    <ICMP6>
        <ICMP6Type></ICMP6Type>
        <ICMP6Code></ICMP6Code>
    </ICMP6>
    <Fragment></Fragment>
    <HopTypeAny></HopTypeAny>
    <HopTypeValue></HopTypeValue>
    <TimeRange></TimeRange>
    <VRF></VRF>
    <QoSLocalID></QoSLocalID>
    <Counting></Counting>
    <Logging></Logging>
    <Comment></Comment>
    <GreValue></GreValue>
    <Options></Options>
    <FragmentType></FragmentType>
    <Status></Status>
    <Count></Count>
    <MatchIndex></MatchIndex>
    <RuleNum></RuleNum>
    <Ttl>
        <TtlOp></TtlOp>
        <TtlValue1></TtlValue1>
        <TtlValue2></TtlValue2>
    </Ttl>
    <PktLength>
        <PktLengthOp></PktLengthOp>
        <PktLengthValue1></PktLengthValue1>
        <PktLengthValue2></PktLengthValue2>
    </PktLength>
    </Rule>
</IPv6NamedAdvanceRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	IPv6NamedAdvanceRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 3000 to 3999.</li> </ul>	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Deny.</li> <li><b>2</b>—Permit.</li> </ul>	N/A
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 represents all IPv6 protocols.	N/A
SrcAny	Whether a rule matches any source IPv6 addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IPv6 addresses.</li> <li><b>false</b>—Matches the specified source IPv6 address.</li> </ul>	N/A
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr.</li> <li>SrcIPv6Prefix.</li> </ul>	The two members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>SrcAny</b> column is <b>false</b> . It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcObjectGroup	Source object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DstAny	Whether a rule matches any destination IPv6 addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IPv6 addresses.</li> <li><b>false</b>—Matches the specified destination IPv6 address.</li> </ul>	N/A
DstIPv6	Destination IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv6Addr.</li> <li>DstIPv6Prefix.</li> </ul>	The two members must both be specified.
DstIPv6Addr	Destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv6Prefix	Length of the destination IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstObjectGroup	Destination object group name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
ECN	ECN flag.	N/A	Unsigned integer. Value range: 0 to 3.	N/A
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
FlowLabel	Flow label value in an IPv6 packet header.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RoutingTypeAny	Whether a rule matches any types of routing header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of routing header.</li> <li><b>false</b>—Matches the specified type of routing header.</li> </ul>	N/A
RoutingTypeValue	Routing header type.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—lt (lower than).</li> <li><b>2</b>—eq (equal to).</li> <li><b>3</b>—gt (greater than).</li> <li><b>4</b>—neq (not equal to).</li> <li><b>5</b>—range (inclusive range).</li> </ul>	N/A
SrcPortValue1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPortValue2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstPortOp.</li> <li>DstPortValue1.</li> <li>DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—lt (lower than).</li> <li><b>2</b>—eq (equal to).</li> <li><b>3</b>—gt (greater than).</li> <li><b>4</b>—neq (not equal to).</li> <li><b>5</b>—range (inclusive range).</li> </ul>	N/A
DstPortValue1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DstPortValue2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
TcpFlag	TCP flags.	Data structure	Members include: <ul style="list-style-type: none"> <li>• ACK.</li> <li>• FIN.</li> <li>• PSH.</li> <li>• RST.</li> <li>• SYN.</li> <li>• URG.</li> </ul>	N/A
ACK	ACK flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—ACK flag is not set.</li> <li>• <b>1</b>—ACK flag is set.</li> </ul>	Only the TCP protocol supports this column.
FIN	FIN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—FIN flag is not set.</li> <li>• <b>1</b>—FIN flag is set.</li> </ul>	Only the TCP protocol supports this column.
PSH	PSH flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—PSH flag is not set.</li> <li>• <b>1</b>—PSH flag is set.</li> </ul>	Only the TCP protocol supports this column.
RST	RST flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—RST flag is not set.</li> <li>• <b>1</b>—RST flag is set.</li> </ul>	Only the TCP protocol supports this column.
SYN	SYN flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—SYN flag is not set.</li> <li>• <b>1</b>—SYN flag is set.</li> </ul>	Only the TCP protocol supports this column.
URG	URG flag in a TCP packet.	N/A	Unsigned integer. Value range: 0 or 1. <ul style="list-style-type: none"> <li>• <b>0</b>—URG flag is not set.</li> <li>• <b>1</b>—URG flag is set.</li> </ul>	Only the TCP protocol supports this column.



Column name	Column description	Column type	Data type and restrictions	Remarks
Established	Whether a rule matches flags indicating the established status of a TCP connection.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches the flags.</li> <li><b>false</b>—Ignores the flags.</li> </ul>	Only the TCP protocol supports this column. On a router, the rule matches TCP connection packets with the ACK or RST flag set. On a switch, the availability and usage of this column depend on the device model.
ICMP6	ICMPv6 messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>ICMP6Type.</li> <li>ICMP6Code.</li> </ul>	The members must both be specified.
ICMP6Type	Type of ICMPv6 messages.	N/A	Unsigned integer. Value range: 0 to 255.	Only the ICMPv6 protocol supports this column.
ICMP6Code	Code of ICMPv6 messages.	N/A	Unsigned integer. Value range: 0 to 256. The value 256 indicates that no ICMPv6 message code is specified.	Only the ICMPv6 protocol supports this column.
Fragment	Whether a rule matches only non-first fragments.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches only non-first fragments.</li> <li><b>false</b>—Matches both fragments and non-fragments.</li> </ul>	N/A
HopTypeAny	Whether a rule matched any types of Hop-by-Hop Options header.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any types of Hop-by-Hop Options header.</li> <li><b>false</b>—Matches the specified type of Hop-by-Hop Options header.</li> </ul>	N/A
HopTypeValue	Type of Hop-by-Hop Options header.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 0 to 32 characters.	N/A
VRF	VRF.	N/A	String, case-sensitive. Length: 0 to 31 characters.	N/A
QoSLocalID	Local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Logging	Whether to log rule match events.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Logs rule match events.</li> <li><b>false</b>—Does not log rule match events.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
GreValue	Config a gre value.	N/A	Hexadecimal string. Length: 1 to 8 characters. Value range: 0 to FFFFFFFF.	Only the GRE protocol supports this column.
Options	IP options.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Options.</li> <li><b>false</b>—Not options, default.</li> </ul>	Only when the ProtocolType value is 256, and then the table can support this column.
FragmentType	Check fragment packet type.	N/A	Unsigned integer. Value range: 0 to 3. <ul style="list-style-type: none"> <li><b>0</b>—First-fragment.</li> <li><b>1</b>—Non-fragment.</li> <li><b>2</b>—Non-or-first-fragment.</li> <li><b>3</b>—Any-fragment.</li> </ul>	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A
RuleNum	Number of rules in the ACL.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Ttl	Whether a rule matches TTL.	Data structure	Members include: <ul style="list-style-type: none"> <li>TtlOp.</li> <li>TtlValue1.</li> <li>TtlValue2.</li> </ul>	N/A
TtlOp	TTL operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—lt (lower than).</li> <li><b>2</b>—eq (equal to).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	
TtlValue1	Start TTL value.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
TtlValue2	End TTL value.	N/A	Unsigned integer. Value range: 1 to 256.	When the TtlOp is 5, the value range is 1 to 255. Otherwise, it can only be 256. <b>The value 256 indicates that the end TTL value is not available.</b>
PktLength	Whether a rule matches packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li>PktLengthOp.</li> <li>PktLengthValue1.</li> <li>PktLengthValue2.</li> </ul>	N/A
PktLengthOp	Packet length operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
PktLengthValue 1	Start packet length value.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PktLengthValue 2	End packet length value.	N/A	Unsigned integer. Value range: 0 to 65536.	When the PktLengthOp is 5, the value range is 0 to 65535. Otherwise, it can only be 65536. <b>The value 65536 indicates that the packet length value is not available.</b>

## ACL/MACRules

This table contains Ethernet frame header ACL rule information.

### XML structure

```

<ACL>
  <MACRules>
    <Rule>
      <GroupID></GroupID>
      <RuleID></RuleID>
      <Action></Action>
    </Rule>
  </MACRules>
</ACL>

```

```

<SrcMACAddr>
  <SrcMACAddress></SrcMACAddress>
  <SrcMACMask></SrcMACMask>
</SrcMACAddr>
<DstMACAddr>
  <DstMACAddress></DstMACAddress>
  <DstMACMask></DstMACMask>
</DstMACAddr>
<COS></COS>
<Protocol>
  <ProtocolType></ProtocolType>
  <ProtocolTypeMask></ProtocolTypeMask>
</Protocol>
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  <LSAPType></LSAPType>
  <LSAPTypeMask></LSAPTypeMask>
</LSAP>
<EncapType></EncapType>
<VxlanID></VxlanID>
<InSrcMACAddr>
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</InSrcMACAddr>
<InDstMACAddr>
  <InDstMACAddress></InDstMACAddress>
  <InDstMACMask></InDstMACMask>
</InDstMACAddr>
<InProtocol>
  <InProtocolType></InProtocolType>
  <InProtocolTypeMask></InProtocolTypeMask>
</InProtocol>
<TimeRange></TimeRange>
<Counting></Counting>
<Comment></Comment>
<Status></Status>
<Count></Count>
<MatchIndex></MatchIndex>
</Rule>
</MACRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	MACRules
Table type	Multi-instance table

Item	Description
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 4000 to 4999.	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
SrcMACAddr	Information about the source MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcMACAddress.</li> <li>SrcMACMask.</li> </ul>	The members must both be specified.
SrcMACAddresses	Source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
SrcMACMask	Mask of the source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff.
DstMACAddr	Information about the destination MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstMACAddress.</li> <li>DstMACMask.</li> </ul>	The members must both be specified.
DstMACAddresses	Destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
DstMACMask	Mask of the destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff.
COS	802.1p priority.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
Protocol	Link layer protocol.	Data structure	Members include: <ul style="list-style-type: none"> <li>ProtocolType.</li> <li>ProtocolTypeMask.</li> </ul>	The members must both be specified.
ProtocolType	Type of the link layer protocol.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
ProtocolTypeMask	Mask of the link layer protocol type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
LSAP	LSAP.	Data structure	Members include: <ul style="list-style-type: none"> <li>LSAPType.</li> <li>LSAPTypeMask.</li> </ul>	The members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
LSAPType	Type of LSAP.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
LSAPTypeMask	Mask of the LSAP type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
EncapType	Encapsulation type.	N/A	Members include: <ul style="list-style-type: none"> <li>VXLAN encapsulation.</li> <li>GRE encapsulation.</li> <li>IPINIP encapsulation.</li> </ul>	N/A
VxlanID	VXLAN ID	N/A	Unsigned integer Value range: 0 to 16777215	Only the VXLAN encapsulation supports this column.
InSrcMACAddr	Information about the inner source MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcMACAddress.</li> <li>InSrcMACMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.
InSrcMACAddress	Inner source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
InSrcMACMask	Mask of the inner source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff-ff.
InDstMACAddr	Information about the inner destination MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstMACAddress.</li> <li>InDstMACMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.
InDstMACAddress	Inner destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
InDstMACMask	Mask of the inner destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff-ff.
InProtocol	Inner link layer protocol.	Data structure	Members include: <ul style="list-style-type: none"> <li>ProtocolType.</li> <li>ProtocolTypeMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
InProtocolType	Type of the inner link layer protocol.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
InProtocolType Mask	Mask of the inner link layer protocol type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A

## ACL/MACNamedRules

This table contains named Ethernet frame header ACL rule information.

### XML structure

```

<ACL>
  <MACNamedRules>
    <Rule>
      <GroupIndex></GroupIndex>
      <RuleID></RuleID>
      <Action></Action>
      <SrcMACAddr>
        <SrcMACAddress></SrcMACAddress>
        <SrcMACMask></SrcMACMask>
      </SrcMACAddr>
    </Rule>
  </MACNamedRules>
</ACL>

```

```

</SrcMACAddr>
<DstMACAddr>
  <DstMACAddress></DstMACAddress>
  <DstMACMask></DstMACMask>
</DstMACAddr>
<COS></COS>
<Protocol>
  <ProtocolType></ProtocolType>
  <ProtocolTypeMask></ProtocolTypeMask>
</Protocol>
<LSAP>
  <LSAPType></LSAPType>
  <LSAPTypeMask></LSAPTypeMask>
</LSAP>
<EncapType></EncapType>
<VxlanID></VxlanID>
<InSrcMACAddr>
  <InSrcMACAddress></InSrcMACAddress>
  <InSrcMACMask></InSrcMACMask>
</InSrcMACAddr>
<InDstMACAddr>
  <InDstMACAddress></InDstMACAddress>
  <InDstMACMask></InDstMACMask>
</InDstMACAddr>
<InProtocol>
  <InProtocolType></InProtocolType>
  <InProtocolTypeMask></InProtocolTypeMask>
</InProtocol>
<TimeRange></TimeRange>
<Counting></Counting>
<Comment></Comment>
<Status></Status>
<Count></Count>
<MatchIndex></MatchIndex>
<RuleNum></RuleNum>
</Rule>
</MACNamedRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	MACNamedRules
Table type	Multi-instance table
Row name	Rule



Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 4000 to 4999.</li> </ul>	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Deny.</li> <li><b>2</b>—Permit.</li> </ul>	N/A
SrcMACAddr	Information about the source MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcMACAddress.</li> <li>SrcMACMask.</li> </ul>	The members must both be specified.
SrcMACAddresses	Source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
SrcMACMask	Mask of the source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff.
DstMACAddr	Information about the destination MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstMACAddress.</li> <li>DstMACMask.</li> </ul>	The members must both be specified.
DstMACAddresses	Destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
DstMACMask	Mask of the destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff.
COS	802.1p priority.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
Protocol	Link layer protocol.	Data structure	Members include: <ul style="list-style-type: none"> <li>ProtocolType.</li> <li>ProtocolTypeMask.</li> </ul>	The members must both be specified.
ProtocolType	Type of the link layer protocol.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
ProtocolTypeMask	Mask of the link layer protocol type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LSAP	LSAP.	Data structure	Members include: <ul style="list-style-type: none"> <li>LSAPType.</li> <li>LSAPTypeMask.</li> </ul>	The members must both be specified.
LSAPType	Type of LSAP.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
LSAPTypeMask	Mask of the LSAP type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
EncapType	Encapsulation type.	N/A	Members include: <ul style="list-style-type: none"> <li>VXLAN encapsulation.</li> <li>GRE encapsulation.</li> <li>IPINIP encapsulation.</li> </ul>	N/A
VxlanID	VXLAN ID	N/A	Unsigned integer Value range: 0 to 16777215	Only the VXLAN encapsulation supports this column.
InSrcMACAddr	Information about the inner source MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>InSrcMACAddress.</li> <li>InSrcMACMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.
InSrcMACAddress	Inner source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
InSrcMACMask	Mask of the inner source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff.
InDstMACAddr	Information about the inner destination MAC address.	Data structure	Members include: <ul style="list-style-type: none"> <li>InDstMACAddress.</li> <li>InDstMACMask.</li> </ul>	Only the VXLAN encapsulation supports this column.  The members must both be specified.
InDstMACAddress	Inner destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
InDstMACMask	Mask of the inner destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: ff-ff-ff-ff-ff.
InProtocol	Inner link layer protocol.	Data structure	Members include: <ul style="list-style-type: none"> <li>ProtocolType.</li> <li>ProtocolTypeMask.</li> </ul>	Only the VXLAN encapsulation supports this

Column name	Column description	Column type	Data type and restrictions	Remarks
				column.  The members must both be specified.
InProtocolType	Type of the inner link layer protocol.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
InProtocolType Mask	Mask of the inner link layer protocol type.	N/A	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchIndex	Index of the rule after sorting.	N/A	Unsigned integer. Value range: 0 to 65534.	N/A
RuleNum	Number of rules in the ACL.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## ACL/PfilterDefAction

This table contains information about the default global packet filter actions.

### XML structure

```
<ACL>
  <PfilterDefAction>
    <DefaultAction></DefaultAction>
  </PfilterDefAction>
```

</ACL>

## Table description

Item	Description
Feature name	ACL
Table name	PfilterDefAction
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
DefaultAction	Default packet filter action	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Permit.</li><li>• 2—Deny.</li></ul>

## ACL/PfilterIgnoreAction

This table contains information about the ignoring the packet filter permit action.

## XML structure

```
<ACL>
  <PfilterIgnoreAction>
    <IgnoreAction></IgnoreAction>
  </PfilterIgnoreAction>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	PfilterIgnoreAction
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IgnoreAction	Whether to the ignore packet filter permit action.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Ignore the packet filter permit action.</li><li><b>false</b>—Not ignore the packet filter permit action.</li></ul>	N/A

## ACL/PfilterApply

This table contains information about packet filter application.

## XML structure

```
<ACL>
  <PfilterApply>
    <Pfilter>
      <AppObjType></AppObjType>
      <AppObjIndex></AppObjIndex>
      <AppDirection></AppDirection>
      <AppAclType></AppAclType>
      <AppAclGroup></AppAclGroup>
      <HardCount></HardCount>
      <InnerEncap></InnerEncap>
      <ShareMode></ShareMode>
      <AppSequence></AppSequence>
    </Pfilter>
  </PfilterApply>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	PfilterApply
Table type	Multi-instance table
Row name	Pfilter
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppObjType	Type of the application object.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—VLAN.</li> <li>3—Global.</li> </ul>	N/A
AppObjIndex	Index of the application object.	Index	Unsigned integer. Value range: 0 to 4294967295.	The value depends on the AppObjType column. <ul style="list-style-type: none"> <li>Interface index if AppObjType is 1.</li> <li>VLAN ID in the range of 1 to 4094 if AppObjType is 2.</li> <li>The value is 0 if AppObjType is 3.</li> </ul>
AppDirection	Application direction.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
AppAclType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 ACL.</li> <li>2—IPv6 ACL.</li> <li>3—MAC ACL.</li> <li>4—User-defined ACL.</li> <li>5—ACL with the default action.</li> </ul>	<ul style="list-style-type: none"> <li>Type 5 is a special ACL.</li> </ul>
AppAclGroup	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits valued 0 or in the range of 2000 to 5999.</li> </ul>	The value range depends on the AppAclType column. <ul style="list-style-type: none"> <li>2000 to 3999 if AppAclType is 1.</li> <li>2000 to 3999 if AppAclType is 2.</li> <li>4000 to 4999 if AppAclType is 3.</li> <li>5000 to 5999 if AppAclType is 4.</li> <li>0 if AppAclType is 5.</li> </ul>
HardCount	Whether to count rule matches in hardware for the ACL.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable.</li> <li>2—disable.</li> </ul>	N/A
InnerEncap	Match the inner packet information of encapsulation packets.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—VXLAN.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ShareMode	Whether to apply the ACL in sharing mode.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Apply the ACL in sharing mode.</li> <li><b>false</b>—Do not apply the ACL in sharing mode.</li> </ul>	N/A
AppSequence	ACL application sequence.	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A

## ACL/PfilterGroupRunInfo

This table contains running information about packet filter ACLs on application objects.

### XML structure

```

<ACL>
  <PfilterGroupRunInfo>
    <GroupRunInfo>
      <AppObjType></AppObjType>
      <AppObjIndex></AppObjIndex>
      <AppDirection></AppDirection>
      <AppAclType></AppAclType>
      <AppAclGroup></AppAclGroup>
      <AclGroupStatus></AclGroupStatus>
      <AclGroupCountStatus></AclGroupCountStatus>
      <AclGroupPermitPkts></AclGroupPermitPkts>
      <AclGroupPermitBytes></AclGroupPermitBytes>
      <AclGroupDenyPkts></AclGroupDenyPkts>
      <AclGroupDenyBytes></AclGroupDenyBytes>
    </GroupRunInfo>
  </PfilterGroupRunInfo>
</ACL>

```

### Table description

Item	Description
Feature name	ACL
Table name	PfilterGroupRunInfo
Table type	Multi-instance table
Row name	GroupRunInfo
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppObjType	Type of the application object.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—VLAN.</li> <li>3—Global.</li> </ul>	N/A
AppObjIndex	Index of the application object.	Index	Unsigned integer. Value range: 0 to 4294967295.	The value depends on the AppObjType column. <ul style="list-style-type: none"> <li>Interface index if AppObjType is 1.</li> <li>VLAN ID in the range of 1 to 4094 if AppObjType is 2.</li> <li>The value is 0 if AppObjType is 3.</li> </ul>
AppDirection	Application direction.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
AppAclType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 ACL.</li> <li>2—IPv6 ACL.</li> <li>3—MAC ACL.</li> <li>4—User-defined ACL.</li> <li>5—ACL with the default action.</li> </ul>	<ul style="list-style-type: none"> <li>Type 5 is a special ACL. The default action can be the default MAC action, default IPv4 action, or default IPv6 action.</li> </ul>
AppAclGroup	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits valued 0 or in the range of 2000 to 5999.</li> </ul>	The value depends on the AppAclType column. <ul style="list-style-type: none"> <li>2000 to 3999 if AppAclType is 1.</li> <li>2000 to 3999 if AppAclType is 2.</li> <li>4000 to 4999 if AppAclType is 3.</li> <li>5000 to 5999 if AppAclType is 4.</li> <li>1 if AppAclType is 4 and the default action is default MAC action.</li> <li>2 if AppAclType is 4 and the default action is default IPv4 action.</li> <li>3 if AppAclType is 4 and the default action is default IPv6 action.</li> </ul>
AclGroupStatus	Whether an ACL is successfully applied.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> <li>3—Partly succeeded.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
AclGroupCountStatus	Whether an ACL with hardware counting enabled is successfully applied.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> <li>3—Partly succeeded.</li> </ul>	N/A
AclGroupPermitPkts	Number of permitted packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.
AclGroupPermitBytes	Number of permitted bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.
AclGroupDenyPkts	Number of denied packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.
AclGroupDenyBytes	Number of denied bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.

## ACL/PfilterRuleRunInfo

This table contains running information about packet filter ACL rules on application objects.

### XML structure

```

<ACL>
  <PfilterRuleRunInfo>
    <RuleRunInfo>
      <AppObjType></AppObjType>
      <AppObjIndex></AppObjIndex>
      <AppDirection></AppDirection>
      <AppAclType></AppAclType>
      <AppAclGroup></AppAclGroup>
      <AppAclRuleIndex></AppAclRuleIndex>
      <AclRuleStatus></AclRuleStatus>
      <AclRuleCountStatus></AclRuleCountStatus>
      <AclRuleMatchPkts></AclRuleMatchPkts>
      <AclRuleMatchBytes></AclRuleMatchBytes>
    </RuleRunInfo>
  </PfilterRuleRunInfo>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	PfilterRuleRunInfo
Table type	Multi-instance table
Row name	RuleRunInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppObjType	Type of the application object.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—VLAN.</li> <li>3—Global.</li> </ul>	N/A
AppObjIndex	Index of the application object.	Index	Unsigned integer. Value range: 0 to 4294967295.	The value depends on the AppObjType column. <ul style="list-style-type: none"> <li>Interface index if AppObjType is 1.</li> <li>VLAN ID in the range of 1 to 4094 if AppObjType is 2.</li> <li>The value is 0 if AppObjType is 3.</li> </ul>
AppDirection	Application direction.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
AppAclType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 ACL.</li> <li>2—IPv6 ACL.</li> <li>3—MAC ACL.</li> <li>4—User-defined ACL.</li> </ul>	N/A
AppAclGroup	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits valued 0 or in the range of 2000 to 5999.</li> </ul>	The value range depends on the AppAclType column. <ul style="list-style-type: none"> <li>2000 to 3999 if AppAclType is 1.</li> <li>2000 to 3999 if AppAclType is 2.</li> <li>4000 to 4999 if AppAclType is 3.</li> <li>5000 to 5999 if AppAclType is 4.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
AppAclRuleIndex	Index of the ACL rules.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
AclRuleStatus	Whether an ACL rule is successfully applied.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> <li>3—Partly succeeded.</li> </ul>	N/A
AclRuleCountStatus	Whether an ACL rule with hardware counting enabled is successfully applied.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> <li>3—Partly succeeded.</li> </ul>	N/A
AclRuleMatchPkts	Number of matched packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.
AclRuleMatchBytes	Number of matched bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.

## ACL/PfilterStatisticSum

This table contains accumulative statistics about an ACL on a specific direction.

### XML structure

```

<ACL>
  <PfilterStatisticSum>
    <StatisticSum>
      <Direction></Direction>
      <AclType></AclType>
      <AclGroup></AclGroup>
      <AclRuleIndex></AclRuleIndex>
      <MatchPackets></MatchPackets>
      <MatchBytes></MatchBytes>
    </StatisticSum>
  </PfilterStatisticSum>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	PfilterStatisticSum
Table type	Multi-instance table
Row name	StatisticSum
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
AcIType	ACL type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 ACL.</li> <li>2—IPv6 ACL.</li> <li>3—MAC ACL.</li> <li>4—User-defined ACL.</li> </ul>	N/A
AcIGroup	ACL name or number	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits valued 0 or in the range of 2000 to 5999.</li> </ul>	The value range depends on the AcIType column. <ul style="list-style-type: none"> <li>2000 to 3999 if AcIType is 1.</li> <li>2000 to 3999 if AcIType is 2.</li> <li>4000 to 4999 if AppAcIType is 3.</li> <li>5000 to 5999 if AppAcIType is 4.</li> </ul>
AcIRuleIndex	Index of the ACL rules	Index	Unsigned integer. Value range: 0 to 65534.	N/A
MatchPackets	Number of matched packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.
MatchBytes	Number of matched bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.

# ACL/UserRules

This table contains information about user-defined ACL rules.

## XML structure

```
<ACL>
  <UserRules>
    <Rule>
      <GroupID></GroupID>
      <RuleID></RuleID>
      <Action></Action>
      <L2Rule>
        <L2RuleString></L2RuleString>
        <L2RuleMask></L2RuleMask>
        <L2Offset></L2Offset>
      </L2Rule>
      <IPv4Rule>
        <IPv4RuleString></IPv4RuleString>
        <IPv4RuleMask></IPv4RuleMask>
        <IPv4Offset></IPv4Offset>
      </IPv4Rule>
      <IPv6Rule>
        <IPv6RuleString></IPv6RuleString>
        <IPv6RuleMask></IPv6RuleMask>
        <IPv6Offset></IPv6Offset>
      </IPv6Rule>
      <L4Rule>
        <L4RuleString></L4RuleString>
        <L4RuleMask></L4RuleMask>
        <L4Offset></L4Offset>
      </L4Rule>
      <L5Rule>
        <L5RuleString></L5RuleString>
        <L5RuleMask></L5RuleMask>
        <L5Offset></L5Offset>
      </L5Rule>
      <UdfFormat></UdfFormat>
      <ProtocolType></ProtocolType>
      <IPv6ProtocolType></IPv6ProtocolType>
      <SrcAny></SrcAny>
      <SrcIPv4>
        <SrcIPv4Addr></SrcIPv4Addr>
        <SrcIPv4Wildcard></SrcIPv4Wildcard>
      </SrcIPv4>
      <SrcIPv6>
        <SrcIPv6Addr></SrcIPv6Addr>
        <SrcIPv6Prefix></SrcIPv6Prefix>
```

```

</SrcIPv6>
<DstAny></DstAny>
<DstIPv4>
  <DstIPv4Addr></DstIPv4Addr>
  <DstIPv4Wildcard></DstIPv4Wildcard>
</DstIPv4>
<DstIPv6>
  <DstIPv6Addr></DstIPv6Addr>
  <DstIPv6Prefix></DstIPv6Prefix>
</DstIPv6>
<SrcPort>
  <SrcPortOp></SrcPortOp>
  <SrcPortValue1></SrcPortValue1>
  <SrcPortValue2></SrcPortValue2>
</SrcPort>
<DstPort>
  <DstPortOp></DstPortOp>
  <DstPortValue1></DstPortValue1>
  <DstPortValue2></DstPortValue2>
</DstPort>
<DSCP></DSCP>
<TimeRange></TimeRange>
<Counting></Counting>
<Comment></Comment>
<Status></Status>
<Count></Count>
</Rule>
</UserRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	UserRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	ACL number.	Index	Unsigned integer. Value range: 5000 to 5999.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
L2Rule	Specifies that the offset is relative to the beginning of the Layer 2 frame header.	Data structure	Members include: <ul style="list-style-type: none"> <li>L2RuleString.</li> <li>L2RuleMask.</li> <li>L2Offset.</li> </ul>	The members must all be specified.
L2RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L2RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L2Offset	Offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
IPv4Rule	Specifies that the offset is relative to the beginning of the IPv4 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4RuleString.</li> <li>IPv4RuleMask.</li> <li>IPv4Offset.</li> </ul>	The members must all be specified.
IPv4RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
IPv4RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
IPv4Offset	Offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
IPv6Rule	Specifies that the offset is relative to the beginning of the IPv6 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv6RuleString.</li> <li>IPv6RuleMask.</li> <li>IPv6Offset.</li> </ul>	The members must all be specified.
IPv6RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
IPv6RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
IPv6Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
L4Rule	Specifies that the offset is relative to the beginning of the Layer 4 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>L4RuleString.</li> <li>L4RuleMask.</li> <li>L4Offset.</li> </ul>	The members must all be specified.
L4RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L4RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L4Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
L5Rule	Specifies that the offset is relative to the beginning of the payload.	Data structure	Members include: <ul style="list-style-type: none"> <li>L5RuleString.</li> <li>L5RuleMask.</li> <li>L5Offset.</li> </ul>	The members must all be specified.
L5RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L5RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L5Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
UdfFormat	User-defined packet format.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IFA packet.</li> <li>2—Raw ip packet.</li> <li>3—VXLAN packet.</li> </ul>	N/A
ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256.  The value 256 represents all IPv4 protocols.	N/A
IPv6ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256.  The value 256 represents all IPv6 protocols.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Matches any source IP addresses (default).</li> <li><b>false</b>—Matches the specified source IP address.</li> </ul>	This column is available when the ProtocolType is specified.  This column must be configured together with the <b>SrcIPv4</b> or <b>SrcIPv6</b> column.
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr.</li> <li>SrcIPv4Wildcard.</li> </ul>	The members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	Example: 255.255.255.0.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr.</li> <li>SrcIPv6Prefix.</li> </ul>	The two members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	<p>Example: 1:1::1:1.</p> <p>This column is available when the <b>SrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>SrcAny</b> column is <b>true</b>.</p>
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	<p>Unsigned integer.</p> <p>Value range: 1 to 128.</p>	<p>This column is available when the <b>SrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>SrcAny</b> column is <b>true</b>.</p>
DstAny	Whether a rule matches any destination IP addresses.	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li><b>true</b>—Matches any destination IP addresses.</li> <li><b>false</b>—Matches the specified destination IP address.</li> </ul>	N/A
DstIPv4	Destination IPv4 information.	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>DstIPv4Addr.</li> <li>DstIPv4Wildcard.</li> </ul>	The members must both be specified.
DstIPv4Addr	Destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>This column is available when the <b>DstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>DstAny</b> column is <b>true</b>.</p>
DstIPv4Wildcard	Wildcard mask for the destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>DstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>DstAny</b> column is <b>true</b>.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
DstIPv6	Destination IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv6Addr.</li> <li>DstIPv6Prefix.</li> </ul>	The two members must both be specified.
DstIPv6Addr	Destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
DstIPv6Prefix	Length of the destination IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	This column is available when the <b>DstAny</b> column is <b>false</b> . It must be empty when the <b>DstAny</b> column is <b>true</b> .
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcPortOp.</li> <li>SrcPortValue1.</li> <li>SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column. The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—lt (lower than).</li> <li>2—eq (equal to).</li> <li>3—gt (greater than).</li> <li>4—neq (not equal to).</li> <li>5—range (inclusive range).</li> </ul>	N/A
SrcPortValue1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcPortValue 2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• DstPortOp.</li> <li>• DstPortValue1.</li> <li>• DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—lt (lower than).</li> <li>• <b>2</b>—eq (equal to).</li> <li>• <b>3</b>—gt (greater than).</li> <li>• <b>4</b>—neq (not equal to).</li> <li>• <b>5</b>—range (inclusive range).</li> </ul>	N/A
DstPortValue 1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPortValue 2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## ACL/UserNamedRules

This table contains information about named user-defined ACL rules.

### XML structure

```

<ACL>
  <UserNamedRules>
    <Rule>
      <GroupIndex></GroupIndex>
      <RuleID></RuleID>
      <Action></Action>
      <L2Rule>
        <L2RuleString></L2RuleString>
        <L2RuleMask></L2RuleMask>
        <L2Offset></L2Offset>
      </L2Rule>
      <IPv4Rule>
        <IPv4RuleString></IPv4RuleString>
        <IPv4RuleMask></IPv4RuleMask>
        <IPv4Offset></IPv4Offset>
      </IPv4Rule>
      <IPv6Rule>
        <IPv6RuleString></IPv6RuleString>
        <IPv6RuleMask></IPv6RuleMask>
        <IPv6Offset></IPv6Offset>
      </IPv6Rule>
      <L4Rule>
        <L4RuleString></L4RuleString>
        <L4RuleMask></L4RuleMask>
        <L4Offset></L4Offset>
      </L4Rule>
    </Rule>
  </UserNamedRules>
</ACL>

```

```

<L5Rule>
  <L5RuleString></L5RuleString>
  <L5RuleMask></L5RuleMask>
  <L5Offset></L5Offset>
</L5Rule>
<UdfFormat></UdfFormat>
<ProtocolType></ProtocolType>
<IPv6ProtocolType></IPv6ProtocolType>
<SrcAny></SrcAny>
<SrcIPv4>
  <SrcIPv4Addr></SrcIPv4Addr>
  <SrcIPv4Wildcard></SrcIPv4Wildcard>
</SrcIPv4>
<SrcIPv6>
  <SrcIPv6Addr></SrcIPv6Addr>
  <SrcIPv6Prefix></SrcIPv6Prefix>
</SrcIPv6>
<DstAny></DstAny>
<DstIPv4>
  <DstIPv4Addr></DstIPv4Addr>
  <DstIPv4Wildcard></DstIPv4Wildcard>
</DstIPv4>
<DstIPv6>
  <DstIPv6Addr></DstIPv6Addr>
  <DstIPv6Prefix></DstIPv6Prefix>
</DstIPv6>
<SrcPort>
  <SrcPortOp></SrcPortOp>
  <SrcPortValue1></SrcPortValue1>
  <SrcPortValue2></SrcPortValue2>
</SrcPort>
<DstPort>
  <DstPortOp></DstPortOp>
  <DstPortValue1></DstPortValue1>
  <DstPortValue2></DstPortValue2>
</DstPort>
<DSCP></DSCP>
<TimeRange></TimeRange>
<Counting></Counting>
<Comment></Comment>
<Status></Status>
<Count></Count>
</Rule>
</UserNamedRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	UserNameedRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupIndex	ACL name or number.	Index	String. Length: 1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> String of digits in the range of 5000 to 5999.</li> </ul>	N/A
RuleID	Rule ID.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Action	Action on packets matching the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Deny.</li> <li><b>2</b>—Permit.</li> </ul>	N/A
L2Rule	Specifies that the offset is relative to the beginning of the Layer 2 frame header.	Data structure	Members include: <ul style="list-style-type: none"> <li>L2RuleString.</li> <li>L2RuleMask.</li> <li>L2Offset.</li> </ul>	The members must all be specified.
L2RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L2RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L2Offset	Offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
IPv4Rule	Specifies that the offset is relative to the beginning of the IPv4 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4RuleString.</li> <li>IPv4RuleMask.</li> <li>IPv4Offset.</li> </ul>	The members must all be specified.
IPv4RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
IPv4Offset	Offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
IPv6Rule	Specifies that the offset is relative to the beginning of the IPv6 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv6RuleString.</li> <li>IPv6RuleMask.</li> <li>IPv6Offset.</li> </ul>	The members must all be specified.
IPv6RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
IPv6RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
IPv6Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
L4Rule	Specifies that the offset is relative to the beginning of the Layer 4 header.	Data structure	Members include: <ul style="list-style-type: none"> <li>L4RuleString.</li> <li>L4RuleMask.</li> <li>L4Offset.</li> </ul>	The members must all be specified.
L4RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L4RuleMask	Match pattern mask.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A
L4Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer. Value range: 0 to the device-specific upper limit.	N/A
L5Rule	Specifies that the offset is relative to the beginning of the payload.	Data structure	Members include: <ul style="list-style-type: none"> <li>L5RuleString.</li> <li>L5RuleMask.</li> <li>L5Offset.</li> </ul>	The members must all be specified.
L5RuleString	String for the match pattern.	N/A	Hexadecimal string. Length: 2 to the device-specific upper limit.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
L5RuleMask	Match pattern mask.	N/A	Hexadecimal string.  Length: 2 to the device-specific upper limit.	N/A
L5Offset	Specifies an offset in bytes after which the match operation begins.	N/A	Unsigned integer.  Value range: 0 to the device-specific upper limit.	N/A
UdfFormat	User-defined packet format.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—IFA packet.</li> <li>• <b>2</b>—Raw ip packet.</li> <li>• <b>3</b>—VXLAN packet.</li> </ul>	N/A
ProtocolType	Protocol type.	N/A	Unsigned integer.  Value range: 0 to 256.  The value 256 represents all IPv4 protocols.	N/A
IPv6ProtocolType	Protocol type.	N/A	Unsigned integer. Value range: 0 to 256.  The value 256 represents all IPv6 protocols.	N/A
SrcAny	Whether a rule matches any source IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Matches any source IP addresses.</li> <li>• <b>false</b>—Matches the specified source IP address.</li> </ul>	N/A
SrcIPv4	Source IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• SrcIPv4Addr.</li> <li>• SrcIPv4Wildcard.</li> </ul>	The members must both be specified.
SrcIPv4Addr	Source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.  This column is available when the <b>SrcAny</b> column is <b>false</b> .  It must be empty when the <b>SrcAny</b> column is <b>true</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIPv4Wildcard	Wildcard mask for the source IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>SrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>SrcAny</b> column is <b>true</b>.</p>
SrcIPv6	Source IPv6 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• SrcIPv6Addr.</li> <li>• SrcIPv6Prefix.</li> </ul>	The two members must both be specified.
SrcIPv6Addr	Source IPv6 address.	N/A	Hexadecimal string, colon-separated.	<p>Example: 1:1::1:1.</p> <p>This column is available when the <b>SrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>SrcAny</b> column is <b>true</b>.</p>
SrcIPv6Prefix	Length of the source IPv6 address prefix.	N/A	Unsigned integer. Value range: 1 to 128.	<p>This column is available when the <b>SrcAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>SrcAny</b> column is <b>true</b>.</p>
DstAny	Whether a rule matches any destination IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Matches any destination IP addresses.</li> <li>• <b>false</b>—Matches the specified destination IP address.</li> </ul>	N/A
DstIPv4	Destination IPv4 information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• DstIPv4Addr.</li> <li>• DstIPv4Wildcard.</li> </ul>	The members must both be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
DstIPv4Addr	Destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>This column is available when the <b>DstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>DstAny</b> column is <b>true</b>.</p>
DstIPv4Wildcard	Wildcard mask for the destination IPv4 address.	N/A	String, dotted decimal notation.	<p>Example: 255.255.255.0.</p> <p>This column is available when the <b>DstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>DstAny</b> column is <b>true</b>.</p>
DstIPv6	Destination IPv6 information.	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>DstIPv6Addr.</li> <li>DstIPv6Prefix.</li> </ul>	The two members must both be specified.
DstIPv6Addr	Destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	<p>Example: 1:1::1:1.</p> <p>This column is available when the <b>DstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>DstAny</b> column is <b>true</b>.</p>
DstIPv6Prefix	Length of the destination IPv6 address prefix.	N/A	<p>Unsigned integer.</p> <p>Value range: 1 to 128.</p>	<p>This column is available when the <b>DstAny</b> column is <b>false</b>.</p> <p>It must be empty when the <b>DstAny</b> column is <b>true</b>.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcPort	Source port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• SrcPortOp.</li> <li>• SrcPortValue1.</li> <li>• SrcPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
SrcPortOp	Source port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—lt (lower than).</li> <li>• 2—eq (equal to).</li> <li>• 3—gt (greater than).</li> <li>• 4—neq (not equal to).</li> <li>• 5—range (inclusive range).</li> </ul>	N/A
SrcPortValue 1	Start source port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPortValue 2	End source port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the SrcPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end source port is not available.
DstPort	Destination port information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• DstPortOp.</li> <li>• DstPortValue1.</li> <li>• DstPortValue2.</li> </ul>	Only the TCP and UDP protocols support this column.  The members must be all specified.
DstPortOp	Destination port operator.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—lt (lower than).</li> <li>• 2—eq (equal to).</li> <li>• 3—gt (greater than).</li> <li>• 4—neq (not equal to).</li> <li>• 5—range (inclusive range).</li> </ul>	N/A
DstPortValue 1	Start destination port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DstPortValue 2	End destination port.	N/A	Unsigned integer. Value range: 0 to 65536.	When the DstPortOp is <b>5</b> , the value range is 0 to 65535. Otherwise, it can only be 65536. The value 65536 indicates that the end destination port is not available.
DSCP	DSCP priority.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
TimeRange	Time range.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
Counting	Whether to count the rule matches.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Counts the rule matches.</li> <li><b>false</b>—Does not count the rule matches.</li> </ul>	N/A
Comment	Rule comment.	N/A	String, case-sensitive. Length: 1 to 127 characters.	N/A
Status	Rule status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	N/A
Count	Number of packets that match a rule.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## ACL/ZonePairPfilterApply

This table contains information about packet filter application for zone pair.

### XML structure

```

<ACL>
  <ZonePairPfilterApply>
    <Pfilter>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <AclType></AclType>
      <AclGroup></AclGroup>
      <AppSequence></AppSequence>
    </Pfilter>
  </ZonePairPfilterApply>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	ZonePairPfilterApply
Table type	Multi-instance table
Row name	Pfilter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZone	Name of the source zone.	Index	String, case insensitive. <ul style="list-style-type: none"><li>Length: 1 to 31 characters.</li></ul>	Cannot contain midline( - ).
DestZone	Name of the destination zone.	Index	String, case insensitive. <ul style="list-style-type: none"><li>Length: 1 to 31 characters.</li></ul>	Cannot contain midline( - ).
AcIType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"><li><b>1</b>—IPv4 ACL.</li><li><b>2</b>—IPv6 ACL.</li><li><b>3</b>—Ethernet frame header ACL.</li></ul>	Type 3 is not supported in the current software version, and is reserved for future support.
AcIGroup	ACL name or number.	Index	<ul style="list-style-type: none"><li>ACL name: Case-insensitive string of 1 to 63 characters.</li><li>ACL number: An unsigned integer in the range of 2000 to 5999.</li></ul>	An ACL name must start with an English letter and cannot be <b>all</b> . The value range depends on the AppAcIType column. <ul style="list-style-type: none"><li>2000 to 5999 if AppAcIType is <b>1</b>.</li><li>2000 to 3999 if AppAcIType is <b>2</b>.</li></ul>
AppSequence	ACL application sequence.	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A

## ACL/ZonePairPfilterRules

This table contains running information about packet filter ACL rules for zone pair.

## XML structure

```
<ACL>
  <ZonePairPfilterRules>
```

```

<Rule>
  <SrcZone></SrcZone>
  <DestZone></DestZone>
  <AclType></AclType>
  <AclGroup></AclGroup>
  <AclRuleID></AclRuleID>
  <RuleMatchPkts></RuleMatchPkts>
  <RuleMatchBytes></RuleMatchBytes>
</Rule>
</ZonePairPfilterRules>
</ACL>

```

## Table description

Item	Description
Feature name	ACL
Table name	ZonePairPfilterRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZone	Name of the source zone.	Index	String, case insensitive. <ul style="list-style-type: none"> <li>Length: 1 to 31 characters.</li> </ul>	Cannot contain midline( - ).
DestZone	Name of the destination zone.	Index	String, case insensitive. <ul style="list-style-type: none"> <li>Length: 1 to 31 characters.</li> </ul>	Cannot contain midline( - ).
AclType	ACL type.	Index	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—IPv4 ACL.</li> <li><b>2</b>—IPv6 ACL.</li> <li><b>3</b>—Ethernet frame header ACL.</li> </ul>	Type 3 is not supported in the current software version, and is reserved for future support.
AclGroup	ACL name or number.	Index	<ul style="list-style-type: none"> <li>ACL name: Case-insensitive string of 1 to 63 characters.</li> <li>ACL number: An unsigned integer in the range of 2000 to 5999.</li> </ul>	<p>An ACL name must start with an English letter and cannot be <b>all</b>.</p> <p>The value range depends on the AppAclType column.</p> <ul style="list-style-type: none"> <li>2000 to 5999 if AppAclType is <b>1</b>.</li> <li>2000 to 3999 if AppAclType is <b>2</b>.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
AclRuleID	Index of the ACL rules.	Index	Unsigned integer. Value range: 0 to 65534.	N/A
RuleMatchPkts	Number of matched packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.
RuleMatchBytes	Number of matched bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support match counting for packet filter, 0xFFFFFFFFFFFFFFFF is returned.



# Contents

ACL.....1

ACL .....1

# ACL

## ACL

Message	Explanation
Can't edit rules for an ACL when the match order is auto. 当规则匹配顺序为自动排序时，不能修改规则。	The ACL group created in auto mode cannot modify rules. 以 auto 形式创建的 ACL 组不能修改规则。
The rule doesn't exist. Please create the rule first. 规则不存在，请在添加描述信息前先添加规则。	Cannot add rule comment information when the rule does not exist. 规则不存在时不能添加规则评论信息。
Can't name or rename an existing ACL. 不能命名或重命名一个已存在的ACL。	Cannot modify the name as an existing ACL. 不能修改名字为已存在的ACL。
Can't change the match order for an ACL that contains rules. 不能修改一个包含规则的ACL的匹配顺序。	When an ACL is configured with rules, the matching order cannot be modified. 当ACL已经配置了规则，不能修改匹配顺序。
The rule already exists. 规则已存在。	The newly created rule content is the same as other existing rules. 新建的规则内容与其他已存在的规则内容相同。
The rule ID is out of range. 规则编号超出范围。	Automatically assigned rule number is out of range. 自动分配的规则编码超出了范围。
The step is too large to generate sufficient rule IDs. 步长过大，可分配的规则编号不足。	The modified step size is too large, and the number of rules that can be assigned is insufficient. 修改后的步长过大，可分配的规则编号不足。
The name is already used by another ACL. 该名字已被另一个ACL使用。	The newly created ACL name is occupied by other existing ACLs. 新建的ACL名称被其他已经存在的ACL占用。
Maximum number of rules in the ACL already is reached. 此ACL的规则数已达上限。	The number of rules has reached the upper limit when a new ACL rule is created. 新建ACL规则时规则个数已达到上限。
Resources are insufficient for processing the request. 系统资源不足，请求无法完成。	Insufficient memory. 设备内存不足。
The ACL doesn't exist. 指定的ACL不存在。	Add a rule to an ACL group that does not exist. 向不存在的ACL组下添加规则。
The source IPv4 address object group doesn't exist. 指定的源IPv4地址对象组不存在。	The object-group referenced by the source address of the IPv4 type ACL rule does not exist. IPv4类型ACL规则源地址引用的对象组不存在。
The source IPv6 address object group doesn't exist. 指定的源IPv6地址对象组不存在。	The object-group referenced by the source address of the IPv6 type ACL rule does not exist. IPv6类型ACL规则源地址引用的对象组不存在。
The destination IPv4 address object group doesn't exist. 指定的目的IPv4地址对象组不存在。	The object-group referenced by the destination address of the IPv4 type ACL rule does not exist. IPv4类型ACL规则目的地址引用的对象组不存在。

<p>The destination IPv6 address object group doesn't exist.</p> <p>指定的目的IPv6地址对象组不存在。</p>	<p>The object-group referenced by the destination address of the IPv6 type ACL rule does not exist.</p> <p>IPv6类型ACL规则目的地址引用的对象组不存在。</p>
<p>Illegal source IPv4 address object group type.</p> <p>指定的源IPv4地址对象组类型不正确。</p>	<p>The object-group type referenced by the source address of the IPv4 type ACL is not the IPv4 type.</p> <p>IPv4类型ACL规则源地址引用的对象组类型不是IPv4类型。</p>
<p>Illegal source IPv6 address object group type.</p> <p>指定的源IPv6地址对象组类型不正确。</p>	<p>The object-group type referenced by the source address of the IPv6 type ACL is not the IPv6 type.</p> <p>IPv6类型ACL规则源地址引用的对象组类型不是IPv6类型。</p>
<p>Illegal destination IPv4 address object group type.</p> <p>指定的目的IPv4地址对象组类型不正确。</p>	<p>The object-group type referenced by the destination address of the IPv4 type ACL is not the IPv4 type.</p> <p>IPv4类型ACL规则目的地址引用的对象组类型不是IPv4类型。</p>
<p>Illegal destination IPv6 address object group type.</p> <p>指定的目的IPv6地址对象组类型不正确。</p>	<p>The object-group type referenced by the destination address of the IPv6 type ACL is not the IPv6 type.</p> <p>IPv6类型ACL规则目的地址引用的对象组类型不是IPv6类型。</p>
<p>Can't delete the ACL because it is being used.</p> <p>该ACL正被引用，无法删除。</p>	<p>The ACL specified to be deleted is referenced by other modules and cannot be deleted.</p> <p>指定要删除的ACL被其他模块引用，不能被删除。</p>

# Contents

ADVPN .....	1
ResetTunnelAdvpnSession .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ResetAllSessions .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
ResetTunnelAdvpnSessionStat .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
ResetAllSessionStats .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# ADVPN

## ResetTunnelAdvpnSession

This table is used to clear ADVPN sessions in the specified tunnel.

### XML structure

```
<ADVPN>
  <ResetTunnelAdvpnSession>
    <Reset>
      <IPVersion></IPVersion>
      <TunnelID></TunnelID>
      <PrivateAddress></PrivateAddress>
    </Reset>
  </ResetTunnelAdvpnSession>
</ADVPN>
```

### Table description

Item	Description
Feature name	ADVPN
Table name	ResetTunnelAdvpnSession
Table type	Multi-instance table
Row name	Reset
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPVersion	Version of the IP protocol	Index	Enumeration <ul style="list-style-type: none"><li>4—IPv4</li><li>6—IPv6</li></ul>	This column must not be empty.
TunnelID	Tunnel ID	Index	Unsigned integer	N/A
PrivateAddress	Private address	N/A	String	IPv4 address or IPv6 address.

## ResetAllSessions

This table is used to clear all ADVPN sessions.

## XML structure

```
<ADVPN>
  <ResetAllSessions>
    <Reset>
      <IPVersion></IPVersion>
    </Reset>
  </ResetAllSessions>
</ADVPN>
```

## Table description

Item	Description
Feature name	ADVPN
Table name	ResetAllSessions
Table type	Single-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPVersion	Version of the IP protocol	Index	Enumeration <ul style="list-style-type: none"><li>4—IPv4</li><li>6—IPv6</li></ul>	This column must not be empty.

## ResetTunnelAdvpnSessionStat

This table is used to clear ADVPN session statistics for the specified tunnel.

## XML structure

```
<ADVPN>
  <ResetTunnelAdvpnSessionStat>
    <Reset>
      <IPVersion></IPVersion>
      <TunnelID></TunnelID>
      <PrivateAddress></PrivateAddress>
    </Reset>
  </ResetTunnelAdvpnSessionStat>
</ADVPN>
```

## Table description

Item	Description
Feature name	ADVPN
Table name	ResetSessionStatistics
Table type	Multi-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPVersion	Version of the IP protocol	Index	Enumeration <ul style="list-style-type: none"><li>4—IPv4</li><li>6—IPv6</li></ul>	This column must not be empty.
TunnelID	Tunnel ID	Index	Unsigned integer	N/A
PrivateAddress	Private address	N/A	String	IPv4 address or IPv6 address.

## ResetAllSessionStats

This table is used to clear all ADVPN session statistics.

## XML structure

```
<ADVPN>
  <ResetAllSessionStats>
    <Reset>
      <IPVersion></IPVersion>
    </Reset>
  </ResetAllSessionStats>
</ADVPN>
```

## Table description

Item	Description
Feature name	ADVPN
Table name	ResetAllSessionStatistics
Table type	Single-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPVersion	Version of the IP protocol	Index	Enumeration <ul style="list-style-type: none"><li>• 4—IPv4</li><li>• 6—IPv6</li></ul>	This column must not be empty.



# Contents

ADVPN .....	1
TunnelAdvpnCfg .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPv4Networks .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
IPv6Networks .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# ADVPN

## TunnelAdvpnCfg

This table is used to configure ADVPN feature in the specified tunnel.

### XML structure

```
<ADVPN>
  <TunnelAdvpnCfg>
    <Tunnel>
      <TunnelID></TunnelID>
      <IPv4Client></IPv4Client>
      <Compatible></Compatible>
      <IPv6Client></IPv6Client>
      <DumbTime></DumbTime>
      <IdleTime></IdleTime>
      <SourcePort></SourcePort>
    </Tunnel>
  </TunnelAdvpnCfg>
</ADVPN>
```

### Table description

Item	Description
Feature name	ADVPN
Table name	TunnelAdvpnCfg
Table type	Multi-instance table
Row name	Tunnel
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A
IPv4Client	Name of the VAM client bounded to an IPv4 ADVPN tunnel interface	N/A	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).

Column name	Column description	Column type	Data type and restrictions	Remarks
Compatible	Compatibility configuration	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Incompatible</li> <li>1—Compatible</li> <li>2—Invalid</li> </ul>	The value of “2” means not specifying the IPv4 VAM client config.
IPv6Client	Name of the VAM client bounded to an IPv6 ADVPN tunnel interface	N/A	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
DumbTime	Dumb time for an ADVPN session	N/A	Unsigned integer Value range: 10 to 600 The default value is 120 seconds	N/A
IdleTime	Idle timeout time for a spoke-spoke ADVPN tunnel	N/A	Unsigned integer. Value range:60 to 65535. The default value is 600 seconds	N/A
SourcePort	Source UDP port number	N/A	Unsigned integer Value range: 1025 to 65535 The default value is 18001	Only supports tunnel in the following modes: <ul style="list-style-type: none"> <li>9—DVPN tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>11—DVPN tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> </ul>

## IPv4Networks

This table is used to configure the IPv4 subnets under the specified tunnel which is ADVPN node.

## XML structure

```

<ADVPN>
  <IPv4Networks>
    <IPv4Network>
      <TunnelID></TunnelID>
      <Address></Address>
      <MaskLength></MaskLength>
      <Preference></Preference>
    </IPv4Network>
  </IPv4Networks>
</ADVPN>

```

```

    </IPv4Network>
  </IPv4Networks>
</ADVPN>

```

## Table description

Item	Description
Feature name	ADVPN
Table name	IPv4Networks
Table type	Multi-instance table
Row name	IPv4Network
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A.
Address	Private IPv4 network address	Index	IPv4 address	N/A.
MaskLength	Mask of the private IPv4 network address	Index	Unsigned integer Value range: 0 to 32	Example: 24
Preference	Preference for the route to the private network	N/A	Unsigned integer Value range: 1 to 255 The default value is 8	N/A.

## IPv6Networks

This table is used to configure the IPv6 subnets under the specified tunnel which is ADVPN node.

## XML structure

```

<ADVPN>
  <IPv6Networks>
    <IPv6Network>
      <TunnelID></TunnelID>
      <Address></Address>
      <MaskLength></MaskLength>
      <Preference></Preference>
    </IPv6Network>
  </IPv6Networks>
</ADVPN>

```

## Table description

Item	Description
Feature name	ADVPN
Table name	IPv6Networks
Table type	Multi-instance table
Row name	IPv6Network
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A.
Address	Private IPv6 network address	Index	IPv6 address	Example: 1001::
MaskLength	Prefix length of private IPv6 network address	Index	Unsigned integer Value range: 0 to 128	N/A.
Preference	Preference for the route to the private network	N/A	Unsigned integer Value range: 1 to 255 The default value is 8	N/A.

# Contents

ADVPN .....	1
TunnelAdvpnCfg .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPv4Networks .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
IPv6Networks .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
IPv4TunnelAdvpnSession .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
IPv6TunnelAdvpnSession .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
IPv4TunnelRunInfo .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
IPv6TunnelRunInfo .....	14
XML structure .....	15
Table description .....	15
Columns .....	15

# ADVPN

## TunnelAdvpnCfg

This table displays the configuration about ADVPN tunnels.

### XML structure

```
<ADVPN>
  <TunnelAdvpnCfg>
    <Tunnel>
      <TunnelID></TunnelID>
      <IPv4Client></IPv4Client>
      <Compatible></Compatible>
      <IPv6Client></IPv6Client>
      <DumbTime></DumbTime>
      <IdleTime></IdleTime>
      <SourcePort></SourcePort>
    </Tunnel>
  </TunnelAdvpnCfg>
</ADVPN>
```

### Table description

Item	Description
Feature name	ADVPN
Table name	TunnelAdvpnCfg
Table type	Multi-instance table
Row name	Tunnel
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A
IPv4Client	Name of the VAM client bounded to an	N/A	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).

Column name	Column description	Column type	Data type and restrictions	Remarks
	IPv4 ADVPN tunnel interface			
Compatible	Compatibility configuration	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Incompatible</li> <li>1—Compatible</li> <li>2—Invalid</li> </ul>	The value of “2” means not specifying the IPv4 VAM client config.
IPv6Client	Name of the VAM client bounded to an IPv6 ADVPN tunnel interface	N/A	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
DumbTime	Dumb time for an ADVPN session	N/A	Unsigned integer Value range: 10 to 600 The default value is 120 seconds	N/A
IdleTime	Idle timeout time for a spoke-spoke ADVPN tunnel	N/A	Unsigned integer. Value range: 60 to 65535. The default value is 600 seconds	N/A
SourcePort	Source UDP port number	N/A	Unsigned integer Value range: 1025 to 65535 The default value is 18001	Only supports tunnel in the following modes: <ul style="list-style-type: none"> <li>9—DVPN tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>11—DVPN tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> </ul>



# IPv4Networks

This table displays the IPv4 subnets configuration under an ADVPN node.

## XML structure

```
<ADVPN>
  <IPv4Networks>
    <IPv4Network>
      <TunnelID></TunnelID>
      <Address></Address>
      <MaskLength></MaskLength>
      <Preference></Preference>
    </IPv4Network>
  </IPv4Networks>
</ADVPN>
```

## Table description

Item	Description
Feature name	ADVPN
Table name	IPv4Networks
Table type	Multi-instance table
Row name	IPv4Network
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A.
Address	Private IPv4 network address	Index	IPv4 address	N/A.
MaskLength	Mask of the private IPv4 network address	Index	Unsigned integer Value range: 0 to 32	Example: 24
Preference	Preference for the route to the private network	N/A	Unsigned integer Value range: 1 to 255 The default value is 8	N/A.

# IPv6Networks

This table displays the IPv6 subnets configuration under an ADVPN node.

## XML structure

```
<ADVPN>
  <IPv6Networks>
    <IPv6Network>
      <TunnelID></TunnelID>
      <Address></Address>
      <MaskLength></MaskLength>
      <Preference></Preference>
    </IPv6Network>
  </IPv6Networks>
</ADVPN>
```

## Table description

Item	Description
Feature name	ADVPN
Table name	IPv6Networks
Table type	Multi-instance table
Row name	IPv6Network
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A.
Address	Private IPv6 network address	Index	IPv6 address	Example: 1001::
MaskLength	Prefix length of private IPv6 network address	Index	Unsigned integer Value range: 0 to 128	N/A.
Preference	Preference for the route to the	N/A	Unsigned integer Value range: 1 to 255	N/A.

Column name	Column description	Column type	Data type and restrictions	Remarks
	private network		The default value is 8	

# IPv4TunnelAdvpnSession

This table is used to display IPv4 ADVPN tunnel session information.

## XML structure

```

<ADVPN>
  <IPv4TunnelAdvpnSession>
    <IPv4AdvpnSession>
      <TunnelID></TunnelID>
      <PrivateAddress></PrivateAddress>
      <PublicAddress></PublicAddress>
      <AdvpnPort></AdvpnPort>
      <SPI>
        <AhInbound></AhInbound>
        <AhOutbound></AhOutbound>
        <EspInbound></EspInbound>
        <EspOutbound></EspOutbound>
      </SPI>
      <BehindNAT></BehindNAT>
      <SessionType></SessionType>
      <TunnelState></TunnelState>
      <HoldingTime></HoldingTime>
      <Input>
        <TotalPackets></TotalPackets>
        <DataPackets></DataPackets>
        <ControlPackets></ControlPackets>
        <Multicasts></Multicasts>
        <Errors></Errors>
      </Input>
      <Output>
        <TotalPackets></TotalPackets>
        <DataPackets></DataPackets>
        <ControlPackets></ControlPackets>
        <Multicasts></Multicasts>
        <Errors></Errors>
      </Output>
      <IPsecTunnelID></IPsecTunnelID>
      <SAIndex>
        <AhInbound></AhInbound>
        <AhOutbound></AhOutbound>
        <EspInbound></EspInbound>
        <EspOutbound></EspOutbound>
      </SAIndex>
    </IPv4AdvpnSession>
  </IPv4TunnelAdvpnSession>
</ADVPN>

```

```

    </IPv4AdvpnSession>
  </IPv4TunnelAdvpnSession>
</ADVPN>

```

## Table description

Item	Description
Feature name	ADVPN
Table name	IPv4TunnelAdvpnSession
Table type	Multi-instance table
Row name	IPv4AdvpnSession
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A
PrivateAddresses	Private address of the ADVPN tunnel peer	Index	Ipv4Address	IPv4 address
PublicAddress	Public address of the ADVPN tunnel peer	N/A	String	IPv4 address. IPv6 address.
AdvpnPort	UDP port number for the ADVPN tunnel	N/A	Unsigned integer Value range: 1025 to 65535	Only supported when the link layer protocol is UDP or IPsec-UDP.
SPI	SP index for the inbound and outbound SAs	Data structure	Members include: <ul style="list-style-type: none"> <li>AhInbound</li> <li>AhOutbound</li> <li>EspInbound</li> <li>EspOutbound</li> </ul>	Only supported when link layer protocol is IPsec-UDP or IPsec-GRE.
AhInbound	Inbound AH SP index	N/A	Unsigned integer Value range: 0 to $2^{32}-1$ .	N/A
AhOutbound	Outbound AH SP index	N/A	Unsigned integer Value range: 0 to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
EspInbound	Inbound ESP SP index	N/A	Unsigned integer Value range: 0 to $2^{32}-1$ .	N/A
EspOutbound	Outbound ESP SP index	N/A	Unsigned integer Value range: 0 to $2^{32}-1$ .	N/A
BehindNAT	Whether the NAT peer node is behind NAT	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>False</li> </ul>	N/A
SessionType	ADVPN tunnel type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> <li>1—Hub-Hub</li> <li>2—Hub-Spoke</li> <li>3—Spoke-Hub</li> <li>4—Spoke-Spoke</li> </ul>	N/A
TunnelState	ADVPN tunnel state	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Establishing</li> <li>1—Dumb</li> <li>2—Success</li> </ul>	N/A
HoldingTime	Duration that the tunnel has been in the current state	N/A	Unsigned integer	Unit: seconds
Input	Statistics for incoming packets	Data structure	Members include: <ul style="list-style-type: none"> <li>TotalPackets</li> <li>DataPackets</li> <li>ControlPackets</li> <li>Multicasts</li> <li>Errors</li> </ul>	N/A
TotalPackets	The number of all incoming packets	N/A	Unsigned Integer64	N/A
DataPackets	The number of incoming data packets	N/A	Unsigned Integer64	N/A
ControlPackets	The number of incoming control packets	N/A	Unsigned integer 64	N/A
Multicasts	The number of	N/A	Unsigned integer 64	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	incoming multicast packets			
Errors	The number of incoming erroneous packets	N/A	Unsigned integer 64	N/A
Output	Statistics for outgoing packets	Data structure	Members include: <ul style="list-style-type: none"> <li>TotalPackets</li> <li>DataPackets</li> <li>ControlPackets</li> <li>Multicasts</li> <li>Errors</li> </ul>	N/A
TotalPackets	The number of all outgoing packets	N/A	Unsigned integer	N/A
DataPackets	The number of outgoing data packets	N/A	Unsigned integer 64	N/A
ControlPackets	The number of outgoing control packets	N/A	Unsigned integer 64	N/A
Multicasts	The number of outgoing multicast packets	N/A	Unsigned integer 64.	N/A
Errors	The number of outgoing erroneous packets	N/A	Unsigned integer 64	N/A
IPsecTunnelID	IPsec tunnel index	N/A	Unsigned integer 32	N/A
SAIndex	IPsec SA index information	Data structure	Members include: <ul style="list-style-type: none"> <li>AhInbound</li> <li>AhOutbound</li> <li>EspInbound</li> <li>EspOutbound</li> </ul>	N/A
AhInbound	Inbound IPsec AH SA index	N/A	Unsigned integer 32	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AhOutbound	Outbound IPsec AH SA index	N/A	Unsigned integer 32	N/A
EspInbound	Inbound IPsec ESP SA index	N/A	Unsigned integer 32	N/A
EspOutbound	Outbound IPsec ESP SA index	N/A	Unsigned integer 32	N/A

## IPv6TunnelAdvpnSession

This table is used to display IPv6 ADVPN tunnel session information.

### XML structure

```

<ADVPN>
  <IPv6TunnelAdvpnSession>
    <IPv6AdvpnSession>
      <TunnelID></TunnelID>
      <PrivateAddress></PrivateAddress>
      <PublicAddress></PublicAddress>
      <AdvpnPort></AdvpnPort>
      <SPI>
        <AhInbound></AhInbound>
        <AhOutbound></AhOutbound>
        <EspInbound></EspInbound>
        <EspOutbound></EspOutbound>
      </SPI>
      <BehindNAT></BehindNAT>
      <SessionType></SessionType>
      <TunnelState></TunnelState>
      <HoldingTime></HoldingTime>
      <Input>
        <TotalPackets></TotalPackets>
        <DataPackets></DataPackets>
        <ControlPackets></ControlPackets>
        <Multicasts></Multicasts>
        <Errors></Errors>
      </Input>
      <Output>
        <TotalPackets></TotalPackets>
        <DataPackets></DataPackets>
        <ControlPackets></ControlPackets>
        <Multicasts></Multicasts>
    </IPv6AdvpnSession>
  </IPv6TunnelAdvpnSession>
</ADVPN>

```

```

    <Errors></Errors>
</Output>
<IPsecTunnelID></IPsecTunnelID>
    <SAIndex>
    <AhInbound></AhInbound>
    <AhOutbound></AhOutbound>
    <EspInbound></EspInbound>
    <EspOutbound></EspOutbound>
    </SAIndex>
</IPv6AdvpnSession>
</IPv6TunnelAdvpnSession>
</ADVPN>

```

## Table description

Item	Description
Feature name	ADVPN
Table name	IPv6TunnelAdvpnSession
Table type	Multi-instance table
Row name	IPv6AdvpnSession
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A
PrivateAddresses	Private address of the ADVPN tunnel peer	Index	Ipv6Address	IPv6 address
PublicAddress	Public address of the ADVPN tunnel peer	N/A	String	IPv4 address. IPv6 address.
AdvpnPort	UDP port number for the ADVPN tunnel	N/A	Unsigned integer Value range: 1025 to 65535	Only supported when the link layer protocol is UDP or IPsec-UDP.
SPI	SP index for the inbound and outbound SAs	Data structure	Members include: <ul style="list-style-type: none"> <li>AhInbound</li> <li>AhOutbound</li> </ul>	Only supported when the link layer protocol is



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>EspInbound</li> <li>EspOutbound</li> </ul>	IPsec-UDP or IPsec-GRE.
AhInbound	Inbound AH SP index	N/A	Unsigned integer Value range: 0 to $2^{32}-1$ .	N/A
AhOutbound	Outbound AH SP index	N/A	Unsigned integer Value range: 0 to $2^{32}-1$ .	N/A
EspInbound	Inbound ESP SP index	N/A	Unsigned integer Value range: 0 to $2^{32}-1$ .	N/A
EspOutbound	Outbound ESP SP index	N/A	Unsigned integer Value range: 0 to $2^{32}-1$ .	N/A
BehindNAT	Whether the NAT peer node is behind NAT	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>False</li> </ul>	N/A
SessionType	ADVPN tunnel type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> <li>1—Hub-Hub</li> <li>2—Hub-Spoke</li> <li>3—Spoke-Hub</li> <li>4—Spoke-Spoke</li> </ul>	N/A
TunnelState	ADVPN tunnel state	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Establishing</li> <li>1—Dumb</li> <li>2—Success</li> </ul>	N/A
HoldingTime	Duration that the tunnel has been in the current state	N/A	Unsigned integer	Unit: seconds
Input	Statistics for incoming packets	Data structure	Members include: <ul style="list-style-type: none"> <li>TotalPackets</li> <li>DataPackets</li> <li>ControlPackets</li> <li>Multicasts</li> <li>Errors</li> </ul>	N/A
TotalPackets	The number of all incoming packets	N/A	Unsigned integer 64	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DataPackets	The number of incoming data packets	N/A	Unsigned integer 64	N/A
ControlPackets	The number of incoming control packets	N/A	Unsigned integer 64	N/A
Multicasts	The number of incoming multicast packets	N/A	Unsigned integer 64	N/A
Errors	The number of incoming erroneous packets	N/A	Unsigned integer 64	N/A
Output	Statistics for outgoing packets	Data structure	Members include: <ul style="list-style-type: none"> <li>• TotalPackets</li> <li>• DataPackets</li> <li>• ControlPackets</li> <li>• Multicasts</li> <li>• Errors</li> </ul>	N/A
TotalPackets	The number of all outgoing packets	N/A	Unsigned integer 64	N/A
DataPackets	The number of outgoing data packets	N/A	Unsigned integer 64	N/A
ControlPackets	The number of outgoing control packets	N/A	Unsigned integer 64	N/A
Multicasts	The number of outgoing multicast packets	N/A	Unsigned integer 64.	N/A
Errors	The number of outgoing erroneous packets	N/A	Unsigned integer 64	N/A
IPsecTunnelID	IPsec tunnel index	N/A	Unsigned integer 32	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SAIndex	IPsec SA index information	Data structure	Members include: <ul style="list-style-type: none"> <li>AhInbound</li> <li>AhOutbound</li> <li>EspInbound</li> <li>EspOutbound</li> </ul>	N/A
AhInbound	Inbound IPsec AH SA index	N/A	Unsigned integer 32	N/A
AhOutbound	Outbound IPsec AH SA index	N/A	Unsigned integer 32	N/A
EspInbound	Inbound IPsec ESP SA index	N/A	Unsigned integer 32	N/A
EspOutbound	Outbound IPsec ESP SA index	N/A	Unsigned integer 32	N/A

## IPv4TunnelRunInfo

This table displays the IPv4 interface information.

## XML structure

```

<ADVPN>
  <IPv4TunnelRunInfo>
    <TunnelRunInfo>
      <TunnelID></TunnelID>
      <ClientName></ClientName>
      <DomainName></DomainName>
      <LinkProtocol></LinkProtocol>
      <SessionNum></SessionNum>
    </TunnelRunInfo>
  </IPv4TunnelRunInfo>
</ADVPN>

```

## Table description

Item	Description
Feature name	ADVPN
Table name	IPv4TunnelRunInfo
Table type	Multi-instance table
Row name	TunnelRunInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A
ClientName	Name of the VAM client bound to the tunnel interface	N/A	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
DomainName	Domain name of the VAM client	N/A	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
LinkProtocol	Link layer protocol for the ADVPN tunnel	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Unknown</li><li>1—GRE</li><li>2—UDP</li><li>3—IPsec-GRE</li><li>4—IPsec-UDP</li></ul>	N/A
SessionNum	Number of ADVPN tunnels established on the tunnel interface	N/A	Unsigned integer	N/A

## IPv6TunnelRunInfo

This table displays the IPv6 interface information.

## XML structure

```
<ADVPN>
  <IPv6TunnelRunInfo>
    <TunnelRunInfo>
      <TunnelID></TunnelID>
      <ClientName></ClientName>
      <DomainName></DomainName>
      <LinkProtocol></LinkProtocol>
      <SessionNum></SessionNum>
    </TunnelRunInfo>
  </IPv6TunnelRunInfo>
</ADVPN>
```

## Table description

Item	Description
Feature name	ADVPN
Table name	IPv6TunnelRunInfo
Table type	Multi-instance table
Row name	TunnelRunInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer	N/A
ClientName	Name of the VAM client bound to the tunnel interface	N/A	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
DomainName	Domain name of the VAM client	N/A	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
LinkProtocol	Link layer protocol for the ADVPN tunnel	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Unknown</li><li>1—GRE</li><li>2—UDP</li><li>3—IPsec-GRE</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>4—IPsec-UDP</li> </ul>	
SessionNum	Number of ADVPN tunnels established on the tunnel interface	N/A	Unsigned integer	N/A

# Contents

- SessionDeleted event ..... 1
  - XML structure for event subscription ..... 1
  - XML structure for event report ..... 2
- SessionStateChanged event ..... 4
  - XML structure for event subscription ..... 4
  - XML structure for event report ..... 5

# SessionDeleted event

This event is used to report ADVPN tunnel information when the ADVPN tunnel is deleted.

## XML structure for event subscription

```
<SessionDeletedEvent>
  <Tunnel>
    <TunnelID></TunnelID>
  </Tunnel>
</SessionDeletedEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>ADVPN</stream>
    <filter type="subtree">
      <SessionDeletedEvent xmlns="http://www.h3c.com/netconf/event:1.0/advpn:1.0">
        <Tunnel>
          <TunnelID>1</TunnelID>
        </Tunnel>
      </SessionDeletedEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	ADVPN
Event name	SessionDeletedEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/advpn:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
TunnelID	Tunnel ID	Unsigned integer	No



# XML structure for event report

```
<SessionDeletedEvent>
  <Tunnel>
    <TunnelID></TunnelID>
    <PrivateAddress></PrivateAddress>
    <PublicAddress></PublicAddress>
    <PeerPrivateAddress></PeerPrivateAddress>
    <PeerPublicAddress></PeerPublicAddress>
    <Type></Type>
    <LastState></LastState>
    <LastStateDuration></LastStateDuration>
    <DomainName></DomainName>
    <GroupName></GroupName>
  </Tunnel>
</SessionDeletedEvent>
```

## Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <SessionDeletedEvent xmlns="http://www.h3c.com/netconf/event:1.0/advpn:1.0">
    <Tunnel>
      <TunnelID>1</TunnelID>
      <PrivateAddress>112.168.60.56</PrivateAddress>
      <PublicAddress>192.168.60.137</PublicAddress>
      <PeerPrivateAddress>112.168.60.18</PeerPrivateAddress>
      <PeerPublicAddress>192.168.60.11</PeerPublicAddress>
      <Type>2</Type>
      <LastState>2</LastState>
      <LastStateDuration>0H8M8S</LastStateDuration>
      <DomainName>abc</DomainName>
      <GroupName>aaa</GroupName>
    </Tunnel>
  </SessionDeletedEvent>
</notification>
```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
TunnelID	Tunnel ID	Unsigned integer	No
PrivateAddress	Private address	String, dotted decimal notation.	No
PublicAddress	Public address	String, dotted decimal notation.	No
PeerPrivateAddress	Peer's private address	String, dotted decimal notation.	No
PeerPublicAddress	Peer's public address	String, dotted decimal notation.	No

Column name	Column description	Data type and restrictions	Support for extended queries
ss			
Type	ADVPN tunnel type	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> <li>1—Hub-Hub</li> <li>2—Hub-Spoke</li> <li>3—Spoke-Hub</li> <li>4—Spoke-Spoke</li> </ul>	No
LastState	ADVPN tunnel's last state before the tunnel is deleted	Enumeration: <ul style="list-style-type: none"> <li>0—Establishing</li> <li>1—Dumb</li> <li>2—Success</li> </ul>	No
LastStateDuration	ADVPN tunnel's holding time before the tunnel is deleted.	String, in the format of xxHxxMxxS. H, M, and S represent hours, minutes, and seconds.	No
DomainName	Domain name of the VAM client	String	No
GroupName	Group name of the ADVPN tunnel	String	No

# SessionStateChanged event

This event is used to report ADVPN tunnel information when the ADVPN tunnel's state is changed.

## XML structure for event subscription

```
<SessionStateChangedEvent>
  <Tunnel>
    <TunnelID></TunnelID>
  </Tunnel>
</SessionStateChangedEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>ADVPN</stream>
    <filter type="subtree">
      <SessionStateChangedEvent
xmlns="http://www.h3c.com/netconf/event:1.0/advpn:1.0">
        <Tunnel>
          <TunnelID>1</TunnelID>
        </Tunnel>
      </SessionStateChangedEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	ADVPN
Event name	SessionStateChangedEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/advpn:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
TunnelID	Tunnel ID	Unsigned integer	No

# XML structure for event report

```
<SessionStateChangedEvent>
  <Tunnel>
    <TunnelID></TunnelID>
    <CurrentState></CurrentState>
    <NextState></NextState>
    <PrivateAddress></PrivateAddress>
    <PublicAddress></PublicAddress>
    <PeerPrivateAddress></PeerPrivateAddress>
    <PeerPublicAddress></PeerPublicAddress>
    <Type></Type>
    <LastState></LastState>
    <LastStateDuration></LastStateDuration>
    <DomainName></DomainName>
    <GroupName></GroupName>
  </Tunnel>
</SessionStateChangedEvent>
```

## Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <SessionStateChangedEvent xmlns="http://www.h3c.com/netconf/event:1.0/advpn:1.0">
    <Tunnel>
      <TunnelID>1</TunnelID>
      <CurrentState>0</CurrentState>
      <NextState>2</NextState>
      <PrivateAddress>112.168.60.56</PrivateAddress>
      <PublicAddress>192.168.60.137</PublicAddress>
      <PeerPrivateAddress>112.168.60.18</PeerPrivateAddress>
      <PeerPublicAddress>192.168.60.11</PeerPublicAddress>
      <Type>2</Type>
      <LastState>0</LastState>
      <LastStateDuration>0H0M5S</LastStateDuration>
      <DomainName>abc</DomainName>
      <GroupName>aaa</GroupName>
    </Tunnel>
  </SessionStateChangedEvent>
</notification>
```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
TunnelID	Tunnel ID	Unsigned integer	No
CurrentState	ADVPN tunnel's current state	Enumeration: <ul style="list-style-type: none"><li>0—Establishing</li></ul>	No

Column name	Column description	Data type and restrictions	Support for extended queries
		<ul style="list-style-type: none"> <li>1—Dumb</li> <li>2—Success</li> </ul>	
NextState	ADVPN tunnel's next state	Enumeration: <ul style="list-style-type: none"> <li>0—Establishing</li> <li>1—Dumb</li> <li>2—Success</li> </ul>	No
PrivateAddress	Private address	String, dotted decimal notation.	No
PublicAddress	Public address	String, dotted decimal notation.	No
PeerPrivateAddress	Peer's private address	String, dotted decimal notation.	No
PeerPublicAddress	Peer's public address	String, dotted decimal notation.	No
Type	ADVPN tunnel type	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> <li>1—Hub-Hub</li> <li>2—Hub-Spoke</li> <li>3—Spoke-Hub</li> <li>4—Spoke-Spoke</li> </ul>	No
LastState	ADVPN tunnel's last state before the tunnel's state is changed.	Enumeration: <ul style="list-style-type: none"> <li>0—Establishing</li> <li>1—Dumb</li> <li>2—Success</li> </ul>	No
LastStateDuration	ADVPN tunnel's holding time before the tunnel's state is changed	String, in the format of xxHxxMxxS. H, M, and S represent hours, minutes, and seconds.	No
DomainName	Domain name of the VAM client	String	No
GroupName	Group name of the ADVPN tunnel	String	No

# Contents

AFT.....	1
AFT/AftEnable.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
AFT/AftLogEnable.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
AFT/AftFlowBegin.....	2
XML structure.....	3
Table description.....	3
Columns.....	3
AFT/AftFlowEnd.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
AFT/AftPrefixNat64.....	4
XML structure.....	4
Table description.....	4
Columns.....	5
AFT/AftAddressGroup.....	5
XML structure.....	5
Table description.....	5
Columns.....	6
AFT/AftAddressGroupMember.....	6
XML structure.....	6
Table description.....	6
Columns.....	6
AFT/AftV6toV4SrcDynamicAcl.....	7
XML structure.....	7
Table description.....	7
Columns.....	8

# AFT

## AFT/AftEnable

This table contains informations about AFT enabling switch on the interface.

### XML structure

```
<AFT>
  <AftEnable>
    <Interface>
      <IfIndex></IfIndex>
      <EnableSwitch></EnableSwitch>
    </Interface>
  </AftEnable>
</AFT>
```

### Table description

Item	Description
Feature name	AFT
Table name	AftEnable
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index or interface name	Index	String. case-sensitive. Length: 1 to 99 characters.	Some versions support interface name. For relevant information, you can see the XSD document of your product. For more information about IfIndex, you can reference "Appendix" in Ifmgr NETCONF XML API Configuration document.
EnableSwitch	Whether enable AFT on the	N/A	Boolean:	N/A

	interface		<ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	
--	-----------	--	--	--

## AFT/AftLogEnable

This table contains information about AFT logging switch

### XML structure

```
<AFT>
  <AftLogEnable>
    <EnableSwitch></EnableSwitch>
  </AftLogEnable>
</AFT>
```

### Table description

Item	Description
Feature name	AFT
Table name	AftLogEnable
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
EnableSwitch	Whether enable AFT logging	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>

## AFT/AftFlowBegin

This table contains information about AFT flow begin enabling switch



## XML structure

```
<AFT>
  <AftFlowBegin>
    <EnableSwitch></EnableSwitch>
  </AftFlowBegin>
</AFT>
```

## Table description

Item	Description
Feature name	AFT
Table name	AftFlowBegin
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
EnableSwitch	Whether enable AFT flow-begin logging	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>

## AFT/AftFlowEnd

This table contains information about AFT flow end enabling switch

## XML structure

```
<AFT>
  <AftFlowEnd>
    <EnableSwitch></EnableSwitch>
  </AftFlowEnd>
</AFT>
```

## Table description

Item	Description
Feature name	AFT
Table name	AftFlowEnd
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
EnableSwitch	Whether enable AFT flow-end logging	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>

## AFT/AftPrefixNat64

This table contains information about AFT NAT64 prefix

## XML structure

```
<AFT>
  <AftPrefixNat64>
    <PrefixNat64>
      <Ipv6Prefix></Ipv6Prefix>
      <Ipv6PrefixLength></Ipv6PrefixLength>
    </PrefixNat64>
  </AftPrefixNat64>
</AFT>
```

## Table description

Item	Description
Feature name	AFT
Table name	AftPrefixNat64
Table type	Multi-instance table
Row name	PrefixNat64

Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv6Prefix	IPv6 NAT64 prefix	Index	IPv6: Hexadecimal string, colon-separated.	Example: 1000::
Ipv6PrefixLength	IPv6 NAT64 prefix length	Index	Unsigned integer. Value range:32,40,48,56,64,96.	N/A

## AFT/AftAddressGroup

This table contains information about AFT address groups.

## XML structure

```

<AFT>
  <AftAddressGroup>
    <GroupNumbers>
      <GroupNumber></GroupNumber>
    </GroupNumbers>
  </AftAddressGroup>
</AFT>

```

## Table description

Item	Description
Feature name	AFT
Table name	AftAddressGroup
Table type	Muti-instance table
Row name	GroupNumbers
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupNumber	AFT address group number	Index	Unsigned integer. Value range: 0 to 65535.

## AFT/AftAddressGroupMember

This table contains information about AFT address group members.

## XML structure

```
<AFT>
  <AftAddressGroupMember>
    <GroupMembers>
      <GroupNumber></GroupNumber>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
    </GroupMembers>
  </AftAddressGroupMember>
</AFT>
```

## Table description

Item	Description
Feature name	AFT
Table name	AftAddressGroupMember
Table type	Multi-instance table
Row name	GroupMembers
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	Address group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
StartIpv4Address	Start IPv4 address of the address group	Index	IPv4: String, dotted decimal notation.	The <i>StartIpv4Address</i> cannot be greater than the <i>EndIpv4Address</i> . If

	member			<p>they are the same, the group member has only one IP address.</p> <p>The IP addresses of address members on the device must not overlap.</p> <p>The source address in a packet destined for an external network is translated into an address in one of group members.</p>
EndIpv4Address	End IPv4 address of the address group member	Index	IPv4: String, dotted decimal notation.	N/A

## AFT/AftV6toV4SrcDynamicAcl

This table contains information about AFT IPv6 to IPv4 source dynamic acl rules.

### XML structure

```

<AFT>
  <AftV6toV4SrcDynamicAcl>
    <RuleNumbers>
      <Ipv6Acl></Ipv6Acl>
      <Type></Type>
      <AddressGroup></AddressGroup>
      <IfIndex></IfIndex>
      <AddrGrpType></AddrGrpType>
      <PortBlockSize></PortBlockSize>
      <Ipv4VpnName></Ipv4VpnName>
    </RuleNumbers>
  </AftV6toV4SrcDynamicAcl>
</AFT>

```

### Table description

Item	Description
Feature name	AFT
Table name	AftV6toV4SrcDynamicAcl
Table type	Multi-instance table
Row name	RuleNumbers
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv6Acl	Ipv6Acl name or number	Index	String, case-insensitive. Must start with a-z or A-Z, the word “all” can not be used as name. or the acl number Value range: 2000 to 3999. Length: 1 to 63 characters..	N/A
Type	Address group or easy ip	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—address group.</li> <li>1—easy ip.</li> </ul>	N/A
AddressGroup	Address group number	N/A	Unsigned integer. Value range: 0 to 65535	N/A
IfIndex	Interface index or interface name	N/A	String. case-sensitive. Length: 1 to 99 characters.	Some versions support interface name. For relevant information, you can reference the XSD document of your product. For more information about IfIndex, you can reference “Appendix” in Ifmgr NETCONF XML API Configuration document.
AddrGrpType	Address group type:pat or nopat	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NPt.</li> <li>1—PT</li> </ul>	N/A
PortBlockSize	Whether to use port block	N/A	Unsigned integer. Value range: 100 to 64512.	Can be empty
Ipv4VpnName	Whether to use vpn	N/A	String. Length:1 to 31 characters	Can be empty

# Contents

AFT.....	1
AFT/AftEnable.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
AFT/AftLogEnable.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
AFT/AftFlowBegin.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
AFT/AftFlowEnd.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
AFT/AftPrefixNat64.....	4
XML structure.....	4
Table description.....	4
Columns.....	4
AFT/AftAddressGroup.....	5
XML structure.....	5
Table description.....	5
Columns.....	5
AFT/AftAddressGroupMember.....	5
XML structure.....	5
Table description.....	6
Columns.....	6
AFT/AftV6toV4SrcDynamicAcl.....	6
XML structure.....	7
Table description.....	7
Columns.....	7

# AFT

## AFT/AftEnable

This table contains informations about AFT enable switch on the interface.

### XML structure

```
<AFT>
  <AftEnable>
    <Interface>
      <IfIndex></IfIndex>
      <EnableSwitch></EnableSwitch>
    </Interface>
  </AftEnable>
</AFT>
```

### Table description

Item	Description
Feature name	AFT
Table name	AftEnable
Table type	Multi-instance table
Row name	Interface
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index or interface name	Index	String. case-sensitive. Length: 1 to 99 characters.	Some versions support interface name. For relevant information, you can reference the XSD document of your product. For more information about IfIndex, you can reference “Appendix” in Ifmgr NETCONF XML API Configuration document.
EnableSwitch	Whether enable AFT on the inerface	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>	N/A



# AFT/AftLogEnable

This table contains informations about AFT log enable switch

## XML structure

```
<AFT>
  <AftLogEnable>
    <EnableSwitch></EnableSwitch>
  </AftLogEnable>
</AFT>
```

## Table description

Item	Description
Feature name	AFT
Table name	AftLogEnable
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
EnableSwitch	Whether enable AFT log	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>

# AFT/AftFlowBegin

This table contains informations about AFT flow begin enable switch

## XML structure

```
<AFT>
  <AftFlowBegin>
    <EnableSwitch></EnableSwitch>
  </AftFlowBegin>
</AFT>
```

</AFT>

## Table description

Item	Description
Feature name	AFT
Table name	AftFlowBegin
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
EnableSwitch	Whether enable AFT flow-begin log	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>

## AFT/AftFlowEnd

This table contains informations about AFT flow end enable switch

## XML structure

```
<AFT>
  <AftFlowEnd>
    <EnableSwitch></EnableSwitch>
  </AftFlowEnd>
</AFT>
```

## Table description

Item	Description
Feature name	AFT
Table name	AftFlowEnd
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
EnableSwitch	Whether enable AFT flow-end log	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>

## AFT/AftPrefixNat64

This table contains informations about AFT nat64 prefix

## XML structure

```
<AFT>
  <AftPrefixNat64>
    <PrefixNat64>
      <Ipv6Prefix></Ipv6Prefix>
      <Ipv6PrefixLength></Ipv6PrefixLength>
    </PrefixNat64>
  </AftPrefixNat64>
</AFT>
```

## Table description

Item	Description
Feature name	AFT
Table name	AftPrefixNat64
Table type	Multi-instance table
Row name	PrefixNat64
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv6Prefix	Ipv6 nat64 prefix	index	IPv6: Hexadecimal string, colon-separated.	Example: 1000::
Ipv6PrefixLength	Ipv6 nat64 prefix length	index	Unsigned integer. Value range:32、40、48、56、64、96.	N/A

# AFT/AftAddressGroup

This table contains informations about AFT address groups.

## XML structure

```
<AFT>
  <AftAddressGroup>
    <GroupNumbers>
      <GroupNumber></GroupNumber>
    </GroupNumbers>
  </AftAddressGroup>
</AFT>
```

## Table description

Item	Description
Feature name	AFT
Table name	AftAddressGroup
Table type	Muti-instance table
Row name	GroupNumbers
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupNumber	AFT address group number	Index	Unsigned integer. Value range: 0 to 65535.

# AFT/AftAddressGroupMember

This table contains informations about AFT address group members.

## XML structure

```
<AFT>
  <AftAddressGroupMember>
    <GroupMembers>
```

```

    <GroupNumber></GroupNumber>
    <StartIpv4Address></StartIpv4Address>
    <EndIpv4Address></EndIpv4Address>
  </GroupMembers>
</AftAddressGroupMember>
</AFT>

```

## Table description

Item	Description
Feature name	AFT
Table name	AftAddressGroupMember
Table type	Multi-instance table
Row name	GroupMembers
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	Address group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
StartIpv4Address	Start IPv4 address of the address group member	Index	IPv4: String, dotted decimal notation.	<p>The <i>StartIpv4Address</i> cannot be greater than the <i>EndIpv4Address</i>. If they are the same, the group member has only one IP address.</p> <p>The IP addresses of address members on the device must not overlap.</p> <p>The source address in a packet destined for an external network is translated into an address in one of group members.</p>
EndIpv4Address	End IPv4 address of the address group member	Index	IPv4: String, dotted decimal notation.	N/A

## AFT/AftV6toV4SrcDynamicAcl

This table contains the aft ipv6 to ipv4 source dynamic acl rules.

# XML structure

```
<AFT>
  <AftV6toV4SrcDynamicAcl>
    <RuleNumbers>
      <Ipv6Acl></Ipv6Acl>
      <Type></Type>
      <AddressGroup></AddressGroup>
      <IfIndex></IfIndex>
      <AddrGrpType></AddrGrpType>
      <PortBlockSize></PortBlockSize>
      <Ipv4VpnName></Ipv4VpnName>
    </RuleNumbers>
  </AftV6toV4SrcDynamicAcl>
</AFT>
```

## Table description

Item	Description
Feature name	AFT
Table name	AftV6toV4SrcDynamicAcl
Table type	Multi-instance table
Row name	RuleNumbers
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv6Acl	Ipv6Acl name or number	Index	String, case-insensitive. Must start with a-z or A-Z, the word “all” can not be used as name. or the acl number Value range: 2000 to 3999. Length: 1 to 63 characters..	N/A
Type	Address group or easy ip	N/A	Enumeration: <ul style="list-style-type: none"><li>0—address group.</li><li>1—easy ip.</li></ul>	N/A
AddressGroup	Address group number	N/A	Unsigned integer. Value range: 0 to 65535	N/A
IfIndex	Interface index or interface name	N/A	String, case-sensitive. Length: 1 to 99 characters.	Some versions support interface name. For relevant information, you can reference the XSD document of your product. For more information about

				IfIndex, you can reference “Appendix” in Ifmgr NETCONF XML API Configuration document.
AddrGrpType	Address group type:pat or nopat	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—NPt.</li> <li>• 1—PT</li> </ul>	N/A
PortBlockSize	Whether to use port block	N/A	Unsigned integer. Value range: 100 to 64512.	Can be empty
Ipv4VpnName	Whether to use vpn	N/A	String. Length:1 to 31 characters	Can be empty

# Contents

AntiVirus .....	1
AntiVirus/SignatureManualUpgrading .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AntiVirus/SignatureAutoUpgradeNow .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
AntiVirus/SignatureRollback .....	2
XML structure .....	2
Table description .....	2
Columns .....	3



# AntiVirus

## AntiVirus/SignatureManualUpgrading

This table contains the information of AntiVirus signatures manual upgrade.

### XML structure

```
<AntiVirus>
  <SignatureManualUpgrading>
    <URL></URL>
    <Location></Location>
  </SignatureManualUpgrading>
</AntiVirus>
```

### Table description

Item	Description
Feature name	AntiVirus
Table name	SignatureManualUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
URL	URL the upgrade signature file.	N/A	String: case-insensitive When the file is remote, Length: 1 to 255 characters. When the file is local, Length: 1 to 127 character.	N/A
Location	The Location of the file.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Local</li><li>• 1—remote</li></ul>	If Location is set to 0, the device deletes the signature file after the signature library update is complete.

## AntiVirus/SignatureAutoUpgradeNow

This table contains the information of AntiVirus signatures upgrade at once.

## XML structure

```
<AntiVirus>
  <SignatureAutoUpgrade>
    <UpgradeNow></UpgradeNow>
  </SignatureAutoUpgrade>
</AntiVirus>
```

## Table description

Item	Description
Feature name	AntiVirus
Table name	SignatureAutoUpgrade
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UpgradeNow	Auto upgrade at once.	N/A	This column must be empty.	N/A

## AntiVirus/SignatureRollback

This table contains the information of AntiVirus signatures rollback.

## XML structure

```
<AntiVirus>
  <SignatureRollback>
    <Rollback></Rollback>
  </SignatureRollback>
</AntiVirus>
```

## Table description

Item	Description
Feature name	AntiVirus
Table name	SignatureRollback
Table type	Single-instance table

Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Rollback	rollback	N/A	Boolean: <ul style="list-style-type: none"> <li>• true: rollback last version</li> <li>• false: rollback original version</li> </ul>	N/A

# Contents

AntiVirus .....	1
AntiVirus/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AntiVirus/PolicyInProfile .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
AntiVirus/RuleInPolicy .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
AntiVirus/SignatureAutoUpgrading .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
AntiVirus/ActionDefaultParameters .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
AntiVirus/RuleInPolicySigID .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
AntiVirus/CloudQueryConfig .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
AntiVirus/RuleInPolicyMd5 .....	7
XML structure .....	7
Table description .....	8
Columns .....	8

# AntiVirus

## AntiVirus/Policies

This table contains AntiVirus policy.

### XML structure

```
<AntiVirus>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <Description></Description>
      <CloudQuery></CloudQuery>
    </Policy>
  </Policies>
</AntiVirus>
```

### Table description

Item	Description
Feature name	AntiVirus
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the policy	N/A	String: case-sensitive. Length: 1 to 255 characters.	N/A
CloudQuery	Enabling status of cloud querying	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Enabled.</li><li>2—Disabled.</li></ul>	N/A

# AntiVirus/PolicyInProfile

This table contains AntiVirus policy applied to the profile.

## XML structure

```
<AntiVirus>
  <PolicyInProfile>
    <Profile>
      <ProfileName></ProfileName>
      <PolicyName></PolicyName>
    </Profile>
  </PolicyInProfile>
</AntiVirus>
```

## Table description

Item	Description
Feature name	AntiVirus
Table name	PolicyInProfile
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the profile	Index	String: case-insensitive. Length: 1 to 100 characters.	N/A
PolicyName	Name of the policy	N/A	String: case-insensitive. Length: 1 to 63 characters.	N/A

# AntiVirus/RuleInPolicy

This table contains the information of rules in an AntiVirus policy.

## XML structure

```
<AntiVirus>
  <RuleInPolicy>
    <Policy>
```

```

<PolicyName></PolicyName>
<Protocol>
  <ProtocolName></ProtocolName>
  <Direction></Direction>
  <Action></Action>
</Protocol>
<Application>
  <AppName></AppName>
  <Action></Action>
</Application>
</Policy>
</RuleInPolicy>
</AntiVirus>

```

## Table description

Item	Description
Feature name	AntiVirus
Table name	RuleInPolicy
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Protocol	Protocol configuration	Data Structure	Members include: <ul style="list-style-type: none"> <li>ProtocolName</li> <li>Direction</li> <li>Action</li> </ul>	N/A
ProtocolName	Protocol name	N/A	String: case-insensitive <ul style="list-style-type: none"> <li>HTTP</li> <li>FTP</li> <li>SMTP</li> <li>POP3</li> <li>IMAP</li> </ul>	N/A
Direction	Direction of protocol traffic	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Upload</li> <li>1—Download</li> <li>2—Both</li> </ul>	N/A
Action	Actions for the	N/A	Enumeration:	N/A

	specified protocol's traffic		<ul style="list-style-type: none"> <li>1—Alert</li> <li>2—Block</li> <li>3—Redirect</li> </ul>	
Application	Application configuration	Data Structure	Members include: <ul style="list-style-type: none"> <li>AppName</li> <li>Action</li> </ul>	N/A
AppName	Application name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Action	Actions for the specified application	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Alert</li> <li>2—Block</li> <li>3—Permit</li> </ul>	N/A

## AntiVirus/SignatureAutoUpgrading

This table contains the information of AntiVirus signatures auto upgrading.

### XML structure

```

<AntiVirus>
  <SignatureAutoUpgrading>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrading>
</AntiVirus>

```

### Table description

Item	Description
Feature name	AntiVirus
Table name	SignatureAutoUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Enabled or disabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> </ul>	Default is false



			<ul style="list-style-type: none"> <li>• false</li> </ul>	
StartTime	The time that the system auto upgrading	N/A	Time.	Default is 03:01:00, HH:MM:SS
Type	Type of the system auto upgrading	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Week</li> <li>• 1—Periodic</li> </ul>	Default is 1
Day	Days	N/A	Unsigned integer. Value range: 0 to 15.	When Type is 0, the value range is 0 to 6. Otherwise, the value range is 1 to 15. The default is 3.

## AntiVirus/ActionDefaultParameters

This table contains Antivirus action default parameter information.

### XML structure

```

<AntiVirus>
  <ActionDefaultParameters>
    <ActionDefaultParameter>
      <Action></Action>
      <ParameterName></ParameterName>
    </ActionDefaultParameter>
  </ActionDefaultParameters>
</AntiVirus>

```

### Table description

Item	Description
Feature name	AntiVirus
Table name	ActionDefaultParameters
Table type	Multi-instance table
Row name	ActionDefaultParameter
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	action	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—Block</li> <li>• 2—Capture</li> </ul>	N/A

			<ul style="list-style-type: none"> <li>• 3—Logging</li> <li>• 4—Redirect</li> <li>• 5—Mail</li> </ul>	
ParameterName	Parameter-Name	N/A	String: case-insensitive. Length: 1 to 63 characters.	The value is from DIM table. E.g. If Action is block, the ParameterName's value is from DIM/BlockParameters.

## AntiVirus/RuleInPolicySigID

This table contains the Exception sigs information of an AntiVirus policy.

### XML structure

```
<AntiVirus>
  <RuleInPolicySigID>
    <Policy>
      <PolicyName></PolicyName>
      <ExceptionSigID></ExceptionSigID>
    </Policy>
  </RuleInPolicySigID>
</AntiVirus>
```

### Table description

Item	Description
Feature name	AntiVirus
Table name	RuleInPolicySigID
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
ExceptionSigID	ID of the virus	Index	Unsigned integer. Value range: 1 to 536870910.	N/A

# AntiVirus/CloudQueryConfig

This table contains cloud query configuration.

## XML structure

```
<AntiVirus>
  <CloudQueryConfig>
    <HostName></HostName>
    <CacheSize></CacheSize>
    <CacheTime></CacheTime>
  </CloudQueryConfig>
</AntiVirus>
```

## Table description

Item	Description
Feature name	AntiVirus
Table name	CloudQueryConfig
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HostName	Name of the host	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
CacheSize	Size of the cache	N/A	Unsigned integer. Value range: 100000 to 200000.	N/A
CacheTime	Lifetime of the cached entries	N/A	Unsigned integer. Value range: 10 to 720.	N/A

# AntiVirus/RuleInPolicyMd5

This table contains the MD5 exception information of an AntiVirus policy.

## XML structure

```
<AntiVirus>
  <RuleInPolicyMd5>
```

```

<Policy>
  <PolicyName></PolicyName>
  <ExceptionMd5></ExceptionMd5>
</Policy>
</RuleInPolicyMd5>
</AntiVirus>

```

## Table description

Item	Description
Feature name	AntiVirus
Table name	RuleInPolicyMd5
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
ExceptionMd5	Value of the MD5	Index	String: case-insensitive. Length: 32 characters.	N/A

# Contents

AntiVirus .....	1
AntiVirus/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AntiVirus/PolicyInProfile .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
AntiVirus/RuleInPolicy .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
AntiVirus/Signatures .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
AntiVirus/SignatureFileInfos .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
AntiVirus/UpdatePercentage .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
AntiVirus/SignatureAutoUpgrading .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
AntiVirus/ActionDefaultParameters .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
AntiVirus/RuleInPolicySigID .....	8
XML structure .....	9
Table description .....	9
Columns .....	9
AntiVirus/FamilyInfos .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
AntiVirus/CloudQueryConfig .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
AntiVirus/CloudQueryState .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
AntiVirus/RuleInPolicyMd5 .....	12
XML structure .....	12
Table description .....	12
Columns .....	13

# AntiVirus

## AntiVirus/Policies

This table contains AntiVirus policy.

### XML structure

```
<AntiVirus>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <Description></Description>
      <CloudQuery></CloudQuery>
    </Policy>
  </Policies>
</AntiVirus>
```

### Table description

Item	Description
Feature name	AntiVirus
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the policy	N/A	String: case-sensitive. Length: 1 to 255 characters.	N/A
CloudQuery	Enabling status of cloud querying	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Enabled.</li><li>2—Disabled.</li></ul>	N/A

# AntiVirus/PolicyInProfile

This table contains AntiVirus policy applied to the profile.

## XML structure

```
<AntiVirus>
  <PolicyInProfile>
    <Profile>
      <ProfileName></ProfileName>
      <PolicyName></PolicyName>
    </Profile>
  </PolicyInProfile>
</AntiVirus>
```

## Table description

Item	Description
Feature name	AntiVirus
Table name	PolicyInProfile
Table type	Multi-instance table
Row name	Profile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the profile	Index	String: case-insensitive. Length: 1 to 100 characters.	N/A
PolicyName	Name of the policy	N/A	String: case-insensitive. Length: 1 to 63 characters.	N/A

# AntiVirus/RuleInPolicy

This table contains the information of rules in an AntiVirus policy.

## XML structure

```
<AntiVirus>
  <RuleInPolicy>
    <Policy>
      <PolicyName></PolicyName>
```

```

    <Protocol>
      <ProtocolName></ProtocolName>
      <Direction></Direction>
      <Action></Action>
    </Protocol>
  <Application>
    <AppName></AppName>
    <Action></Action>
  </Application>
</Policy>
</RuleInPolicy>
</AntiVirus>

```

## Table description

Item	Description
Feature name	AntiVirus
Table name	RuleInPolicy
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Protocol	Protocol configuration	DataStructure	Members include: <ul style="list-style-type: none"> <li>ProtocolName</li> <li>Direction</li> <li>Action</li> </ul>	N/A
ProtocolName	Protocol name	N/A	String: case-insensitive. <ul style="list-style-type: none"> <li>HTTP</li> <li>FTP</li> <li>SMTP</li> <li>POP3</li> <li>IMAP</li> </ul>	N/A
Direction	Direction of protocol traffic	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Upload</li> <li>1—Download</li> <li>2—Both</li> </ul>	N/A
Action	Actions for the specified protocol's traffic	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Alert</li> <li>2—Block</li> <li>3—Redirect</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Application	Application configuration	Data Structure	Members include: <ul style="list-style-type: none"> <li>• AppName</li> <li>• Action</li> </ul>	N/A
AppName	Application name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Action	Actions for the specified application	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Alert</li> <li>• 2—Block</li> <li>• 3—Permit</li> </ul>	N/A

## AntiVirus/Signatures

This table contains the pre-defined rules information of an AntiVirus policy.

### XML structure

```

<AntiVirus>
  <Signatures>
    <Signature>
      <SignatureID></SignatureID>
      <Severity></Severity>
      <SignatureName></SignatureName>
    </Signature>
  </Signatures>
</AntiVirus>

```

### Table description

Item	Description
Feature name	AntiVirus
Table name	Signatures
Table type	Multi-instance table
Row name	Signature
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SignatureID	ID of the virus	Index	Unsigned integer. Value range: 1 to 536870910.	From signature file.

Column name	Column description	Column type	Data type and restrictions	Remarks
Severity	Severity of the virus	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Critical</li> <li>2—High</li> <li>3—Minor</li> <li>4—Low</li> </ul>	From signature file.
SignatureName	Name of the virus	N/A	String: case-insensitive. Length: 1 to 127 characters.	From signature file.

## AntiVirus/SignatureFileInfos

This table contains AntiVirus policy.

### XML structure

```

<AntiVirus>
  <SignatureFileInfos>
    <FileInfo>
      <Version></Version>
      <FileName></FileName>
      <PublishedTime></PublishedTime>
      <Updates></Updates>
    </FileInfo>
  </SignatureFileInfos>
</AntiVirus>

```

### Table description

Item	Description
Feature name	AntiVirus
Table name	SignatureFileInfos
Table type	Multi-instance table
Row name	FileInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Version	signature file version	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Current</li> <li>2—Latest</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>3—Factory</li> </ul>	
FileName	Name of the signature file	N/A	String: case-insensitive. Length: 1 to 31 characters.	v.v(2.1)
PublishedTime	The time when the signature is published	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	Consider time-zone
Updates	Updating Information	N/A	String: case-insensitive. Length: 1 to 255 characters.	N/A

## AntiVirus/UpdatePercentage

This table contains the percentage of update.

### XML structure

```
<AntiVirus>
  <UpdatePercentage>
    <Percentage></Percentage>
  </UpdatePercentage>
</AntiVirus>
```

### Table description

Item	Description
Feature name	AntiVirus
Table name	UpdatePercentage
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Percentage	Percentage of update	N/A	Unsigned integer. Value range: 0 to 100.	When the value range is 0 to 100, it means in upgrading, Otherwise, it means error

# AntiVirus/SignatureAutoUpgrading

This table contains the information of AntiVirus signatures auto upgrading.

## XML structure

```
<AntiVirus>
  <SignatureAutoUpgrading>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrading>
</AntiVirus>
```

## Table description

Item	Description
Feature name	AntiVirus
Table name	SignatureAutoUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Enabled or disabled	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Default is false
StartTime	The time that the system auto upgrading	N/A	Time.	Default is 03:01:00, HH:MM:SS
Type	Type of the system auto upgrading	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Week</li><li>1—Periodic</li></ul>	Default is 1
Day	Days	N/A	Unsigned integer. Value range: 0 to 15.	When Type is 0, the value range is 0 to 6. Otherwise, the value range is 1 to 15. The default is 3.

# AntiVirus/ActionDefaultParameters

This table contains Antivirus action default parameter information.

## XML structure

```
<AntiVirus>
  <ActionDefaultParameters>
    <ActionDefaultParameter>
      <Action></Action>
      <ParameterName></ParameterName>
    </ActionDefaultParameter>
  </ActionDefaultParameters>
</AntiVirus>
```

## Table description

Item	Description
Feature name	AntiVirus
Table name	ActionDefaultParameters
Table type	Multi-instance table
Row name	ActionDefaultParameter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	action	Index	Enumeration: <ul style="list-style-type: none"><li>1—Block</li><li>2—Capture</li><li>3—Logging</li><li>4—Redirect</li><li>5—Mail</li></ul>	N/A
ParameterName	Parameter-Name	N/A	String: case-insensitive. Length: 1 to 63 characters.	The value is from DIM table. E.g. If Action is block, the ParameterName's value is from DIM/BlockParameters.

# AntiVirus/RuleInPolicySigID

This table contains the Exception sigs information of an AntiVirus policy.

## XML structure

```
<AntiVirus>
  <RuleInPolicySigID>
    <Policy>
      <PolicyName></PolicyName>
      <ExceptionSigID></ExceptionSigID>
    </Policy>
  </RuleInPolicySigID>
</AntiVirus>
```

## Table description

Item	Description
Feature name	AntiVirus
Table name	RuleInPolicySigID
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
ExceptionSigID	ID of the virus	Index	Unsigned integer. Value range: 1 to 536870910.	N/A

## AntiVirus/FamilyInfos

This table contains information about virus families displayed on paginated lists.

## XML structure

```
<AntiVirus>
  <FamilyInfos>
    <FamilyInfo>
      <UserID></UserID>
      <Position></Position>
      <TotalCount></TotalCount>
      <FamilyID></FamilyID>
      <FamilyName></FamilyName>
    </FamilyInfo>
  </FamilyInfos>
</AntiVirus>
```

```

    </FamilyInfos>
</AntiVirus>

```

## Table description

Item	Description
Feature name	AntiVirus
Table name	FamilyInfos
Table type	Multi-instance table
Row name	FamilyInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserID	ID of the current virtual user.	Index	Unsigned integer.	The value is used to identify each query results in back end, and send to fore-end to get other paginated results when query results is more than one page.
Position	Position of the family on the entire virus families list.	Index	Unsigned integer.	N/Az
TotalCount	Total number of virus families.	N/A	Unsigned integer.	If the query function is used, the total number of virus families in the query results is displayed.
FamilyID	ID of the family.	Index	Unsigned integer. Value range: 1 to 536870910.	The value is obtained from the anti-virus signature file.
FamilyName	Name of the family.	N/A	String: case-insensitive. Length: 1 to 63 characters.	The value is obtained from the anti-virus signature file.

## AntiVirus/CloudQueryConfig

This table contains cloud query configure information.

## XML structure

```

<AntiVirus>
  <CloudQueryConfig>

```

```

    <HostName></HostName>
    <CacheSize></CacheSize>
    <CacheTime></CacheTime>
  </CloudQueryConfig>
</AntiVirus>

```

## Table description

Item	Description
Feature name	AntiVirus
Table name	CloudQueryConfig
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HostName	Name of the host	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
CacheSize	Size of the cache	N/A	Unsigned integer. Value range: 100000 to 200000.	N/A
CacheTime	Lifetime of the cached entries	N/A	Unsigned integer. Value range: 10 to 720.	N/A

## AntiVirus/CloudQueryState

This table contains cloud query status information.

## XML structure

```

<AntiVirus>
  <CloudQueryState>
    <HostName></HostName>
    <HostState></HostState>
    <HostStateErrCode></HostStateErrCode>
  </CloudQueryState>
</AntiVirus>

```



## Table description

Item	Description
Feature name	AntiVirus
Table name	CloudQueryState
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HostName	Name of the host	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
HostState	Status of the host	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Available</li><li>1—Unavailable</li></ul>	N/A
HostStateErrCode	Error code of cloud query	N/A	Unsigned integer. Value range: 0 to 3.	N/A

## AntiVirus/RuleInPolicyMd5

This table contains the MD5 exception information of an AntiVirus policy.

## XML structure

```
<AntiVirus>
  <RuleInPolicyMd5>
    <Policy>
      <PolicyName></PolicyName>
      <ExceptionMd5></ExceptionMd5>
    </Policy>
  </RuleInPolicyMd5>
</AntiVirus>
```

## Table description

Item	Description
Feature name	AntiVirus
Table name	RuleInPolicyMd5
Table type	Multi-instance table

Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
ExceptionMd5	Value of the MD5	Index	String: case-insensitive. Length: 32 characters.	N/A

# Contents

- AntiVirus .....2
  - AntiVirus/SignatureManualUpgrading .....2
  - AntiVirus/SignatureAutoUpgradeNow .....2
  - AntiVirus/RuleInPolicy .....2
  - AntiVirus/RuleInPolicySigID .....3

# AntiVirus

## AntiVirus/SignatureManualUpgrading

Message	Explanation
Operation failed because no valid license could be found. 操作失败：没有找到有效的license。	Please install a valid license. 请安装正确的license。

## AntiVirus/SignatureAutoUpgradeNow

Message	Explanation
Operation failed because no valid license could be found. 操作失败：没有找到有效的license。	Please install a valid license. 请安装正确的license。
The signature file is updating. Please try again later. 特征库正在升级，请稍后再试。	Please try later. 正在升级，稍后再试。
Operation failed because a connection to the signature library server could not be established. 操作失败：连接特征库服务器失败。	Please examine your network or server. 请检查网络和服务器是否正常。
Cannot execute this operation because of memory alert. 由于内存门限不能执行此操作。	Please try later. 待设备内存门限解除后再试。
The signature version is up to date. No update is needed. 特征库已是最新版本，不需要进行升级。	No update is needed because the version is up to date. 不需要升级，已经是最新版本。
Cannot update the signature library because the required service card cannot be found. 未检测到业务板，特征库升级失败。	Cannot update the signature library because the required service card cannot be found. 特征库升级操作需要有业务板。

## AntiVirus/RuleInPolicy

Message	Explanation
The maximum number of 100 application exceptions already reached. 最多可配置100个应用例外。	A maximum of 100 application exceptions can be configured. 最多可配置100个应用例外。

# AntiVirus/RuleInPolicySigID

Message	Explanation
The maximum number of 512 signature exceptions already reached. 最多可配置512个病毒例外。	A maximum of 512 signature exceptions can be configured. 最多可配置512个病毒例外。

# Contents

AP .....	1
AP/ResetAP .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AP/ResetAllAP .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
AP/PersistentAP .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
AP/RegroupAPByName .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
AP/RegroupAPByMac .....	3
XML structure .....	4
Table description .....	4
Columns .....	4
AP/RegroupAPBySerialID .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
AP/RegroupAPByGroup .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
AP/AuthenticateAP .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
AP/AuthenticateAllAP .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
AP/ImportAuthenticateFile .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
AP/ProvisionAP .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
AP/RenameAP .....	9
XML structure .....	9
Table description .....	9
Columns .....	9

# AP

## AP/ResetAP

This table contains information of AP resetting.

### XML structure

```
<AP>
  <ResetAP>
    <AP>
      <ApName></ApName>
    </AP>
  </ResetAP>
</AP>
```

### Table description

Item	Description
Feature name	AP
Table name	ResetAP
Table type	Multi-instance table
Row name	AP
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.

## AP/ResetAllAP

This table contains information of resetting all APs.

### XML structure

```
<AP>
  <ResetAllAP>
    <Global>
      <ResetType></ResetType>
    </Global>
  </ResetAllAP>
</AP>
```

```

    </ResetAllAP>
  </AP>

```

## Table description

Item	Description
Feature name	AP
Table name	ResetAllAP
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ResetType	Which type of APs will be reset.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—All.</li> <li>2—Unauthenticated.</li> </ul>

## AP/PersistentAP

This table contains information of AP persistence.

## XML structure

```

<AP>
  <PersistentAP>
    <AP>
      <ApName></ApName>
    </AP>
  </PersistentAP>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	PersistentAP
Table type	Multi-instance table
Row name	AP
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.

## AP/RegroupAPByName

This table contains information of AP regrouping.

## XML structure

```
<AP>
  <RegroupAPByName>
    <AP>
      <ApName></ApName>
      <GroupName></GroupName>
    </AP>
  </RegroupAPByName>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	RegroupAPByName
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
GroupName	The name of AP group which the AP will belong to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A

## AP/RegroupAPByMac

This table contains information of AP regrouping by MAC address.

## XML structure

```
<AP>
  <RegroupAPByMac>
    <MAC>
      <MacAddress></MacAddress>
      <GroupName></GroupName>
    </MAC>
  </RegroupAPByMac>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	RegroupAPByMac
Table type	Multi-instance table
Row name	MAC
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	AP MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
GroupName	The name of AP group which the AP will belong to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A

## AP/RegroupAPBySerialID

This table contains information of AP regrouping by serial ID.

## XML structure

```
<AP>
  <RegroupAPBySerialID>
    <SerialID>
      <SerialID></SerialID>
      <GroupName></GroupName>
    </SerialID>
  </RegroupAPBySerialID>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	RegroupAPBySerialID
Table type	Multi-instance table
Row name	SerialID
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SerialID	AP serial ID	Index	String, uppercase. Length: 1 to 127 characters.	If this column contains lowercase character, it will be converted to uppercase automatically.
GroupName	The name of AP group which the AP will belong to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A

## AP/RegroupAPByGroup

This table contains information of AP regrouping by group.

## XML structure

```
<AP>
  <RegroupAPByGroup>
    <Group>
      <OldGroupName></OldGroupName>
      <NewGroupName></NewGroupName>
    </Group>
  </RegroupAPByGroup>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	RegroupAPByGroup
Table type	Multi-instance table
Row name	Group

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
OldGroupName	The name of old AP group.	Index	String, lowercase. Length: 1 to 31 characters.	If this column contains uppercase character, it will be converted to lowercase automatically.
NewGroupName	The name of AP group which the AP in old group will belong to.	N/A	String, lowercase. Length: 1 to 31 characters.	If this column contains uppercase character, it will be converted to lowercase automatically.

## AP/AuthenticateAP

This table contains information of authenticating APs.

## XML structure

```

<AP>
  <AuthenticateAP>
    <AP>
      <ApName></ApName>
      <Action></Action>
    </AP>
  </AuthenticateAP>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	AuthenticateAP
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	The authenticating action type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Accept.</li> <li>2—<b>Reject.</b></li> </ul>	N/A

## AP/AuthenticateAllAP

This table contains information of authenticating all APs.

### XML structure

```

<AP>
  <AuthenticateAllAP>
    <Global>
      <Action></Action>
    </Global>
  </AuthenticateAllAP>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	AuthenticateAllAP
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Action	The authenticating action type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Accept.</li> <li>2—<b>Reject.</b></li> </ul>

## AP/ImportAuthenticateFile

This table contains information of importing authenticating file.

### XML structure

```

<AP>

```

```

<ImportAuthenticateFile>
  <FileName></FileName>
</ImportAuthenticateFile>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	ImportAuthenticateFile
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	The TXT file name with full path which will be imported as the AP ACL rules for AP authentication.	N/A	String, case-insensitive. Length: 1 to 255 characters.	Should end with ".txt" and specify the authentication ACL first.

## AP/ProvisionAP

This table contains information of provisioning APs.

## XML structure

```

<AP>
  <ProvisionAP>
    <AP>
      <ApName></ApName>
      <Action></Action>
    </AP>
  </ProvisionAP>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	ProvisionAP
Table type	Multi-instance table

Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
Action	The authenticating action type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Provision.</li> <li>2—Reset provisioning.</li> </ul>	N/A

## AP/RenameAP

This table contains information about renaming APs.

## XML structure

```

<AP>
  <RenameAP>
    <AP>
      <ApName></ApName>
      <NewApName></NewApName>
    </AP>
  </RenameAP>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	RenameAP
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.

Column name	Column description	Column type	Data type and restrictions	Remarks
NewApName	New AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.



# Contents

AP .....	1
AP/GlobalCfg .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
AP/ManualAP .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
AP/RadioOfManualAP .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
AP/PrvsOfManualAP .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
AP/PrvsOfManualAPACIPv4 .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
AP/PrvsOfManualAPACIPv6 .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
AP/EdcaRadio .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
AP/RadioWmm .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
AP/Radio11n .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
AP/Radio11ac .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
AP/APGroup .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
AP/APGroupMACRule .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
AP/APGroupSerialIDRule .....	24
XML structure .....	24
Table description .....	25
Columns .....	25
AP/APGroupNameRule .....	25
XML structure .....	25
Table description .....	26
Columns .....	26

AP/APGroupIPv4Rule .....	26
XML structure .....	26
Table description .....	26
Columns .....	27
AP/APGroupIPv6Rule .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
AP/APGroupModel .....	28
XML structure .....	28
Table description .....	28
Columns .....	29
AP/APGroupRadio .....	29
XML structure .....	29
Table description .....	30
Columns .....	30
AP/APGroupRadio11n .....	34
XML structure .....	34
Table description .....	35
Columns .....	35
AP/APGroupRadio11ac .....	37
XML structure .....	37
Table description .....	37
Columns .....	38
AP/APGroupPrvs .....	38
XML structure .....	38
Table description .....	39
Columns .....	39
AP/APGroupPrvsACIPv4 .....	40
XML structure .....	40
Table description .....	40
Columns .....	40
AP/APGroupPrvsACIPv6 .....	40
XML structure .....	40
Table description .....	41
Columns .....	41
AP/Location .....	41
XML structure .....	41
Table description .....	41
Columns .....	42
AP/APAuthentication .....	42
XML structure .....	42
Table description .....	42
Columns .....	43
AP/LocalAC .....	43
XML structure .....	43
Table description .....	44
Columns .....	44
AP/ContainerTopology .....	45
XML structure .....	45
Table description .....	45
Columns .....	45
AP/Container .....	46
XML structure .....	46
Table description .....	46
Columns .....	46

# AP

## AP/GlobalCfg

This table contains the informations of global.

### XML structure

```
<AP>
  <GlobalCfg>
    <AutoAp></AutoAp>
    <AutoPersistent></AutoPersistent>
    <RegionCode></RegionCode>
    <RegionLock></RegionLock>
    <Preempt></Preempt>
    <FirmwareUpgrade></FirmwareUpgrade>
    <TunnelEncryption></TunnelEncryption>
    <Gps></Gps>
    <LocalAC></LocalAC>
    <CentralACIPv4></CentralACIPv4>
    <CentralACIPv6></CentralACIPv6>
    <ControlAddress></ControlAddress>
    <ControlAddressIPv4></ControlAddressIPv4>
    <ControlAddressIPv6></ControlAddressIPv6>
  </GlobalCfg>
</AP>
```

### Table description

Item	Description
Feature name	AP
Table name	GlobalCfg
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoAp	Whether an AP can connect the AC without creating a manual AP.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul> Default value is false.	N/A
AutoPersistent	When an auto AP connects the AC , whether convert the AP to manual AP automatically.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul> Default value is false.	N/A
RegionCode	Region code of AP group.	N/A	Unsigned short.	Conform to ISO 3166 standard.
RegionLock	Whether the region code of the AC is locked	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul> Default value is false.	N/A
Preempt	Whether the AP in this group will be forced to switch the backup tunnel to active by priority.	N/A	Boolean: <ul style="list-style-type: none"> <li>true: Switch</li> <li>false: Not switch</li> </ul> Default value is false.	N/A
FirmwareUpgrade	Whether the AC will upgrade AP's firmware automatically if the software is mismatch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul> Default value is disable.	N/A
TunnelEncryption	Whether to enable tunnel encryption.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
Gps	Whether to open the Gps report switch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	Only for FatAP Type
LocalAC	Whether to enable Local ac.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	Only for Local-ac Type
CentralACIPv4	The IPv4 Central AC address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. Only for Local-ac Type
CentralACIPv6	The IPv6 Central AC address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. Only for Local-ac Type
ControlAddress	CAPWAP control address configuration	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ControlAddressIPv4	Specify an AC IPv4 address for AC rediscovery	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ControlAddressIPv6	Specify an AC IPv4 address for AC rediscovery	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.

## AP/ManualAP

This table contains manual AP information.

### XML structure

```

<AP>
  <ManualAP>
    <AP>
      <Name></Name>
      <Model></Model>
      <CfgSerialID></CfgSerialID>
      <CfgMacAddress></CfgMacAddress>
      <RegionCode></RegionCode>
      <RegionLock></RegionLock>
      <Priority></Priority>
      <Preempt></Preempt>
      <EchoInterval></EchoInterval>
      <EchoCount></EchoCount>
      <RetransInterval></RetransInterval>
      <RetransCount></RetransCount>
      <StatisInterval></StatisInterval>
      <FirmwareUpgrade></FirmwareUpgrade>
      <BackupACIPv4></BackupACIPv4>
      <BackupACIPv6></BackupACIPv6>
      <LocationName></LocationName>
      <Description></Description>
      <TunnelEncryption></TunnelEncryption>
      <ControlAddress></ControlAddress>
      <ControlAddressIPv4></ControlAddressIPv4>
      <ControlAddressIPv6></ControlAddressIPv6>
      <ProvisionAutoUpgrade></ProvisionAutoUpgrade>
      <ProvisionAutoRecover></ProvisionAutoRecover>
      <LedMode></LedMode>
    </AP>
  </ManualAP>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	ManualAP
Table type	Multi-instance table
Row name	AP
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
Model	AP model name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	Characters will be automatically convert case. Refer to AP/APDB. This column is mandatory when the row is being created. This column is not writable when the row is being deleted, removed. This column should not be changed when the row is being replaced or merged.
CfgSerialID	Configured AP serial ID.	N/A	String, uppercase. Length: 1 to 127 characters.	If this column contains lowercase character, it will be converted to uppercase automatically.
CfgMacAddress	Configured AP MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
RegionCode	Region code of AP.	N/A	Unsigned short.	Conform to ISO 3166 standart.
RegionLock	Whether the region code of the AP is locked.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
Priority	AP connection priority	N/A	Unsigned short. Value range: 0 to 7.	N/A
Preempt	Whether the AP will be forced to switch the backup tunnel to active by priority.	N/A	Boolean: <ul style="list-style-type: none"> <li>true: Switch</li> <li>false: Not switch</li> </ul>	N/A

EchoInterval	The transmit interval of tunnel echo messages.	N/A	Unsigned short. Value range: 0, 5 to 255. Unit: seconds	N/A
EchoCount	The allowed maximum number of echo messages which are not received. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20.	N/A
RetransInterval	The interval to retransmit a request message.	N/A	Unsigned short. Value range: 1 to 30. Unit: seconds	N/A
RetransCount	The allowed maximum number of retransmission attempts. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20. Unit: seconds	N/A
StatisInterval	The interval of AP sending the statistics informations to AC.	N/A	Unsigned short. Value range: 0 to 240. Default value is 50 seconds.	N/A
FirmwareUpgrade	Whether the AC will upgrade AP's firmware automatically if the software is mismatch.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enable</li> <li>• false—Disable</li> </ul>	N/A
BackupACIPv4	The IPv4 backup AC address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
BackupACIPv6	The IPv6 backup AC address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
LocationName	Which location the AP group belongs to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A
Description	The description of AP.	N/A	String, Length: 1 to 64 characters.	N/A
TunnelEncryption	Whether to enable tunnel encryption.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enable</li> <li>• false—Disable</li> </ul>	N/A
ControlAddress	CAPWAP control address configuration.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enable.</li> <li>• false—Disable.</li> </ul>	N/A
ControlAddressIPv4	Specify an AC IPv4 address for AC rediscovery.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ControlAddressIPv6	Specify an AC IPv4 address for AC rediscovery.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
ProvisionAutoUpgrade	Whether to enable provision	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enable.</li> </ul>	N/A

	auto-upgrade.		<ul style="list-style-type: none"> <li>false—Disable.</li> </ul>	
ProvisionAutoRecover	Whether to enable provision auto-recover.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
LedMode	LED mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Normal</li> <li>1—Quiet</li> <li>2—Awake</li> <li>3—Always-on</li> <li>4—Inherit</li> </ul>	N/A

## AP/RadioOfManualAP

This table contains radio information of manual AP.

### XML structure

```

<AP>
  <RadioOfManualAP>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <Mode></Mode>
      <Bandwidth></Bandwidth>
      <Status></Status>
      <RateMulticast></RateMulticast>
      <RateMandatory></RateMandatory>
      <RateSupported></RateSupported>
      <RateDisabled></RateDisabled>
      <Preamble></Preamble>
      <BeaconInterval></BeaconInterval>
      <PowerLock></PowerLock>
      <Distance></Distance>
      <MaxRxDuration></MaxRxDuration>
      <FragmentThreshold></FragmentThreshold>
      <LongRetryThreshold></LongRetryThreshold>
      <ProtectionThreshold></ProtectionThreshold>
      <ShortRetryThreshold></ShortRetryThreshold>
      <CfgChannel></CfgChannel>
      <CfgMaxPower></CfgMaxPower>
      <CfgMaxPowerPercent></CfgMaxPowerPercent>
    </Radio>
  </RadioOfManualAP>
</AP>

```



## Table description

Item	Description
Feature name	AP
Table name	RadioOfManualAP
Table type	Multi-instance table
Row name	Radio
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
RadioID	Radio ID	Index	Unsigned short. Value range: 1 to 31.	N/A
Mode	Radio mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11a</li> <li>3—802.11g</li> <li>4—802.11n(2.4GHz)</li> <li>5—802.11n(5GHz)</li> <li>6—802.11ac(2.4GHz)</li> <li>7—802.11ac(5GHz)</li> </ul>	N/A
Bandwidth	Radio bandwidth.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—20M</li> <li>2—40M</li> <li>3—80M</li> <li>4—160M</li> <li>5—80M + 80M</li> <li>17—5M</li> <li>18—10M</li> </ul>	N/A
Status	Radio status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> <li>2—Inherit</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RateMulticast	Multicast rate.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 1—1Mbps</li> <li>• 2—2Mbps</li> <li>• 3—5.5Mbps</li> <li>• 4—6Mbps</li> <li>• 5—9Mbps</li> <li>• 6—11Mbps</li> <li>• 7—12Mbps</li> <li>• 8—18Mbps</li> <li>• 9—24Mbps</li> <li>• 10—36Mbps</li> <li>• 11—48Mbps</li> <li>• 12—54Mbps</li> <li>• 13—auto</li> </ul> <p>If this column is not configured, the multicast rate will be calculated automatically.</p>	<p>The value can have multi-selections. List of enumeration, separated by comma Example: 1, 2.</p>
RateMandatory	Mandatory rate.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 1—1Mbps</li> <li>• 2—2Mbps</li> <li>• 3—5.5Mbps</li> <li>• 4—6Mbps</li> <li>• 5—9Mbps</li> <li>• 6—11Mbps</li> <li>• 7—12Mbps</li> <li>• 8—18Mbps</li> <li>• 9—24Mbps</li> <li>• 10—36Mbps</li> <li>• 11—48Mbps</li> <li>• 12—54Mbps</li> </ul>	<p>The value can have multi-selections. List of enumeration, separated by comma Example: 1, 2.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
RateSupported	Supported rate.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul>	The value can have multi-selections, exclude the one which multicast rate uses. List of enumeration, separated by comma Example: 1, 2.
RateDisabled	Disabled rate.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul>	The value can have multi-selections, exclude the one which multicast rate uses. List of enumeration, separated by comma Example: 1, 2.
Preamble	Preamble.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Short.</li> <li>false—Long.</li> </ul> The column is only for 2.4GHz radio mode.	N/A
BeaconInterval	Beacon Interval time.	N/A	Unsigned short. The value range is 32~8191. Unit: TU. 1TU = 1024ms	N/A
PowerLock	Lock the power.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> <li>2—Inherit</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ChannelAutoLock	<del>Lock the channel</del>	N/A	Boolean: <ul style="list-style-type: none"> <li><del>true ChannelAutoLock</del></li> <li><del>false ChannelAutoUnLock</del></li> </ul> The default value is true.	<del>When the value is true, the radio automatically selects an optimal channel, and then locks the channel.</del>  When the AC detects any radar signals on its channel, it immediately selects another channel (even if the channel auto lock is true) and locks the new channel.
Distance	The distance that Radio can cover.	N/A	Unsigned short. The value range is 1~40. Unit: km(kilometre).	N/A
MaxRxDuration	Max Reveived frame duration tim.	N/A	Unsigned integer. The value range is 500~250000. Unit: ms(millisecond).	N/A
FragmentThreshold	Fragment threshold.	N/A	Unsigned short. The value range is 256~2346. And the value must be an even number. Unit: byte.	N/A
LongRetryThreshold	Long retry threshold.	N/A	Unsigned short. The value range is 1~15. Unit: null.	N/A
ProtectionThreshold	Protection threshold.	N/A	Unsigned short. The value range is 0~2346. Unit: byte.	N/A
ShortRetryThreshold	Short retry threshold.	N/A	Unsigned short. The value range is 1~15. Unit: null.	N/A
CfgChannel	Configured channel number.	N/A	Unsigned short. The value range conforms to "AP/ChannelDB/Supported ChannelList" column. If this column is not configured, the channel number will be calculated automatically.	When the value is true, the radio automatically selects an optimal channel, and then locks the channel.  When the AC detects any radar signals on its channel, it immediately selects another channel (even if the channel auto lock is true) and locks the new channel.
CfgMaxPower	Configured maximum power	N/A	Unsigned short. Value range: 1 to "AP/PowerDB/ValidMaxPower". Unit: dBm	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CfgMaxPowerPercent	Configured maximum power in percentage	N/A	Unsigned short. Value range: 1 to 10. Unit: null.	<ul style="list-style-type: none"> <li>When both CfgMaxPower and CfgMaxPowerPercent are configured, CfgMaxPowerPercent has higher priority.</li> <li>Value 1 represents 10%, 2 represents 20%, etc.</li> </ul> <p>The Remove operation will set the value of this parameter to 10 by default.</p>

## AP/PrvsOfManualAP

This table contains provision information of manual AP.

### XML structure

```

<AP>
  <PrvsOfManualAP>
    <Prvs>
      <ApName></ApName>
      <ACHostName></ACHostName>
      <ACIPv4></ACIPv4>
      <ACIPv6></ACIPv6>
      <DnsDomain></DnsDomain>
      <DnsServerIPv4></DnsServerIPv4>
      <DnsServerIPv6></DnsServerIPv6>
      <GatewayIPv4></GatewayIPv4>
      <GatewayIPv6></GatewayIPv6>
      <IPv4Address></IPv4Address>
      <IPv6Address></IPv6Address>
      <Dot1xSupplAnonyIdent></Dot1xSupplAnonyIdent>
      <Dot1xSupplEapMethod></Dot1xSupplEapMethod>
      <Dot1xSupplEnable></Dot1xSupplEnable>
      <Dot1xSupplPasswdCiper></Dot1xSupplPasswdCiper>
      <Dot1xSupplPasswdSimple></Dot1xSupplPasswdSimple>
      <Dot1xSupplUsername></Dot1xSupplUsername>
    </Prvs>
  </PrvsOfManualAP>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	PrvsOfManualAP
Table type	Multi-instance table
Row name	Prvs
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
ACHostName	Specify an AC by its hostname.	N/A	String. Length: 1 to 253 characters.	N/A
ACIPv4	Specify an AC by its IPv4 address.	N/A	List of string, dotted decimal notation, Separated by comma.	Example: 1.1.1.1, 1.1.1.2.
ACIPv6	Specify an AC by its IPv6 address.	N/A	List of hexadecimal string, colon-separated, Separated by comma.	Example: 1:1::1:1, 1:1::1:2.
DnsDomain	Specify the domain name suffix.	N/A	String. Length: 1 to 253.	N/A
DnsServerIPv4	Specify a DNS server by its IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
DnsServerIPv6	Specify a DNS server by its IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
GatewayIPv4	Specify a gateway by its IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
GatewayIPv6	Specify a gateway by its IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
IPv4Addresses	Specify an IP address that the AP uses to establish a CAPWAP tunnel.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv6Addresses	Specify an IPv6 address that the AP uses to establish a CAPWAP tunnel.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
Dot1xSupplAnonyIdent	Specify an anonymous identifier for the supplicant.	N/A	String. Length: 1 to 253 characters.	N/A
Dot1xSupplEapMethod	Specify an EAP authentication method.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—md5</li> <li>2—peap-gtc</li> <li>3—peap-mschapv2</li> <li>4—tls-gtc</li> <li>5—tls-mschapv2</li> </ul>	N/A
Dot1xSupplEnable	Enable the 802.1X supplicant feature.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Dot1xSupplPasswdCipher	Specify a ciphertext password for the 802.1X supplicant.	N/A	String. Length: 1 to 201 characters.	N/A
Dot1xSupplPasswdSimple	Specify a plaintext password for the 802.1X supplicant.	N/A	String. Length: 1 to 127 characters.	N/A
Dot1xSupplUsername	Specify a username for the 802.1X supplicant.	N/A	String. Length: 1 to 253 characters.	N/A

## AP/PrvsOfManualAPACIPv4

This table contains provision information of manual AP of IPv4 address.

### XML structure

```

<AP>
  <PrvsOfManualAPACIPv4>
    <Prvs>
      <ApName></ApName>
      <ACIPv4></ACIPv4>
    </Prvs>
  </PrvsOfManualAPACIPv4>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	PrvsOfManualAPACIPv4
Table type	Multi-instance table
Row name	Prvs
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
ACIPv4	Specify an AC by its IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

## AP/PrvsOfManualAPACIPv6

This table contains provision information of manual AP of IPv6 address.

## XML structure

```
<AP>
  <PrvsOfManualAPACIPv6>
    <Prvs>
      <ApName></ApName>
      <ACIPv6></ACIPv6>
    </Prvs>
  </PrvsOfManualAPACIPv6>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	PrvsOfManualAPACIPv6
Table type	Multi-instance table
Row name	Prvs
Restrictions	None



Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	ApName	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
ACIPv6	Specify an AC by its IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1.1.1.1. This column is available when the SrcAny column is false.

## AP/EdcaRadio

This table contains radio EDCA information.

## XML structure

```

<AP>
  <EdcaRadio>
    <EdcaPara>
      <ApName></ApName>
      <RadioID></RadioID>
      <AccessCategory></AccessCategory>
      <Noack></Noack>
      <CfgAifsn></CfgAifsn>
      <CfgEcwmin></CfgEcwmin>
      <CfgEcwmax></CfgEcwmax>
      <CfgTxOpLimit></CfgTxOpLimit>
    </EdcaPara>
  </EdcaRadio>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	EdcaRadio
Table type	Multi-instance table
Row name	EdcaPara
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned short. Value range: 1 to 31.	N/A
AccessCategory	A label for the common set of enhanced distributed channel access parameters that are used by a WMM STA to contend for the channel in order to transmit MSDUs with certain priorities.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—BK.</li> <li>1—BE.</li> <li>2—VI.</li> <li>3—VO.</li> </ul>	N/A
Noack	Whether acknowledgement is required.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Not required.</li> <li>false—Required.</li> </ul> The default value is false.	N/A
CfgAifsn	Arbitration Inter Frame Spacing Number.	N/A	The value range conforms to “AP/RadioIDB/Aifsn” column.	N/A
CfgEcwmin	Exponent form of CWmin.	N/A	The value range conforms to “AP/RadioIDB/Ecwmin” column.	N/A
CfgEcwmax	Exponent form of CWmax.	N/A	The value range conforms to “AP/RadioIDB/Ecwmax” column.	N/A
CfgTxOpLimit	Transmission opportunity limit.	N/A	The value range conforms to “AP/RadioIDB/TxOpLimit” column.	N/A

## AP/RadioWmm

This table contains radio WMM information.

## XML structure

```

<AP>
  <RadioWmm>
    <Wmm>
      <ApName></ApName>
      <RadioID></RadioID>
      <Status></Status>
    </Wmm>
  </RadioWmm>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	RadioWmm
Table type	Multi-instance table
Row name	Wmm
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length:1to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned char. Value range: 1 to 31.	N/A
Status	WMM status of radio.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul> The default value is true.	N/A

## AP/Radio11n

This table contains radio 802.11n information.

## XML structure

```
<AP>
  <Radio11n>
    <Dot11n>
      <ApName></ApName>
      <RadioID></RadioID>
      <MCSMulticast></MCSMulticast>
      <MCSMandatory></MCSMandatory>
      <MCSSupported></MCSSupported>
      <Ampdu></Ampdu>
      <Amsdu></Amsdu>
      <ShortGI></ShortGI>
      <Stbc></Stbc>
      <Ldpc></Ldpc>
```

```

    <Mimo></Mimo>
    <Greenap></Greenap>
    <SmartAntenna></SmartAntenna>
    <SmartAntennaPolicy></SmartAntennaPolicy>
    <Protection></Protection>
    <Client11nOnly></Client11nOnly>
    <BandwidthAutoswitch></BandwidthAutoswitch >
  </Dot11n>
</Radio11n>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	Radio11n
Table type	Multi-instance table
Row name	Dot11n
Restrictions	The table is only for 802.11n and 802.11ac radio mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned char. Value range: 1 to 31.	N/A
MCSMulticast	The index for multicast MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSMulticast must be smaller than or equal to the MCSMandatory.
MCSMandatory	The maximum index for mandatory MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSMandatory must be smaller than or equal to the MCSSupported, and the MCSMandatory must be greater than or equal to the MCSMulticast.
MCSSupported	The maximum index for supported MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSSupported must be greater than or equal to the MCSMandatory.

Column name	Column description	Column type	Data type and restrictions	Remarks
Ampdu	A-mpdu function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Amsdu	A-msdu function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
ShortGI	Short GI function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Stbc	STBC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Ldpc	LDPC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Mimo	MIMO.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: 1X1</li> <li>2: 2X2</li> <li>3: 3X3</li> <li>4: 4X4</li> </ul>	N/A
Greenap	Green ap function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntenna	Smart antenna function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntennaPolicy	Smart antenna policy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: Auto</li> <li>2: High-availability</li> <li>3: High-throughput</li> </ul>	Effective only when SmartAntenna is enabled.
Protection	802.11n protection function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Client11nOnly	Client dot11n only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
BandwidthAutoswitch	Bandwidth autoswitch function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul> <p>The column is only for 2.4GHz radio mode, and AP/RadiusManualAP/Bandwidth must be 2..</p>	N/A

# AP/Radio11ac

This table contains radio 802.11ac information.

## XML structure

```
<AP>
  <Radio11ac>
    <Dot11ac>
      <ApName></ApName>
      <RadioID></RadioID>
      <VHTNSSMulticast></VHTNSSMulticast>
      <VHTMCSMulticast></VHTMCSMulticast>
      <VHTNSSMandatory></VHTNSSMandatory>
      <VHTNSSSupported></VHTNSSSupported>
      <Client11acOnly></Client11acOnly>
    </Dot11ac>
  </Radio11ac>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	Radio11ac
Table type	Multi-instance table
Row name	Dot11ac
Restrictions	The table is only for 802.11ac radio mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned char. Value range: 1 to 31.	N/A
VHTNSSMulticast	The NSS for multicast VHT-MCS	N/A	Unsigned short. Value range: 0 to 8. Default value is 0.	The VHTNSSMulticast must be smaller than or equal to the VHTNSSMandatory.

Column name	Column description	Column type	Data type and restrictions	Remarks
VHTMCSMulticast	The index for multicast VHT-MCS.	N/A	Unsigned short. Value range: 0 to 9, 255. Default value is 255.	N/A
VHTNSSMandatory	The maximum NSS for mandatory VHT-MCS	N/A	Unsigned short. Value range: 0 to 8. Default value is 0.	The VHTNSSMandatory must be smaller than or equal to the VHTNSSSupported, and the VHTNSSMandatory must be greater than or equal to the VHTNSSMulticast.
VHTNSSSupported	The maximum NSS for supported VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8. Default value is 0.	The VHTNSSSupported must be greater than or equal to the VHTNSSMandatory.
Client11acOnly	Client dot11ac only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A

## AP/APGroup

This table contains information of AP groups.

## XML structure

```

<AP>
  <APGroup>
    <Group>
      <Name></Name>
      <RegionCode></RegionCode>
      <RegionLock></RegionLock>
      <Priority></Priority>
      <Preempt></Preempt>
      <EchoInterval></EchoInterval>
      <EchoCount></EchoCount>
      <RetransInterval></RetransInterval>
      <RetransCount></RetransCount>
      <StatisInterval></StatisInterval>
      <FirmwareUpgrade></FirmwareUpgrade>
      <BackupACIPv4></BackupACIPv4>
      <BackupACIPv6></BackupACIPv6>
      <LocationName></LocationName>
      <Description></Description>
      <TunnelEncryption></TunnelEncryption>
      <ProvisionAutoUpgrade></ProvisionAutoUpgrade>
      <ProvisionAutoRecover></ProvisionAutoRecover>
      <LedMode></LedMode>
    </Group>
  </APGroup>
</AP>

```

```

    </Group>
  </APGroup>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroup
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ApName	Region code of AP group.	N/A	Unsigned short.	Conform to ISO 3166 standard.
RegionLock	Whether the region code of the AP group is locked.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul> Default value is false.	N/A
Priority	AP connection priority	N/A	Unsigned short. Value range: 0 to 7.	N/A
Preempt	Whether the AP in this group will be forced to switch the backup tunnel to active by priority.	N/A	Boolean: <ul style="list-style-type: none"> <li>true: Switch</li> <li>false: Not switch</li> </ul> Default value is false.	N/A
EchoInterval	The transmit interval of tunnel echo messages.	N/A	Unsigned short. Value range: 0, 5 to 255. Unit: seconds Default value is 10 seconds.	N/A
EchoCount	The allowed maximum number of echo messages which are not received. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20. Default value is 3.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
RetransInterval	The interval to retransmit a request message.	N/A	Unsigned short. Value range: 1 to 30. Unit: seconds Default value is 5 seconds.	N/A
RetransCount	The allowed maximum number of retransmission attempts. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20. Unit: seconds Default value is 6.	N/A
StatInterval	The interval of AP sending the statistics informations to AC.	N/A	Unsigned short. Value range: 0 to 240. Unit: seconds Default value is 50 seconds.	N/A
FirmwareUpgrade	Whether the AC will upgrade AP's firmware automatically if the software is mismatch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul> Default value is disable.	N/A
BackupACIPv4	The IPv4 backup AC address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
BackupACIPv6	The IPv6 backup AC address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
LocationName	Which location the AP group belongs to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A
Description	The description of APGroup.	N/A	String, Length: 1 to 64 cahracters	N/A
TunnelEncryption	Whether to enable tunnel encryption.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
ProvisionAutoUpgrade	Whether to enable provision auto-upgrade	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
ProvisionAutoRecover	Whether to enable provision auto-recover	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
LedMode	LED mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Normal</li> <li>1—Quiet</li> <li>2—Awake</li> <li>3—Always-on</li> </ul>	N/A

# AP/APGroupMACRule

This table contains information of AP groups' rules of MAC address.

## XML structure

```
<AP>
  <APGroupMACRule>
    <Rule>
      <GroupName></GroupName>
      <MacAddress></MacAddress>
    </Rule>
  </APGroupMACRule>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupMACRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
MacAddress	AP MAC address.	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

# AP/APGroupSerialIDRule

This table contains information of AP groups' rules of serial ID.

## XML structure

```
<AP>
  <APGroupSerialIDRule>
    <Rule>
```

```

    <GroupName></GroupName>
    <SerialID></SerialID>
    <Rule>
  </APGroupSerialIDRule>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupSerialIDRule
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
SerialID	AP serial ID	Index	String, uppercase. Length: 1 to 127 characters.	N/A

## AP/APGroupNameRule

This table contains information of AP groups' rules of AP name.

## XML structure

```

<AP>
  <APGroupNameRule>
    <Rule>
      <GroupName></GroupName>
      <APName></APName>
    </Rule>
  </APGroupNameRule>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupNameRule
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
APName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A

## AP/APGroupIPv4Rule

This table contains information of AP groups' rules of IPv4 address range.

## XML structure

```
<AP>
  <APGroupIPv4Rule>
    <Rule>
      <GroupName></GroupName>
      <IPv4Addr></IPv4Addr>
      <IPv4Wildcard></IPv4Wildcard>
    </Rule>
  </APGroupIPv4Rule>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupIPv4Rule
Table type	Multi-instance table
Row name	Rule

Item	Description
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
IPv4Addr	IPv4 address of AP.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
IPv4Wildcard	Wildcard mask for the IPv4 address of AP.	Index	String, dotted decimal notation.	Example: 255.255.255.0.

## AP/APGroupIPv6Rule

This table contains information of AP groups' rules of IPv6 address range.

## XML structure

```

<AP>
  <APGroupIPv6Rule>
    <Rule>
      <GroupName></GroupName>
      <IPv6Addr></IPv6Addr>
      <IPv6Wildcard></IPv6Wildcard>
    </Rule>
  </APGroupIPv6Rule>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupIPv6Rule
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
IPv6Addr	Source IPv6 address.	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the SrcAny column is false.
IPv6Wildcard	Length of the source IPv6 address prefix.	Index	Unsigned integer. Value range: 1 to 128.	This column is available when the SrcAny column is false.

## AP/APGroupModel

This table contains information of AP group models.

## XML structure

```
<AP>
  <APGroupModel>
    <Model>
      <GroupName></GroupName>
      <ModelName></ModelName>
    </Model>
  </APGroupModel>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupModel
Table type	Multi-instance table
Row name	Model
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModelName	AP model name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## AP/APGroupRadio

This table contains information of AP group radios.

## XML structure

```
<AP>
  <APGroupRadio>
    <Radio>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioID></RadioID>
      <Mode></Mode>
      <Bandwidth></Bandwidth>
      <Spectrum></Spectrum>
      <Status></Status>
      <RateMulticast></RateMulticast>
      <RateMandatory></RateMandatory>
      <RateSupported></RateSupported>
      <RateDisabled></RateDisabled>
      <Preamble></Preamble>
      <BeaconInterval></BeaconInterval>
      <PowerLock></PowerLock>
      <ChannelAutoLock></ChannelAutoLock>
      <Distance></Distance>
      <MaxRxDuration></MaxRxDuration>
      <FragmentThreshold></FragmentThreshold>
      <LongRetryThreshold></LongRetryThreshold>
      <ProtectionThreshold></ProtectionThreshold>
      <ShortRetryThreshold></ShortRetryThreshold>
      <CfgChannel></CfgChannel>
      <CfgMaxPower></CfgMaxPower>
    </Radio>
  </APGroupRadio>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupRadio
Table type	Multi-instance table
Row name	Radio
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModelName	AP model name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID.	Index	Unsigned short. Value range: 1 to 31.	N/A
Mode	Radio mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11a</li> <li>3—802.11g</li> <li>4—802.11n(2.4GHz)</li> <li>5—802.11n(5GHz)</li> <li>6—802.11ac(2.4GHz)</li> <li>7—802.11ac(5GHz)</li> </ul>	N/A
Bandwidth	Radio bandwidth.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—20M</li> <li>2—40M</li> <li>3—80M</li> <li>4—160M</li> <li>5—80M + 80M</li> <li>17—5M</li> <li>18—10M</li> </ul> <p>Default value is 1 when the Mode is 1、2、3、4、6.</p> <p>Default value is 2 when the Mode is 5.</p> <p>Default value is 3 when the Mode is 7.</p>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Spectrum	Supported radio spectrum.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Support both 5GHz and 2.4GHz</li> <li>2—Support 5GHz only</li> <li>3—Support 2.4GHz only</li> </ul>	N/A
Status	Radio status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> <li>2—Inherit</li> </ul>	N/A
RateMulticast	Multicast rate.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> <li>13—auto</li> </ul> If this column is not configured, the multicast rate will be calculated automatically. Default value: auto	The value can have multi-selections. List of enumeration, separated by comma Example: 1, 2.

Column name	Column description	Column type	Data type and restrictions	Remarks
RateMandatory	Mandatory rate.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul> <p>Default value:</p> <p>A. 1, 2Mbps(802.11b).</p> <p>B. 6, 12, 24Mbps(802.11a/802.11an)</p> <p>C. 1, 2, 5.5, 11Mbps(802.11g/802.11gn)</p>	<p>The value can have multi-selections. List of enumeration, separated by comma</p> <p>Example: 1, 2.</p>
RateSupported	Supported rate.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul> <p>Default value:</p> <p>A. 5.5, 11Mbps(802.11b)</p> <p>B. 9, 18, 24, 36, 48, 54Mbps(802.11a/802.11an)</p> <p>C. 6, 9, 12, 18, 24, 36, 54Mbps(802.11g/802.11gn)</p>	<p>The value can have multi-selections, exclude the one which multicast rate uses. List of enumeration, separated by comma</p> <p>Example: 1, 2.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
RateDisabled	Disabled rate.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul> <p>Default value: null.</p>	<p>The value can have multi-selections, exclude the one which multicast rate uses.</p> <p>List of enumeration, separated by comma</p> <p>Example: 1, 2.</p>
Preamble	Preamble.	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li>true—Short.</li> <li>false—Long.</li> </ul> <p>The column is only for 2.4GHz radio mode.</p> <p>Default value: short.</p>	N/A
BeaconInterval	Beacon Interval time.	N/A	<p>Unsigned short.</p> <p>The value range is 32~8191.</p> <p>Unit: TU. 1TU = 1024ms</p> <p>Default value: 100</p>	N/A
PowerLock	Lock the power.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> <li>2—Inherit</li> </ul>	N/A
<del>ChannelAutoLock</del>	<del>Lock the channel</del>	<del>N/A</del>	<p><del>Boolean:</del></p> <ul style="list-style-type: none"> <li><del>true—ChannelAutoLock.</del></li> <li><del>false—ChannelAutoUnLock.</del></li> </ul> <p><del>The default value is true.</del></p>	<p><del>When the value is true, the radio automatically selects an optimal channel, and then locks the channel.</del></p> <p><del>When the AC detects any radar signals on its channel, it immediately selects another channel (even if the channel auto lock is true) and locks the new channel.</del></p>
Distance	The distance that Radio can cover.	N/A	<p>Unsigned short.</p> <p>The value range is 1~40.</p> <p>Unit: km(kilometre).</p> <p>Default value: 1</p>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxRxDuration	Max Received frame duration time.	N/A	Unsigned integer. The value range is 500~250000. Unit: ms. Default value: 2000	N/A
FragmentThreshold	Fragment threshold.	N/A	Unsigned short. The value range is 256~2346. And the value must be an even number. Unit: byte. Default value: 2346	N/A
LongRetryThreshold	Long retry threshold.	N/A	Unsigned short. The value range is 1~15. Unit: null. Default value: 4	N/A
ProtectionThreshold	Protection threshold.	N/A	Unsigned short. The value range is 0~2346. Unit: byte. Default value: 2346	N/A
ShortRetryThreshold	Short retry threshold.	N/A	Unsigned short. The value range is 1~15. Unit: null. Default value: 7	N/A
CfgChannel	Configured channel number.	N/A	Unsigned short. The value range conforms to "AP/ChannelDB/Supported ChannelList" column. If this column is set to zero, the channel number will be calculated automatically.	N/A
CfgMaxPower	Configured maximum power.	N/A	Unsigned short. Value range: 1 to "AP/PowerDB/ValidMaxPower". Unit: dBm	N/A

## AP/APGroupRadio11n

This table contains 802.11n information of AP group radios.

### XML structure

```

<AP>
  <APGroupRadio11n>
    <Radio11n>

```

```

    <GroupName></GroupName>
    <ModelName></ModelName>
    <RadioID></RadioID>
    <MCSMulticast></MCSMulticast>
    <MCSMandatory></MCSMandatory>
    <MCSSupported></MCSSupported>
    <Ampdu></Ampdu>
    <Amsdu></Amsdu>
    <ShortGI></ShortGI>
    <Stbc></Stbc>
    <Ldpc></Ldpc>
    <Mimo></Mimo>
    <Greenap></Greenap>
    <SmartAntenna></SmartAntenna>
    <SmartAntennaPolicy></SmartAntennaPolicy>
    <Protection></Protection>
    <Client11nOnly></Client11nOnly>
    <BandwidthAutoswitch></ BandwidthAutoswitch >
  </Radio11n>
</APGroupRadio11n>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupRadio11n
Table type	Multi-instance table
Row name	Radio11n
Restrictions	The table is only for 802.11n and 802.11ac radio mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModelName	AP model name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID.	Index	Unsigned short. Value range: 1 to 31.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MCSMulticast	The index for multicast MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSMulticast must be smaller than or equal to the MCSMandatory.
MCSMandatory	The maximum index for mandatory MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSMandatory must be smaller than or equal to the MCSSupported, and the MCSMandatory must be greater than or equal to the MCSMulticast.
MCSSupported	The maximum index for supported MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 76.	The MCSSupported must be greater than or equal to the MCSMandatory.
Ampdu	A-mpdu function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Amsdu	A-msdu function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
ShortGI	Short GI function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Stbc	STBC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Ldpc	LDPC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Mimo	MIMO.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: 1X1</li> <li>2: 2X2</li> <li>3: 3X3</li> <li>4: 4X4</li> </ul>	N/A
Greenap	Green ap function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntenna	Smart antenna function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntennaPolicy	Smart antenna policy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: Auto</li> <li>2: High-availability</li> <li>3: High-throughput</li> </ul>	Effective only when SmartAntenna is enabled.

Column name	Column description	Column type	Data type and restrictions	Remarks
Protection	802.11n protection function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Client11nOnly	Client dot11n only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
BandwidthAutoswitch	Bandwidth autoswitch function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul> The column is only for 2.4GHz radio mode, and AP/APGroupRadio/Bandwidth must be 2.	N/A

## AP/APGroupRadio11ac

This table contains 802.11ac information of AP group radios.

### XML structure

```

<AP>
  <APGroupRadio11ac>
    <Radio11ac>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioID></RadioID>
      <VHTNSSMulticast></VHTNSSMulticast>
      <VHTMCSMulticast></VHTMCSMulticast>
      <VHTNSSMandatory></VHTNSSMandatory>
      <VHTNSSSupported></VHTNSSSupported>
      <Client11acOnly></Client11acOnly>
    </Radio11ac>
  </APGroupRadio11ac>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	APGroupRadio11ac
Table type	Multi-instance table
Row name	Radio11ac
Restrictions	The table is only for 802.11ac radio mode.

Item	Description
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModelName	AP model name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID.	Index	Unsigned short. Value range: 1 to 31.	N/A
VHTNSSMulticast	The NSS for multicast VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8. Default value is 0.	The VHTNSSMulticast must be smaller than or equal to the VHTNSSMandatory.
VHTMCSMulticast	The index for multicast VHT-MCS.	N/A	Unsigned short. Value range: 0 to 9, 255. Default value is 255.	N/A
VHTNSSMandatory	The maximum NSS for mandatory VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8. Default value is 0.	The VHTNSSMandatory must be smaller than or equal to the VHTNSSSupported, and the VHTNSSMandatory must be greater than or equal to the VHTNSSMulticast.
VHTNSSSupported	The maximum NSS for supported VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8. Default value is 8.	The VHTNSSSupported must be greater than or equal to the VHTNSSMandatory.
Client11acOnly	Client dot11ac only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A

## AP/APGroupPrvs

This table contains provision information of AP Group.

## XML structure

```

<AP>
  <APGroupPrvs>
    <Prvs>
      <GroupName></GroupName>
      <ACHostName></ACHostName>
    
```



```

<ACIPv4></ACIPv4>
<ACIPv6></ACIPv6>
<DnsDomain></DnsDomain>
<DnsServerIPv4></DnsServerIPv4>
<DnsServerIPv6></DnsServerIPv6>
</Prvs>
</APGroupPrvs>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupPrvs
Table type	Multi-instance table
Row name	Prvs
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	GroupName.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ACHostName	Specify an AC by its hostname.	N/A	String. Length: 1 to 253 characters.	N/A
ACIPv4	Specify an AC by its IPv4 address	N/A	List of string, dotted decimal notation, Separated by comma.	Example: 1.1.1.1, 1.1.1.2.
ACIPv6	Specify an AC by its IPv6 address	N/A	List of hexadecimal string, colon-separated, Separated by comma.	Example: 1:1::1:1, 1:1::1:2.
DnsDomain	Specify the domain name suffix.	N/A	String. Length: 1 to 253.	N/A
DnsServerIPv4	Specify a DNS server by its IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
DnsServerIPv6	Specify a DNS server by its IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.

# AP/APGroupPrvsACIPv4

This table contains provision information of AP Group of IPv4 address.

## XML structure

```
<AP>
  <APGroupPrvsACIPv4>
    <Prvs>
      <GroupName></GroupName>
      <ACIPv4></ACIPv4>
    </Prvs>
  </APGroupPrvsACIPv4>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupPrvsACIPv4
Table type	Multi-instance table
Row name	Prvs
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ACIPv4	Specify an AC by its IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

# AP/APGroupPrvsACIPv6

This table contains provision information of AP group of IPv6 address.

## XML structure

```
<AP>
  <APGroupPrvsACIPv6>
    <Prvs>
      <GroupName></GroupName>
    </Prvs>
  </APGroupPrvsACIPv6>
</AP>
```

```

    <ACIPv6></ACIPv6>
  </Prvs>
</APGroupPrvsACIPv6>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupPrvsACIPv6
Table type	Multi-instance table
Row name	Prvs
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	GroupName.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ACIPv6	Specify an AC by its IPv6 address.	N/A	Hexadecimal string,colon-separated.	Example: 1:1::1:1. This column is available when the SrcAny column is false.

## AP/Location

This table contains the informations of locations.

## XML structure

```

<AP>
  <Location>
    <Location>
      <LocationName></LocationName>
    </Location>
  </Location>
</AP>

```

## Table description

Item	Description
Feature name	AP

Item	Description
Table name	Location
Table type	Multi-instance table
Row name	Location
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocationName	Location name.	Index	String, lowercase. Length: 1 to 31 characters.	N/A

## AP/APAuthentication

This table contains the informations of AP authentication.

## XML structure

```

<AP>
  <APAuthentication>
    <Status></Status>
    <Method></Method>
    <PermitUnauth></PermitUnauth>
    <AuthDomain></AuthDomain>
    <AclNumber></AclNumber>
    <AclName></AclName>
  </APAuthentication>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APAuthentication
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	The status of AP authentication.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul> Default value is disable.	N/A
Method	The authentication method.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—MAC address.</li> <li>2—Serial ID.</li> </ul> Default value is MAC address.	N/A
PermitUnauth	Whether the un-authenticated AP is allowed to join the AC.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Allowed.</li> <li>false—Not allowed.</li> </ul> Default value is allowed.	N/A
AuthDomain	The ISP domain of remote AP authentication.	N/A	String, case-insensitive. Length: 1 to 24 characters.	N/A
AcINumber	The ACL number of local AP authentication.	N/A	Unsigned short. Value range: 200 to 299.	This column is unavailable when the AC uses an ACL name.
AcIName	The ACL name of local AP authentication.	N/A	String, case-sensitive. Length: 1 to 64 characters.	This column is unavailable when the AC uses an ACL number. The ACL name should not be "all".

## AP/LocalAC

This table contains local-ac information.

## XML structure

```

<AP>
  <LocalAC>
    <AC>
      <Name></Name>
      <Model></Model>
      <CfgSerialID></CfgSerialID>
      <EchoInterval></EchoInterval>
      <RetransInterval></RetransInterval>
      <RetransCount></RetransCount>
      <FirmwareUpgrade></FirmwareUpgrade>
    </AC>
  </LocalAC>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	LocalAC
Table type	Multi-instance table
Row name	AC
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Local-ac name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
Model	Local-ac model name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	Characters will be automatically convert case. Refer to AP/ACDB. This column is mandatory when the row is being created. This column is not writable when the row is being deleted, removed. This column should not be changed when the row is being replaced or merged.
CfgSerialID	Configured Local-ac serial ID.	N/A	String, uppercase. Length: 1 to 63 characters.	If this column contains lowercase character, it will be converted to uppercase automatically.
EchoInterval	The transmit interval of tunnel echo messages.	N/A	Unsigned short. Value range: 0, 5 to 255. Unit: seconds	N/A
RetransInterval	The interval to retransmit a request message.	N/A	Unsigned short. Value range: 3 to 8 Unit: seconds	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RetransCount	The allowed maximum number of retransmission attempts. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 2 to 5. Unit: seconds	N/A
FirmwareUpgrade	Whether the AC will upgrade AP's firmware automatically if the software is mismatch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A

## AP/ContainerTopology

This table contains information about all PoE ports on the container (such as SPM and WT).

### XML structure

```

<AP>
  <ContainerTopology>
    <Container>
      <ContainerName></ContainerName>
      <PoePort></PoePort>
      <PoeStatus></PoeStatus>
    </Container>
  </ContainerTopology>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	ContainerTopology
Table type	Multi-instance table
Row name	Container
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContainerName	Container name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PoePort	Port on the container	Index	Unsigned short.	See AP/APDB/.
PoeStatus	PoE port status	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A

## AP/Container

This table contains information about containers.

## XML structure

```

<AP>
  <Container>
    <AP>
      <Name></Name>
      <Model></Model>
      <CfgMacAddress></CfgMacAddress>
    </AP>
  </Container>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	Container
Table type	Multi-instance table
Row name	AP
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
Model	AP model name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
CfgMacAddress	Configured AP MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

# Contents

AP .....	1
AP/APSummary .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
AP/GlobalCfg .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
AP/ManualAP .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
AP/APRunningCfg .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
AP/RunAP .....	15
XML structure .....	15
Table description .....	16
Columns .....	17
AP/APHistory .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
AP/RadioOfManualAP .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
AP/RadioRunningCfg .....	26
XML structure .....	26
Table description .....	26
Columns .....	27
AP/Radio11n .....	31
XML structure .....	31
Table description .....	32
Columns .....	32
AP/Radio11ac .....	34
XML structure .....	34
Table description .....	34
Columns .....	34
AP/RadioRunningCfg11n .....	35
XML structure .....	35
Table description .....	36
Columns .....	36
AP/RadioRunningCfg11ac .....	37
XML structure .....	37
Table description .....	38
Columns .....	38
AP/RadioOfRunAP .....	39
XML structure .....	39
Table description .....	39
Columns .....	40
AP/PrvsOfManualAP .....	41
XML structure .....	41
Table description .....	41
Columns .....	42

AP/PrvsOfManualAPACIPv4 .....	43
XML structure .....	43
Table description .....	43
Columns .....	44
AP/PrvsOfManualAPACIPv6 .....	44
XML structure .....	44
Table description .....	44
Columns .....	45
AP/APDB .....	45
XML structure .....	45
Table description .....	45
Columns .....	46
AP/APDBVersion .....	46
XML structure .....	46
Table description .....	46
Columns .....	47
AP/RadioDB .....	47
XML structure .....	47
Table description .....	48
Columns .....	48
AP/RegionDB .....	51
XML structure .....	51
Table description .....	51
Columns .....	51
AP/AntennaDB .....	52
XML structure .....	52
Table description .....	52
Columns .....	52
AP/ChannelTypeMap .....	53
XML structure .....	53
Table description .....	53
Columns .....	53
AP/PowerIndex .....	56
XML structure .....	56
Table description .....	56
Columns .....	57
AP/ChannelIDB .....	58
XML structure .....	58
Table description .....	59
Columns .....	59
AP/PowerDB .....	61
XML structure .....	61
Table description .....	61
Columns .....	62
AP/ChannelReport .....	64
XML structure .....	64
Table description .....	65
Columns .....	65
AP/NeighborAPReport .....	66
XML structure .....	66
Table description .....	66
Columns .....	67
AP/EdcaRadio .....	67
XML structure .....	67
Table description .....	68
Columns .....	68
AP/RadioWmm .....	69
XML structure .....	69
Table description .....	69
Columns .....	70
AP/APGroup .....	70
XML structure .....	70

Table description .....	71
Columns .....	71
AP/APGroupMACRule .....	72
XML structure .....	73
Table description .....	73
Columns .....	73
AP/APGroupSerialIDRule .....	73
XML structure .....	73
Table description .....	74
Columns .....	74
AP/APGroupNameRule .....	74
XML structure .....	74
Table description .....	74
Columns .....	75
AP/APGroupIPv4Rule .....	75
XML structure .....	75
Table description .....	75
Columns .....	75
AP/APGroupIPv6Rule .....	76
XML structure .....	76
Table description .....	76
Columns .....	76
AP/APGroupModel .....	77
XML structure .....	77
Table description .....	77
Columns .....	77
AP/APGroupRadio .....	77
XML structure .....	77
Table description .....	78
Columns .....	79
AP/APGroupRadio11n .....	83
XML structure .....	83
Table description .....	84
Columns .....	84
AP/APGroupRadio11ac .....	85
XML structure .....	85
Table description .....	86
Columns .....	86
AP/APGroupPrvs .....	87
XML structure .....	87
Table description .....	87
Columns .....	88
AP/APGroupPrvsACIPv4 .....	88
XML structure .....	88
Table description .....	88
Columns .....	89
AP/APGroupPrvsACIPv6 .....	89
XML structure .....	89
Table description .....	89
Columns .....	90
AP/APListOfGroup .....	90
XML structure .....	90
Table description .....	90
Columns .....	90
AP/Location .....	91
XML structure .....	91
Table description .....	91
Columns .....	91
AP/APAuthentication .....	91
XML structure .....	91
Table description .....	92
Columns .....	92

AP/HistorySummary .....	92
XML structure .....	92
Table description .....	93
Columns .....	93
AP/AllAP .....	94
XML structure .....	94
Table description .....	94
Columns .....	95
AP/LocalACDB .....	96
XML structure .....	96
Table description .....	96
Columns .....	96
AP/LocalAC .....	96
XML structure .....	97
Table description .....	97
Columns .....	97
AP/ContainerTopology .....	98
XML structure .....	98
Table description .....	99
Columns .....	99
AP/Container .....	99
XML structure .....	99
Table description .....	100
Columns .....	100

# AP

## AP/APSummary

This table contains AP global statistics.

### XML structure

```
<AP>
  <APSummary>
    <ManualApNum></ManualApNum>
    <RunApNum></RunApNum>
    <OfflineApNum></OfflineApNum>
    <UnhealthyApNum></UnhealthyApNum>
    <ApGroupNum></ApGroupNum>
    <LocationNum></LocationNum>
    <NorthIfOutPkt></NorthIfOutPkt>
    <NorthIfOutByte></NorthIfOutByte>
    <NorthIfInPkt></NorthIfInPkt>
    <NorthIfInByte></NorthIfInByte>
    <Is5gRadioNum></Is5gRadioNum>
    <Is2gRadioNum></Is2gRadioNum>
    <AccessModeNum></AccessModeNum>
    <SensorModeNum></SensorModeNum>
    <HybirdModeNum></HybirdModeNum>
    <ChannelBusyLower10PctNum></ChannelBusy10PctNum>
    <ChannelBusy10PctNum></ChannelBusy10PctNum>
    <ChannelBusy20PctNum></ChannelBusy20PctNum>
    <ChannelBusy30PctNum></ChannelBusy30PctNum>
    <ChannelBusy40PctNum></ChannelBusy40PctNum>
    <ChannelBusy50PctNum></ChannelBusy50PctNum>
    <ChannelBusy60PctNum></ChannelBusy60PctNum>
    <ChannelBusy70PctNum></ChannelBusy70PctNum>
    <ChannelBusy80PctNum></ChannelBusy80PctNum>
    <ChannelBusy90PctNum></ChannelBusy90PctNum>
    <NoiseFloorLower105Num></NoiseFloorLower105Num>
    <NoiseFloor100Num></NoiseFloor100Num>
    <NoiseFloor95Num></NoiseFloor95Num>
    <NoiseFloor90Num></NoiseFloor90Num>
    <NoiseFloor85Num></NoiseFloor85Num>
    <NoiseFloor80Num></NoiseFloor80Num>
    <NoiseFloor75Num></NoiseFloor75Num>
    <NoiseFloor70Num></NoiseFloor70Num>
    <NoiseFloorUpper70Num></NoiseFloorUpper70Num>
    <Dot11InterfLower10PctNum></Dot11InterfLower10PctNum>
    <Dot11Interf10PctNum></Dot11Interf10PctNum>
    <Dot11Interf20PctNum></Dot11Interf20PctNum>
```

```

<Dot11Interf30PctNum></Dot11Interf30PctNum>
<Dot11Interf40PctNum></Dot11Interf40PctNum>
<Dot11Interf50PctNum></Dot11Interf50PctNum>
<Dot11Interf60PctNum></Dot11Interf60PctNum>
<Dot11Interf70PctNum></Dot11Interf70PctNum>
<Dot11Interf80PctNum></Dot11Interf80PctNum>
<Dot11Interf90PctNum></Dot11Interf90PctNum>
<NonDot11InterfLower10PctNum></NoneDot11InterfLower10PctNum>
<NonDot11Interf10PctNum></NonDot11Interf10PctNum>
<NonDot11Interf20PctNum></NonDot11Interf20PctNum>
<NonDot11Interf30PctNum></NonDot11Interf30PctNum>
<NonDot11Interf40PctNum></NonDot11Interf40PctNum>
<NonDot11Interf50PctNum></NonDot11Interf50PctNum>
<NonDot11Interf60PctNum></NonDot11Interf60PctNum>
<NonDot11Interf70PctNum></NonDot11Interf70PctNum>
<NonDot11Interf80PctNum></NonDot11Interf80PctNum>
<NonDot11Interf90PctNum></NonDot11Interf90PctNum>
<RunSPMNum></RunSPMNum>
<OfflineSPMNum></OfflineSPMNum>
<MaxRunApNum></MaxRunApNum>
<MaxPersistentApNum></MaxPersistentApNum> </APSummary>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APSummary
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ManualApNum	Number of manual APs	N/A	Unsigned integer. Value range: 0 to 65535.
RunApNum	Number of running APs	N/A	Unsigned integer. Value range: 0 to 65535.
OfflineApNum	Number of offline APs	N/A	Unsigned integer. Value range: 0 to 65535.
UnhealthyApNum	Number of Unhealthy APs	N/A	Unsigned integer. Value range: 0 to 65535.

Column name	Column description	Column type	Data type and restrictions
ApGroupNum	Number of AP groups	N/A	Unsigned integer. Value range: 0 to 65535.
LocationNum	Number of locations	N/A	Unsigned integer. Value range: 0 to 65535.
NorthIfOutPkt	Packets count of northbound interface with outbound direction.	N/A	Unsigned integer. Value range: 0 to 4294967295.
NorthIfOutByte	Throughput statistics of northbound interface with outbound direction.	N/A	Unsigned integer. Value range: 0 to 4294967295.
NorthIfInPkt	Packets count of northbound interface with inbound direction.	N/A	Unsigned integer. Value range: 0 to 4294967295.
NorthIfInByte	Throughput statistics of northbound interface with inbound direction.	N/A	Unsigned integer. Value range: 0 to 4294967295.
Is5gRadioNum	Number of radios which is 5GHz.	N/A	Unsigned integer. Value range: 0 to 4294967295.
Is2.4gRadioNum	Number of radios which is 2.4GHz.	N/A	Unsigned integer. Value range: 0 to 4294967295.
AccessModeNum	Number of radios in access mode.	N/A	Unsigned integer. Value range: 0 to 4294967295.
SensorModeNum	Number of radios in sensor mode.	N/A	Unsigned integer. Value range: 0 to 4294967295.
HybirdModeNum	Number of radios in hybird mode.	N/A	Unsigned integer. Value range: 0 to 4294967295.
ChannelBusyLower10PctNum	Number of radios which channel busy is lower than 10%	N/A	Unsigned integer. Value range: 0 to 4294967295.
ChannelBusy10PctNum	Number of radios which channel busy is between 10% and 20%	N/A	Unsigned integer. Value range: 0 to 4294967295.
ChannelBusy20PctNum	Number of radios which channel busy is between 20% and 30%	N/A	Unsigned integer. Value range: 0 to 4294967295.
ChannelBusy30PctNum	Number of radios which channel busy is between 30% and	N/A	Unsigned integer. Value range: 0 to 4294967295.



Column name	Column description	Column type	Data type and restrictions
	40%		
ChannelBusy40PctNum	Number of radios which channel busy is between 40% and 50%	N/A	Unsigned integer. Value range: 0 to 4294967295.
ChannelBusy50PctNum	Number of radios which channel busy is between 50% and 60%	N/A	Unsigned integer. Value range: 0 to 4294967295.
ChannelBusy60PctNum	Number of radios which channel busy is between 60% and 70%	N/A	Unsigned integer. Value range: 0 to 4294967295.
ChannelBusy70PctNum	Number of radios which channel busy is between 70% and 80%	N/A	Unsigned integer. Value range: 0 to 4294967295.
ChannelBusy80PctNum	Number of radios which channel busy is between 80% and 90%	N/A	Unsigned integer. Value range: 0 to 4294967295.
ChannelBusy90PctNum	Number of radios which channel busy is upper than 90%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NoiseFloorLower105Num	Number of radios which noise floor is lower than 105dbm	N/A	Unsigned integer. Value range: 0 to 4294967295.
NoiseFloor100Num	Number of radios which noise floor is between 100dbm and 105dbm	N/A	Unsigned integer. Value range: 0 to 4294967295.
NoiseFloor95Num	Number of radios which noise floor is between 95dbm and 100dbm	N/A	Unsigned integer. Value range: 0 to 4294967295.
NoiseFloor90Num	Number of radios which noise floor is between 90dbm and 95dbm	N/A	Unsigned integer. Value range: 0 to 4294967295.
NoiseFloor85Num	Number of radios which noise floor is between 85dbm and 90dbm	N/A	Unsigned integer. Value range: 0 to 4294967295.
NoiseFloor80Num	Number of radios which noise floor is between 80dbm and 85dbm	N/A	Unsigned integer. Value range: 0 to 4294967295.
NoiseFloor75Num	Number of radios which noise floor is between 75dbm and 80dbm	N/A	Unsigned integer. Value range: 0 to 4294967295.

Column name	Column description	Column type	Data type and restrictions
NoiseFloor70Num	Number of radios which noise floor is between 70dbm and 75dbm	N/A	Unsigned integer. Value range: 0 to 4294967295.
NoiseFloorUpper70Num	Number of radios which noise floor is upper than 70dbm	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11InterfLower10PctNum	Number of radios which 802.11 interference is lower than 10%	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11Interf10PctNum	Number of radios which 802.11 interference is between 10% and 20%	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11Interf20PctNum	Number of radios which 802.11 interference is between 20% and 30%	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11Interf30PctNum	Number of radios which 802.11 interference is between 30% and 40%	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11Interf40PctNum	Number of radios which 802.11 interference is between 40% and 50%	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11Interf50PctNum	Number of radios which 802.11 interference is between 50% and 60%	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11Interf60PctNum	Number of radios which 802.11 interference is between 60% and 70%	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11Interf70PctNum	Number of radios which 802.11 interference is between 70% and 80%	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11Interf80PctNum	Number of radios which 802.11 interference is between 80% and 90%	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dot11Interf90PctNum	Number of radios which 802.11 interference is upper	N/A	Unsigned integer. Value range: 0 to

Column name	Column description	Column type	Data type and restrictions
	than 90%		4294967295.
NonDot11InterfLower10PctNum	Number of radios which non-802.11 interference is lower than 10%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NonDot11Interf10PctNum	Number of radios which non-802.11 interference is between 10% and 20%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NonDot11Interf20PctNum	Number of radios which non-802.11 interference is between 10% and 20%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NonDot11Interf30PctNum	Number of radios which non-802.11 interference is between 20% and 30%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NonDot11Interf40PctNum	Number of radios which non-802.11 interference is between 30% and 40%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NonDot11Interf50PctNum	Number of radios which non-802.11 interference is between 50% and 60%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NonDot11Interf60PctNum	Number of radios which non-802.11 interference is between 60% and 70%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NonDot11Interf70PctNum	Number of radios which non-802.11 interference is between 70% and 80%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NonDot11Interf80PctNum	Number of radios which non-802.11 interference is between 80% and 90%	N/A	Unsigned integer. Value range: 0 to 4294967295.
NonDot11Interf90PctNum	Number of radios which non-802.11 interference is upper than 90%	N/A	Unsigned integer. Value range: 0 to 4294967295.
RunSPMNum	Number of running SPMs	N/A	Unsigned integer. Value range: 0 to 65535.
OfflineSPMNum	Number of offline SPMs	N/A	Unsigned integer. Value range: 0 to 65535.

Column name	Column description	Column type	Data type and restrictions
MaxRunApNum	Max number of running APs	N/A	Unsigned integer. Value range: 0 to 65535.
MaxPersistentApNum	Max number of persistent APs	N/A	Unsigned integer. Value range: 0 to 65535.

## AP/GlobalCfg

This table contains the informations of global.

### XML structure

```

<AP>
  <GlobalCfg>
    <AutoAp></AutoAp>
    <AutoPersistent></AutoPersistent>
    <RegionCode></RegionCode>
    <RegionLock></RegionLock>
    <Priority></Priority>
    <Preempt></Preempt>
    <EchoInterval></EchoInterval>
    <EchoCount></EchoCount>
    <RetransInterval></RetransInterval>
    <RetransCount></RetransCount>
    <StatisInterval></StatisInterval>
    <FirmwareUpgrade></FirmwareUpgrade>
    <BackupACIPv4></BackupACIPv4>
    <BackupACIPv6></BackupACIPv6>
    <TunnelEncryption></TunnelEncryption>
    <MainAPName></MainAPName>
    <Gps></Gps>
    <LocalAC></LocalAC>
    <CentralACIPv4></CentralACIPv4>
    <CentralACIPv6></CentralACIPv6>
    <ContralAddress></ContralAddress>
    <ControlAddressIPv4></ControlAddressIPv4>
    <ControlAddressIPv6></ControlAddressIPv6>
  </GlobalCfg>
</AP>

```

### Table description

Item	Description
Feature name	AP

Item	Description
Table name	GlobalCfg
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoAp	Whether an AP can connect the AC without creating a manual AP.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul> Default value is false.	N/A
AutoPersistent	When an auto AP connects the AC , whether convert the AP to manual AP automatically.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul> Default value is false.	N/A
RegionCode	Region code of AP group.	N/A	Unsigned short.	Conform to ISO 3166 standart.
RegionLock	Whether the region code of the AC is locked.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul> Default value is false.	N/A
Priority	AP connection priority	N/A	Unsigned short. Value range: 0 to 7.	N/A
Preempt	Whether the AP in this group will be forced to switch the backup tunnel to active by priority.	N/A	Boolean: <ul style="list-style-type: none"> <li>true: Switch</li> <li>false: Not switch</li> </ul>	N/A
EchoInterval	The transmit interval of tunnel echo messages.	N/A	Unsigned short. Value range: 0, 5 to 255. Unit: seconds	N/A
EchoCount	The allowed maximum number of echo messges which are not received. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20.	N/A
RetransInterval	The interval to retransmit a request message.	N/A	Unsigned short. Value range: 1 to 30. Unit: seconds	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RetransCount	The allowed maximum number of retransmission attempts. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20. Unit: seconds.	N/A
StatInterval	The interval of AP sending the statistics informations to AC.	N/A	Unsigned short. Value range: 0 to 240. Unit: seconds.	N/A
FirmwareUpgrade	Whether the AC will upgrade AP's firmware automatically if the software is mismatch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true: Enable</li> <li>false: Disable</li> </ul>	N/A
BackupACIPv4	The IPv4 backup AC address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
BackupACIPv6	The IPv6 backup AC address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
TunnelEncryption	Whether to enable tunnel encryption.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
MainAPName	AP name.	N/A	String, case-sensitive. Length: 1 to 64 characters.	Only for FatAP Type.
Gps	Gps.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	Only for FatAP Type
LocalAC	Whether to enable Local ac.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	Only for Local-ac Type
CentralACIPv4	The IPv4 Central AC address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. Only for Local-ac Type
CentralACIPv6	The IPv6 Central AC address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. Only for Local-ac Type
ControlAddress	CAPWAP control address configuration.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
ControlAddressIPv4	Specify an AC IPv4 address for AC rediscovery	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ControlAddressIPv6	Specify an AC IPv4 address for AC rediscovery	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.

# AP/ManualAP

This table contains information of manual AP.

## XML structure

```
<AP>
  <ManualAP>
    <AP>
      <Name></Name>
      <Model></Model>
      <CfgSerialID></CfgSerialID>
      <CfgMacAddress></CfgMacAddress>
      <RadioNum></RadioNum>
      <Status></Status>
      <GroupName></GroupName>
      <RegionCode></RegionCode>
      <RegionLock></RegionLock>
      <Priority></Priority>
      <Preempt></Preempt>
      <EchoInterval></EchoInterval>
      <EchoCount></EchoCount>
      <RetransInterval></RetransInterval>
      <RetransCount></RetransCount>
      <StatisInterval></StatisInterval>
      <FirmwareUpgrade></FirmwareUpgrade>
      <BackupACIPv4></BackupACIPv4>
      <BackupACIPv6></BackupACIPv6>
      <LocationName></LocationName>
      <Description></Description>
      <TunnelEncryption></TunnelEncryption>
      <OfflineTime></OfflineTime>
      <OfflineMoment></OfflineMoment>
      <ControlAddress></ControlAddress>
      <ControlAddressIPv4></ControlAddressIPv4>
      <ControlAddressIPv6></ControlAddressIPv6>
      <ProvisionAutoUpgrade></ProvisionAutoUpgrade>
      <ProvisionAutoRecover></ProvisionAutoRecover>
      <ModelType></ModelType>
      <LedMode></LedMode>
    </AP>
  </ManualAP>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	ManualAP
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
Model	AP model name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
CfgSerialID	Configured AP serial ID.	N/A	String, uppercase. Length: 1 to 127 characters.	N/A
CfgMacAddress	Configured AP MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
RadioNum	Number of the radio.	N/A	Unsigned short. Value range: 1 to 4.	N/A
Status	AP associated status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Online</li> <li>2—Offline</li> <li>3—Image downloading</li> </ul>	N/A
GroupName	The name of AP group which the AP belongs to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A
RegionCode	Region code of AP.	N/A	Unsigned short.	Conform to ISO 3166 standard.
RegionLock	Whether the region code of the AP is locked.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
Priority	AP connection priority.	N/A	Unsigned short. Value range: 0 to 7.	N/A
Preempt	Whether the AP will be forced to switch the backup tunnel to active by priority.	N/A	Boolean: <ul style="list-style-type: none"> <li>true: Switch</li> <li>false: Not switch</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
EchoInterval	The transmit interval of tunnel echo messages.	N/A	Unsigned short. Value range: 0, 5 to 255. Unit: seconds	N/A
EchoCount	The allowed maximum number of echo messages which are not received. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20.	N/A
RetransInterval	The interval to retransmit a request message.	N/A	Unsigned short. Value range: 1 to 30. Unit: seconds.	N/A
RetransCount	The allowed maximum number of retransmission attempts. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20. Unit: seconds.	N/A
StatInterval	RetransCount	N/A	Unsigned short. Value range: 0 to 240. Unit: seconds Default value is 50 seconds.	N/A
FirmwareUpgrade	Whether the AC will upgrade AP's firmware automatically if the software is mismatch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
BackupACIPv4	The IPv4 backup AC address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
BackupACIPv6	The IPv6 backup AC address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
LocationName	Which location the AP group belongs to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A
Description	The description of AP.	N/A	String, Length: 1 to 64 characters.	N/A
TunnelEncryption	Whether to enable tunnel encryption.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
OfflineTime	The time since the AP online.	N/A	Unsigned integer. Value range: 0 to 4294967295. Unit: Second	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
OfflineMoment	The time of the AP offline in last time.	N/A	Date/Time. Format: YYYY-MM-DDTHH:MM:SS	Example: 2014-05-07T09:35:07
ControlAddress	CAPWAP control address configuration	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
ControlAddressIPv4	Specify an AC IPv4 address for AC rediscovery	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ControlAddressIPv6	Specify an AC IPv6 address for AC rediscovery	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
ProvisionAutoUpgrade	Whether to enable provision auto-upgrade	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
ProvisionAutoRecover	Whether to enable provision auto-recover	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
ModelType	Model type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Normal.</li> <li>2—WT.</li> <li>3—WTU.</li> </ul>	When the value is 3, some commands can not be configured.
LedMode	LED mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Quiet.</li> <li>2—Awake.</li> <li>3—Always-on.</li> </ul>	N/A

## AP/APRunningCfg

This table contains information of AP running configurations.

### XML structure

```

<AP>
  <APRunningCfg>
    <AP>
      <Name></Name>
      <RegionCode></RegionCode>
      <RegionLock></RegionLock>
      <Priority></Priority>
      <Preempt></Preempt>
      <EchoInterval></EchoInterval>
      <EchoCount></EchoCount>
      <RetransInterval></RetransInterval>

```

```

    <RetransCount></RetransCount>
    <StatisInterval></StatisInterval>
    <FirmwareUpgrade></FirmwareUpgrade>
    <BackupACIPv4></BackupACIPv4>
    <BackupACIPv6></BackupACIPv6>
    <LocationName></LocationName>
    <Description></Description>
    <TunnelEncryption></TunnelEncryption>
  </AP>
</APRunningCfg>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APRunningCfg
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
RegionCode	Region code of AP.	N/A	Unsigned short.	Conform to ISO 3166 standard.
RegionLock	Whether the region code of the AP is locked.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
Priority	AP connection priority.	N/A	Unsigned short. Value range: 0 to 7.	N/A
Preempt	Whether the AP will be forced to switch the backup tunnel to active by priority.	N/A	Boolean: <ul style="list-style-type: none"> <li>true: Switch</li> <li>false: Not switch</li> </ul>	N/A
EchoInterval	The transmit interval of tunnel echo messages.	N/A	Unsigned short. Value range: 0, 5 to 255. Unit: seconds	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
EchoCount	The allowed maximum number of echo messages which are not received. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20.	N/A
RetransInterval	The interval to retransmit a request message.	N/A	Unsigned short. Value range: 1 to 30. Unit: seconds.	N/A
RetransCount	The allowed maximum number of retransmission attempts. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20. Unit: seconds.	N/A
StatsInterval	The interval of AP sending the statistics informations to AC.	N/A	Unsigned short. Value range: 0 to 240. Unit: seconds.	N/A
FirmwareUpgrade	Whether the AC will upgrade AP's firmware automatically if the software is mismatch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
BackupACIPv4	The IPv4 backup AC address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
BackupACIPv6	The IPv6 backup AC address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
LocationName	Which location the AP group belongs to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A
Description	The description of AP.	N/A	String, Length: 1 to 64 characters.	N/A
TunnelEncryption	Whether to enable tunnel encryption.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A

## AP/RunAP

This table contains the information of the running AP.

## XML structure

<AP>

```

<RunAP>
  <AP>
    <Name></Name>
    <Model></Model>
    <SerialID></SerialID>
    <Type></Type>
    <MacAddress></MacAddress>
    <RadioNum></RadioNum>
    <Status></Status>
    <Ipv4Address></Ipv4Address>
    <Ipv6Address></Ipv6Address>
    <PortNumber></PortNumber>
    <GroupName></GroupName>
    <OnlineTime></OnlineTime>
    <HWVer><HWVer>
    <SWVer><SWVer>
    <BWVer><BWVer>
    <TransCtrlPkt></TransCtrlPkt>
    <RecvCtrlPkt></RecvCtrlPkt>
    <TransDataPkt></TransDataPkt>
    <RecvDataPkt></RecvDataPkt>
    <EchoReqCnt></EchoReqCnt>
    <EchoRespLossCnt></EchoRespLossCnt>
    <DiscoveryType></DiscoveryType>
    <ConfigFailCnt></ConfigFailCnt>
    <LastFailReason></LastFailReason>
    <LastRebootReason></LastRebootReason>
    <TunnelDownReason></TunnelDownReason>
    <ConnectionType></ConnectionType>
    <PeerACIPv4Address><PeerACIPv4Address>
    <PeerACIPv6Address><PeerACIPv6Address>
    <LocationName></LocationName>
    <AuthenticatedFlag></AuthenticatedFlag>
    <LocalACName><LocalACName>
  </AP>
</RunAP>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	RunAP
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
Model	AP model name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
SerialID	AP serial ID.	N/A	String, uppercase. Length: 1 to 127 characters.	N/A
Type	AP type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—auto</li> <li>2—manual</li> </ul>	N/A
MacAddress	AP MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
RadioNum	Number of the radio.	N/A	Unsigned short. Value range: 1 to 4.	N/A
Status	AP associated status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Online</li> <li>3—Image downloading</li> </ul>	N/A
Ipv4Address	AP IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is unavailable when the AP uses an IPv6 address.
Ipv6Address	AP IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is unavailable when the AP uses an IPv4 address.
PortNumber	AP port number.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
GroupName	The name of AP group which the AP belongs to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A
OnlineTime	AP online duration.	N/A	Unsigned integer. Value range: 0 to 4294967295. Unit: Second	N/A
HWVer	The version of AP hardware.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ver.A</li> <li>2—Ver.B</li> <li>3—Ver.C</li> <li>4—Ver.D</li> <li>5—Ver.E</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SWVer	The version of AP software.	N/A	String. Length: 1 to 31 characters.	N/A
BWVer	The version of AP bootrom.	N/A	String. Length: 1 to 31 characters.	N/A
TransCtrlPkt	Count of transmitted control packets.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
RecvCtrlPkt	Count of received control packets.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
TransDataPkt	Count of transmitted data packets.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
RecvDataPkt	Count of received data packets.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
EchoReqCnt	Count of echo request packets.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
EchoRespLossCnt	Count of lost echo response packets.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
DiscoveryType	By which type the AP find the AC.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Unknown</li> <li>2—DHCP</li> <li>3—Static Configuration</li> <li>4—DNS</li> </ul>	N/A
ConfigFailCnt	Count of failed Configuration.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
LastFailReason	The cause of synchronizing configurations to the AP failed in last time.	N/A	String. Length: 1 to 31 characters.	N/A
LastRebootReason	The cause of the AP rebooting in last time.	N/A	String. Length: 1 to 31 characters.	N/A
TunnelDownReason	The cause of the tunnel down in last time.	N/A	String. Length: 1 to 31 characters.	N/A
ConnectionType	The connection type of tunnel.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Active</li> <li>2—Standby</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PeerACIPv4 Address	The IPv4 address of peer AC that AP is connecting to.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is unavailable when the AP uses an IPv6 address.
PeerACIPv6 Address	The IPv6 address of peer AC that AP is connecting to.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is unavailable when the AP uses an IPv4 address.
LocationName	Which location the AP group belongs to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A
AuthenticatedFlag	Whether the auto-ap is authenticated.	N/A	Boolean: <ul style="list-style-type: none"> <li>Enable</li> <li>Disable</li> </ul>	When AP type is manual AP, this column is invalid.
LocalACName	Local-ac name.	N/A	String, case-sensitive. Length: 1 to 64 characters.	N/A

## AP/APHistory

This table contains the information of the AP history.

### XML structure

```

<AP>
  <APHistory>
    <AP>
      <Name></Name>
      <LatestIPv4Address></LatestIPv4Address>
      <LatestIPv6Address></LatestIPv6Address>
      <ConnectCnt></ConnectCnt>
    </AP>
  </APHistory>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	APHistory
Table type	Multi-instance table
Row name	AP
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
LatestIPv4Address	The latest IPv4 address that AP used.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is unavailable when the AP uses an IPv6 address.
LatestIPv6Address	The latest IPv6 address that AP used.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is unavailable when the AP uses an IPv4 address.
ConnectCnt	The count that the AP connected the AC.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A

## AP/RadioOfManualAP

This table contains radio information of manual AP.

## XML structure

```

<AP>
  <RadioOfManualAP>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <Mode></Mode>
      <SupportDot11B></SupportDot11B>
      <SupportDot11A></SupportDot11A>
      <SupportDot11G></SupportDot11G>
      <SupportDot11GN></SupportDot11GN>
      <SupportDot11AN></SupportDot11AN>
      <SupportDot11GAC></SupportDot11GAC>
      <SupportDot11AC></SupportDot11AC>
      <Bandwidth></Bandwidth>
      <Spectrum></Spectrum>
      <Status></Status>
      <RateMulticast></RateMulticast>
      <RateMandatory></RateMandatory>
      <RateSupported></RateSupported>
      <RateDisabled></RateDisabled>
      <Preamble></Preamble>
      <BeaconInterval></BeaconInterval>
      <PowerLock></PowerLock>
    </Radio>
  </RadioOfManualAP>
</AP>

```

```

    <ChannelAutoLock></ChannelAutoLock>
    <Distance></Distance>
    <MaxRxDuration></MaxRxDuration>
    <FragmentThreshold></FragmentThreshold>
    <LongRetryThreshold></LongRetryThreshold>
    <ProtectionThreshold></ProtectionThreshold>
    <ShortRetryThreshold></ShortRetryThreshold>
    <CfgChannel></CfgChannel>
    <CfgMaxPower></CfgMaxPower>
    <ProtectionMode></ProtectionMode>
    <ValidChannelNum></ValidChannelNum>
    <ValidChannelList></ValidChannelList>
  </Radio>
</RadioOfManualAP>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	RadioOfManualAP
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID.	Index	Unsigned short. Value range: 1 to 31.	N/A
Mode	Radio mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11a</li> <li>3—802.11g</li> <li>4—802.11n(2.4GHz)</li> <li>5—802.11n(5GHz)</li> <li>6—802.11ac(2.4GHz)</li> <li>7—802.11ac(5GHz)</li> </ul>	N/A
SupportDot11B	Whether a radio supports 802.11b radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportDot11A	Whether a radio supports 802.11a radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11G	Whether a radio supports 802.11g radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11GN	Whether a radio supports 802.11n(2.4GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11AN	Whether a radio supports 802.11n(5GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11GAC	Whether a radio supports 802.11ac(2.4GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11AC	Whether a radio supports 802.11ac(5GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
Bandwidth	Radio bandwidth.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—20M</li> <li>2—40M</li> <li>3—80M</li> <li>4—160M</li> <li>5—80M + 80M</li> <li>17—5M</li> <li>18—10M</li> </ul>	N/A
Spectrum	Supported radio spectrum.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Support both 5GHz and 2.4GHz</li> <li>2—Support 5GHz only</li> <li>3—Support 2.4GHz only</li> </ul>	N/A
Status	Radio status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> <li>2—Inherit</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RateMulticast	Multicast.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 1—1Mbps</li> <li>• 2—2Mbps</li> <li>• 3—5.5Mbps</li> <li>• 4—6Mbps</li> <li>• 5—9Mbps</li> <li>• 6—11Mbps</li> <li>• 7—12Mbps</li> <li>• 8—18Mbps</li> <li>• 9—24Mbps</li> <li>• 10—36Mbps</li> <li>• 11—48Mbps</li> <li>• 12—54Mbps</li> <li>• 13—auto</li> </ul> <p>If this column is not configured, the multicast rate will be calculated automatically.</p>	<p>The value can have multi-selections. List of enumeration, separated by comma</p> <p>Example: 1, 2.</p>
RateMandatory	Mandatory rate.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 1—1Mbps</li> <li>• 2—2Mbps</li> <li>• 3—5.5Mbps</li> <li>• 4—6Mbps</li> <li>• 5—9Mbps</li> <li>• 6—11Mbps</li> <li>• 7—12Mbps</li> <li>• 8—18Mbps</li> <li>• 9—24Mbps</li> <li>• 10—36Mbps</li> <li>• 11—48Mbps</li> <li>• 12—54Mbps</li> </ul>	<p>The value can have multi-selections. List of enumeration, separated by comma</p> <p>Example: 1, 2.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
RateSupported	Supported rate.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul>	The value can have multi-selections, exclude the one which multicast rate uses. List of enumeration, separated by comma Example: 1, 2.
RateDisabled	Disabled rate.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul>	The value can have multi-selections, exclude the one which multicast rate uses. List of enumeration, separated by comma Example: 1, 2.
Preamble	Preamble.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Short.</li> <li>false—Long.</li> </ul> The column is only for 2.4GHz radio mode.	N/A
BeaconInterval	Beacon Interval time.	N/A	Unsigned short. The value range is 32~8191. Unit: TU. 1TU = 1024ms	N/A
PowerLock	Lock the power.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> <li>2—Inherit</li> </ul>	N/A
Distance	The distance that Radio can cover.	N/A	Unsigned short. The value range is 1~40. Unit: km(kilometre).	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxRxDuration	Max Received frame duration time.	N/A	Unsigned integer. The value range is 500~250000. Unit: ms(millisecond).	N/A
FragmentThreshold	Fragment threshold.	N/A	Unsigned short. The value range is 256~2346.And the value must be an even number. Unit: byte.	N/A
LongRetryThreshold	Long retry threshold.	N/A	Unsigned short. The value range is 1~15. Unit: null.	N/A
ProtectionThreshold	ProtectionThreshold.	N/A	Unsigned short. The value range is 0~2346. Unit: byte.	N/A
ShortRetryThreshold	ShortRetryThreshold.	N/A	Unsigned short. The value range is 1~15. Unit: null.	N/A
CfgChannel	Configured channel number.	N/A	The value range conforms to "AP/ChannelDB/Supported ChannelList" column. And 15 - auto lock、16-auto unlock.	When the value is 15, the radio automatically selects an optimal channel, and then locks the channel.  When the AC detects any radar signals on its channel, it immediately selects another channel (even if the channel auto lock is true) and locks the new channel.
CfgMaxPower	Configured maximum power.	N/A	Unsigned short. Value range: 1 to "AP/PowerDB/ValidMaxPower". Unit: dBm	N/A
ProtectionMode	Protection mode.	N/A	Enumeration: • 1—Rts/Cts. • 2—Cts To Self	N/A
ValidChannelNum	Number of the valid channels	N/A	Unsigned integer. Value range: 0 to 32.	N/A
ValidChannelList	a list of the valid channels.	N/A	Number string. It is a comma-separated list of valid channels. The string must not end with a comma or hyphen, or include any whitespace	Example: 1,2,3,4,5,6,7,8,9,10,11

# AP/RadioRunningCfg

This table contains radio information of radio running configurations.

## XML structure

```
<AP>
  <RadioRunningCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <Mode></Mode>
      <SupportDot11B></SupportDot11B>
      <SupportDot11A></SupportDot11A>
      <SupportDot11G></SupportDot11G>
      <SupportDot11GN></SupportDot11GN>
      <SupportDot11AN></SupportDot11AN>
      <SupportDot11GAC></SupportDot11GAC>
      <SupportDot11AC></SupportDot11AC>
      <Bandwidth></Bandwidth>
      <Spectrum></Spectrum>
      <Status></Status>
      <RateMulticast></RateMulticast>
      <RateMandatory></RateMandatory>
      <RateSupported></RateSupported>
      <RateDisabled></RateDisabled>
      <Preamble></Preamble>
      <BeaconInterval></BeaconInterval>
      <PowerLock></PowerLock>
      <Distance></Distance>
      <MaxRxDuration></MaxRxDuration>
      <FragmentThreshold></FragmentThreshold>
      <LongRetryThreshold></LongRetryThreshold>
      <ProtectionThreshold></ProtectionThreshold>
      <ShortRetryThreshold></ShortRetryThreshold>
      <CfgChannel></CfgChannel>
      <CfgMaxPower></CfgMaxPower>
    </Radio>
  </RadioRunningCfg>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	RadioRunningCfg

Item	Description
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID.	Index	Unsigned short. Value range: 1 to 31.	N/A
Mode	Radio mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11a</li> <li>3—802.11g</li> <li>4—802.11n(2.4GHz)</li> <li>5—802.11n(5GHz)</li> <li>6—802.11ac(2.4GHz)</li> <li>7—802.11ac(5GHz)</li> </ul>	N/A
SupportDot11B	Whether a radio supports 802.11b radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11A	Whether a radio supports 802.11a radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11G	Whether a radio supports 802.11g radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11GN	Whether a radio supports 802.11n(2.4GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11AN	Whether a radio supports 802.11n(5GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11GAC	Whether a radio supports 802.11ac(2.4GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11AC	Whether a radio supports 802.11ac(5GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Bandwidth	Radio bandwidth.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—20M</li> <li>2—40M</li> <li>3—80M</li> <li>4—160M</li> <li>5—80M + 80M</li> <li>17—5M</li> <li>18—10M</li> </ul>	N/A
Spectrum	Supported radio spectrum.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Support both 5GHz and 2.4GHz</li> <li>2—Support 5GHz only</li> <li>3—Support 2.4GHz only</li> </ul>	N/A
Status	Radio status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>Disable</li> <li>Enable</li> </ul>	N/A
RateMulticast	Multicast rate.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> <li>13—auto</li> </ul>	The value can have multi-selections. List of enumeration, separated by comma Example: 1, 2.

Column name	Column description	Column type	Data type and restrictions	Remarks
RateMandatory	Mandatory rate.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul>	The value can have multi-selections. List of enumeration, separated by comma Example: 1, 2.
RateSupported	Supported rate.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul>	The value can have multi-selections, exclude the one which multicast rate uses. List of enumeration, separated by comma Example: 1, 2.
RateDisabled	Disabled rate.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul>	The value can have multi-selections, exclude the one which multicast rate uses. List of enumeration, separated by comma Example: 1, 2.

Column name	Column description	Column type	Data type and restrictions	Remarks
Preamble	Preamble.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Short.</li> <li>false—Long.</li> </ul> The column is only for 2.4GHz radio mode.	N/A
BeaconInterval	Beacon Interval time.	N/A	Unsigned short. The value range is 32~8191. Unit: TU. 1TU = 1024ms	N/A
PowerLock	Lock the power.	N/A	Enumeration: <ul style="list-style-type: none"> <li>Disable</li> <li>Enable</li> </ul>	N/A
	<del>Lock the channel or not</del>		<del>Boolean:</del> <ul style="list-style-type: none"> <li><del>true—ChannelAutoLock.</del></li> <li><del>false—ChannelAutoUnLock.</del></li> </ul> <del>The default value is true.</del>	<del>When the value is true, the radio automatically selects an optimal channel, and then locks the channel.</del>  <del>When the AC detects any radar signals on its channel, it immediately selects another channel (even if the channel auto lock is true) and locks the new channel.</del>
Distance	The distance that Radio can cover.	N/A	Unsigned short. The value range is 1~40. Unit: km(kilometre).	N/A
MaxRxDuration	Max Reveived frame duration time.	N/A	Unsigned integer. The value range is 500~250000. Unit: ms(millisecond).	N/A
FragmentThreshold	Fragment threshold.	N/A	Unsigned short. The value range is 256~2346. And the value must be an even number. Unit: byte.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LongRetryThreshold	LongRetryThreshold.	N/A	Unsigned short. The value range is 1~15. Unit: null.	N/A
ProtectionThreshold	ProtectionThreshold.	N/A	Unsigned short. The value range is 0~2346. Unit: byte.	N/A
ShortRetryThreshold	ShortRetryThreshold.	N/A	Unsigned short. The value range is 1~15. Unit: null.	N/A
CfgChannel	Configured channel number.	N/A	The value range conforms to AP/ChannelDB/Supported ChannelList" column. And 15 - auto lock、16-auto unlock.	When the value is 15, the radio automatically selects an optimal channel, and then locks the channel. When the AC detects any radar signals on its channel, it immediately selects another channel (even if the channel auto lock is true) and locks the new channel.
CfgMaxPower	Configured maximum power.	N/A	Unsigned short. Value range: 1 to "AP/PowerDB/ValidMaxPower". Unit: dBm	N/A

## AP/Radio11n

This table contains radio 802.11n information.

## XML structure

```

<AP>
  <Radio11n>
    <Dot11n>
      <ApName></ApName>
      <RadioID></RadioID>
      <MCSMulticast></MCSMulticast>
      <MCSMandatory></MCSMandatory>
      <MCSSupported></MCSSupported>
      <Ampdu></Ampdu>
      <Amsdu></Amsdu>
      <ShortGI></ShortGI>
      <Stbc></Stbc>
      <Ldpc></Ldpc>
      <Mimo></Mimo>
    
```

```

    <Greenap></Greenap>
    <SmartAntenna></SmartAntenna>
    <SmartAntennaPolicy></SmartAntennaPolicy>
    <Protection></Protection>
    <Client11nOnly></Client11nOnly>
    <BandwidthAutoswitch></ BandwidthAutoswitch >
  </Dot11n>
</Radio11n>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	Radio11n
Table type	Multi-instance table
Row name	Dot11n
Restrictions	The table is only for 802.11n and 802.11ac radio mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned char. Value range: 1 to 31.	N/A
MCSMulticast	The index for multicast MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSMulticast must be smaller than or equal to the MCSMandatory.
MCSMandatory	The maximum index for mandatory MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSMandatory must be smaller than or equal to the MCSSupported, and the MCSMandatory must be greater than or equal to the MCSMulticast.
MCSSupported	The maximum index for supported MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSSupported must be greater than or equal to the MCSMandatory.

Column name	Column description	Column type	Data type and restrictions	Remarks
Ampdu	A-mpdu function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Amsdu	A-msdu function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
ShortGI	Short GI function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Stbc	STBC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Ldpc	LDPC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Mimo	Mimo.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: 1X1</li> <li>2: 2X2</li> <li>3: 3X3</li> <li>4: 4X4</li> </ul>	N/A
Greenap	Green ap function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntenna	Smart antenna function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntennaPolicy	Smart antenna policy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: Auto</li> <li>2: High-availability</li> <li>3: High-throughput</li> </ul>	Effective only when SmartAntenna is enabled.
Protection	802.11n protection function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Client11nOnly	Client dot11n only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
BandwidthAutoswitch	Bandwidth autoswitch function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul> <p>The column is only for 2.4GHz radio mode, and AP/Radius/ManualAP/Bandwidth must be 2..</p>	N/A

# AP/Radio11ac

This table contains radio 802.11ac information.

## XML structure

```
<AP>
  <Radio11ac>
    <Dot11ac>
      <ApName></ApName>
      <RadioID></RadioID>
      <VHTNSSMulticast></VHTNSSMulticast>
      <VHTMCSMulticast></VHTMCSMulticast>
      <VHTNSSMandatory></VHTNSSMandatory>
      <VHTNSSSupported></VHTNSSSupported>
      <Client11acOnly></Client11acOnly>
    </Dot11ac>
  </Radio11ac>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	Radio11ac
Table type	Multi-instance table
Row name	Dot11ac
Restrictions	The table is only for 802.11ac radio mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned char. Value range: 1 to 31.	N/A
VHTNSSMulticast	The NSS for multicast VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8. Default value is 0.	The VHTNSSMulticast must be smaller than or equal to the VHTNSSMandatory.

Column name	Column description	Column type	Data type and restrictions	Remarks
VHTMCSMulticast	The index for multicast VHT-MCS.	N/A	Unsigned short. Value range: 0 to 9, 255. Default value is 255.	N/A
VHTNSSMandatory	The maximum NSS for mandatory VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8. Default value is 0.	The VHTNSSMandatory must be smaller than or equal to the VHTNSSSupported, and the VHTNSSMandatory must be greater than or equal to the VHTNSSMulticast.
VHTNSSSupported	The maximum NSS for supported VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8. Default value is 0.	The VHTNSSSupported must be greater than or equal to the VHTNSSMandatory.
Client11acOnly	Client dot11ac only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A

## AP/RadioRunningCfg11n

This table contains radio 802.11n information of radio running configurations.

### XML structure

```

<AP>
  <RadioRunningCfg11n>
    <Dot11n>
      <ApName></ApName>
      <RadioID></RadioID>
      <MCSMulticast></MCSMulticast>
      <MCSMandatory></MCSMandatory>
      <MCSSupported></MCSSupported>
      <Ampdu></Ampdu>
      <Amsdu></Amsdu>
      <ShortGI></ShortGI>
      <Stbc></Stbc>
      <Ldpc></Ldpc>
      <Mimo></Mimo>
      <Greenap></Greenap>
      <SmartAntenna></SmartAntenna>
      <SmartAntennaPolicy></SmartAntennaPolicy>
      <Protection></Protection>
      <Client11nOnly></Client11nOnly>
      <BandwidthAutoswitch></BandwidthAutoswitch >
    </Dot11n>
  </RadioRunningCfg11n>

```



</AP>

## Table description

Item	Description
Feature name	AP
Table name	RadioRunningCfg11n
Table type	Multi-instance table
Row name	Dot11n
Restrictions	The table is only for 802.11n and 802.11ac radio mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned char. Value range: 1 to 31.	N/A
MCSMulticast	The index for multicast MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255.	The MCSMulticast must be smaller than or equal to the MCSMandatory.
MCSMandatory	The maximum index for mandatory MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255.	The MCSMandatory must be smaller than or equal to the MCSSupported, and the MCSMandatory must be greater than or equal to the MCSMulticast.
MCSSupported	The maximum index for supported MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255.	The MCSSupported must be greater than or equal to the MCSMandatory.
Ampdu	A-mpdu function.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>	N/A
Amsdu	A-msdu function.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>	N/A
ShortGI	Short GI function.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Stbc	STBC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Ldpc	LDPC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Mimo	MIMO.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: 1X1</li> <li>2: 2X2</li> <li>3: 3X3</li> <li>4: 4X4</li> </ul>	N/A
Greenap	Green ap function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntenna	Smart antenna function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntennaPolicy	Smart antenna policy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: Auto</li> <li>2: High-availability</li> <li>3: High-throughput</li> </ul>	Effective only when SmartAntenna is enabled.
Protection	802.11n protection function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Client11nOnly	Client dot11n only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
BandwidthAutoswitch	Bandwidth autoswitch function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul> The column is only for 2.4GHz radio mode, and AP/ RadioRunningCfg/ Bandwidth must be 2..	N/A

## AP/RadioRunningCfg11ac

This table contains radio 802.11ac information of radio running configurations.

### XML structure

```

<AP>
  <RadioRunningCfg11ac>
    <Dot11ac>

```

```

    <ApName></ApName>
    <RadioID></RadioID>
    <VHTNSSMulticast></VHTNSSMulticast>
    <VHTMCSMulticast></VHTMCSMulticast>
    <VHTNSSMandatory></VHTNSSMandatory>
    <VHTNSSSupported></VHTNSSSupported>
    <Client11acOnly></Client11acOnly>
  </Dot11ac>
</RadioRunningCfg11ac>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	RadioRunningCfg11ac
Table type	Multi-instance table
Row name	Dot11ac
Restrictions	The table is only for 802.11ac radio mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned char. Value range: 1 to 31.	N/A
VHTNSSMulticast	The NSS for multicast VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8.	The VHTNSSMulticast must be smaller than or equal to the VHTNSSMandatory.
VHTMCSMulticast	The index for multicast VHT-MCS.	N/A	Unsigned short. Value range: 0 to 9, 255.	N/A
VHTNSSMandatory	The maximum NSS for mandatory VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8.	The VHTNSSMandatory must be smaller than or equal to the VHTNSSSupported, and the VHTNSSMandatory must be greater than or equal to the VHTNSSMulticast.

Column name	Column description	Column type	Data type and restrictions	Remarks
VHTNSSSupported	The maximum NSS for supported VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8.	The VHTNSSSupported must be greater than or equal to the VHTNSSMandatory.
Client11acOnly	Client dot11ac only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A

## AP/RadioOfRunAP

This table contains radio information of running AP.

### XML structure

```

<AP>
  <RadioOfRunAP>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <Mode></Mode>
      <Bandwidth></Bandwidth>
      <Status></Status>
      <Channel></Channel>
      <SecondaryOffSet></SecondaryOffSet>
      <MaxPower></MaxPower>
      <BasicBSSID></BasicBSSID>
      <TxPower></TxPower>
      <NoiseFloor></NoiseFloor>
      <ChannelBusy></ChannelBusy>
    </Radio>
  </RadioOfRunAP>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	RadioOfRunAP
Table type	Multi-instance table
Row name	Radio
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID.	Index	Unsigned short. Value range: 1 to 31.	N/A
Mode	Radio mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11a</li> <li>3—802.11g</li> <li>4—802.11n(2.4GHz)</li> <li>5—802.11n(5GHz)</li> <li>6—802.11ac(2.4GHz)</li> <li>7—802.11ac(5GHz)</li> </ul>	N/A
Bandwidth	Radio bandwidth.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—20M</li> <li>2—40M</li> <li>3—80M</li> <li>4—160M</li> <li>5—80M + 80M</li> <li>17—5M</li> <li>18—10M</li> </ul>	N/A
Status	Radio status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>	N/A
Channel	Channel number.	N/A	Unsigned short. The value range is related to AP model, radio mode, antenna type and region code.	N/A
SecondaryOffsetSet	Secondary channel offset.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0: None</li> <li>1: Above</li> <li>2: Below</li> </ul>	N/A
MaxPower	Maximum power.	N/A	Unsigned short. The value range is related to AP model, radio mode, antenna type, channel number and region code. Unit: dBm	N/A
BasicBSSID	Basic BSSID.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

Column name	Column description	Column type	Data type and restrictions	Remarks
TxPower	Tx power.	N/A	Unsigned short.	N/A
NoiseFloor	Noise floor.	N/A	String, Length: 1 to 7 characters.	N/A
ChannelBus y	Channel usage.	N/A	Unsigned short.	N/A

## AP/PrvsOfManualAP

This table contains provision information of manual AP.

### XML structure

```

<AP>
  <PrvsOfManualAP>
    <Prvs>
      <ApName></ApName>
      <ACHostName></ACHostName>
      <ACIPv4></ACIPv4>
      <ACIPv6></ACIPv6>
      <DnsDomain></DnsDomain>
      <DnsServerIPv4></DnsServerIPv4>
      <DnsServerIPv6></DnsServerIPv6>
      <GatewayIPv4></GatewayIPv4>
      <GatewayIPv6></GatewayIPv6>
      <IPv4Address></IPv4Address>
      <IPv6Address></IPv6Address>
      <Dot1xSupplAnonyIdent></Dot1xSupplAnonyIdent>
      <Dot1xSupplEapMethod></Dot1xSupplEapMethod>
      <Dot1xSupplEnable></Dot1xSupplEnable>
      <Dot1xSupplPasswdCiper></Dot1xSupplPasswdCiper>
      <Dot1xSupplPasswdSimple></Dot1xSupplPasswdSimple>
      <Dot1xSupplUsername></Dot1xSupplUsername>
    </Prvs>
  </PrvsOfManualAP>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	PrvsOfManualAP
Table type	Multi-instance table
Row name	Prvs

Item	Description
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
ACHostName	Specify an AC by its hostname.	N/A	String. Length: 1 to 253 characters.	N/A
ACIPv4	Specify an AC by its IPv4 address.	N/A	List of string, dotted decimal notation, Separated by comma.	Example: 1.1.1.1, 1.1.1.2.
ACIPv6	Specify an AC by its IPv6 address.	N/A	List of hexadecimal string, colon-separated, Separated by comma.	Example: 1:1::1:1, 1:1::1:2.
DnsDomain	Specify the domain name suffix.	N/A	String. Length: 1 to 253.	N/A
DnsServerIPv4	Specify a DNS server by its IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
DnsServerIPv6	Specify a DNS server by its IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
GatewayIPv4	Specify a gateway by its IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
GatewayIPv6	Specify a gateway by its IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
IPv4Addresses	Specify an IP address that the AP uses to establish a CAPWAP tunnel.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
IPv6Addresses	Specify an IPv6 address that the AP uses to establish a CAPWAP tunnel.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
Dot1xSupplicantAnonymousIdent	Specify an anonymous identifier for the supplicant.	N/A	String. Length: 1 to 253 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Dot1xSupplEapMethod	Specify an EAP authentication method.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—md5</li> <li>2—peap-gtc</li> <li>3—peap-mschapv2</li> <li>4—tls-gtc</li> <li>5—tls-mschapv2</li> </ul>	N/A
Dot1xSupplEnable	Enable the 802.1X supplicant feature.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Dot1xSupplPasswdCipher	Specify a ciphertext password for the 802.1X supplicant.	N/A	String. Length: 1 to 201 characters.	N/A
Dot1xSupplPasswdSimple	Specify a plaintext password for the 802.1X supplicant.	N/A	String. Length: 1 to 127 characters.	N/A
Dot1xSupplUsername	Specify a username for the 802.1X supplicant.	N/A	String. Length: 1 to 253 characters.	N/A

## AP/PrvsOfManualAPACIPv4

This table contains provision information of manual AP of IPv4 address.

### XML structure

```

<AP>
  <PrvsOfManualAPACIPv4>
    <Prvs>
      <ApName></ApName>
      <ACIPv4></ACIPv4>
    </Prvs>
  </PrvsOfManualAPACIPv4>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	PrvsOfManualAPACIPv4
Table type	Multi-instance table
Row name	Prvs
Restrictions	None



Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
ACIPv4	Specify an AC by its IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

## AP/PrvsOfManualAPACIPv6

This table contains provision information of manual AP of IPv6 address.

## XML structure

```

<AP>
  <PrvsOfManualAPACIPv6>
    <Prvs>
      <ApName></ApName>
      <ACIPv6></ACIPv6>
    </Prvs>
  </PrvsOfManualAPACIPv6>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	PrvsOfManualAPACIPv6
Table type	Multi-instance table
Row name	Prvs
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
ACIPv6	Specify an AC by its IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the SrcAny column is false.

## AP/APDB

This table contains AP model information.

## XML structure

```
<AP>
  <APDB>
    <Model>
      <ModelName></ModelName>
      <RadioNum></RadioNum>
      <DefaultRegionCode></DefaultRegionCode>
      <StartPoePort></StartPoePort>
      <EndPoePort></EndPoePort>
      <ModelType></ModelType>
    </Model>
  </APDB>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APDB
Table type	Multi-instance table
Row name	Model
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModelName	AP model name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioNum	Radio's number of AP model	N/A	Unsigned short. Value range: 1 to 4.	N/A
DefaultRegionCode	Default region code of AP model.	N/A	Unsigned short.	Conform to ISO 3166 standard.
StartPoePort	Start PoE port.	N/A	Unsigned char.	N/A
EndPoePort	End PoE port.	N/A	Unsigned char.	N/A
ModelType	Model type.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Normal</li><li>2—WT</li><li>3—WTU</li></ul>	When the value is 3, some command can not be configured.

## AP/APDBVersion

This table contains apdb version of AP model.

## XML structure

```
<AP>
  <APDBVersion>
    <Model>
      <ModelName></ModelName>
      <HardwareVersion></HardwareVersion>
      <SoftwareVersion></SoftwareVersion>
    </Model>
  </APDBVersion>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APDBVersion
Table type	Multi-instance table
Row name	Model
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModelName	AP model name.	Index	String, uppercase. Length: 1 to 63 characters.	Refer to APDB/ModelName.
HardwareVersion	The version of Hardware.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Ver.A</li> <li>2—Ver.B</li> <li>3—Ver.C</li> <li>4—Ver.D</li> <li>5—Ver.E</li> <li>6—Ver.F</li> </ul>	N/A
SoftwareVersion	The version of Software.	N/A	String Length:1 to 31.	N/A

## AP/RadioDB

This table contains radio information of AP model.

## XML structure

```

<AP>
  <RadioDB>
    <Radio>
      <ModelName></ModelName>
      <RadioID></RadioID>
      <DefaultRadioMode></DefaultRadioMode>
      <SupportDot11B></SupportDot11B>
      <SupportDot11A></SupportDot11A>
      <SupportDot11G></SupportDot11G>
      <SupportDot11GN></SupportDot11GN>
      <SupportDot11AN></SupportDot11AN>
      <SupportDot11GAC></SupportDot11GAC>
      <SupportDot11AC></SupportDot11AC>
      <Spectrum></Spectrum>
      <DefaultAntennaType></DefaultAntennaType>
      <Aifsn></Aifsn>
      <Ecwmin></Ecwmin>
      <Ecwmax></Ecwmax>
      <TxOpLimit></TxOpLimit>
      <SupportBandwidth></SupportBandwidth>
      <SupportMCS></SupportMCS>
      <SupportVHTMCS></SupportVHTMCS>
      <ShortGI20M></ShortGI20M>
      <ShortGI40M></ShortGI40M>

```

```

    <ShortGI80M></ShortGI80M>
    <ShortGI160M></ShortGI160M>
    <SUBeamformer></SUBeamformer>
    <MUBeamformer></MUBeamformer>
    <Ldpc></Ldpc>
    <TxStbc></TxStbc>
    <RxStbc></RxStbc>
    <VHTLdpc></VHTLdpc>
    <VHTTxStbc></VHTTxStbc>
    <VHTRxStbc></VHTRxStbc>
  </Radio>
</RadioDB>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	RadioDB
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModelName	AP model name.	Index	String, uppercase. Length: 1 to 63 characters.	N/A
RadioID	Radio ID.	Index	Unsigned short. Value range: 1 to 31.	N/A
DefaultRadioMode	Default radio mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11a</li> <li>3—802.11g</li> <li>4—802.11n(2.4GHz)</li> <li>5—802.11n(5GHz)</li> <li>6—802.11ac(2.4GHz)</li> <li>7—802.11ac(5GHz)</li> </ul>	N/A
SupportDot11B	Whether a radio supports 802.11b radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportDot11A	Whether a radio supports 802.11a radio mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11G	Whether a radio supports 802.11g radio mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11GN	Whether a radio supports 802.11n(2.4GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11AN	Whether a radio supports 802.11n(5GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11GAC	Whether a radio supports 802.11ac(2.4GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11AC	Whether a radio supports 802.11ac(5GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
Spectrum	Supported radio spectrum.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Support both 5GHz and 2.4GHz</li> <li>2—Support 5GHz only</li> <li>3—Support 2.4GHz only</li> </ul>	N/A
DefaultAntennaType	Default antenna type of radio.	N/A	String, case-insensitive. Length: 1 to 80 characters.	N/A
Aifsn	ArbitrationInter Frame Spacing Number	N/A	Unsigned integer. Value range is 1 to 15, and is restricted by chipset.	N/A
Ecwmin	Exponent form of CWmin	N/A	Unsigned integer. Value range is 0 to 10, and is restricted by chipset.	N/A
Ecwmax	Exponent form of CWmax	N/A	Unsigned integer. Value range is 1 to 10, and is restricted by chipset.	N/A
TxOpLimit	Transmission opportunity limit	N/A	Unsigned integer. Value range is 0 to 32767 and is restricted by chipset. Unit is millisecond.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportBandwidth	Supported channel bandwidth	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—20M</li> <li>2—40M</li> <li>3—80M</li> <li>4—160M</li> <li>5—80M + 80M</li> <li>17—5M</li> <li>18—10M</li> </ul>	N/A
SupportMCS	Supported MCS	N/A	Unsigned short. Value range: 0 to 76.	N/A
SupportVHTMCS	Supported VHT-MCS	N/A	Unsigned short. Value range: 1 to 8.	N/A
ShortGI20M	Supported short GI for 20MHz	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
ShortGI40M	Supported short GI for 40MHz	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
ShortGI80M	Supported short GI for 80MHz	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
ShortGI160M	Supported short GI for 160MHz	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SUBeamformer	Supported SU-Beamformer	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
MUBeamformer	Supported MU-Beamformer	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
Ldpc	Supported ldpc	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
TxStbc	Supported TxStbc	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
RxStbc	Supported RxStbc	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
VHTLdpc	Supported VHT ldpc	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
VHTTxStbc	Supported VHT TxStbc	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
VHTRxStbc	Supported VHT RxStbc	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A

## AP/RegionDB

This table contains valid region list of AP models.

## XML structure

```

<AP>
  <RegionDB>
    <Region>
      <ModelName></ModelName>
      <RegionCode></RegionCode>
      <SupportedRadioList></SupportedRadioList>
    </Region>
  </RegionDB>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	RegionDB
Table type	Multi-instance table
Row name	Region
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModelName	AP model name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RegionCode	Region code of AP.	N/A	Unsigned short.	Conform to ISO 3166 standard.



Column name	Column description	Column type	Data type and restrictions	Remarks
SupportedRadioList	Supported radio list of current region.	N/A	Number string. It is a comma-separated list of supported radio IDs. The string must not end with a comma or hyphen, or include any whitespace	Example: 1,2

## AP/AntennaDB

This table contains valid antenna types of AP models.

## XML structure

```

<AP>
  <AntennaDB>
    <Antenna>
      <ModelName></ModelName>
      <RadioID></RadioID>
      <AntennaType></AntennaType>
    </Antenna>
  </AntennaDB>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	AntennaDB
Table type	Multi-instance table
Row name	Antenna
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModelName	AP model name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned short. Value range: 1 to 31.	N/A
AntennaType	Antenna type of radio	Index	String, case-insensitive. Length: 1 to 80 characters.	N/A

# AP/ChannelTypeMap

This table contains channel type of radios.

## XML structure

```
<AP>
  <ChannelTypeMap>
    <ChannelMap>
      <RadioMode></RadioMode>
      <Bandwidth></Bandwidth>
      <Channel></Channel>
      <ChannelType></ChannelType>
    </ChannelMap>
  </ChannelTypeMap>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	ChannelTypeMap
Table type	Multi-instance table
Row name	ChannelMap
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RadioMode	Radio mode	Index	Enumeration: <ul style="list-style-type: none"><li>1—802.11b</li><li>2—802.11a</li><li>3—802.11g</li><li>4—802.11n(2.4GHz)</li><li>5—802.11n(5GHz)</li><li>6—802.11ac(2.4GHz)</li><li>7—802.11ac(5GHz)</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Bandwidth	Radio bandwidth	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—20M</li> <li>• 2—40M</li> <li>• 3—80M</li> <li>• 4—160M</li> <li>• 5—80M + 80M</li> <li>• 17—5M</li> <li>• 18—10M</li> </ul>	N/A
Channel	Legal channel number.	Index	Unsigned short.	Conform to IEEE 802.11 protocol , ISO 3166 standart and the related national and regional laws and regulations.

Column name	Column description	Column type	Data type and restrictions	Remarks
ChannelType	Type of spectrum, bandwidth and channel range.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11g</li> <li>3—802.11n(2.4GHz) in 20M mode</li> <li>4—802.11n(2.4GHz) in 40M mode</li> <li>5—802.11gac(2.4GHz) in 20M mode</li> <li>6—802.11gac(2.4GHz) in 40M mode</li> <li>7—802.11a(36 to 64)</li> <li>8—802.11a(100 to 144)</li> <li>9—802.11a(149 to 165)</li> <li>10—802.11n(5GHz) (36 to 64) in 20M mode</li> <li>11—802.11n(5GHz) (100 to 144) in 20M mode</li> <li>12—802.11n(5GHz) (149 to 165) in 20M mode</li> <li>13—802.11n(5GHz) (36 to 64) in 40M mode</li> <li>14—802.11n(5GHz) (100 to 144) in 40M mode</li> <li>15—802.11n(5GHz) (149 to 165) in 40M mode</li> <li>16—802.11ac (36 to 64) in 20M mode</li> <li>17—802. 11ac (100 to 144) in 20M mode</li> <li>18—802. 11ac (149 to 165) in 20M mode</li> <li>19—802.11ac (36 to 64) in 40M mode</li> <li>20—802. 11ac (100 to 144) in 40M mode</li> <li>21—802. 11ac (149 to 165) in 40M mode</li> <li>22—802.11ac (36 to 64) in 80M mode</li> <li>23—802. 11ac (100 to 144) in 80M mode</li> <li>24—802. 11ac (149 to 165) in 80M mode</li> <li>25—802.11ac (36 to 64) in 160M mode</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>26—802. 11ac (100 to 144) in 160M mode</li> <li>27—802. 11ac (149 to 165) in 160M mode</li> <li>28—802. 11ac (36 to 64) in 8080M mode</li> <li>29—802. 11ac (100 to 144) in 8080M mode</li> <li>30—802. 11ac (149 to 165) in 8080M mode</li> </ul>	

## AP/PowerIndex

This table contains valid power index of AP models.

### XML structure

```

<AP>
  <PowerIndex>
    <Index>
      <ModelName></ModelName>
      <RadioID></RadioID>
      <RadioMode></RadioMode>
      <AntennaType></AntennaType>
      <RegionCode></RegionCode>
      <ChannelType></ChannelType>
      <PowerIndex></PowerIndex>
      <PowerSubIndex></PowerSubIndex>
    </Index>
  </PowerIndex>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	PowerIndex
Table type	Multi-instance table
Row name	Index
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModelName	AP model name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned short. Value range: 1 to 31.	N/A
RadioMode	Radio mode	Index	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11a</li> <li>3—802.11g</li> <li>4—802.11n(2.4GHz)</li> <li>5—802.11n(5GHz)</li> <li>6—802.11ac(2.4GHz)</li> <li>7—802.11ac(5GHz)</li> </ul>	N/A
AntennaType	Antenna type of radio.	Index	String, case-insensitive. Length: 1 to 80 characters.	N/A
RegionCode	Region code of AP.	Index	Unsigned short.	Refer to AP/RegionDB/RegionCode.
ChannelType	Type of spectrum, bandwidth and channel range.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11g</li> <li>3—802.11n(2.4GHz) in 20M mode</li> <li>4—802.11n(2.4GHz) in 40M mode</li> <li>5—802.11gac in 20M mode</li> <li>6—802.11gac in 40M mode</li> <li>7—802.11a(36 to 64)</li> <li>8—802.11a(100 to 144)</li> <li>9—802.11a(149 to 165)</li> <li>10—802.11n(5GHz) (36 to 64) in 20M mode</li> <li>11—802.11n(5GHz) (100 to 144) in 20M mode</li> <li>12—802.11n(5GHz) (149 to 165) in 20M mode</li> <li>13—802.11n(5GHz) (36 to 64) in 40M mode</li> <li>14—802.11n(5GHz) (100 to 144) in 40M</li> </ul>	Refer to AP/ChannelTypeMap/ChannelType.

Column name	Column description	Column type	Data type and restrictions	Remarks
			mode <ul style="list-style-type: none"> <li>15—802.11n(5GHz) (149 to 165) in 40M mode</li> <li>16—802.11ac (36 to 64) in 20M mode</li> <li>17—802. 11ac (100 to 144) in 20M mode</li> <li>18—802. 11ac (149 to 165) in 20M mode</li> <li>19—802.11ac (36 to 64) in 40M mode</li> <li>20—802. 11ac (100 to 144) in 40M mode</li> <li>21—802. 11ac (149 to 165) in 40M mode</li> <li>22—802.11ac (36 to 64) in 80M mode</li> <li>23—802. 11ac (100 to 144) in 80M mode</li> <li>24—802. 11ac (149 to 165) in 80M mode</li> <li>25—802.11ac (36 to 64) in 160M mode</li> <li>26—802. 11ac (100 to 144) in 160M mode</li> <li>27—802. 11ac (149 to 165) in 160M mode</li> <li>28—802. 11ac (36 to 64) in 8080M mode</li> <li>29—802. 11ac (100 to 144) in 8080M mode</li> <li>30—802. 11ac (149 to 165) in 8080M mode</li> </ul>	
PowerIndex	The index value of power table	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—System script</li> <li>2—Userscript</li> </ul>	N/A
PowerSubIndex	The sub-index value of power table	N/A	Unsigned short.	N/A

## AP/ChannelDB

This table contains valid channel list of AP models.

## XML structure

```

<AP>
  <ChannelDB>
    <Channel>
      <PowerIndex></PowerIndex>

```

```

    <ChannelType></ChannelType>
    <PowerSubIndex></PowerSubIndex>
    <SupportedChannelList></SupportedChannelList>
  </Channel>
</ChannelDB>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	ChannelDB
Table type	Multi-instance table
Row name	Channel
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PowerIndex	The index value of power table	Index	Enumeration: <ul style="list-style-type: none"> <li>1—System script</li> <li>2—Userscript</li> </ul>	Refer to AP/PowerIndex/PowerIndex



Column name	Column description	Column type	Data type and restrictions	Remarks
ChannelType	Type of spectrum, bandwidth and channel range.	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11g</li> <li>3—802.11n(2.4GHz) in 20M mode</li> <li>4—802.11n(2.4GHz) in 40M mode</li> <li>5—802.11gac in 20M mode</li> <li>6—802.11gac in 40M mode</li> <li>7—802.11a(36 to 64)</li> <li>8—802.11a(100 to 144)</li> <li>9—802.11a(149 to 165)</li> <li>10—802.11n(5GHz) (36 to 64) in 20M mode</li> <li>11—802.11n(5GHz) (100 to 144) in 20M mode</li> <li>12—802.11n(5GHz) (149 to 165) in 20M mode</li> <li>13—802.11n(5GHz) (36 to 64) in 40M mode</li> <li>14—802.11n(5GHz) (100 to 144) in 40M mode</li> <li>15—802.11n(5GHz) (149 to 165) in 40M mode</li> <li>16—802.11ac (36 to 64) in 20M mode</li> <li>17—802.11ac (100 to 144) in 20M mode</li> <li>18—802.11ac (149 to 165) in 20M mode</li> <li>19—802.11ac (36 to 64) in 40M mode</li> <li>20—802.11ac (100 to 144) in 40M mode</li> <li>21—802.11ac (149 to 165) in 40M mode</li> <li>22—802.11ac (36 to 64) in 80M mode</li> <li>23—802.11ac (100 to 144) in 80M mode</li> <li>24—802.11ac (149 to 165) in 80M mode</li> <li>25—802.11ac (36 to 64) in 160M mode</li> </ul>	Refer to AP/ChannelTypeMap/ChannelType.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>26—802. 11ac (100 to 144) in 160M mode</li> <li>27—802. 11ac (149 to 165) in 160M mode</li> <li>28—802. 11ac (36 to 64) in 8080M mode</li> <li>29—802. 11ac (100 to 144) in 8080M mode</li> <li>30—802. 11ac (149 to 165) in 8080M mode</li> </ul>	
PowerSubIndex	The sub-index value of power table	Index	Unsigned short.	Refer to AP/PowerIndex/PowerSubIndex
SupportedChannelList	Supported channel list of current model.	N/A	Number string. It is a comma-separated list of supported channels. The string must not end with a comma or hyphen, or include any whitespace	Example: 1,2,3

## AP/PowerDB

This table contains valid power values of AP models.

## XML structure

```

<AP>
  <PowerDB>
    <Power>
      <PowerIndex></PowerIndex>
      <ChannelType></ChannelType>
      <PowerSubIndex></PowerSubIndex>
      <Channel></Channel>
      <ValidMaxPower></ValidMaxPower>
    </Power>
  </PowerDB>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	PowerDB
Table type	Multi-instance table
Row name	Power
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PowerIndex	The index value of power table	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—System script</li><li>• 2—User script</li></ul>	Refer to AP/PowerIndex/PowerIndex

Column name	Column description	Column type	Data type and restrictions	Remarks
ChannelType	Type of spectrum, bandwidth and channel range.	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11g</li> <li>3—802.11n(2.4GHz) in 20M mode</li> <li>4—802.11n(2.4GHz) in 40M mode</li> <li>5—802.11gac in 20M mode</li> <li>6—802.11gac in 40M mode</li> <li>7—802.11a(36 to 64)</li> <li>8—802.11a(100 to 144)</li> <li>9—802.11a(149 to 165)</li> <li>10—802.11n(5GHz) (36 to 64) in 20M mode</li> <li>11—802.11n(5GHz) (100 to 144) in 20M mode</li> <li>12—802.11n(5GHz) (149 to 165) in 20M mode</li> <li>13—802.11n(5GHz) (36 to 64) in 40M mode</li> <li>14—802.11n(5GHz) (100 to 144) in 40M mode</li> <li>15—802.11n(5GHz) (149 to 165) in 40M mode</li> <li>16—802.11ac (36 to 64) in 20M mode</li> <li>17—802.11ac (100 to 144) in 20M mode</li> <li>18—802.11ac (149 to 165) in 20M mode</li> <li>19—802.11ac (36 to 64) in 40M mode</li> <li>20—802.11ac (100 to 144) in 40M mode</li> <li>21—802.11ac (149 to 165) in 40M mode</li> <li>22—802.11ac (36 to 64) in 80M mode</li> <li>23—802.11ac (100 to 144) in 80M mode</li> <li>24—802.11ac (149 to 165) in 80M mode</li> <li>25—802.11ac (36 to 64) in 160M mode</li> </ul>	Refer to AP/ChannelTypeMap/ChannelType.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>26—802. 11ac (100 to 144) in 160M mode</li> <li>27—802. 11ac (149 to 165) in 160M mode</li> <li>28—802. 11ac (36 to 64) in 8080M mode</li> <li>29—802. 11ac (100 to 144) in 8080M mode</li> <li>30—802. 11ac (149 to 165) in 8080M mode</li> </ul>	
PowerSubIndex	The sub-index value of power table	Index	Unsigned short.	Refer to AP/PowerIndex/PowerSubIndex
Channel	Legal channel number.	Index	Unsigned short.	Refer to AP/ChannelID/SupportedChannelList.
ValidMaxPower	Legal maximum power. The upper limit of configurable maximum power.	N/A	Unsigned short. The value range is related to AP model, radio mode, antenna type, channel number and region code.	Conform to IEEE 802.11 protocol , ISO 3166 standard and the related national and regional laws and regulations.

## AP/ChannelReport

This table contains the fields which carry the channel reports of the Ap.

### XML structure

```

<AP>
  <ChannelReport>
    <Channel>
      <ApName></ApName>
      <RadioID></RadioID>
      <Channel></Channel>
      <NeighborCount></NeighborCount>
      <Load></Load>
      <Utilization></Utilization>
      <Interference></Interference>
      <PacketErr></PacketErr>
      <Retry></Retry>
      <RadarStatus><RadarStatus>
    </Channel>
  </ChannelReport>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	ChannelReport
Table type	Multi-instance table
Row name	Channel
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned short. Value range: 1 to 31.	N/A
Channel	Legal channel number.	Index	Unsigned short.	Refer to AP/ChannelDB/SupportedChannelList.
NeighborCount	Neighbour number of the legal channels.	N/A	Unsigned integer.	N/A
Load	Percentage of the time for transmitting all packets on the channel to the total time for scanning the channel.	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
Utilization	Percentage of the time for transmitting packets of the BSS to the total time for scanning the channel.	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
Interference	Percentage of the time for transmitting packets of other BSSs to the total time for scanning the channel.	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
PacketErr	Packet error rate of the legal channel.	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Retry	Retransmission rate of the legal channel.	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
RadarStatus	Radar detection status at the legal channel.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Radar is detected.</li> <li>false—Radar is not detected.</li> </ul>	N/A

## AP/NeighborAPReport

This table contains the fields which carry the information of the Ap's current neighbors.

### XML structure

```

<AP>
  <NeighborAPReport>
    <Neighbor>
      <ApName></ApName>
      <RadioID></RadioID>
      <MacAddress></MacAddress>
      <Channel></Channel>
      <Interference></Interference>
      <SignalStrength></SignalStrength>
      <NeighborType></NeighborType>
    </Neighbor>
  </NeighborAPReport>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	NeighborAPReport
Table type	Multi-instance table
Row name	Neighbor
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned short. Value range: 1 to 31.	N/A
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	If the neighbor is unmanaged AP, this column is MAC address; or if the neighbor is managed AP, it is basic BSSID.  Example: 00-0c-af-e3-5d-c0.
Channel	Channel number where the neighbor is discovered.	N/A	Unsigned short.  The value range is related to AP model, radio mode, antenna type and country code.	N/A
Interference	Percentage of the time for transmitting packets of the neighbor to the total time for scanning the channel.	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
SignalStrength	Strength of signal received.	N/A	Unsigned integer. Unit: dBm.	An indication of the total channel power (signal, noise, and interference) of a received frame measured on the channel and at the antenna connector used to receive the frame.
NeighborType	Management status of the neighbor.	N/A	Boolean: <ul style="list-style-type: none"><li>• true—Managed neighbor.</li><li>• false—UnManaged neighbor.</li></ul>	N/A

## AP/EdcaRadio

This table contains radio EDCA information.

## XML structure

```
<AP>
  <EdcaRadio>
```



```

<EdcaPara>
  <ApName></ApName>
  <RadioID></RadioID>
  <AccessCategory></AccessCategory>
  <Noack></Noack>
  <CfgAifsn></CfgAifsn>
  <CfgEcwmin></CfgEcwmin>
  <CfgEcwmax></CfgEcwmax>
  <CfgTxOpLimit></CfgTxOpLimit>
</EdcaPara>
</EdcaRadio>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	EdcaRadio
Table type	Multi-instance table
Row name	EdcaPara
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length:1to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned char. Value range: 1 to 31.	N/A
AccessCategory	A label for the common set of enhanced distributed channel access parameters that are used by a WMM STA to contend for the channel in order to transmit MSDUs with certain priorities..	Index	Enumeration: <ul style="list-style-type: none"> <li>0—BK.</li> <li>1—BE.</li> <li>2—VI.</li> <li>3—VO.</li> </ul>	N/A
Noack	Whether acknowledgement is required.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Not required.</li> <li>false—Required.</li> </ul>	N/A
CfgAifsn	Arbitration Inter Frame Spacing Number.	N/A	The value range conforms to "AP/RadioIDB/Aifsn" column.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CfgEcwmin	Exponent form of CWmin.	N/A	The value range conforms to "AP/RadiolDB/Ecwmin" column.	N/A
CfgEcwmax	Exponent form of CWmax.	N/A	The value range conforms to "AP/RadiolDB/Ecwmax" column.	N/A
CfgTxOpLimit	Transmission opportunity limit.	N/A	The value range conforms to "AP/RadiolDB/TxOpLimit" column.	N/A

## AP/RadioWmm

This table contains radio WMM information.

## XML structure

```

<AP>
  <RadioWmm>
    <Wmm>
      <ApName></ApName>
      <RadioID></RadioID>
      <Status></Status>
    </Wmm>
  </RadioWmm>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	RadioWmm
Table type	Multi-instance table
Row name	Wmm
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name.	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A.
RadioID	Radio identifier.	Index	Unsigned char. Value range: 1 to 31.	N/A
Status	WMM status of radio.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>	N/A

## AP/APGroup

This table contains information of AP groups.

## XML structure

```
<AP>
  <APGroup>
    <Group>
      <Name></Name>
      <RuleNum></RuleNum>
      <ModelNum></ModelNum>
      <APNum></APNum>
      <RegionCode></RegionCode>
      <RegionLock></RegionLock>
      <Priority></Priority>
      <Preempt></Preempt>
      <EchoInterval></EchoInterval>
      <EchoCount></EchoCount>
      <RetransInterval></RetransInterval>
      <RetransCount></RetransCount>
      <StatisInterval></StatisInterval>
      <FirmwareUpgrade></FirmwareUpgrade>
      <BackupACIPv4></BackupACIPv4>
      <BackupACIPv6></BackupACIPv6>
      <LocationName></LocationName>
      <Description></Description>
      <TunnelEncryption></TunnelEncryption>
      <ProvisionAutoUpgrade></ProvisionAutoUpgrade>
      <ProvisionAutoRecover></ProvisionAutoRecover>
      <LedMode></LedMode>
    </Group>
  </APGroup>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroup
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
AP group name	Number of rules in the AP group	N/A	Unsigned short. Value range: 0 to 5.	N/A
ModelNum	Number of models in the AP group	N/A	Unsigned short. Value range: 0 to 65535.	N/A
APNum	Number of APs in the AP group	N/A	Unsigned short. Value range: 0 to 65535.	N/A
RegionCode	Region code of AP group.	N/A	Unsigned short.	Conform to ISO 3166 standard.
RegionLock	Whether the region code of the AP group is locked.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
Priority	AP connection priority	N/A	Unsigned short. Value range: 0 to 7.	N/A
Preempt	Whether the AP in this group will be forced to switch the backup tunnel to active by priority.	N/A	Boolean: <ul style="list-style-type: none"> <li>true: Switch</li> <li>false: Not switch.</li> </ul>	N/A
EchoInterval	The transmit interval of tunnel echo messages.	N/A	Unsigned short. Value range: 0, 5 to 255. Unit: seconds	N/A
EchoCount	The allowed maximum number of echo messages which are not received. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RetransInterval	The interval to retransmit a request message.	N/A	Unsigned short. Value range: 1 to 30. Unit: seconds	N/A
RetransCount	The allowed maximum number of retransmission attempts. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 1 to 20. Unit: seconds	N/A
StatsInterval	The interval of AP sending the statistics informations to AC.	N/A	Unsigned short. Value range: 0 to 240. Unit: seconds	N/A
FirmwareUpgrade	Whether the AC will upgrade AP's firmware automatically if the software is mismatch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
BackupACIPv4	The IPv4 backup AC address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
BackupACIPv6	The IPv6 backup AC address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
LocationName	Which location the AP group belongs to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A
Description	The description of APGroup.	N/A	String, Length: 1 to 64 cahracters	N/A
TunnelEncryption	Whether to enable tunnel encryption.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	N/A
ProvisionAutoUpgrade	Whether to enable provision auto-upgrade	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
ProvisionAutoRecover	Whether to enable provision auto-recover	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
LedMode	LED mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Normal</li> <li>1—Quiet</li> <li>2—Awake</li> <li>3—Always-on</li> </ul>	N/A

## AP/APGroupMACRule

This table contains information of AP groups' rules of MAC address.

## XML structure

```
<AP>
  <APGroupMACRule>
    <Rule>
      <GroupName></GroupName>
      <MacAddress></MacAddress>
    </Rule>
  </APGroupMACRule>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupMACRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
MacAddress	AP MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

## AP/APGroupSerialIDRule

This table contains information of AP groups' rules of serial ID.

## XML structure

```
<AP>
  <APGroupSerialIDRule>
    <Rule>
      <GroupName></GroupName>
      <SerialID></SerialID>
    </Rule>
  </APGroupSerialIDRule>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupSerialIDRule
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
SerialID	AP serial ID	Index	String, uppercase. Length: 1 to 127 characters.	N/A

## AP/APGroupNameRule

This table contains information of AP groups' rules of AP name.

## XML structure

```
<AP>
  <APGroupNameRule>
    <Rule>
      <GroupName></GroupName>
      <APName></APName>
    </Rule>
  </APGroupNameRule>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupNameRule
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
APName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A

## AP/APGroupIPv4Rule

This table contains information of AP groups' rules of IPv4 address range.

## XML structure

```
<AP>
  <APGroupIPv4Rule>
    <Rule>
      <GroupName></GroupName>
      <IPv4Addr></IPv4Addr>
      <IPv4Wildcard></IPv4Wildcard>
    </Rule>
  </APGroupIPv4Rule>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupIPv4Rule
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
IPv4Addr	IPv4 address of AP.	Index	String, dotted decimal notation.	Example: 1.1.1.1.



Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Wildcard	Wildcard mask for the IPv4 address of AP.	Index	String, dotted decimal notation.	Example: 255.255.255.0.

## AP/APGroupIPv6Rule

This table contains information of AP groups' rules of IPv6 address range.

### XML structure

```

<AP>
  <APGroupIPv6Rule>
    <Rule>
      <GroupName></GroupName>
      <IPv6Addr></IPv6Addr>
      <IPv6Wildcard></IPv6Wildcard>
    </Rule>
  </APGroupIPv6Rule>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	APGroupIPv6Rule
Table type	Multi-instance table
Row name	Rule
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
IPv6Addr	Source IPv6 address.	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the SrcAny column is false.
IPv6Wildcard	Length of the source IPv6 address prefix.	Index	Unsigned integer. Value range: 1 to 128.	This column is available when the SrcAny column is false.

# AP/APGroupModel

This table contains information of AP group models.

## XML structure

```
<AP>
  <APGroupModel>
    <Model>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioNum></RadioNum>
    </Model>
  </APGroupModel>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupModel
Table type	Multi-instance table
Row name	Model
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModelName	AP model name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioNum	Number of the radio	N/A	Unsigned short. Value range: 1 to 4.	N/A

# AP/APGroupRadio

This table contains information of AP group radios.

## XML structure

```
<AP>
  <APGroupRadio>
```

```

<Radio>
  <GroupName></GroupName>
  <ModelName></ModelName>
  <RadioID></RadioID>
  <Mode></Mode>
  <SupportDot11B></SupportDot11B>
  <SupportDot11A></SupportDot11A>
  <SupportDot11G></SupportDot11G>
  <SupportDot11GN></SupportDot11GN>
  <SupportDot11AN></SupportDot11AN>
  <SupportDot11AC></SupportDot11AC>
  <Bandwidth></Bandwidth>
  <Spectrum></Spectrum>
  <Status></Status>
  <RateMulticast></RateMulticast>
  <RateMandatory></RateMandatory>
  <RateSupported></RateSupported>
  <RateDisabled></RateDisabled>
  <Preamble></Preamble>
  <BeaconInterval></BeaconInterval>
  <PowerLock></PowerLock>
  <Distance></Distance>
  <MaxRxDuration></MaxRxDuration>
  <FragmentThreshold></FragmentThreshold>
  <LongRetryThreshold></LongRetryThreshold>
  <ProtectionThreshold></ProtectionThreshold>
  <ShortRetryThreshold></ShortRetryThreshold>
  <CfgChannel></CfgChannel>
  <CfgMaxPower></CfgMaxPower>
</Radio>
</APGroupRadio>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupRadio
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModelName	AP model name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned short. Value range: 1 to 31.	N/A
Mode	Radio mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b</li> <li>2—802.11a</li> <li>3—802.11g</li> <li>4—802.11n(2.4GHz)</li> <li>5—802.11n(5GHz)</li> <li>6—802.11ac(2.4GHz)</li> <li>7—802.11ac(5GHz)</li> </ul>	N/A
SupportDot11B	Whether a radio supports 802.11b radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11A	Whether a radio supports 802.11a radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11G	Whether a radio supports 802.11g radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11GN	Whether a radio supports 802.11n(2.4GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11AN	Whether a radio supports 802.11n(5GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
SupportDot11AC	Whether a radio supports 802.11ac(5GHz) radio mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A
Bandwidth	Radio bandwidth	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—20M</li> <li>2—40M</li> <li>3—80M</li> <li>4—160M</li> <li>5—80M + 80M</li> <li>17—5M</li> <li>18—10M</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Spectrum	Supported radio spectrum	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Support both 5GHz and 2.4GHz</li> <li>2—Support 5GHz only</li> <li>3—Support 2.4GHz only</li> </ul>	N/A
Status	Radio status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> <li>2—Inherit</li> </ul>	N/A
RateMulticast	Multicast rate	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> <li>13—auto</li> </ul> The value range conforms to "AP/RadioOfManualAP/Cfg RateMandatory" column. If this column is not configured, the multicast rate will be calculated automatically.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RateMandatory	Mandatory rate	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul> <p>Default value:</p> <p>A. 1, 2Mbps(802.11b).</p> <p>B. 6, 12, 24Mbps(802.11a/802.11an)</p> <p>C. 1, 2, 5.5, 11Mbps(802.11g/802.11gn)</p>	The value can have multi-selections.
RateSupported	Supported rate	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul> <p>Default value:</p> <p>A. 5.5, 11Mbps(802.11b)</p> <p>B. 9, 18, 24, 36, 48, 54Mbps(802.11a/802.11an)</p> <p>C. 6, 9, 12, 18, 24, 36, 54Mbps(802.11g/802.11gn)</p>	The value can have multi-selections, exclude the one which multicast rate uses.

Column name	Column description	Column type	Data type and restrictions	Remarks
RateDisabled	Disabled rate	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1Mbps</li> <li>2—2Mbps</li> <li>3—5.5Mbps</li> <li>4—6Mbps</li> <li>5—9Mbps</li> <li>6—11Mbps</li> <li>7—12Mbps</li> <li>8—18Mbps</li> <li>9—24Mbps</li> <li>10—36Mbps</li> <li>11—48Mbps</li> <li>12—54Mbps</li> </ul>	The value can have multi-selections, exclude the one which multicast rate uses.
Preamble	Preamble	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Short.</li> <li>false—Long.</li> </ul> The column is only for 2.4GHz radio mode.	N/A
BeaconInterval	Beacon Interval time	N/A	Unsigned short. The value range is 32~8191. Unit: TU. 1TU = 1024ms	N/A
PowerLock	Lock the power	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Distance	The distance that Radio can cover	N/A	Unsigned short. The value range is 1~40. Unit: km(kilometre).	N/A
MaxRxDuration	Max Reveived frame duration time	N/A	Unsigned integer. The value range is 500~250000. Unit: ms.	N/A
FragmentThreshold	Fragment threshold	N/A	Unsigned short. The value range is 256~2346. And the value must be an even number. Unit: byte.	N/A
LongRetryThreshold	Long retry threshold	N/A	Unsigned short. The value range is 1~15. Unit: null.	N/A
ProtectionThreshold	Protection threshold	N/A	Unsigned short. The value range is 0~2346. Unit: byte.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ShortRetryThreshold	Short retry threshold	N/A	Unsigned short. The value range is 1~15. Unit: null.	N/A
CfgChannel	Configured channel number	N/A	The value range conforms to "AP/ChannelDB/Supported ChannelList" column. And 15 - auto lock、16-auto unlock.	When the value is 15, the radio automatically selects an optimal channel, and then locks the channel. When the AC detects any radar signals on its channel, it immediately selects another channel (even if the channel auto lock is true) and locks the new channel.
CfgMaxPower	Configured maximum power	N/A	Unsigned short. Value range: 1 to "AP/PowerDB/ValidMaxPower". Unit: dBm	N/A

## AP/APGroupRadio11n

This table contains 802.11n information of AP group radios.

### XML structure

```

<AP>
  <APGroupRadio11n>
    <Radio11n>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioID></RadioID>
      <MCSMulticast></MCSMulticast>
      <MCSMandatory></MCSMandatory>
      <MCSSupported></MCSSupported>
      <Ampdu></Ampdu>
      <Amsdu></Amsdu>
      <ShortGI></ShortGI>
      <Stbc></Stbc>
      <Ldpc></Ldpc>
      <Mimo></Mimo>
      <Greenap></Greenap>
      <SmartAntenna></SmartAntenna>
      <SmartAntennaPolicy></SmartAntennaPolicy>
      <Protection></Protection>
      <Client11nOnly></Client11nOnly>
      <BandwidthAutoswitch></ BandwidthAutoswitch >

```



```

    </Radio11n>
  </APGroupRadio11n>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupRadio11n
Table type	Multi-instance table
Row name	Radio11n
Restrictions	The table is only for 802.11n and 802.11ac radio mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModelName	AP model name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned short. Value range: 1 to 31.	N/A
MCSMulticast	The index for multicast MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSMulticast must be smaller than or equal to the MCSMandatory.
MCSMandatory	The maximum index for mandatory MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 255.	The MCSMandatory must be smaller than or equal to the MCSSupported, and the MCSMandatory must be greater than or equal to the MCSMulticast.
MCSSupported	The maximum index for supported MCS.	N/A	Unsigned short. Value range: 0 to 76, and 255. Default value is 76.	The MCSSupported must be greater than or equal to the MCSMandatory.
Ampdu	A-mpdu function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Amsdu	A-msdu function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ShortGI	Short GI function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Stbc	STBC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Ldpc	LDPC function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Mimo	MIMO.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: 1X1</li> <li>2: 2X2</li> <li>3: 3X3</li> <li>4: 4X4</li> </ul>	N/A
Greenap	Green ap function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntenna	Smart antenna function	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
SmartAntennaPolicy	Smart antenna policy	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: Auto</li> <li>2: High-availability</li> <li>3: High-throughput</li> </ul>	Effective only when SmartAntenna is enabled.
Protection	802.11n protection function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Client11nOnly	Client dot11n only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
BandwidthAutoswitch	Bandwidth autoswitch function	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul> <p>The column is only for 2.4GHz radio mode, and AP/APGroupRadio/Bandwidth must be 2.</p>	N/A

## AP/APGroupRadio11ac

This table contains 802.11ac information of AP group radios.

### XML structure

<AP>

```

<APGroupRadio11ac>
  <Radio11ac>
    <GroupName></GroupName>
    <ModelName></ModelName>
    <RadioID></RadioID>
    <VHTNSSMulticast></VHTNSSMulticast>
    <VHTMCSMulticast></VHTMCSMulticast>
    <VHTNSSMandatory></VHTNSSMandatory>
    <VHTNSSSupported></VHTNSSSupported>
    <Client11acOnly></Client11acOnly>
  </Radio11ac>
</APGroupRadio11ac>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupRadio11ac
Table type	Multi-instance table
Row name	Radio11ac
Restrictions	The table is only for 802.11ac radio mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModelName	AP model name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned short. Value range: 1 to 31.	N/A
VHTNSSMulticast	The NSS for multicast VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8.	The VHTNSSMulticast must be smaller than or equal to the VHTNSSMandatory.
VHTMCSMulticast	The index for multicast VHT-MCS.	N/A	Unsigned short. Value range: 0 to 9, 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
VHTNSSMandatory	The maximum NSS for mandatory VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8.	The VHTNSSMandatory must be smaller than or equal to the VHTNSSSupported, and the VHTNSSMandatory must be greater than or equal to the VHTNSSMulticast.
VHTNSSSupported	The maximum NSS for supported VHT-MCS.	N/A	Unsigned short. Value range: 0 to 8.	The VHTNSSSupported must be greater than or equal to the VHTNSSMandatory.
Client11acOnly	Client dot11ac only function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A

## AP/APGroupPrvs

This table contains provision information of AP Group.

### XML structure

```

<AP>
  <APGroupPrvs>
    <Prvs>
      <GroupName></GroupName>
      <AHostName></AHostName>
      <ACIPv4></ACIPv4>
      <ACIPv6></ACIPv6>
      <DnsDomain></DnsDomain>
      <DnsServerIPv4></DnsServerIPv4>
      <DnsServerIPv6></DnsServerIPv6>
    </Prvs>
  </APGroupPrvs>
</AP>

```

### Table description

Item	Description
Feature name	AP
Table name	APGroupPrvs
Table type	Multi-instance table
Row name	Prvs
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ACHostName	Specify an AC by its hostname.	N/A	String. Length: 1 to 253 characters.	N/A
ACIPv4	Specify an AC by its IPv4 address.	N/A	List of string, dotted decimal notation, Separated by comma.	Example: 1.1.1.1, 1.1.1.2.
ACIPv6	Specify an AC by its IPv6 address.	N/A	List of hexadecimal string, colon-separated, Separated by comma.	Example: 1:1::1:1, 1:1::1:2.
DnsDomain	Specify the domain name suffix.	N/A	String. Length: 1 to 253.	N/A
DnsServerIPv4	Specify a DNS server by its IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
DnsServerIPv6	Specify a DNS server by its IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.

## AP/APGroupPrvsACIPv4

This table contains provision information of AP Group of IPv4 address.

## XML structure

```
<AP>
  <APGroupPrvsACIPv4>
    <Prvs>
      <GroupName></GroupName>
      <ACIPv4></ACIPv4>
    </Prvs>
  </APGroupPrvsACIPv4>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APGroupPrvsACIPv4
Table type	Multi-instance table

Item	Description
Row name	Prvs
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, dotted decimal notation.	Example: 1.1.1.1.
ACIPv4	Specify an AC by its IPv4 address.	N/A	List of string, dotted decimal notation, Separated by comma.	Example: 1.1.1.1, 1.1.1.2.

## AP/APGroupPrvsACIPv6

This table contains provision information of AP group of IPv6 address.

## XML structure

```

<AP>
  <APGroupPrvsACIPv6>
    <Prvs>
      <GroupName></GroupName>
      <ACIPv6></ACIPv6>
    </Prvs>
  </APGroupPrvsACIPv6>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	APGroupPrvsACIPv6
Table type	Multi-instance table
Row name	Prvs
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ACIPv6	Specify an AC by its IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is available when the SrcAny column is false.

## AP/APListOfGroup

This table contains the AP list of AP groups.

## XML structure

```
<AP>
  <APListOfGroup>
    <AP>
      <GroupName></GroupName>
      <ApName></ApName>
    </AP>
  </APListOfGroup>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	APListOfGroup
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ApName	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A

# AP/Location

This table contains the informations of locations.

## XML structure

```
<AP>
  <Location>
    <Location>
      <LocationName></LocationName>
    </Location>
  </Location>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	Location
Table type	Multi-instance table
Row name	Location
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocationName	Location name	Index	String, lowercase. Length: 1 to 31 characters.	N/A

# AP/APAuthentication

This table contains the informations of AP authentication.

## XML structure

```
<AP>
  <APAuthentication>
    <Status></Status>
    <Method></Method>
    <PermitUnauth></PermitUnauth>
    <AuthDomain></AuthDomain>
    <AclNumber></AclNumber>
    <AclName></AclName>
  </APAuthentication>
</AP>
```



</AP>

## Table description

Item	Description
Feature name	AP
Table name	APAuthentication
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	The status of AP authentication.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>	N/A
Method	The authentication method	N/A	Enumeration: <ul style="list-style-type: none"><li>1—MAC address.</li><li>2—Serial ID.</li></ul>	N/A
PermitUnauth	Whether the un-authenticated AP is allowed to join the AC.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Allowed.</li><li>false—Not allowed.</li></ul>	N/A
AuthDomain	The ISP domain of remote AP authentication.	N/A	String, case-insensitive. Length: 1 to 24 characters.	N/A
AclNumber	The ACL number of local AP authentication.	N/A	Unsigned short. Value range: 200 to 299.	This column is unavailable when the AC uses an ACL name.
AclName	The ACL name of local AP authentication.	N/A	String, case-sensitive. Length: 1 to 64 characters.	This column is unavailable when the AC uses an ACL number. The ACL name should not be "all".

## AP/HistorySummary

This table contains information of history summary.

## XML structure

```
<AP>
  <HistorySummary>
    <Record>
      <Date></Date>
```

```

<Time></Time>
<ManualApNum></ManualApNum>
<RunApNum></RunApNum>
<OfflineApNum></OfflineApNum>
<UnhealthyApNum></UnhealthyApNum>
<ApGroupNum></ApGroupNum>
<LocationNum></LocationNum>
<NorthIfOutPkt></NorthIfOutPkt>
<NorthIfOutByte></NorthIfOutByte>
<NorthIfInPkt></NorthIfInPkt>
<NorthIfInByte></NorthIfInByte>
</Record>
</HistorySummary>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	HistorySummary
Table type	Multi-instance table
Row name	Record
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Date	The date of the record,	Index	Format: YYYY-MM-DD. Value range: 1970-01-01 to 2100-12-31.	N/A
Time	The time of the record.	Index	Format: hh:mm. Value range: 00:00 to 23:59.	N/A
ManualApNum	Number of manual APs	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Index	Number of running APs	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
OfflineApNum	Number of offline APs	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
UnhealthyApNum	Number of Unhealthy APs	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ApGroupNum	Number of AP groups	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

LocationNum	Number of locations	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
NorthIfOutPkt	Packets count of northbound interface with outbound direction.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
NorthIfOutByte	Throughput statistics of northbound interface with outbound direction.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
NorthIfInPkt	Packets count of northbound interface with inbound direction.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
NorthIfInByte	Throughput statistics of northbound interface with inbound direction.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A

## AP/AllAP

This table contains the information of all APs.

## XML structure

```

<AP>
  <AllAP>
    <AP>
      <LocationName></LocationName>
      <Name></Name>
      <Type></Type>
      <Status></Status>
      <GroupName></GroupName>
      <SerialID></SerialID>
      <MacAddress></MacAddress>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <OnlineTime></OnlineTime>    </AP>
    </AllAP>
  </AP>

```

## Table description

Item	Description
Feature name	AP

Item	Description
Table name	AllAP
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocationName	Which location the AP belongs to.	Index	String, lowercase. Length: 1 to 31 characters.	N/A
Name	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
Status	AP associated status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Online</li> <li>2—Offline</li> <li>3—Image downloading</li> </ul>	N/A
Type	AP type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—auto</li> <li>2—manual</li> </ul>	N/A
GroupName	The name of AP group which the AP belongs to.	N/A	String, lowercase. Length: 1 to 31 characters.	N/A
SerialID	AP serial ID.	N/A	String, uppercase. Length: 1 to 127 characters.	N/A
MacAddress	AP MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
Ipv4Address	AP IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is unavailable when the AP uses an IPv6 address.
Ipv6Address	AP IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is unavailable when the AP uses an IPv4 address.
OnlineTime	AP online duration.	N/A	Unsigned integer. Value range: 0 to 4294967295. Unit: Second	N/A

# AP/LocalACDB

This table contains local-ac model information.

## XML structure

```
<AP>
  <LocalACDB>
    <Model>
      <ModelName></ModelName>
      <HardwareVersion></HardwareVersion>
      <SoftwareVersion></SoftwareVersion>
    </Model>
  </LocalACDB>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	LocalACDB
Table type	Multi-instance table
Row name	Model
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModelName	Local-ac model name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
HardwareVersion	The version of Hardware.	Index	Enumeration: <ul style="list-style-type: none"><li>1—Ver.A</li><li>2—Ver.B</li><li>3—Ver.C</li><li>4—Ver.D</li><li>5—Ver.E</li><li>6—Ver.F</li></ul>	N/A
SoftwareVersion	The version of Software.	N/A	String Length:1 to 31.	N/A

# AP/LocalAC

This table contains information of local-ac.

## XML structure

```
<AP>
  <LocalAC>
    <AC>
      <Name></Name>
      <Model></Model>
      <CfgSerialID></CfgSerialID>
      <Status></Status>
      <EchoInterval></EchoInterval>
      <RetransInterval></RetransInterval>
      <RetransCount></RetransCount>
      <FirmwareUpgrade></FirmwareUpgrade>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
    </AC>
  </LocalAC>
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	LocalAC
Table type	Multi-instance table
Row name	AC
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Local-ac name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
Model	Local-ac model name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
CfgSerialID	Configured Local-ac serial ID	N/A	String, uppercase. Length: 1 to 63 characters.	N/A
Status	Local-ac associated status	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Online</li><li>2—Offline</li><li>3—Image downloading</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
EchoInterval	The transmit interval of tunnel echo messages.	N/A	Unsigned short. Value range: 0, 5 to 255. Unit: seconds	N/A
RetransInterval	The interval to retransmit a request message.	N/A	Unsigned short. Value range: 3 to 8 Unit: seconds	N/A
RetransCount	The allowed maximum number of retransmission attempts. If the count is reached, the tunnel will be down.	N/A	Unsigned short. Value range: 2 to 5. Unit: seconds	N/A
FirmwareUpgrade	Whether the AC will upgrade AP's firmware automatically if the software is mismatch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Ipv4Address	Local AC IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is unavailable when the AC uses an IPv6 address.
Ipv6Address	Local AC IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is unavailable when the AC uses an IPv4 address.

## AP/ContainerTopology

This table contains information about all PoE ports on the container and units (such as WAP and WTU) connected to the container (such as SPM and WT).

### XML structure

```

<AP>
  <ContainerTopology>
    <Container>
      <ContainerName></ContainerName>
      <PoePort></PoePort>
      <PoeStatus></PoeStatus>
      <UnitName></UnitName>
    </Container>
  </ContainerTopology>
</AP>

```

## Table description

Item	Description
Feature name	AP
Table name	ContainerTopology
Table type	Multi-instance table
Row name	Container
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContainerName	Container name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
PoePort	Port on the container	Index	Unsigned short.	See AP/APDB/.
PoeStatus	PoE port status	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>	N/A
UnitName	Unit name	N/A	String, case-sensitive. Length: 1 to 64 characters.	N/A

## AP/Container

This table contains information about containers.

## XML structure

```
<AP>
  <Container>
    <AP>
      <Name></Name>
      <Model></Model>
      <CfgMacAddress></CfgMacAddress>
      <APNum></APNum>
      <Status></Status>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <OnlineTime></OnlineTime>
      <LastDownReason></LastDownReason>
      <LastRebootReason></LastRebootReason>
      <OfflineMoment></OfflineMoment>
    </AP>
  </Container>
</AP>
```



```
</Container>  
</AP>
```

## Table description

Item	Description
Feature name	AP
Table name	Container
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name	Index	String, case-sensitive. Length: 1 to 64 characters.	N/A
Model	AP model name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
CfgMacAddress	Configured AP MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
APNum	Number of APs connected to the container	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Status	AP association status	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Online.</li><li>2—Image downloading.</li></ul>	N/A
Ipv4Address	AP IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column is unavailable when the AP uses an IPv6 address.
Ipv6Address	AP IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column is unavailable when the AP uses an IPv4 address.
OnlineTime	Time since the AP came online.	N/A	Unsigned integer. Value range: 0 to 4294967295. Unit: Second	N/A
LastDownReason	Cause of the tunnel down the last time.	N/A	String. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LastReboot Reason	Cause of the AP rebooting in last time.	N/A	String. Length: 1 to 31 characters.	N/A
OfflineMoment	The time of the AP offline in last time.	N/A	<b>DateTime.</b> <b>Format:</b> <b>YYYY-MM-DDTHH:MM:SS</b>	Example: 2014-05-07T09:35:07

# Contents

- AppProfile.....1
  - AppProfile/Profiles .....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# AppProfile

## AppProfile/Profiles

This table contains application profile information.

### XML structure

```
<AppProfile>
  <Profiles>
    <Profile>
      <ProfileName></ProfileName>
    </Profile>
  </Profiles>
</AppProfile>
```

### Table description

Item	Description
Feature name	AppProfile
Table name	Profiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the application profile	Index	String: case-insensitive. Length: 1 to 100 characters. Only numbers, letters, and underscores (_) are allowed.	N/A

# Contents

- AppProfile.....1
  - AppProfile/Profiles .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# AppProfile

## AppProfile/Profiles

This table contains application profile information.

### XML structure

```
<AppProfile>
  <Profiles>
    <Profile>
      <ProfileName></ProfileName>
    </Profile>
  </Profiles>
</AppProfile>
```

### Table description

Item	Description
Feature name	AppProfile
Table name	Profiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the application profile	Index	String: case-insensitive. Length: 1 to 100 characters. Only numbers, letters, and underscores (_) are allowed.	N/A

# Contents

AppProxy .....	1
AppProxy/MoveBeforeRules .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AppProxy/ImportCertificates .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
AppProxy/DeleteCertificates .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
AppProxy/CommitWhiteLists .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# AppProxy

## AppProxy/MoveBeforeRules

This table is used to move a rule to before another rule.

### XML structure

```
<AppProxy>
  <MoveBeforeRules>
    <Rule>
      <ID></ID>
      <DestID></DestID>
    </Rule>
  </MoveBeforeRules>
</AppProxy>
```

### Table description

Item	Description
Feature name	AppProxy
Table name	MoveBeforeRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the rule to be moved	N/A	Unsigned integer. Value range: 1 to 65535	N/A
DestID	ID of the reference rule before which the rule is placed	N/A	Unsigned integer. Value range: 1 to 65536	When the value is 65536, the rule is placed after all rules.

## AppProxy/ImportCertificates

This table is used to import the certificate for SSL server in SSL decryption.



## XML structure

```
<AppProxy>
  <ImportCertificates>
    <ImportCertificate>
      <FileName></FileName>
      <Trust></Trust>
      <Password></Password>
    </ImportCertificate>
  </ImportCertificates>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	ImportCertificates
Table type	Multi-instance table
Row name	ImportCertificate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	File name of the certificate	Index	String, case-insensitive. Length: 1 to 255 characters.	N/A
Trust	Credibility of the certificate	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—untrust.</li><li>• 1—trust.</li><li>• 2—untrust and trust.</li></ul>	N/A
Password	Password of the certificate	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## AppProxy/DeleteCertificates

This table is used to delete the imported certificate.

## XML structure

```
<AppProxy>
  <DeleteCertificates>
    <FileName></FileName>
  </DeleteCertificates>
</AppProxy>
```

</AppProxy>

## Table description

Item	Description
Feature name	AppProxy
Table name	DeleteCertificates
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	File name of the certificate	Index.	String, case-insensitive. Length: 1 to 255 characters.	N/A

## AppProxy/CommitWhiteLists

This table contains information about committing SSL whitelist.

## XML structure

```
<AppProxy>
  <CommitWhiteLists>
    <Commit></Commit>
  </CommitWhiteLists>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	CommitWhiteLists
Table type	Single-instance table
Row name	None
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Commit	Action of committing SSL whitelist	N/A	This column must be empty.	N/A

# Contents

AppProxy .....	1
AppProxy/PolicyRules .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AppProxy/RuleSrcAddrs .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
AppProxy/RuleDestAddrs .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
AppProxy/RuleSrcSecZones .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
AppProxy/RuleDestSecZones .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
AppProxy/RuleUsers .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
AppProxy/RuleUserGrps .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
AppProxy/RuleServGrps .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
AppProxy/WhiteListHostNames .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
AppProxy/WhiteListPredefine .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
AppProxy/WhiteListPredefineChromeHsts .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
AppProxy/TrustCertificate .....	12
XML structure .....	12
Table description .....	12
Columns .....	12

# AppProxy

## AppProxy/PolicyRules

This table contains proxy rule information.

### XML structure

```
<AppProxy>
  <PolicyRules>
    <Rule>
      <ID></ID>
      <RuleName></RuleName>
      <Action></Action>
      <Enable></Enable>
    </Rule>
  </PolicyRules>
</AppProxy>
```

### Table description

Item	Description
Feature name	AppProxy
Table name	PolicyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65536.	When creating a rule, if the ID is set to 0, the device will automatically assign an ID. The value 65536 is reserved for default rule.
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	The value cannot be "default". When operating the default rule, this column cannot be specified.
Action	Action for the	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	rule		<ul style="list-style-type: none"> <li>1—No proxy.</li> <li>2—SSL decrypt.</li> <li>3—TCP proxy.</li> </ul>	
Enable	Enabling status of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled.</li> <li>1—Enabled.</li> </ul>	When operating the default rule, this column cannot be set to 0.

## AppProxy/RuleSrcAddrs

This table contains source address object group information for an existing app-proxy policy rule.

### XML structure

```

<AppProxy>
  <RuleSrcAddrs>
    <SrcAddr>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcAddr>
  </RuleSrcAddrs>
</AppProxy>

```

### Table description

Item	Description
Feature name	AppProxy
Table name	RuleSrcAddrs
Table type	Multi-instance table
Row name	SrcAddr
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	N/A
NameList	Object group list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the source address object group	N/A	String, case-insensitive. Length: 0 to 31 characters.	The value cannot be “any”.

## AppProxy/RuleDestAddr

This table contains destination address object group information for an existing app-proxy policy rule.

### XML structure

```

<AppProxy>
  <RuleDestAddr>
    <DestAddr>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestAddr>
  </RuleDestAddr>
</AppProxy>

```

### Table description

Item	Description
Feature name	AppProxy
Table name	RuleDestAddr
Table type	Multi-instance table
Row name	DestAddr
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>	N/A
NameList	Object group list	Data structure	Members include: <ul style="list-style-type: none"><li>• NameItem</li></ul>	N/A
NameItem	Name of the destination address object group	N/A	String, case-insensitive. Length: 0 to 31 characters.	The value cannot be “any”.

## AppProxy/RuleSrcSecZones

This table contains source security zone information for an existing app-proxy policy rule.

## XML structure

```
<AppProxy>
  <RuleSrcSecZones>
    <SrcSecZone>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcSecZone>
  </RuleSrcSecZones>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleSrcSecZones
Table type	Multi-instance table
Row name	SrcSecZone
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Yes.</li><li><b>false</b>—No.</li></ul>	N/A
NameList	Zone list	Data structure	Members include: <ul style="list-style-type: none"><li>NameItem</li></ul>	N/A
NameItem	Name of the source security zone	N/A	String, case-insensitive. Length: 0 to 31 characters.	The value cannot be "any".

## AppProxy/RuleDestSecZones

This table contains destination security zone information for an existing app-proxy policy rule.

## XML structure

```
<AppProxy>
  <RuleDestSecZones>
    <DestSecZone>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestSecZone>
  </RuleDestSecZones>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleDestSecZones
Table type	Multi-instance table
Row name	DestSecZone
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Yes.</li><li><b>false</b>—No.</li></ul>	N/A
ZoneList	Zone list	Data structure	Members include: <ul style="list-style-type: none"><li>Nameltem</li></ul>	N/A
Nameltem	Name of the destination security zone	N/A	String, case-insensitive. Length: 0 to 31 characters.	The value cannot be "any".

## AppProxy/RuleUsers

This table contains user information for an existing app-proxy policy rule.

## XML structure

```
<AppProxy>
  <RuleUsers>
    <User>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <UserList>
        <UserName></UserName>
        <DomainName></DomainName>
      </UserList>
    </User>
  </RuleUsers>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleUsers
Table type	Multi-instance table
Row name	User
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Yes.</li><li><b>false</b>—No.</li></ul>	N/A
UserList	User list	Data structure	Members include: <ul style="list-style-type: none"><li>UserName</li><li>DomainName</li></ul>	N/A
UserName	Name of the user	N/A	String, case-sensitive. Length: 1 to 55 characters.	The user name cannot be a, al, or all, and it cannot contain any of the following characters: \   / : * ? < > @.
DomainName	Name of the domain	N/A	String, case-sensitive. Length: 0 to 255 characters.	The domain name cannot contain any of the following characters: \   / ? : * ? < > @, and it cannot be d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.

## AppProxy/RuleUserGrps

This table contains user group information for an existing app-proxy policy rule.

## XML structure

```
<AppProxy>
  <RuleUserGrps>
    <UserGrp>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <UserGrpList>
        <UserGrpName></UserGrpName>
        <DomainName></DomainName>
      </UserGrpList>
    </UserGrp>
  </RuleUserGrps>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleUserGrps
Table type	Multi-instance table
Row name	UserGrp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Yes.</li><li><b>false</b>—No.</li></ul>	N/A
UserGrpList	User group list	Data structure	Members include: <ul style="list-style-type: none"><li>UserGrpName</li><li>DomainName</li></ul>	N/A
UserGrpName	Name of the user group	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A
DomainName	Name of the domain	N/A	String, case-sensitive. Length: 0 to 255 characters.	The domain name cannot contain any of the following characters: \   / ? : * ? < > @, and it cannot be d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknown, or if-unknown.

## AppProxy/RuleServGrps

This table contains service object group information for an existing app-proxy policy rule.

## XML structure

```
<AppProxy>
  <RuleServGrps>
    <ServGrp>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
```

```

        <NameItem></NameItem>
    </NameList>
</ServGrp>
</RuleServGrps>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleServGrps
Table type	Multi-instance table
Row name	ServGrp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	N/A
NameList	Service group list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the service object group	N/A	String, case-insensitive. Length: 0 to 31 characters.	The value cannot be "any".

## AppProxy/WhiteListHostNames

This table contains information of user-defined host name whitelist.

## XML structure

```

<AppProxy>
  <WhiteListHostNames>
    <HostName>
      <Name></Name>
    </HostName>
  </WhiteListHostNames>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	WhiteListHostNames
Table type	Multi-instance table
Row name	HostName
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Host name	Index	String, case-insensitive. Length: 1 to 63 characters.	The host name may contain space.

## AppProxy/WhiteListPredefine

This table contains information of pre-defined host name whitelist.

## XML structure

```
<AppProxy>
  <WhiteListPredefine>
    <HostName>
      <Type></Type>
      <Name></Name>
      <Enable></Enable>
    </HostName>
  </WhiteListPredefine>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	WhiteListPredefine
Table type	Multi-instance table
Row name	HostName
Restrictions	None

Item	Description
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Whether the host name belongs to the pre-define chrome-HSTS list	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Not in chrome-HSTS.</li> <li>2—in chrome-HSTS.</li> </ul>	N/A
Name	Host name	Index	String, case-insensitive. Length: 1 to 63 characters.	The host name may contain spaces.
Enable	Enabling status of the host name	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## AppProxy/WhiteListPredefineChromeHsts

This table contains the state information of chrome-HSTS in pre-defined host name whitelist.

## XML structure

```
<AppProxy>
  <WhiteListPredefineChromeHsts>
    <Enable></Enable>
  </WhiteListPredefineChromeHsts>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	WhiteListPredefineChromeHsts
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of host names in chrome-HSTS whitelist	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled</li><li><b>false</b>—Disabled</li></ul>	N/A

## AppProxy/TrustCertificate

This table contains credibility information of certificates.

## XML structure

```
<AppProxy>
  <TrustCertificates>
    <TrustCertificate>
      <FileName></FileName>
      <Trust></Trust>
    </TrustCertificate>
  </TrustCertificates>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	TrustCertificates
Table type	Multi-instance table
Row name	TrustCertificate
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	File name of the certificate	Index	String, case-insensitive. Length: 1 to 63 characters	N/A
Trust	Credibility type of the certificate	N/A	Enumeration: <ul style="list-style-type: none"><li><b>0</b>—untrust.</li><li><b>1</b>—trust.</li><li><b>2</b>—trust&amp;untrust.</li></ul>	N/A





# Contents

AppProxy .....	1
AppProxy/GetRules .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
AppProxy/QueryRules .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
AppProxy/RuleSrcAddrs .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
AppProxy/RuleDestAddrs .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
AppProxy/RuleSrcSecZones .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
AppProxy/RuleDestSecZones .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
AppProxy/RuleUsers .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
AppProxy/RuleUserGrps .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
AppProxy/RuleServGrps .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
AppProxy/WhiteListHostNames .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
AppProxy/WhiteListPredefine .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
AppProxy/WhiteListPredefineChromeHsts .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
AppProxy/TrustCertificate .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
AppProxy/Certificates .....	17
XML structure .....	17
Table description .....	17
Columns .....	17

AppProxy/Specifications .....	18
XML structure .....	18
Table description .....	18
Columns .....	18

# AppProxy

## AppProxy/GetRules

This table contains information about proxy rules.

### XML structure

```
<AppProxy>
  <GetRules>
    <Rule>
      <ID></ID>
      <Name></Name>
      <Action></Action>
      <SrcZoneList>
        <SrcZoneItem></SrcZoneItem>
      </SrcZoneList>
      <DestZoneList>
        <DestZoneItem></DestZoneItem>
      </DestZoneList>
      <SrcAddrList>
        <SrcAddrItem></SrcAddrItem>
      </SrcAddrList>
      <DestAddrList>
        <DestAddrItem></DestAddrItem>
      </DestAddrList>
      <ServGrpList>
        <ServGrpItem></ServGrpItem>
      </ServGrpList>
      <UserList>
        <UserItem></UserItem>
        <DomainItem></DomainItem>
      </UserList>
      <UserGrpList>
        <UserGrpItem></UserGrpItem>
        <DomainItem></DomainItem>
      </UserGrpList>
      <Enable></Enable>
      <AllRulesCount></AllRulesCount>
    </Rule>
  </GetRules>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	GetRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65536	The value 65536 is reserved for default rule.
Name	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Action	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—No proxy.</li> <li>2—SSL decrypt.</li> <li>3—TCP proxy.</li> </ul>	N/A
SrcZoneList	Source zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcZonItem</li> </ul>	N/A
SrcZonItem	Name of the source security zone	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
DestZoneList	Destination zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>DestZonItem</li> </ul>	N/A
DestZonItem	Name of the destination security zone	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
SrcAddrList	Source address list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcAddrItem</li> </ul>	N/A
SrcAddrItem	Name of the source address object group	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
DestAddrList	Destination address list	Data structure	Members include: <ul style="list-style-type: none"> <li>DestAddrItem</li> </ul>	N/A
DestAddrItem	Name of the destination address object group	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
ServGrpList	Service group list	Data structure	Members include: <ul style="list-style-type: none"> <li>ServGrpItem</li> </ul>	N/A
ServGrpItem	Name of the	N/A	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	service object group		Length: 0 to 31 characters.	
UserList	User list	Data structure	Members include: <ul style="list-style-type: none"> <li>UserItem</li> <li>DomainItem</li> </ul>	N/A
UserItem	Name of the user	N/A	String, case-sensitive. Length: 0 to 55 characters.	The user name cannot be a, al, or all, and it cannot contain any of the following characters: \   / : * ? < > @.
DomainItem	Name of the domain	N/A	String, case-insensitive. Length: 0 to 255 characters.	The domain name cannot contain any of the following characters: \   / ? : * ? < > @, and it cannot be d, de, def, defa, defau, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.
UserGrpList	User group list	Data structure	Members include: <ul style="list-style-type: none"> <li>UserGrpItem</li> <li>DomainItem</li> </ul>	N/A
UserGrpItem	Name of the user group	N/A	String, case-insensitive. Length: 0 to 200 characters.	N/A
DomainItem	Name of the domain	N/A	String, case-insensitive. Length: 0 to 255 characters.	The domain name cannot contain any of the following characters: \   / ? : * ? < > @, and it cannot be d, de, def, defa, defau, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.
Enable	Enabling status of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled.</li> <li>1—Enabled.</li> </ul>	N/A
AllRulesCount	Total number of rules	N/A	Unsigned integer.	

## AppProxy/QueryRules

This table contains information about proxy rules.

### XML structure

```

<AppProxy>
  <QueryRules>
    <Rule>
      <ID></ID>

```

```

<Name></Name>
<Action></Action>
<SrcZoneList>
  <SrcZoneItem></SrcZoneItem>
</SrcZoneList>
<DestZoneList>
  <DestZoneItem></DestZoneItem>
</DestZoneList>
<SrcAddrList>
  <SrcAddrItem></SrcAddrItem>
</SrcAddrList>
<DestAddrList>
  <DestAddrItem></DestAddrItem>
</DestAddrList>
<ServGrpList>
  <ServGrpItem></ServGrpItem>
</ServGrpList>
<UserList>
  <UserItem></UserItem>
  <DomainItem></DomainItem>
</UserList>
<UserGrpList>
  <UserGrpItem></UserGrpItem>
  <DomainItem></DomainItem>
</UserGrpList>
<Enable></Enable>
<AllRulesCount></AllRulesCount>
</Rule>
</QueryRules>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	QueryRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer.	The value 65536 is reserved for the default

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 1 to 65536	rule.
Name	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Action	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—No proxy.</li> <li>2—SSL decrypt.</li> <li>3—TCP proxy.</li> </ul>	N/A
SrcZoneList	Source zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcZoneItem</li> </ul>	N/A
SrcZoneItem	Name of the source security zone	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
DestZoneList	Destination zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>DestZoneItem</li> </ul>	N/A
DestZoneItem	Name of the destination security zone	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
SrcAddrList	Source address list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcAddrItem</li> </ul>	N/A
SrcAddrItem	Name of the source address object group	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
DestAddrList	Destination address list	Data structure	Members include: <ul style="list-style-type: none"> <li>DestAddrItem</li> </ul>	N/A
DestAddrItem	Name of the destination address object group	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
ServGrpList	Service group list	Data structure	Members include: <ul style="list-style-type: none"> <li>ServGrpItem</li> </ul>	N/A
ServGrpItem	Name of the service object group	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
UserList	User list	Data structure	Members include: <ul style="list-style-type: none"> <li>UserItem</li> <li>DomainItem</li> </ul>	N/A
UserItem	Name of the user	N/A	String, case-sensitive. Length: 0 to 55 characters.	The user name cannot be a, al, or all, and it cannot contain any of the following characters: \   / : * ? < > @.
DomainItem	Name of the domain	N/A	String, case-insensitive. Length: 0 to 255 characters.	The domain name cannot contain any of the following characters: \   / : * ? < > @, and it cannot be d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un,



Column name	Column description	Column type	Data type and restrictions	Remarks
				if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.
UserGrpList	User group list	Data structure	Members include: <ul style="list-style-type: none"> <li>UserGrpItem</li> <li>DomainItem</li> </ul>	N/A
UserGrpItem	Name of the user group	N/A	String, case-insensitive. Length: 0 to 200 characters.	N/A
DomainItem	Name of the domain	N/A	String, case-insensitive. Length: 0 to 255 characters.	The domain name cannot contain any of the following characters: \   / ? : * ? < > @, and it cannot be d, de, def, defa, defau, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.
Enable	Enabling status of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled.</li> <li>1—Enabled.</li> </ul>	N/A
AllRulesCount	Total number of rules	N/A	Unsigned integer.	

## AppProxy/RuleSrcAddrs

This table contains source address object group information for an app-proxy policy rule.

### XML structure

```

<AppProxy>
  <RuleSrcAddrs>
    <SrcAddr>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcAddr>
  </RuleSrcAddrs>
</AppProxy>

```

### Table description

Item	Description
Feature name	AppProxy
Table name	RuleSrcAddrs

Item	Description
Table type	Multi-instance table
Row name	SrcAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	This value is always false.
NameList	Object group list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the source address object group	N/A	String, case-insensitive. Length: 1 to 31 characters.	The value cannot be "any".

## AppProxy/RuleDestAddrs

This table contains destination address object group information for an app-proxy policy rule.

## XML structure

```

<AppProxy>
  <RuleDestAddrs>
    <DestAddr>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestAddr>
  </RuleDestAddrs>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleDestAddrs
Table type	Multi-instance table

Item	Description
Row name	DestAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	This value is always false.
NameList	Object group list	Data structure	Members include: <ul style="list-style-type: none"> <li>Nameltem</li> </ul>	N/A
Nameltem	Name of the destination address object group	N/A	String, case-insensitive. Length: 1 to 31 characters.	The value cannot be "any".

## AppProxy/RuleSrcSecZones

This table contains source security zone information for an app-proxy policy rule.

## XML structure

```

<AppProxy>
  <RuleSrcSecZones>
    <SrcSecZone>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcSecZone>
  </RuleSrcSecZones>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleSrcSecZones
Table type	Multi-instance table

Item	Description
Row name	SrcSecZone
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	This value is always false.
NameList	Zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the source security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.	The value cannot be "any".

## AppProxy/RuleDestSecZones

This table contains destination security zone information for an app-proxy policy rule.

## XML structure

```

<AppProxy>
  <RuleDestSecZones>
    <DestSecZone>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestSecZone>
  </RuleDestSecZones>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleDestSecZones
Table type	Multi-instance table
Row name	DestSecZones

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	This value is always false.
NameList	Zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>Nameltem</li> </ul>	N/A
Nameltem	Name of the destination security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.	The value cannot be “any”.

## AppProxy/RuleUsers

This table contains user information for an app-proxy policy rule.

## XML structure

```

<AppProxy>
  <RuleUsers>
    <User>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <UserList>
        <UserName></UserName>
        <DomainName></DomainName>
      </UserList>
    </User>
  </RuleUsers>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleUsers
Table type	Multi-instance table
Row name	User

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	This value is always false.
UserList	User list	Data structure	Members include: <ul style="list-style-type: none"> <li>UserName</li> <li>DomainName</li> </ul>	N/A
UserName	Name of the user	N/A	String, case-sensitive. Length: 1 to 55 characters.	The user name cannot be a, al, or all, and it cannot contain any of the following characters: \   / : * ? < > @.
DomainName	Name of the domain	N/A	String, case-sensitive. Length: 0 to 255 characters.	The domain name cannot contain any of the following characters: \   / ? : * ? < > @, and it cannot be d, de, def, defa, defau, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.

## AppProxy/RuleUserGrps

This table contains user group information for an app-proxy policy rule.

## XML structure

```

<AppProxy>
  <RuleUserGrps>
    <UserGrp>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <UserGrpList>
        <UserGrpName></UserGrpName>
        <DomainName></DomainName>
      </UserGrpList>
    </UserGrp>
  </RuleUserGrps>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleUserGrps
Table type	Multi-instance table
Row name	UserGrp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Yes.</li><li><b>false</b>—No.</li></ul>	This value is always false.
UserGrpList	UserGrp list	Data structure	Members include: <ul style="list-style-type: none"><li>UserGrpName</li><li>DomainName</li></ul>	N/A
UserGrpName	Name of the user group	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A
DomainName	Name of the domain	N/A	String, case-sensitive. Length: 0 to 255 characters.	The domain name cannot contain any of the following characters: \   / ? : * ? < > @, and it cannot be d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.

## AppProxy/RuleServGrps

This table contains service object group information for an app-proxy policy rule.

## XML structure

```
<AppProxy>
  <RuleServGrps>
    <ServGrp>
      <ID></ID>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
```

```

    </NameList>
  </ServGrp>
</RuleServGrps>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	RuleServGrps
Table type	Multi-instance table
Row name	ServGrp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535	N/A
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	This value is always false.
NameList	Service group list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the service object group	N/A	String, case-insensitive. Length: 1 to 31 characters.	The value cannot be "any".

## AppProxy/WhiteListHostNames

This table contains information of user-defined host name whitelist.

## XML structure

```

<AppProxy>
  <WhiteListHostNames>
    <HostName>
      <Name></Name>
      <RowCount></RowCount>
    </HostName>
  </WhiteListHostNames>
</AppProxy>

```



## Table description

Item	Description
Feature name	AppProxy
Table name	WhiteListHostNames
Table type	Multi-instance table
Row name	HostName
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Host name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RowCount	Number of host name items	N/A	Unsigned integer.	N/A

## AppProxy/WhiteListPredefine

This table contains information of pre-defined host name whitelist.

## XML structure

```
<AppProxy>
  <WhiteListPredefine>
    <HostName>
      <Type></Type>
      <Name></Name>
      <Enable></Enable>
      <RowCount></RowCount>
    </HostName>
  </WhiteListPredefine>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	WhiteListPredefine
Table type	Multi-instance table
Row name	HostName

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Whether the host name belongs to the pre-define chrome-HSTS list	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Not in chrome-HSTS.</li> <li>2—In chrome-HSTS.</li> </ul>	N/A
Name	Host name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Enable	Enabling status of the host name	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled.</li> <li>1—Enabled.</li> </ul>	N/A
RowCount	Number of the host name items	N/A	Unsigned integer.	N/A

## AppProxy/WhiteListPredefineChromeHsts

This table contains the state information of chrome-HSTS in pre-defined host name whitelist.

## XML structure

```

<AppProxy>
  <WhiteListPredefineChromeHsts>
    <Enable></Enable>
  </WhiteListPredefineChromeHsts>
</AppProxy>

```

## Table description

Item	Description
Feature name	AppProxy
Table name	WhiteListPredefineChromeHsts
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of host names in chrome-HSTS whitelist	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled</li><li><b>false</b>—Disabled</li></ul>	N/A

## AppProxy/TrustCertificate

This table contains credibility information of certificates.

## XML structure

```
<AppProxy>
  <TrustCertificates>
    <TrustCertificate>
      <FileName></FileName>
      <Trust></Trust>
    </TrustCertificate>
  </TrustCertificates>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	TrustCertificates
Table type	Multi-instance table
Row name	TrustCertificate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	File name of certificate	Index	String, case-insensitive. Length: 1 to 63 characters	N/A
Trust	Credibility type of the certificate	N/A	Enumeration: <ul style="list-style-type: none"><li><b>0</b>—untrust.</li><li><b>1</b>—trust.</li><li><b>2</b>—untrust&amp;trust.</li></ul>	N/A

# AppProxy/Certificates

This table contains certificates information.

## XML structure

```
<AppProxy>
  <Certificates>
    <Certificate>
      <Name></Name>
      <Trust></Trust>
      <Issuer></Issuer>
      <Subject></Subject>
      <StartDate></StartDate>
      <EndDate></EndDate>
      <Version></Version>
      <Serialnumber></Serialnumber>
      <Extend></Extend>
    </Certificate>
  </Certificates>
</AppProxy>
```

## Table description

Item	Description
Feature name	AppProxy
Table name	Certificates
Table type	Multi-instance table
Row name	Certificate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	File name of CA certificate.	Index	String, case-insensitive. Length: 1 to 255 characters.	N/A
Trust	Credibility type of the certificate.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—untrust.</li><li>• 1—trust.</li><li>• 2—untrust&amp;trust.</li></ul>	N/A
Issuer	Publisher of the certificate	N/A	String	N/A
Subject	Holder of the certificate	N/A	String	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
StartDate	The effective date of certificate	N/A	String	N/A
EndDate	Expiration date of the certificate	N/A	String	N/A
Version	Version of the certificate	N/A	Unsigned integer	N/A
Serialnumber	Serial number of the certificate	N/A	String	N/A
Extend	Extended information of the certificate	N/A	String	N/A

## AppProxy/Specifications

This table contains specification information.

### XML structure

```

<Specifications>
  <RuleSrcAddrLimit></RuleSrcAddrLimit>
  <RuleDestAddrLimit></RuleDestAddrLimit>
  <RuleServGrpsLimit></RuleServGrpLimit>
  <RuleSrcSecZonesLimit></RuleSrcSecZonesLimit>
  <RuleDestSecZonesLimit></RuleDestSecZonesLimit>
  <RuleUsersLimit></RuleUsersLimit>
  <RuleUserGrpsLimit></RuleUserGrpsLimit>
</Specifications>

```

### Table description

Item	Description
Feature name	AppProxy
Table name	Specifications
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleSrcAddrLimit	Number limit of source address	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	object groups in a rule			
RuleDestAddr Limit	Number limit of destination address object groups in a rule	N/A	Unsigned integer.	N/A
RuleServGrps Limit	Number limit of service object groups in a rule	N/A	Unsigned integer.	N/A
RuleSrcSecZonesLimit	Number limit of source security zones in a rule	N/A	Unsigned integer.	N/A
RuleDestSecZonesLimit	Number limit of destination security zones in a rule	N/A	Unsigned integer.	N/A
RuleUsersLimit	Number limit of users in a rule	N/A	Unsigned integer.	N/A
RuleUserGrps Limit	Number limit of user groups in a rule	N/A	Unsigned integer.	N/A

# Contents

AppProxy .....	2
AppProxy/MoveBeforeRules .....	2
AppProxy/ImportCertificates .....	2
AppProxy/CommitWhiteLists .....	3
AppProxy/RuleSrcAddrs .....	3
AppProxy/RuleDestAddrs .....	3
AppProxy/RuleSrcSecZones .....	3
AppProxy/RuleDestSecZones .....	4
AppProxy/RuleUsers .....	4
AppProxy/RuleUserGrps .....	4
AppProxy/RuleServGrps .....	5
AppProxy/WhiteListHostNames .....	5
AppProxy/WhiteListPredefine .....	5
AppProxy/WhiteListPredefineChromeHsts .....	5
AppProxy/PolicyRules .....	6

# AppProxy

## AppProxy/MoveBeforeRules

Message	Explanation
The default rule cannot be moved. 默认规则不能移动。	The default rule cannot be moved before any user-defined rules. 默认规则不能被移动到任何自定义规则之前。
The rule to be removed doesn't exist. 要移动的规则不存在。	The rule to be moved does not exist and processing fails. 将要移动的规则不存在，处理失败。
The two rule IDs cannot be the same. 要移动的规则与目标规则是同一个规则。	The rule to be moved and the target rule cannot be the same rule. 要移动的规则和目标规则不能是同一个规则

## AppProxy/ImportCertificates

Message	Explanation
Certificate file does not exist. 证书文件不存在。	The certificate file to import does not exist. 要导入的证书文件不存在。
Invalid password. 无效密码。	The input password does not match the imported certificate. 输入的密码与导入的证书不匹配。
The column Trust cannot be empty. Trust列不能为空。	Trust column must be specified when importing a certificate. 导入证书时必须制定trust列。
Failed to parse the certificate. 导入的证书解析失败。	Imported certificate is invalid and the parsing fails. 导入的证书不合法，导致解析失败
Failed to verify the certificate. 导入的证书验证失败。	The certificate verification fails because the imported certificate expires or other reasons. 导入的证书过期或由于其他原因导致验证失败。
The certificate file does not have a key pair. 导入的证书不含密钥对。	The imported certificate must contain a key pair. 导入的证书必须包含密钥对。
The certificate file does not have a root certificate. 导入的证书不包含根证书。	The imported certificate must contain the root certificate. 导入的证书必须包含根证书。
The certificate and the public key do not match. 导入的证书公钥不匹配。	The imported certificate and public key do not match. 导入的证书和公钥不匹配。
An SSL decryption certificate with the same name already exists. 该证书已存在。	Certificate cannot be imported if it has the same name with a certificate on the device. 不能导入文件名同名的证书。



# AppProxy/CommitWhiteLists

Message	Explanation
Failed to submit the SSL whitelist settings. 提交白名单失败。	Failure to compile the whitelist due to insufficient memory or other reasons. 由于内存不足或其他原因导致编译白名单失败，。
Activating the SSL whitelist settings. Please wait... 正在提交白名单，请稍等。	A whitelist is being submitted. The next submission can be processed only after the submission is completed. 正在提交白名单，需要等提交完之后，才可以处理下一次提交。

# AppProxy/RuleSrcAddrs

Message	Explanation
Object group type not supported. 对象组类型不支持。	The specified object group must be of the address type. 引用的对象组必须是地址类型的。
Maximum number of source IP address object groups in the rule already reached. 引用的源地址对象组已达上限。	A maximum of 64 source address object groups can be used in one rule. 规则下最多引用64个源地址对象组。
The object group does not exist. 对象组不存在。	The specified address object group does not exist. Please create the address object group before using it. 引用的地址对象组不存在，需要先创建地址对象组才可以引用。

# AppProxy/RuleDestAddrs

Message	Explanation
Object group type not supported. 对象组类型不支持。	The specified object group must be of the address type. 引用的对象组必须是地址类型的。
Maximum number of destination IP address object groups in the rule already reached. 引用的目的地址对象组已达上限。	A maximum of 64 destination address object groups can be used in one rule. 规则下最多引用64个目的地址对象组。
The object group does exist. 对象组不存在。	The specified address object group does not exist. Please create the address object group before using it. 引用的地址对象组不存在，需要先创建地址对象组才可以引用。

# AppProxy/RuleSrcSecZones

Message	Explanation
Maximum number of source security zones in the rule already reached. 引用的源安全域已达上限。	A maximum of 16 source security zones can be used in one rule. 规则下最多引用16个源安全域。
Configuration succeeded but the source security zone does not exist. 引用的源安全域不存在。	Configuration succeeded, but it does not take effect because the source security zone does not exist. 配置成功了，但是源安全域不存在，配置不生效。

## AppProxy/RuleDestSecZones

Message	Explanation
Maximum number of destination security zones in the rule already reached. 引用的源安全域已达上限。	Maximum 16 destination security zones referenced under rules. 规则下最多引用16个目的安全域。
Configuration succeeded but the destination security zone does not exist. 引用的源安全域不存在。	Configuration succeeded, but it does not take effect because the destination security zone does not exist. 配置成功了，但是源安全域不存在，配置不生效。

## AppProxy/RuleUsers

Message	Explanation
Configuration succeeded but the user doesn't exist. 引用的用户不存在。	Configuration succeeded, but it does not take effect because the user does not exist. 配置成功了，但是用户不存在，配置不生效。
Maximum number of users in the rule already reached. 引用的用户已达上限。	A maximum of 64 users can be specified in a rule. 规则下最多引用64个用户。
The user name cannot be a, al, or all and cannot contain the following special characters: \r\n\\   / : * ? < > @. 用户名不能包含 \r\n\\   / : * ? , < , > , @,且不能为 a、al、和all。	Input username is not valid. Please enter a new one according to the prompt message. 输入的用户名不合法，按照提示输入。
The domain name cannot contain the following characters: \r\n\\   / : * ? < > @. 域名不能包含 /, \r\n\\   / : * ? , < , > , @。	Input domain name is not valid. Please enter a new one according to the prompt message. 输入的域名不合法，按照提示输入。

## AppProxy/RuleUserGrps

Message	Explanation
Configuration succeeded but the user groups do not exist. 引用的用户组不存在。	Configuration succeeded, but it does not take effect because the user groups do not exist. 配置成功了，但是用户组不存在，配置不生效。
Maximum number of user groups in the rule already reached. 引用的用户组已达上限。	A maximum of 64 user groups can be specified by a under rule. 规则下最多引用64个用户组。
The domain name cannot contain the following characters: \r\n\\   / : * ? < > @.	Input domain name is not valid. Please enter a new one according to the prompt message.

域名不能包含 /, \,  , :, *, ?, <, >, @。	输入的域名不合法，按照提示输入。
-----------------------------------	------------------

## AppProxy/RuleServGrps

Message	Explanation
Incorrect object group type. 对象组类型不支持。	The specified object group must be of the service type. 引用的对象组必须是服务类型的。
Maximum number of service object groups in the rule already reached. 引用的服务已达上限。	A maximum of 64 service object groups can be specified in a rule. 规则下最多引用64个服务对象组。
The object group does not exist. 对象组不存在。	The specified service object group does not exist. Please create the service object group before using it. 引用的服务对象组不存在，需要先创建服务对象组才可以引用。

## AppProxy/WhiteListHostNames

Message	Explanation
Maximum number of user-defined hostnames on the SSL hostname whitelist already reached. 域名白名单已达上限。	A maximum of 1000 items can be created in user-defined hostname whitelist. 自定义域名白名单最多1000个。

## AppProxy/WhiteListPredefine

Message	Explanation
The hostname is not on the pre-defined SSL hostname whitelist. 预定义白名单中不存在指定的域名。	The specified domain name is not on the pre-defined whitelist. 指定的域名不在预定义白名单里。
To disable the Chrome-HSTS whitelist entry, you must first turn on the Chrome-HSTS whitelist by using the app-proxy ssl whitelist predefined-hostname chrome-hsts enable command. Chrome HSTS列表已经禁用。	Chrome HSTS whitelist is already disabled. Chrome HSTS列表已经去使能了，不需要再去使能。

## AppProxy/WhiteListPredefineChromeHsts

Message	Explanation
To activate the setting, execute app-proxy ssl	After modifying the whitelist, please submit the whitelist

whitelist activate. 白名单列表已修改，请提交。	to make it take effect. 修改白名单列表之后，需要提交白名单才能生效。
--------------------------------------	---

## AppProxy/PolicyRules

Message	Explanation
The rule ID is already used by another application proxy policy rule. 规则已经存在。	When creating a rule, the specified ID is already used. A new ID can be manually specified or automatically assigned without specifying an ID at the time of creation. 创建规则时，指定的ID已经被占用了，需要换一个ID或者创建时不指定ID，自动分配。
The rule name is already used by another application proxy policy rule. 规则名称已存在。	When creating a rule, a rule with the specified name already exists, but the ID is inconsistent with the ID of an existing rule. 创建规则时，已有指定名称的规则，但是ID跟已存在的规则的ID不一致。
Maximum number of application proxy policy rules already reached. 规则个数已达上限。	A maximum of 1024 rules can be created. 最多只能创建1024个代理策略规则。
Invalid name. 无效的规则名称。	Rule name cannot be default. 规则名称不能是default。
The default rule cannot delete. 默认策略不能删除。	The default rule is automatically created at startup and cannot be deleted. 默认策略在进程启动时自动创建，不能删除。
The default rule cannot be disabled. 默认策略不能禁用。	The default rule cannot be enabled. It can only be modified. 默认策略不能去使能，只能修改动作。

# Contents

- APR .....1
  - APR/ClearApplicationStatistics .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# APR

## APR/ClearApplicationStatistics

This table contains APR statistics information.

### XML structure

```
<APR>
  <ClearApplicationStatistics>
    <Statistic>
      <IfIndex></IfIndex>
      <Clear></Clear>
    </Statistic>
  </ClearApplicationStatistics>
</APR>
```

### Table description

Item	Description
Feature name	APR
Table name	ClearApplicationStatistics
Table type	Multi-instance table
Row name	Statistic
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
Clear	Resets counters.	N/A	This column must be empty.	N/A

# Contents

APR .....	1
APR/GeneralPortMappings .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
APR/Ipv4PortMappings .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
APR/Ipv6PortMappings .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
APR/Ipv4SubnetPortMappings .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
APR/Ipv6SubnetPortMappings .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
APR/ Ipv4ACLPortMappings .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
APR/ Ipv6ACLPortMappings .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
APR/Applications .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
APR/AppGroups .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
APR/AppGroupMembers .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
APR/ AppGroupMembersIncGrp .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
APR/StatisticOnInterfaces .....	21
XML structure .....	21
Table description .....	21
Columns .....	22

# APR

## APR/GeneralPortMappings

This table contains informations about port mappings.

### XML structure

```
<APR>
  <GeneralPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <AppName></AppName>
    </PortMapping>
  </GeneralPortMappings>
</APR>
```

### Table description

Item	Description
Feature name	APR
Table name	GeneralPortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of a packet matches a general port mapping, APR recognizes the packet as the specified application protocol's packet.</p> <p>If two port mappings are configured with the same port number and transport layer protocol, but with different application protocols, the most recent configuration takes effect.</p>
L4ProtocolID	Transport layer portocol ID	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	<p>This index can be null.</p> <p>If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.</p> <p>A mapping with the transport layer protocol specified has a higher priority than one without it.</p>
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	<p>Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".</p> <p>The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.</p> <p>This column is affirmatively chosen item.</p>
Support for row creation and deletion		Yes		

# APR/Ipv4PortMappings

This table contains informations about IPv4 address-based host-port mappings.

## XML structure

```
<APR>
  <Ipv4PortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <VRF></VRF>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
      <AppName></AppName>
    </PortMapping>
  </Ipv4PortMappings>
</APR>
```

## Table description

Item	Description
Feature name	APR
Table name	Ipv4PortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets destined for the specified IP address or IP subnet, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and IP address or IP address ranges, but with different application protocols, the most recent configuration takes effect.</p>
L4ProtocolID	Transport layer portocol ID	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	<p>This index can be null.</p> <p>If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.</p> <p>A mapping with the transport layer protocol specified has a higher priority than one without it.</p>
VRF	VRF.	Index	String, case-sensitive. Length: 1 to 31 characters.	If you configure a mapping for the public network, do not specify this option.

Column name	Column description	Column type	Data type and restrictions	Remarks
StartIpv4Address	Start IPv4 address	Index	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>To specify only one IP address, provide only the start IP address. To specify a range of IP addresses, provide both the start and end IP addresses, and make sure the end IP address is bigger than the start IP address.</p> <p>No overlapping of IP addresses is tolerable for the host-port mappings configured with the same application protocol, port number, and transport layer protocol.</p>
EndIpv4Address	End IPv4 address	Index	String, dotted decimal notation.	<p>Example: 1.1.1.6. This index can be null.</p>
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	<p>Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".</p> <p>The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.</p> <p>This column is affirmatively chosen item.</p>

## APR/Ipv6PortMappings

This table contains informations about IPv6 address-based host-port mappings.

### XML structure

```

<APR>
  <Ipv6PortMappings>
    <PortMapping>
      <PortNumber></PortNumber>

```

```

    <L4ProtocolID></L4ProtocolID>
    <VRF></VRF>
    <StartIpv6Address></StartIpv6Address>
    <EndIpv6Address></EndIpv6Address>
    <AppName></AppName>
  </PortMapping>
</Ipv6PortMappings>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	Ipv6PortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets destined for the specified IP address or IP subnet, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and IP address or IP address ranges, but with different application protocols, the most recent configuration takes effect.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
L4ProtocolID	Transport layer portocol ID	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	This index can be null. If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets. A mapping with the transport layer protocol specified has a higher priority than one without it.
VRF	VRF.	Index	String, case-sensitive. Length: 1 to 31 characters.	If you configure a mapping for the public network, do not specify this option.
StartIpv6Address	Start IPv6 address	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1. To specify only one IP address, provide only the start IP address. To specify a range of IP addresses, provide both the start and end IP addresses, and make sure the end IP address is bigger than the start IP address. No overlapping of IP addresses is tolerable for the host-port mappings configured with the same application protocol, port number, and transport layer protocol.
EndIpv6Address	End IPv6 address	Index	Hexadecimal string, colon-separated..	Example: 1:1::1:6. This index can be null.

Column name	Column description	Column type	Data type and restrictions	Remarks
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	<p>Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".</p> <p>The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.</p> <p>This column is affirmatively chosen item.</p>

## APR/Ipv4SubnetPortMappings

This table contains informations about IPv4 subnet-based host-port mappings.

### XML structure

```

<APR>
  <Ipv4SubnetPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <AppName></AppName>
    </PortMapping>
  </Ipv4SubnetPortMappings>
</APR>

```

### Table description

Item	Description
Feature name	APR
Table name	Ipv4SubnetPortMappings
Table type	Multi-instance table

Row name	PortMapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets destined for the specified subnet, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and subnet, but with different application protocols, the most recent configuration takes effect.</p>
L4ProtocolID	Transport layer portocol ID	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	<p>This index can be null.</p> <p>If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.</p> <p>A mapping with the transport layer protocol specified has a higher priority than one without it.</p>
VRF	VRF.	Index	String, case-sensitive. Length: 1 to 31 characters.	If you configure a mapping for the public network, do not specify this option.



Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.	Example: 1.1.1.1. APR uses a very precise method to match the packets. If multiple subnet-based mappings are applied to packets and these subnets overlap, APR matches the packets destined for the overlapped segment with the port mapping of the subnet that has the smallest range.
Ipv4PrefixLength	Length of the IPv4 address mask.	Index	Unsigned integer. Value range: 1 to 32.	N/A
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.  This column is affirmatively chosen item.

## APR/Ipv6SubnetPortMappings

This table contains informations about IPv6 subnet-based host-port mappings.

### XML structure

```

<APR>
  <Ipv6SubnetPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <VRF></VRF>
      <Ipv6Address></Ipv6Address>
    </PortMapping>
  </Ipv6SubnetPortMappings>
</APR>

```

```

    <Ipv6PrefixLength></Ipv6PrefixLength>
    <AppName></AppName>
  </PortMapping>
</Ipv6SubnetPortMappings>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	Ipv6SubnetPortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets destined for the specified subnet, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and subnet, but with different application protocols, the most recent configuration takes effect.</p>
L4ProtocolID	Transport layer portocol ID	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>6</b>—TCP.</li> <li><b>17</b>—UDP.</li> <li><b>33</b>—DCCP.</li> <li><b>132</b>—SCTP.</li> <li><b>136</b>—UDP-Lite.</li> </ul>	<p>This index can be null.</p> <p>If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.</p> <p>A mapping with the transport layer protocol specified has a higher priority than one without it.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF.	Index	String, case-sensitive. Length: 1 to 31 characters.	If you configure a mapping for the public network, do not specify this option.
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1. APR uses a very precise method to match the packets. If multiple subnet-based mappings are applied to packets and these subnets overlap, APR matches the packets destined for the overlapped segment with the port mapping of the subnet that has the smallest range.
Ipv6PrefixLength	Length of the IPv6 address prefix.	Index	Unsigned integer. Value range: 1 to 128.	N/A
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.  This column is affirmatively chosen item.

## APR/ Ipv4ACLPortMappings

This table contains informations about IPv4 ACL-based host-port mappings.

### XML structure

```

<APR>
  <Ipv4ACLPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>

```

```

    <L4ProtocolID></L4ProtocolID>
    <ACLNumber></ACLNumber>
    <AppName></AppName>
  </PortMapping>
</Ipv4ACLPortMappings>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	Ipv4ACLPortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets matching the specified ACL, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and ACL, but with different application protocols, the most recent configuration takes effect.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
L4ProtocolID	Transport layer protocol ID specified to the application layer protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	This index can be null. If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets. A mapping with the transport layer protocol specified has a higher priority than one without it.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 2999.	If the destination port of the packet that matches against the specified ACL maps with an application layer protocol, the packet is recognized as the corresponding application layer protocol packet.
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other". The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time. This column is affirmatively chosen item.

## APR/ Ipv6ACLPortMappings

This table contains informations about IPv6 ACL-based host-port mappings.

### XML structure

```
<APR>
  <Ipv6ACLPortMappings>
```

```

<PortMapping>
  <PortNumber></PortNumber>
  <L4ProtocolID></L4ProtocolID>
  <ACLNumber></ACLNumber>
  <AppName></AppName>
</PortMapping>
</Ipv6ACLPortMappings>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	Ipv6ACLPortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets matching the specified ACL, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and ACL, but with different application protocols, the most recent configuration takes effect.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
L4ProtocolID	Transport layer protocol ID specified to the application layer protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	This index can be null.  If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.  A mapping with the transport layer protocol specified has a higher priority than one without it.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 2999.	If the destination port of the packet that matches against the specified ACL maps with an application layer protocol, the packet is recognized as the corresponding application layer protocol packet.
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.  This column is affirmatively chosen item.

## APR/Applications

This table contains informations about pre-defined and user-defined applications.

### XML structure

```
<APR>
  <Applications>
```

```

<Application>
  <Type></Type>
  <AppName></AppName>
  <SecRisk></SecRisk>
</Application>
</Applications>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	Applications
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Type of the application layer protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>0—pre-defined.</li> <li>1—user-defined.</li> </ul>	N/A
AppName	Application layer protocol name	Index	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment.
SecRisk	Application layer protocol security risk	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

## APR/AppGroups

This table contains informations about the user-defined application groups.

## XML structure

```
<APR>
```



```

<AppGroups>
  <GroupInfo>
    <GroupName></GroupName>
    <Description></Description>
  </GroupInfo>
</AppGroups>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	AppGroups
Table type	Multi-instance table
Row name	GroupInfo
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Predefined or user-defined application group name	Index	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_). Names, such as "invalid" or "other" are not allowed.  You can create up to 65536 application groups on the device.
Description	Description for the application group	N/A	String, case-sensitive. Length: 1 to 127 characters.	Blank space can be included in <i>Description</i> . The default description of the user-defined application group is "User defined group".

## APR/AppGroupMembers

This table contains the application protocols included in an user-defined application group.

## XML structure

```

<APR>
  <AppGroupMembers>
    <GroupMember>

```

```

    <GroupName></GroupName>
    <AppName></AppName>
  </GroupMember>
</AppGroupMembers>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	AppGroupMembers
Table type	Multi-instance table
Row name	GroupMember
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	User-defined application group name	Index	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_). Names, such as "invalid" or "other" are not allowed.  You can create up to 65536 application groups on the device.

Column name	Column description	Column type	Data type and restrictions	Remarks
AppName	Predefined or user-defined application protocol name which is added to the application group	Index	String, case-insensitive. Length: 1 to 63 characters.	<p>Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".</p> <p>The application layer protocol name must be standard and can be identified by the equipment.</p> <p>A maximum of 65535 user-defined application protocols can be added to an application group.</p> <p>If you add a nonexistent application protocol to the application group, the system first creates the protocol before adding it to the application group.</p> <p>Whether the device can recognize the packets of this protocol depends on your configuration.</p>

## APR/ AppGroupMembersIncGrp

This table contains the application groups included in an application group.

### XML structure

```

<APR>
  <AppGroupMembersIncGrp>
    <GroupMember>
      <GroupName></GroupName>
      <IncGrpName></IncGrpName>
    </GroupMember>
  </AppGroupMembersIncGrp>
</APR>

```

### Table description

Item	Description
Feature name	APR
Table name	AppGroupMembersIncGrp
Table type	Multi-instance table

Row name	GroupMember
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Application group name	Index	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_). Names, such as "invalid" or "other" are not allowed.  You can create up to 65536 application groups on the device.
IncGrpName	Application group name which is added to the application group	Index	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_). Names, such as "invalid" or "other" are not allowed.  You can create up to 65536 application groups on the device.

## APR/StatisticOnInterfaces

This table contains the interfaces where statistic is enabled.

## XML structure

```

<APR>
  <StatisticOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <EnableStatistic></EnableStatistic>
    </Interface>
  </StatisticOnInterfaces>
</APR>

```

## Table description

Item	Description
Feature name	APR

Table name	StatisticOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
Direction	The direction of the interface	Index	<ul style="list-style-type: none"> <li>Enumeration:</li> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	<b>N/A</b>
EnableStatistic	Whether enable statistic for the interface	N/A	<ul style="list-style-type: none"> <li>Boolean:</li> <li>true—YES.</li> <li>false—NO (default).</li> </ul>	N/A

# Contents

APR .....	1
APR/PredefinedPortMappings .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
APR/GeneralPortMappings .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
APR/Ipv4PortMappings .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
APR/Ipv6PortMappings .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
APR/Ipv4SubnetPortMappings .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
APR/Ipv6SubnetPortMappings .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
APR/ Ipv4ACLPortMappings .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
APR/ Ipv6ACLPortMappings .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
APR/Applications .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
APR/AppGroups .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
APR/AppGroupMembers .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
APR/StatisticOnInterfaces .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
APR/ApplicationStatistics .....	22
XML structure .....	22
Table description .....	23
Columns .....	23
APR/AppSubCategorys .....	24
XML structure .....	24
Table description .....	24
Columns .....	24

APR/SecurityRisks .....	25
XML structure .....	25
Table description .....	25
Columns .....	25
APR/RiskLevels .....	26
XML structure .....	26
Table description .....	26
Columns .....	26

# APR

## APR/PredefinedPortMappings

This table contains informations about predefined port mappings.

### XML structure

```
<APR>
  <PredefinedPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <AppName></AppName>
    </PortMapping>
  </PredefinedPortMappings>
</APR>
```

### Table description

Item	Description
Feature name	APR
Table name	PredefinedPortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
L4ProtocolID	Transport layer protocol ID.	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>6</b>—TCP.</li><li>• <b>17</b>—UDP.</li><li>• <b>33</b>—DCCP.</li><li>• <b>132</b>—SCTP.</li><li>• <b>136</b>—UDP-Lite.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
AppName	Application layer protocol name using the port mapping.	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment.

## APR/GeneralPortMappings

This table contains informations about port mappings.

### XML structure

```

<APR>
  <GeneralPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <AppName></AppName>
    </PortMapping>
  </GeneralPortMappings>
</APR>

```

### Table description

Item	Description
Feature name	APR
Table name	GeneralPortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of a packet matches a general port mapping, APR recognizes the packet as the specified application protocol's packet.</p> <p>If two port mappings are configured with the same port number and transport layer protocol, but with different application protocols, the most recent configuration takes effect.</p>
L4ProtocolID	Transport layer portocol ID	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	<p>This index can be null.</p> <p>If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.</p> <p>A mapping with the transport layer protocol specified has a higher priority than one without it.</p>
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	<p>Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".</p> <p>The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.</p> <p>This column is affirmatively chosen item.</p>

# APR/Ipv4PortMappings

This table contains informations about IPv4 address-based host-port mappings.

## XML structure

```
<APR>
  <Ipv4PortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <VRF></VRF>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
      <AppName></AppName>
    </PortMapping>
  </Ipv4PortMappings>
</APR>
```

## Table description

Item	Description
Feature name	APR
Table name	Ipv4PortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets destined for the specified IP address or IP subnet, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and IP address or IP address ranges, but with different application protocols, the most recent configuration takes effect.</p>
L4ProtocolID	Transport layer portocol ID	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	<p>This index can be null.</p> <p>If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.</p> <p>A mapping with the transport layer protocol specified has a higher priority than one without it.</p>
VRF	VRF.	Index	String, case-sensitive. Length: 1 to 31 characters.	If you configure a mapping for the public network, do not specify this option.

Column name	Column description	Column type	Data type and restrictions	Remarks
StartIpv4Address	Start IPv4 address	Index	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>To specify only one IP address, provide only the start IP address. To specify a range of IP addresses, provide both the start and end IP addresses, and make sure the end IP address is bigger than the start IP address.</p> <p>No overlapping of IP addresses is tolerable for the host-port mappings configured with the same application protocol, port number, and transport layer protocol.</p>
EndIpv4Address	End IPv4 address	Index	String, dotted decimal notation.	<p>Example: 1.1.1.6. This index can be null.</p>
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	<p>Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".</p> <p>The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.</p> <p>This column is affirmatively chosen item.</p>

## APR/Ipv6PortMappings

This table contains informations about IPv6 address-based host-port mappings.

### XML structure

```

<APR>
  <Ipv6PortMappings>
    <PortMapping>
      <PortNumber></PortNumber>

```

```

    <L4ProtocolID></L4ProtocolID>
    <VRF></VRF>
    <StartIpv6Address></StartIpv6Address>
    <EndIpv6Address></EndIpv6Address>
    <AppName></AppName>
  </PortMapping>
</Ipv6PortMappings>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	Ipv6PortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets destined for the specified IP address or IP subnet, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and IP address or IP address ranges, but with different application protocols, the most recent configuration takes effect.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
L4ProtocolID	Transport layer portocol ID	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	This index can be null. If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets. A mapping with the transport layer protocol specified has a higher priority than one without it.
VRF	VRF.	Index	String, case-sensitive. Length: 1 to 31 characters.	If you configure a mapping for the public network, do not specify this option.
StartIpv6Address	Start IPv6 address	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1. To specify only one IP address, provide only the start IP address. To specify a range of IP addresses, provide both the start and end IP addresses, and make sure the end IP address is bigger than the start IP address. No overlapping of IP addresses is tolerable for the host-port mappings configured with the same application protocol, port number, and transport layer protocol.
EndIpv6Address	End IPv6 address	Index	Hexadecimal string, colon-separated..	Example: 1:1::1:6. This index can be null.

Column name	Column description	Column type	Data type and restrictions	Remarks
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	<p>Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".</p> <p>The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.</p> <p>This column is affirmatively chosen item.</p>

## APR/Ipv4SubnetPortMappings

This table contains informations about IPv4 subnet-based host-port mappings.

### XML structure

```

<APR>
  <Ipv4SubnetPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <AppName></AppName>
    </PortMapping>
  </Ipv4SubnetPortMappings>
</APR>

```

### Table description

Item	Description
Feature name	APR
Table name	Ipv4SubnetPortMappings
Table type	Multi-instance table



Row name	PortMapping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets destined for the specified subnet, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and subnet, but with different application protocols, the most recent configuration takes effect.</p>
L4ProtocolID	Transport layer protocol ID	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	<p>This index can be null.</p> <p>If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.</p> <p>A mapping with the transport layer protocol specified has a higher priority than one without it.</p>
VRF	VRF.	Index	String, case-sensitive. Length: 1 to 31 characters.	If you configure a mapping for the public network, do not specify this option.
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>APR uses a very precise method to match the packets. If multiple subnet-based mappings are applied to packets and these subnets overlap, APR matches the packets destined for the overlapped segment with the port mapping of the subnet that has the smallest range.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4PrefixLength	Length of the IPv4 address mask.	Index	Unsigned integer. Value range: 1 to 32.	N/A
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.  This column is affirmatively chosen item.

## APR/Ipv6SubnetPortMappings

This table contains informations about IPv6 subnet-based host-port mappings.

### XML structure

```

<APR>
  <Ipv6SubnetPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <VRF></VRF>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <AppName></AppName>
    </PortMapping>
  </Ipv6SubnetPortMappings>
</APR>

```

### Table description

Item	Description
Feature name	APR

Table name	Ipv6SubnetPortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	If the destination port of these packets matches a port mapping for packets destined for the specified subnet, APR recognizes them as the specified application protocol's packets.  If two port mappings are configured with the same port number, transport layer protocol, and subnet, but with different application protocols, the most recent configuration takes effect.
L4ProtocolID	Transport layer protocol ID	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	This index can be null.  If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.  A mapping with the transport layer protocol specified has a higher priority than one without it.
VRF	VRF.	Index	String, case-sensitive. Length: 1 to 31 characters.	If you configure a mapping for the public network, do not specify this option.

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1. APR uses a very precise method to match the packets. If multiple subnet-based mappings are applied to packets and these subnets overlap, APR matches the packets destined for the overlapped segment with the port mapping of the subnet that has the smallest range.
Ipv6PrefixLength	Length of the IPv6 address prefix.	Index	Unsigned integer. Value range: 1 to 128.	N/A
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.  This column is affirmatively chosen item.

## APR/ Ipv4ACLPortMappings

This table contains informations about IPv4 ACL-based host-port mappings.

### XML structure

```

<APR>
  <Ipv4ACLPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <ACLNumber></ACLNumber>
      <AppName></AppName>
    </PortMapping>
  </Ipv4ACLPortMappings>
</APR>

```

```

    </PortMapping>
  </Ipv4ACLPortMappings>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	Ipv4ACLPortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets matching the specified ACL, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and ACL, but with different application protocols, the most recent configuration takes effect.</p>
L4ProtocolID	Transport layer portocol ID specified to the application layer protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	<p>This index can be null.</p> <p>If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.</p> <p>A mapping with the transport layer protocol specified has a higher priority than one without it.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 2999.	If the destination port of the packet that matches against the specified ACL maps with an application layer protocol, the packet is recognized as the corresponding application layer protocol packet.
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.  This column is affirmatively chosen item.

## APR/ Ipv6ACLPortMappings

This table contains informations about IPv6 ACL-based host-port mappings.

### XML structure

```

<APR>
  <Ipv6ACLPortMappings>
    <PortMapping>
      <PortNumber></PortNumber>
      <L4ProtocolID></L4ProtocolID>
      <ACLNumber></ACLNumber>
      <AppName></AppName>
    </PortMapping>
  </Ipv6ACLPortMappings>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	Ipv6ACLPortMappings
Table type	Multi-instance table
Row name	PortMapping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number	Index	Unsigned integer. Value range: 0 to 65535.	<p>If the destination port of these packets matches a port mapping for packets matching the specified ACL, APR recognizes them as the specified application protocol's packets.</p> <p>If two port mappings are configured with the same port number, transport layer protocol, and ACL, but with different application protocols, the most recent configuration takes effect.</p>
L4ProtocolID	Transport layer portocol ID specified to the application layer protocol	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>6</b>—TCP.</li> <li>• <b>17</b>—UDP.</li> <li>• <b>33</b>—DCCP.</li> <li>• <b>132</b>—SCTP.</li> <li>• <b>136</b>—UDP-Lite.</li> </ul>	<p>This index can be null.</p> <p>If no transport layer protocol is specified, all the transport layer protocol packets and that have the specified port are recognized as the specified application protocol's packets.</p> <p>A mapping with the transport layer protocol specified has a higher priority than one without it.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 2999.	If the destination port of the packet that matches against the specified ACL maps with an application layer protocol, the packet is recognized as the corresponding application layer protocol packet.
AppName	Application layer protocol name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment. It can be predefined port mapping application name or the application name which doesn't exist, but the user defined application will be created at the same time.  This column is affirmatively chosen item.

## APR/Applications

This table contains informations about pre-defined and user-defined applications.

### XML structure

```

<APR>
  <Applications>
    <Application>
      <Type></Type>
      <AppName></AppName>
      <AppID></AppID>
      <L5AppID></L5AppID>
      <AppSubCategoryID></AppSubCategoryID>
      <IsTunnel></IsTunnel>
      <IsEncrypted></IsEncrypted>
      <SecRisk></SecRisk>
      <RiskLevel></RiskLevel>
    </Application>
  
```



```

    </Applications>
  </APR>

```

## Table description

Item	Description
Feature name	APR
Table name	Applications
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Type of the application layer protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>0—pre-defined.</li> <li>1—user-defined.</li> </ul>	N/A
AppName	Application layer protocol name	Index	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment.
AppID	Application layer protocol ID	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
L5AppID	Application layer 5 protocol ID	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
AppSubCategoryID	Identify a subCategory	N/A	Unsigned integer. Value range: 1 to $2^{32} - 1$ .	N/A
IsTunnel	Whether or not the protocol is a tunnel protocol	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO (default).</li> </ul>	N/A
IsEncrypted	Whether or not the protocol is a cryptographic protocol	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO (default).</li> </ul>	N/A
SecRisk	Application layer protocol security risk	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
RiskLevel	Application layer protocol risk level	N/A	Unsigned integer. Value range: 1 to $2^{16} - 1$ .	N/A

# APR/AppGroups

This table contains informations about the application groups.

## XML structure

```
<APR>
  <AppGroups>
    <GroupInfo>
      <GroupName></GroupName>
      <GroupID></GroupID>
      <Type></Type>
      <Description></Description>
    </GroupInfo>
  </AppGroups>
</APR>
```

## Table description

Item	Description
Feature name	APR
Table name	AppGroups
Table type	Multi-instance table
Row name	GroupInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Predefined or user-defined application group name	Index	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_). Names, such as "invalid" or "other" are not allowed.  You can create up to 65536 application groups on the device.
GroupID	Application group ID	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Type	Application group type	N/A	<ul style="list-style-type: none"><li>Enumeration:</li><li>0—pre-defined.</li><li>1—user-defined.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Description	Description for the application group	N/A	String, case-sensitive. Length: 1 to 127 characters.	Blank space can be included in <i>Description</i> . The default description of the user-defined application group is "User defined group".

## APR/AppGroupMembers

This table contains the application protocols included in an application group.

### XML structure

```

<APR>
  <AppGroupMembers>
    <GroupMember>
      <GroupName></GroupName>
      <AppName></AppName>
    </GroupMember>
  </AppGroupMembers>
</APR>

```

### Table description

Item	Description
Feature name	APR
Table name	AppGroupMembers
Table type	Multi-instance table
Row name	GroupMember
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Predefined or user-defined application group name	Index	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_). Names, such as "invalid" or "other" are not allowed.  You can create up to 65536 application groups on the device.

Column name	Column description	Column type	Data type and restrictions	Remarks
AppName	Predefined or user-defined application protocol name which is added to the application group	Index	String, case-insensitive. Length: 1 to 63 characters.	<p>Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".</p> <p>The application layer protocol name must be standard and can be identified by the equipment.</p> <p>A maximum of 65535 user-defined application protocols can be added to an application group.</p> <p>If you add a nonexistent application protocol to the application group, the system first creates the protocol before adding it to the application group.</p> <p>Whether the device can recognize the packets of this protocol depends on your configuration.</p>

## APR/StatisticOnInterfaces

This table contains the interfaces where statistic is enabled.

### XML structure

```

<APR>
  <StatisticOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <EnableStatistic></EnableStatistic>
    </Interface>
  </StatisticOnInterfaces>
</APR>

```

### Table description

Item	Description
Feature name	APR
Table name	StatisticOnInterfaces
Table type	Multi-instance table

Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
Direction	The direction of the interface	Index	<ul style="list-style-type: none"> <li>Enumeration:</li> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
EnableStatistic	Whether enable statistic for the interface	N/A	<ul style="list-style-type: none"> <li>Boolean:</li> <li>true—YES.</li> <li>false—NO (default).</li> </ul>	N/A

## APR/ApplicationStatistics

This table contains the statistics for the specified application protocols on the interface.

## XML structure

```

<APR>
  <ApplicationStatistics>
    <Statistic>
      <IfIndex></IfIndex>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <AppName></AppName>
      <InPackets></InPackets>
      <InBytes></InBytes>
      <InPPS></InPPS>
      <InBPS></InBPS>
      <OutPackets></OutPackets>
      <OutBytes></OutBytes>
      <OutPPS></OutPPS>
      <OutBPS></OutBPS>
    </Statistic>
  </ApplicationStatistics>
</APR>

```

## Table description

Item	Description
Feature name	APR
Table name	ApplicationStatistics
Table type	Multi-instance table
Row name	Statistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
AppName	Application protocol name	Index	String, case-insensitive. Length: 1 to 63 characters.	The application protocol name must be standard and can be identified by the equipment.
InPackets	Number of packets received by the interface	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
InBytes	Number of bytes received by the interface	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
InPPS	Packets received per second by the interface	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
InBPS	Bytes received per second by the interface	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
OutPackets	Number of packets sent by the interface by the interface	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutBytes	Number of bytes sent by the interface	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
OutPPS	Packets sent per second by the interface	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
OutBPS	Bytes sent per second by the interface	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

## APR/AppSubCategorys

This table contains informations about the application categories.

### XML structure

```

<APR>
  <AppSubCategorys>
    <AppSubCategoryEntry>
      <ID></ID>
      <Name></Name>
    </AppSubCategoryEntry>
  </AppSubCategorys>
</APR>

```

### Table description

Item	Description
Feature name	APR
Table name	AppSubCategorys
Table type	Multi-instance table
Row name	AppSubCategoryEntry
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Application category ID	Index	Unsigned integer. Value range: 0 to 232 - 1.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Predefined application category name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_). Names, such as "invalid" or "other" are not allowed.  You can create up to 65536 application groups on the device.

## APR/SecurityRisks

This table contains informations about the application security risk.

### XML structure

```

<APR>
  <SecurityRisks>
    <SecurityRisk>
      <RiskID></RiskID>
      <RiskName></RiskName>
      <RiskValue></RiskValue>
    </SecurityRisk>
  </SecurityRisks>
</APR>

```

### Table description

Item	Description
Feature name	APR
Table name	SecurityRisks
Table type	Multi-instance table
Row name	SecurityRisk
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RiskID	Application layer protocol security risk ID	Index	Unsigned integer. Value range: 0 to $2^{16} - 1$ .	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
RiskName	Application layer protocol security risk name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RiskValue	Risk value	N/A	Unsigned integer. Value range: 0 to $2^{16} - 1$ .	N/A

## APR/RiskLevels

This table contains informations about the application risk level.

### XML structure

```

<APR>
  <RiskLevels>
    <RiskLevel>
      <Level></Level>
      <Boundary></Boundary>
    </RiskLevel>
  </RiskLevels>
</APR>

```

### Table description

Item	Description
Feature name	APR
Table name	RiskLevels
Table type	Multi-instance table
Row name	RiskLevel
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Level	Application layer protocol risk level	Index	Unsigned integer. Value range: 1 to $2^{16} - 1$ .	N/A
Boundary	The boundary value of the level	N/A	Unsigned integer. Value range: 0 to $2^{16} - 1$ .	N/A

# Contents

APR .....	1
APR/GeneralPortMappings .....	1
APR/Ipv4PortMappings .....	1
APR/Ipv6PortMappings .....	2
APR/Ipv4SubnetPortMappings.....	3
APR/Ipv6SubnetPortMappings.....	3
APR/Ipv4ACLPortMappings .....	4
APR/Ipv6ACLPortMappings .....	4
APR/Applications .....	5
APR/AppGroups .....	5
APR/AppGroupMembers .....	5
APR/AppGroupMembersIncGrp .....	6

# APR

## APR/GeneralPortMappings

Message	Explanation
The specified IP address range overlaps with an existing IP address range. 指定的网段地址与已有网段地址重叠。	When adding a port mapping, the specified IP address range overlaps with an existing IP address range. 新增端口映射时，指定的网段地址与已有网段地址重叠。
Maximum number of port mappings already reached. 端口映射条目个数已达到最大值。	When adding a port mapping, the number of port mappings reached the limit. 新增端口映射时，端口映射条目个数已达到最大值。
An application layer protocol is required. 应用层协议为必选配置项。	When adding a port mapping, an application layer protocol is required. 新增端口映射时，应用层协议为必选配置项。
Maximum number of user-defined applications already reached. 自定义应用数量达到最大值。	When adding a port mapping, the maximum number of user-defined applications has been already reached. 新增端口映射时，自定义应用数量达到最大值。
The application is being used by a group and cannot be deleted. 此应用已被应用组引用无法删除。	The application is being used by a group and cannot be deleted. 删除端口映射时，应用已经被应用组引用无法删除。

## APR/Ipv4PortMappings

Message	Explanation
The specified IP address range overlaps with an existing IP address range. 指定的网段地址与已有网段地址重叠。	When adding a port mapping, the specified IP address range overlaps with an existing IP address range. 新增端口映射时，指定的网段地址与已有网段地址重叠。
End IP address cannot be smaller than start IP address. 结束地址不能小于起始地址。	Invalid configuration because the end IP address is lower than start IP address. 结束地址小于起始地址，则为无效地址。
Maximum number of port mappings already reached. 端口映射条目个数已达到最大值。	When adding a port mapping, number of port mappings reached the limit. 新增端口映射时，端口映射条目个数已达到最大值。

<p>An application layer protocol is required.</p> <p>应用层协议为必选配置项。</p>	<p>When adding a port mapping, an application layer protocol is required.</p> <p>新增端口映射时，应用层协议为必选配置项。</p>
<p>Maximum number of user-defined applications already reached.</p> <p>自定义应用数量达到最大值。</p>	<p>When adding a port mapping, maximum number of user-defined applications has been already reached.</p> <p>新增端口映射时，自定义应用数量达到最大值。</p>
<p>The application is being used by a group and cannot be deleted.</p> <p>此应用已被应用组引用无法删除。</p>	<p>The application is being used by a group, and cannot be deleted.</p> <p>删除端口映射时，应用已经被应用组引用无法删除。</p>

## APR/Ipv6PortMappings

Message	Explanation
<p>The specified IP address range overlaps with an existing IP address range.</p> <p>指定的网段地址与已有网段地址重叠。</p>	<p>When adding a port mapping, the specified IP address range overlaps with an existing IP address range.</p> <p>新增端口映射时，指定的网段地址与已有网段地址重叠。</p>
<p>End IP address cannot be smaller than start IP address.</p> <p>结束地址不能小于起始地址。</p>	<p>Invalid configuration because the end IP address is lower than start IP address.</p> <p>结束地址小于起始地址，则为无效地址。</p>
<p>Maximum number of port mappings already reached.</p> <p>端口映射条目个数已达到最大值。</p>	<p>When adding a port mapping, the number of port mappings reached the maximum.</p> <p>新增端口映射时，端口映射条目个数已达到最大值。</p>
<p>An application layer protocol is required.</p> <p>应用层协议为必选配置项。</p>	<p>When adding a port mapping, an application layer protocol is required.</p> <p>新增端口映射时，应用层协议为必选配置项。</p>
<p>Maximum number of user-defined applications already reached.</p> <p>自定义应用数量达到最大值。</p>	<p>When adding a port mapping, maximum number of user-defined applications has been already reached.</p> <p>新增端口映射时，自定义应用数量达到最大值。</p>
<p>The application is being used by a group and cannot be deleted.</p> <p>此应用已被应用组引用无法删除。</p>	<p>The application is being used by a group and cannot be deleted.</p> <p>删除端口映射时，应用已经被应用组引用无法删除。</p>

# APR/Ipv4SubnetPortMappings

Message	Explanation
The specified IP address range overlaps with an existing IP address range. 指定的网段地址与已有网段地址重叠。	When adding a port mapping, the specified IP address range overlaps with an existing IP address range. 新增端口映射时，指定的网段地址与已有网段地址重叠。
Number of port mappings exceeded the limit. 端口映射条目个数已达到最大值。	When adding a port mapping, the number of port mappings reached the maximum. 新增端口映射时，端口映射条目个数已达到最大值。
An application layer protocol is required. 应用层协议为必选配置项。	When adding a port mapping, an application layer protocol is required. 新增端口映射时，应用层协议为必选配置项。
Maximum number of user-defined applications already reached. 自定义应用数量达到最大值。	When adding a port mapping, maximum number of user-defined applications has been already reached. 新增端口映射时，自定义应用数量达到最大值。
The application is being used by a group and cannot be deleted. 此应用已被应用组引用无法删除。	The application is being used by a group and cannot be deleted. 删除端口映射时，应用已经被应用组引用无法删除。

# APR/Ipv6SubnetPortMappings

Message	Explanation
The specified IP address range overlaps with an existing IP address range. 指定的网段地址与已有网段地址重叠。	When adding a port mapping, the specified IP address range overlaps with an existing IP address range. 新增端口映射时，指定的网段地址与已有网段地址重叠。
Number of port mappings exceeded the limit. 端口映射条目个数已达到最大值。	When adding a port mapping, the number of port mappings reached the maximum. 新增端口映射时，端口映射条目个数已达到最大值。
An application layer protocol is required. 应用层协议为必选配置项。	When adding a port mapping, an application layer protocol is required. 新增端口映射时，应用层协议为必选配置项。
Maximum number of user-defined applications already reached. 自定义应用数量达到最大值。	When adding a port mapping, maximum number of user-defined applications has been already reached. 新增端口映射时，自定义应用数量达到最大值。

<p>The application is being used by a group and cannot be deleted.</p> <p>此应用已被应用组引用无法删除。</p>	<p>The application is being used by a group and cannot be deleted.</p> <p>删除端口映射时，应用已经被应用组引用无法删除。</p>
---	---

## APR/Ipv4ACLPortMappings

Message	Explanation
<p>The specified IP address range overlaps with an existing IP address range.</p> <p>指定的网段地址与已有网段地址重叠。</p>	<p>When adding a port mapping, the specified IP address range overlaps with an existing IP address range.</p> <p>新增端口映射时，指定的网段地址与已有网段地址重叠。</p>
<p>Number of port mappings exceeded the limit.</p> <p>端口映射条目个数已达到最大值。</p>	<p>When adding a port mapping, the number of port mappings reached the maximum.</p> <p>新增端口映射时，端口映射条目个数已达到最大值。</p>
<p>An application layer protocol is required.</p> <p>应用层协议为必选配置项。</p>	<p>When adding a port mapping, an application layer protocol is required.</p> <p>新增端口映射时，应用层协议为必选配置项。</p>
<p>Maximum number of user-defined applications already reached.</p> <p>自定义应用数量达到最大值。</p>	<p>When adding a port mapping, maximum number of user-defined applications has been already reached.</p> <p>新增端口映射时，自定义应用数量达到最大值。</p>
<p>The application is being used by a group and cannot be deleted.</p> <p>此应用已被应用组引用无法删除。</p>	<p>The application is being used by a group and cannot be deleted.</p> <p>删除端口映射时，应用已经被应用组引用无法删除。</p>

## APR/Ipv6ACLPortMappings

Message	Explanation
<p>The specified IP address range overlaps with an existing IP address range.</p> <p>指定的网段地址与已有网段地址重叠。</p>	<p>When adding a port mapping, the specified IP address range overlaps with an existing IP address range.</p> <p>新增端口映射时，指定的网段地址与已有网段地址重叠。</p>
<p>Number of port mappings exceeded the limit.</p> <p>端口映射条目个数已达到最大值。</p>	<p>When adding a port mapping, the number of port mappings reached the maximum.</p> <p>新增端口映射时，端口映射条目个数已达到最大值。</p>
<p>An application layer protocol is required.</p>	<p>When adding a port mapping, an application layer protocol is</p>

应用层协议为必选配置项。	required. 新增端口映射时，应用层协议为必选配置项。
Maximum number of user-defined applications already reached. 自定义应用数量达到最大值。	When adding a port mapping, maximum number of user-defined applications has been already reached. 新增端口映射时，自定义应用数量达到最大值。
The application is being used by a group and cannot be deleted. 此应用已被应用组引用无法删除。	The application is being used by a group and cannot be deleted. 删除端口映射时，应用已经被应用组引用无法删除。

## APR/Applications

Message	Explanation
The specified application does not exist. 该应用不存在。	No custom applications are specified. 没有指定的自定义应用。

## APR/AppGroups

Message	Explanation
Cannot modify the configuration of pre-defined application groups. 预定义应用组不能修改。	When configuring application groups, you cannot modify the configuration of pre-defined application groups. 配置应用组时，预定义应用组不能修改。
Maximum number of user-defined application groups already reached. 自定义应用组数量达到最大值。	The maximum number of user-defined application groups is reached and no application groups can be created. 创建自定义应用组时，数量已达到最大值。

## APR/AppGroupMembers

Message	Explanation
Can't modify the configuration of pre-defined application groups. 预定义应用组不能修改。	When configuring application groups, you cannot modify the configuration of pre-defined application groups. 配置应用组时，预定义应用组不能修改。

# APR/AppGroupMembersIncGrp

Message	Explanation
Can't modify the configuration of pre-defined application groups. 预定义应用组不能修改。	When configuring application groups, you cannot modify the configuration of pre-defined application groups. 配置应用组时，预定义应用组不能修改。



# Contents

ARP .....	1
ARP/ArpScan .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ARP/ArpFixup .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
ARP/ArpClearByType .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
ARP/ArpClearByIfIndex .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
ARP/ArpClearTable .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
ARP/ArpSnoopingClearByVLAN .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
ARP/ArpSnoopingClearByIP .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
ARP/ArpRateLimitAllIf .....	7
XML structure .....	7
Table description .....	8
Columns .....	8

# ARP

## ARP/ArpScan

This table is used to enable ARP automatic scanning in a specific Ipv4 address range.

### XML structure

```
<ARP>
  <ArpScan>
    <Scan>
      <IfIndex></IfIndex>
      <Ipv4AddressStart></Ipv4AddressStart>
      <Ipv4AddressEnd></Ipv4AddressEnd>
    </Scan>
  </ArpScan>
</ARP>
```

### Table description

Item	Description
Feature name	ARP
Table name	ArpScan
Table type	Multi-instance table
Row name	Scan
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 aggregate interface/subinterface VLAN interface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4Address Start	The start IPv4 address of the scanning range	N/A	String, dotted decimal notation.	<p>If no address range is specified, the device only scans neighbors on the network where the primary IP address of the interface resides.</p> <p>The start IP address and end IP address must be on the same network as the primary IP address or manually configured secondary IP addresses of the interface.</p>
Ipv4Address End	The end IPv4 address of the scanning range	N/A	String, dotted decimal notation.	Must be specified if the Ipv4AddressStart column is specified.

## ARP/ArpFixup

This table is used to change the existing dynamic ARP entries into static ARP entries.

## XML structure

```

<ARP>
  <ArpFixup>
    <Fixup>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
    </Fixup>
  </ArpFixup>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpFixup

Table type	Multi-instance table
Row name	Fixup
Restrictions	Only Layer 3 interface is supported.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface Index	Index	Unsigned integer.
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.

## ARP/ArpClearByType

This table is used to clear ARP entries according to ARP entry type.

## XML structure

```

<ARP>
  <ArpClearByType>
    <ArpType></ArpType>
  </ArpClearByType>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpClearByType
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ArpType	ARP entry type	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Dynamic.</li><li>• <b>1</b>—Static.</li><li>• <b>2</b>—Multiport.</li><li>• <b>3</b>—All.</li></ul>

## ARP/ArpClearByIfIndex

This table is used to clear dynamic ARP entries according to interface index.

## XML structure

```
<ARP>
  <ArpClearByIfIndex>
    <ClearByIfIndex>
      <IfIndex></IfIndex>
    </ClearByIfIndex>
  </ArpClearByIfIndex>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpClearByIfIndex
Table type	Multi-instance table
Row name	ClearByIfIndex
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface view Layer 3 Ethernet interface/subinterface view Layer 3 aggregate interface/aggregate subinterface view S-channel interface/S-channel aggregate interface view

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface Index	Index	Unsigned integer.

## ARP/ArpClearTable

This table is used to clear ARP entries by an IP address and an interface index.

## XML structure

```
<ARP>
  <ArpClearTable>
    <ClearEntry>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
    </ClearEntry>
  </ArpClearTable>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpClearTable
Table type	Multi-instance table
Row name	ClearEntry
Restrictions	Only Layer 3 interface is supported.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface Index	Index	Unsigned integer.
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.

# ARP/ArpSnoopingClearByVLAN

This table is used to clear dynamic ARP Snnoping entries according to VLAN..

## XML structure

```
<ARP>
  <ArpSnoopingClearByVLAN>
    <ClearByVLAN>
      <VLANID></VLANID>
    </ClearByVLAN>
  </ArpSnoopingClearByVLAN>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpSnoopingClearByVLAN
Table type	Multi-instance table
Row name	ClearByVLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
VLANID	VLAN ID	Index	Unsigned integer.

# ARP/ArpSnoopingClearByIP

This table is used to clear dynamic ARP Snnoping entries according to Ipv4 address.

## XML structure

```
<ARP>
  <ArpSnoopingClearByIP>
```

```

    <ClearByIP>
      <Ipv4Address></Ipv4Address>
    </ClearByIP>
  </ArpSnoopingClearByIP>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpSnoopingClearByIP
Table type	Multi-instance table
Row name	ClearByIP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.

## ARP/ArpRateLimitAllIf

This table is used to config ARP rate limit on all layer 2 physical interface and layer 2 aggregate interface.

## XML structure

```

<ARP>
  <ArpRateLimitAllIf>
    <RateLimitAllIf>
      <RateLimitEnable></RateLimitEnable>
      <RateLimitNum></RateLimitNum>
    </RateLimitAllIf>
  </ArpRateLimitAllIf>
</ARP>

```



## Table description

Item	Description
Feature name	ARP
Table name	ArpRateLimitAllIf
Table type	Multi-instance table
Row name	RateLimitAllIf
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	
RateLimitEnable	Whether the rate limit function is enable.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b> (default)</li><li><b>false</b></li></ul>	N/A
RateLimitNum	Set the rate limit number	N/A	Unsigned integer. Value range: uiRateLimitLowerLimit to uiRateLimitUpperLimit.	<p>The value of uiRateLimitLowerLimit and uiRateLimitUpperLimit depend on the device model.</p> <p>The default value of RateLimitNum depends on the device model.</p> <p>RateLimitNum can be configured only when RateLimitEnable is true.</p>

# Contents

ARP .....	1
ARP/ArpConfig .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ARP/ArpGratuitous .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
ARP/ArpLearnLimit .....	3
XML structure .....	4
Table description .....	4
Columns .....	4
ARP/ArpGratuitousInterval .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
ARP/ArpProxy .....	6
XML structure .....	7
Table description .....	7
Columns .....	7
ARP/ArpAttackProtect .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
ARP/ArpRateLimit .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
ARP/ArpRateLimitLog .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
ARP/ArpSourceMACExclude .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
ARP/ArpAuthorized .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
ARP/ArpDetection .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
ARP/ArpDetectionTrust .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
ARP/ArpFilterSource .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
ARP/ArpFilterBinding .....	19
XML structure .....	20
Table description .....	20
Columns .....	20

ARP/ArpSnooping .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
ARP/ArpInterface .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
ARP/ArpVsiConfig .....	23
XML structure .....	23
Table description .....	24
Columns .....	24
ARP/ArpRouteAdvertise .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
ARP/ArpVsiFeature .....	26
XML structure .....	26
Table description .....	26
Columns .....	27
ARP/ArpVsiDetectionTrust .....	27
XML structure .....	27
Table description .....	28
Columns .....	28

# ARP

## ARP/ArpConfig

This table contains ARP configuration information.

### XML structure

```
<ARP>
  <ArpConfig>
    <Config>
      <VrfIndex></VrfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
      <VLANID></VLANID>
      <PortIndex></PortIndex>
      <ArpType></ArpType>
    </Config>
  </ArpConfig>
</ARP>
```

### Table description

Item	Description
Feature name	ARP
Table name	ArpConfig
Table type	Multi-instance table
Row name	Config
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Index of the VRF	Index	Unsigned integer.	Some versions support VRF name. For relevant

Column name	Column description	Column type	Data type and restrictions	Remarks
				information, see the XSD document of your product. 0 means public network
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Required.
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	It must be configured together with the PortIndex column when ArpType is static. It must be specified when ArpType is multiport.
PortIndex	Port index	N/A	Unsigned integer.	It must be configured together with the VLANID column when ArpType is static. It must not be specified when ArpType is multiport.
ArpType	ARP entry type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Static.</li> <li>2—Multiport.</li> </ul>	Required. If the multiport type is supported depends on the device model.

## ARP/ArpGratuitous

This table contains gratuitous ARP packets enable information.

### XML structure

```

<ARP>
  <ArpGratuitous>
    <LearnEnable></LearnEnable>
    <SendEnable></SendEnable>
  
```

```

    </ArpGratuitous>
  </ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpGratuitous
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
LearnEnable	Whether the learning of gratuitous ARP packets function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b> (default)</li> <li><b>false</b></li> </ul>
SendEnable	Whether the function of sending gratuitous ARP packets upon receiving ARP requests whose target IP address is on a different subnet is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>

## ARP/ArpLearnLimit

This table contains the information of maximum number of dynamic ARP entries that an interface can learn.

## XML structure

```
<ARP>
  <ArpLearnLimit>
    <LearnLimit>
      <IfIndex></IfIndex>
      <LearnMaxNum></LearnMaxNum>
      <LearnAlarmThreshold></LearnAlarmThreshold>
    </LearnLimit>
  </ArpLearnLimit>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpLearnLimit
Table type	Multi-instance table
Row name	LearnLimit
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface Layer 3 Ethernet interface/subinterface Layer 3 aggregate interface/aggregate subinterface S-channel interface/S-channel aggregate interface VLAN interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your

Column name	Column description	Column type	Data type and restrictions	Remarks
				product. For information about IfIndex, see IfMgr in Ifmgr  NETCONF XML API Configuration Reference.
LearnMaxNum	The maximum number of dynamic ARP entries that an interface can learn	N/A	Unsigned integer. Value range: 0 to LearnMaxNumLimit.	0 means the interface is disabled from learning dynamic ARP entries.  The value of LearnMaxNumLimit depends on the device model.  The default setting varies with device models.
LearnAlarmThreshold	Alarm threshold in percentage	N/A	Unsigned integer. Value range: 0 to 100.	To disable the threshold alarming, set the value to 0.  The default setting is 0.

## ARP/ArpGratuitousInterval

This table contains the information of periodic sending of gratuitous ARP packets and set the sending interval on an interface.

### XML structure

```

<ARP>
  <ArpGratuitousInterval>
    <GratuitousInterval>
      <IfIndex></IfIndex>
      <Interval></Interval>
    </GratuitousInterval>
  </ArpGratuitousInterval>
</ARP>

```



## Table description

Item	Description
Feature name	ARP
Table name	ArpGratuitousInterval
Table type	Multi-instance table
Row name	GratuitousInterval
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 aggregate interface/subinterface VLAN interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Interval	The interval at which gratuitous ARP packets are sent	N/A	Unsigned integer. Value range: 0, 200 to 200000 ms. Default: 0.	0 means disable the interface from periodically sending gratuitous ARP packets.

## ARP/ArpProxy

This table contains ARP proxy enable and local ARP proxy enable information.

## XML structure

```
<ARP>
  <ArpProxy>
    <Proxy>
      <IfIndex></IfIndex>
      <ProxyEnable></ProxyEnable>
      <LocalProxyEnable></LocalProxyEnable>
      <LocalStartIpv4Address></LocalStartIpv4Address>
      <LocalEndIpv4Address></LocalEndIpv4Address>
    </Proxy>
  </ArpProxy>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpProxy
Table type	Single-instance table
Row name	Proxy
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 aggregate interface/aggregate subinterface VLAN interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr

Column name	Column description	Column type	Data type and restrictions	Remarks
				NETCONF XML API Configuration Reference.
ProxyEnable	Whether proxy ARP is enabled on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
LocalProxyEnable	Whether local proxy ARP is enabled on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
LocalStartIpv4Address	Start IPv4 address of the specified address range for local proxy ARP	N/A	String, dotted decimal notation.	LocalStartIpv4Address and LocalEndIpv4Address must be configured together. LocalStartIpv4Address and LocalEndIpv4Address can be configured only when local proxy ARP on the interface is enabled.
LocalEndIpv4Address	End IPv4 address of the specified address range for local proxy ARP	N/A	String, dotted decimal notation.	N/A

## ARP/ArpAttackProtect

This table contains ARP attack protect information.

### XML structure

```

<ARP>
  <ArpAttackProtect>
    <ResolvingRouteEnable></ResolvingRouteEnable>
    <SourceSuppressionEnable></SourceSuppressionEnable>
    <SourceSuppressionLimitNum></SourceSuppressionLimitNum>
    <SourceMACDetectType></SourceMACDetectType>
    <SourceMACAgeTime></SourceMACAgeTime>
  </ArpAttackProtect>
</ARP>

```

```

<SourceMACThresholdValue></SourceMACThresholdValue>
<ValidCheckEnable></ValidCheckEnable>
<ActiveACKType></ActiveACKType>
<DetectionValidateSrcMAC></DetectionValidateSrcMAC>
<DetectionValidateDstMAC></DetectionValidateDstMAC>
<DetectionValidateIP></DetectionValidateIP>
</ArpAttackProtect>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpAttackProtect
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ResolvingRouteEnable	Whether the resolving route function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	The default value of ResolvingRouteEnable depends on the device model.
SourceSuppressionEnable	Whether the ARP suppression original address function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
SourceSuppressionLimitNum	Set the source suppression limit number	N/A	Unsigned integer. Value range: 2 to 1024. Default: 10.	N/A
SourceMACDetectType	Set the attack detection function of fixed source MAC address and	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>0—Disabled</b> (default).</li> <li><b>1—Filter.</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	select the mode		<ul style="list-style-type: none"> <li><b>2—Monitor.</b></li> </ul>	
SourceMAC AgeTime	Set the fixed source mac address aging time of arp attack detection entries	N/A	Unsigned integer. Value range: 60 to 6000. Default: 300.	N/A
SourceMAC ThresholdValue	Set the fixed source mac address threshold of ARP attack detection entries	N/A	Unsigned integer. Unsigned integer. Value range: uiSourceMinThreshold to uiSourceMaxThreshold.	The value of uiSourceMinThreshold and uiSourceMaxThreshold depend on the device model.  The default value of SourceMACThresholdValue depends on the device model.
ValidCheck Enable	Whether the source mac address consistency check function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
ActiveACKType	Enable ARP active acknowledgement	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>0—Disabled</b> (default).</li> <li><b>1—Loose.</b></li> <li><b>2—Strict.</b></li> </ul>	N/A
DetectionValidateSrcMAC	Whether the effective checks on the source mac address function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
DetectionValidateDstMAC	Whether the effective checks on the destination mac address function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
DetectionValidateIP	Whether the effective checks	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	on the IP address is enabled		<ul style="list-style-type: none"> <li><b>false</b> (default)</li> </ul>	

## ARP/ArpRateLimit

This table contains ARP rate limit information.

## XML structure

```

<ARP>
  <ArpRateLimit>
    <RateLimit>
      <IfIndex></IfIndex>
      <RateLimitEnable></RateLimitEnable>
      <RateLimitNum></RateLimitNum>
    </RateLimit>
  </ArpRateLimit>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpRateLimit
Table type	Single-instance table
Row name	RateLimit
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
RateLimitEnable	Whether the rate limit function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b> (default)</li> <li><b>false</b></li> </ul>	N/A
RateLimitNum	Set the rate limit number	N/A	Unsigned integer. Value range: uiRateLimitLowerLimit to uiRateLimitUpperLimit.	The value of uiRateLimitLowerLimit and uiRateLimitUpperLimit depend on the device model.  The default value of RateLimitNum depends on the device model.  RateLimitNum can be configured only when RateLimitEnable is true.

## ARP/ArpRateLimitLog

This table contains ARP rate limit log information.

## XML structure

```

<ARP>
  <ArpRateLimitLog>
    <LogEnable></LogEnable>
    <LogInterval></LogInterval>
  </ArpRateLimitLog>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpRateLimitLog
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LogEnable	Whether the rate limit log function is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b>(default)</li></ul>	N/A
LogInterval	Set the interval of sending report or log	N/A	Unsigned integer. Value range: 1 to 86400. Default: 60.	N/A

## ARP/ArpSourceMACExclude

This table contains protective source mac address information.

## XML structure

```
<ARP>
  <ArpSourceMACExclude>
    <SourceMACExclude>
      <MacAddress></MacAddress>
    </SourceMACExclude>
  </ArpSourceMACExclude>
</ARP>
```



## Table description

Item	Description
Feature name	ARP
Table name	ArpSourceMACExclude
Table type	Multi-instance table
Row name	SourceMACExclude
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	The maximum number of protective source mac address that can be configured depends on the device model.

## ARP/ArpAuthorized

This table contains the authorized ARP information.

## XML structure

```
<ARP>
  <ArpAuthorized>
    <Authorized>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </Authorized>
  </ArpAuthorized>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpAuthorized
Table type	Single-instance table
Row name	Authorized
Restrictions	<p>This table supports interface types:</p> <p>Layer 3 Ethernet interface/subinterface</p> <p>Layer 3 aggregate interface/aggregate subinterface</p> <p>VLAN interface</p>
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	<p>Layer 3 Ethernet interface/subinterface</p> <p>Layer 3 aggregate interface/aggregate subinterface</p> <p>VLAN interface</p> <p>Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.</p>
Enable	Whether authorized ARP is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A

# ARP/ArpDetection

This table contains configuration information about ARP attack detection.

## XML structure

```
<ARP>
  <ArpDetection>
    <Detect>
      <VLANID></VLANID>
      <DetectionEnable></DetectionEnable>
      <RestrictedForwardingEnable></RestrictedForwardingEnable>
    </Detect>
  </ArpDetection>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpDetection
Table type	Multi-instance table
Row name	Detect
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094
DetectionEnable	Whether ARP attack detection is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b> (default)</li></ul>
RestrictedForwardingEnable	Whether ARP restricted	N/A	Boolean:

Column name	Column description	Column type	Data type and restrictions
able	forwarding is enabled		<ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>

## ARP/ArpDetectionTrust

This table contains information about ARP trusted interfaces.

### XML structure

```

<ARP>
  <ArpDetectionTrust>
    <Interface>
      <IfIndex></IfIndex>
      <TrustEnable></TrustEnable>
    </Interface>
  </ArpDetectionTrust>
</ARP>

```

### Table description

Item	Description
Feature name	ARP
Table name	ArpDetectionTrust
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 2 aggregate interface
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet

Column name	Column description	Column type	Data type and restrictions	Remarks
				interface Layer 2 aggregate interface Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
TrustEnable	Whether the interface is configured as an ARP trusted interface	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## ARP/ArpFilterSource

This table contains information about ARP gateway protection and the protected gateway IP address.

## XML structure

```

<ARP>
  <ArpFilterSource>
    <FilterSource>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
    </FilterSource>
  </ArpFilterSource>
</ARP>

```

## Table description

Item	Description
Feature name	ARP

Item	Description
Table name	ArpFilterSource
Table type	Multi-instance table
Row name	FilterSource
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 2 aggregate interface
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet interface Layer 2 aggregate interface Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Ipv4Address	The protected gateway IP address	Index	String, dotted decimal notation.	N/A

## ARP/ArpFilterBinding

This table contains the information about restricting arp packet by source IP address and source mac address.

## XML structure

```
<ARP>
  <ArpFilterBinding>
    <FilterBinding>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
    </FilterBinding>
  </ArpFilterBinding>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpFilterBinding
Table type	Multi-instance table
Row name	FilterBinding
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 2 aggregate interface
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet interface. Layer 2 aggregate interface. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex,

Column name	Column description	Column type	Data type and restrictions	Remarks
				see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Ipv4Address	The permitted IP address	Index	String, dotted decimal notation.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	You cannot specify a MAC address when you remove or delete a rule.

## ARP/ArpSnooping

This table contains information about ARP snooping.

### XML structure

```

<ARP>
  <ArpSnooping>
    <Snooping>
      <VLANID></VLANID>
      <SnoopingEnable></SnoopingEnable>
    </Snooping>
  </ArpSnooping>
</ARP>

```

### Table description

Item	Description
Feature name	ARP
Table name	ArpSnooping
Table type	Multi-instance table
Row name	Snooping
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094
SnoopingEnable	Whether ARP snooping is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b> (default)</li></ul>

## ARP/ArpInterface

This table contains ARP interface information.

## XML structure

```
<ARP>
  <ArpInterface>
    <Interface>
      <IfIndex></IfIndex>
      <ModeUNI></ModeUNI>
    </Interface>
  </ArpInterface>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpInterface
Table type	Multi-instance table
Row name	Interface
Restrictions	VLAN interfaces
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only VLAN interfaces are supported.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
ModeUNI	Configure a port as a customer-side port	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Customer-side port.</li> <li><b>false</b>—Network-side port (default).</li> </ul>	Whether the ModeUNI is supported depends on the device model.

## ARP/ArpVsiConfig

This table contains ARP VSI configuration information.

## XML structure

```

<ARP>
  <ArpVsiConfig>
    <VsiConfig>
      <VrfIndex></VrfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
      <VsiIfIndex></VsiIfIndex>
      <PortIndex></PortIndex>
      <SrvID></SrvID>
      <VsiName></VsiName>
    </VsiConfig>
  </ArpVsiConfig>

```

< /ARP>

## Table description

Item	Description
Feature name	ARP
Table name	ArpVsiConfig
Table type	Multi-instance table
Row name	VsiConfig
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Index of the VRF	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. 0 means public network.
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Required.
VsilfIndex	VSI interface index	N/A	Unsigned integer.	The VSI interface must be bound to the VSI.
PortIndex	Port index	N/A	Unsigned integer.	The port can only be a Layer 2 Ethernet interface or a Tunnel interface.
SrvID	Service instance ID	N/A	Unsigned integer. Value range: 1 to 4096.	This field must be configured when the port is a Layer 2 Ethernet

Column name	Column description	Column type	Data type and restrictions	Remarks
				interface. It must be deleted when the port is a Tunnel interface.
VsiName	VSI name	N/A	String, Length: 1 to 31 characters.	You must create a VSI first before you merge, replace or create ARPs.

## ARP/ArpRouteAdvertise

This table contains the information about ARP direct route advertisement.

### XML structure

```

<ARP>
  <ArpRouteAdvertise>
    <RouteAdvertise>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </RouteAdvertise>
  </ArpRouteAdvertise>
</ARP>

```

### Table description

Item	Description
Feature name	ARP
Table name	ArpRouteAdvertise
Table type	Multi-instance table
Row name	RouteAdvertise
Restrictions	This table supports interface types: VE-L3VPN interface VSI interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	VE-L3VPN interface VSI interface Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see <a href="#">Appendix</a> in Ifmgr NETCONF XML API Configuration Reference.
Enable	Whether ARP direct route advertisement is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false (default)</b></li> </ul>	N/A

## ARP/ArpVsiFeature

This table contains ARP configuration information for VSIs.

## XML structure

```

<ARP>
  <ArpVsiFeature>
    <VsiFeature>
      <VsiName></VsiName>
      <SnoopingEnable></SnoopingEnable>
      <DetectionEnable></DetectionEnable>
    </VsiFeature>
  </ArpVsiFeature>
</ARP>

```

## Table description

Item	Description
Feature name	ARP

Item	Description
Table name	ArpVsiFeature
Table type	Multi-instance table
Row name	VsiFeature
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String, Length: 1 to 31 characters.	N/A
SnoopingEnable	Whether ARP snooping is enabled for the VSI	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DetectionEnable	Whether ARP attack detection is enabled for the VSI	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## ARP/ArpVsiDetectionTrust

This table contains ARP trusted AC configuration information for Ethernet service instances.

## XML structure

```

<ARP>
  <ArpVsiDetectionTrust>
    <SRV>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <TrustEnable></TrustEnable>
    </SRV>
  </ArpVsiDetectionTrust>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpVsiDetectionTrust
Table type	Multi-instance table
Row name	SRV
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Ethernet service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
TrustEnable	Whether the Ethernet service instance is configured as an ARP trusted AC	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>	N/A

# Contents

ARP .....	1
ARP/ArpTable .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ARP/ArpConfig .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
ARP/ArpGratuitous .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
ARP/ArpLearnLimit .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
ARP/ArpGratuitousInterval .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
ARP/ArpProxy .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
ARP/ArpAttackProtect .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
ARP/ArpRateLimit .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
ARP/ArpRateLimitLog .....	11
XML structure .....	12
Table description .....	12
Columns .....	12
ARP/ArpSourceMACExclude .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
ARP/ArpSourceMACAttackEntry .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
ARP/ArpAuthorized .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
ARP/ArpDetection .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
ARP/ArpDetectionTrust .....	17
XML structure .....	17
Table description .....	17
Columns .....	18



ARP/ArpFilterSource .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
ARP/ArpFilterBinding .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
ARP/ArpSpecification .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
ARP/ ArpSnoopingEntry .....	22
XML structure .....	22
Table description .....	23
Columns .....	23
ARP/ArpSnooping .....	24
XML structure .....	24
Table description .....	24
Columns .....	25
ARP/ArpInterface .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
ARP/ArpVsiConfig .....	26
XML structure .....	26
Table description .....	27
Columns .....	27
ARP/ArpRouteAdvertise .....	28
XML structure .....	28
Table description .....	28
Columns .....	28
ARP/ArpVsiFeature .....	29
XML structure .....	29
Table description .....	29
Columns .....	29
ARP/ArpVsiDetectionTrust .....	30
XML structure .....	30
Table description .....	30
Columns .....	31

# ARP

## ARP/ArpTable

This table contains ARP table information.

### XML structure

```
<ARP>
  <ArpTable>
    <ArpEntry>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
      <VLANID></VLANID>
      <PortIndex></PortIndex>
      <VrfIndex></VrfIndex>
      <ArpType></ArpType>
    </ArpEntry>
  </ArpTable>
</ARP>
```

### Table description

Item	Description
Feature name	ARP
Table name	ArpTable
Table type	Multi-instance table
Row name	ArpEntry
Restrictions	Only Layer 3 interface is supported.

### Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface Index	Index	Unsigned integer.
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.

Column name	Column description	Column type	Data type and restrictions
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.
PortIndex	Port index	N/A	Unsigned integer.
VrfIndex	Index of the VRF	N/A	Unsigned integer.
ArpType	ARP entry type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Dynamic.</li> <li>• <b>1</b>—Static.</li> <li>• <b>2</b>—Multiport.</li> <li>• <b>3</b>—Rule.</li> <li>• <b>4</b>—Openflow.</li> </ul>

## ARP/ArpConfig

This table contains ARP configuration information.

## XML structure

```

<ARP>
  <ArpConfig>
    <Config>
      <VrfIndex></VrfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
      <VLANID></VLANID>
      <PortIndex></PortIndex>
      <ArpType></ArpType>
    </Config>
  </ArpConfig>
</ARP>

```

## Table description

Item	Description
Feature name	ARP

Item	Description
Table name	ArpConfig
Table type	Multi-instance table
Row name	Config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
VrfIndex	Index of the VRF	Index	Unsigned integer.
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.
PortIndex	Port index	N/A	Unsigned integer.
ArpType	ARP entry type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Static.</li> <li>2—Multiport.</li> </ul>

## ARP/ArpGratuitous

This table contains gratuitous ARP packets enable information.

## XML structure

```

<ARP>
  <ArpGratuitous>
    <LearnEnable></LearnEnable>
    <SendEnable></SendEnable>
  </ArpGratuitous>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpGratuitous
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
LearnEnable	Whether the learning of gratuitous ARP packets function is enable.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>
SendEnable	Whether the function of sending gratuitous ARP packets upon receiving ARP requests whose target IP address is on a different subnet is enable.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>

## ARP/ArpLearnLimit

This table contains the information of maximum number of dynamic ARP entries that an interface can learn.

## XML structure

```
<ARP>
  <ArpLearnLimit>
```

```

<LearnLimit>
  <IfIndex></IfIndex>
  <LearnMaxNum></LearnMaxNum>
  <LearnAlarmThreshold></LearnAlarmThreshold>
</LearnLimit>
</ArpLearnLimit>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpLearnLimit
Table type	Multi-instance table
Row name	LearnLimit
Restrictions	<p>This table supports interface types:</p> <p>Layer 2 Ethernet interface/Layer 2 aggregate interface</p> <p>Layer 3 Ethernet interface/subinterface</p> <p>Layer 3 aggregate interface/aggregate subinterface</p> <p>S-channel interface/S-channel aggregate interface</p> <p>VLAN interface</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	N/A
LearnMaxNum	The maximum number of dynamic ARP entries that an interface can learn	N/A	Unsigned integer. Value range: 0 to LearnMaxNumLimit.	0 means the interface is disabled from learning dynamic ARP entries. The value of LearnMaxNumLimit depends on the device model.
LearnAlarmThreshold	Alarm threshold in percentage	N/A	Unsigned integer. Value range: 0 to 100.	To disable the threshold alarming, set the value to 0.

				0.
--	--	--	--	----

# ARP/ArpGratuitousInterval

This table contains the information of periodic sending of gratuitous ARP packets and set the sending interval on an interface.

## XML structure

```
<ARP>
  <ArpGratuitousInterval>
    <GratuitousInterval>
      <IfIndex></IfIndex>
      <Interval></Interval>
    </GratuitousInterval>
  </ArpGratuitousInterval>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpGratuitousInterval
Table type	Multi-instance table
Row name	GratuitousInterval
Restrictions	<p>This table supports interface types:</p> <p>Layer 3 Ethernet interface/subinterface</p> <p>Layer 3 aggregate interface/subinterface</p> <p>VLAN interface</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	N/A
Interval	The interval at which gratuitous	N/A	Unsigned integer.	0 means disable the interface from

Column name	Column description	Column type	Data type and restrictions	Remarks
	ARP packets are sent		Value range: 0, 200 to 200000ms.	periodically sending gratuitous ARP packets.

## ARP/ArpProxy

This table contains ARP proxy enable and local ARP proxy enable information.

## XML structure

```

<ARP>
  <ArpProxy>
    <Proxy>
      <IfIndex></IfIndex>
      <ProxyEnable></ProxyEnable>
      <LocalProxyEnable></LocalProxyEnable>
      <LocalStartIpv4Address></LocalStartIpv4Address>
      <LocalEndIpv4Address></LocalEndIpv4Address>
    </Proxy>
  </ArpProxy>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpProxy
Table type	Single-instance table
Row name	Proxy
Restrictions	<p>This table supports interface types:</p> <p>Layer 3 Ethernet interface/subinterface</p> <p>Layer 3 aggregate interface/aggregate subinterface</p> <p>VLAN interface</p>



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	N/A
ProxyEnable	Whether proxy ARP is enabled on the interface	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A
LocalProxyEnable	Whether local proxy ARP is enabled on the interface	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A
LocalStartIPv4Address	Start IPv4 address of the specified address range for local proxy ARP	N/A	String, dotted decimal notation.	N/A
LocalEndIPv4Address	End IPv4 address of the specified address range for local proxy ARP	N/A	String, dotted decimal notation.	N/A

## ARP/ArpAttackProtect

This table contains ARP attack protect information.

## XML structure

```
<ARP>
  <ArpAttackProtect>
    <ResolvingRouteEnable></ResolvingRouteEnable>
    <SourceSuppressionEnable></SourceSuppressionEnable>
    <SourceSuppressionLimitNum></SourceSuppressionLimitNum>
    <SourceMACDetectType></SourceMACDetectType>
    <SourceMACAgeTime></SourceMACAgeTime>
    <SourceMACThresholdValue></SourceMACThresholdValue>
    <ValidCheckEnable></ValidCheckEnable>
    <ActiveACKType></ActiveACKType>
    <DetectionValidateSrcMAC></DetectionValidateSrcMAC>
    <DetectionValidateDstMAC></DetectionValidateDstMAC>
```

```

    <DetectionValidateIP></DetectionValidateIP>
  </ArpAttackProtect>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpAttackProtect
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ResolvingRouteEnable	Whether the resolving route function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
SourceSuppressionEnable	Whether the ARP suppression original address function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
SourceSuppressionLimitNum	Set the source suppression limit number	N/A	Unsigned integer. Value range: 2 to 1024.	N/A
SourceMACDetectType	Set the attack detection function of fixed source mac address and select the mode	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>0—Disabled.</b></li> <li><b>1—Filter.</b></li> <li><b>2—Monitor.</b></li> </ul>	N/A
SourceMACAgeTime	Set the fixed source mac address aging time of ARP attack detection entries	N/A	Unsigned integer. Value range: 60 to 6000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SourceMAC ThresholdValue	Set the fixed source mac address threshold of ARP attack detection entries	N/A	Unsigned integer.	N/A
ValidCheck Enable	Whether the source mac address consistency check function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
ActiveACKType	Enable ARP active acknowledgement	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>• <b>0—Disabled.</b></li> <li>• <b>1—Loose.</b></li> <li>• <b>2—Strict.</b></li> </ul>	N/A
DetectionValidateSrcMAC	Whether the effective checks on the source mac address function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectionValidateDstMAC	Whether the effective checks on the destination mac address function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectionValidateIP	Whether the effective checks on the IP address function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

## ARP/ArpRateLimit

This table contains ARP rate limit information.

## XML structure

```
<ARP>
```

```

<ArpRateLimit>
  <RateLimit>
    <IfIndex></IfIndex>
    <RateLimitEnable></RateLimitEnable>
    <RateLimitNum></RateLimitNum>
  </RateLimit>
</ArpRateLimit>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpRateLimit
Table type	Single-instance table
Row name	RateLimit
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	N/A
RateLimitEnable	Whether the rate limit function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
RateLimitNum	Set the rate limit number	N/A	Unsigned integer. Value range: uiRateLimitLowerLimit to uiRateLimitUpperLimit.	The value of uiRateLimitLowerLimit and uiRateLimitUpperLimit depend on the device model.

## ARP/ArpRateLimitLog

This table contains ARP rate limit log information.

## XML structure

```
<ARP>
  <ArpRateLimitLog>
    <LogEnable></LogEnable>
    <LogInterval></LogInterval>
  </ArpRateLimitLog>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpRateLimitLog
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LogEnable	Whether the rate limit log function is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A
LogInterval	Set the interval of sending report or log	N/A	Unsigned integer. Value range: 1 to 86400.	N/A

## ARP/ArpSourceMACExclude

This table contains protective source mac address information.

## XML structure

```
<ARP>
  <ArpSourceMACExclude>
```

```

    <SourceMACExclude>
      <MacAddress></MacAddress>
    </SourceMACExclude>
  </ArpSourceMACExclude>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpSourceMACExclude
Table type	Multi-instance table
Row name	SourceMACExclude
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	The MAX number of protective source mac address that can be configured depends on the device model.

## ARP/ArpSourceMACAttackEntry

This table contains the information about the ARP attack detection entries of fixed source MAC address.

## XML structure

```

<ARP>
  <ArpSourceMACAttackEntry>
    <Entry>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
      </DeviceNode>
    </Entry>
  </ArpSourceMACAttackEntry>
</ARP>

```

```

        <CPUID></CPUID>
    </DeviceNode>
    <VLANID></VLANID>
    <MacAddress></MacAddress>
    <IfIndex></IfIndex>
    <AgeTime></AgeTime>
</Entry>
</ArpSourceMACAttackEntry>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpSourceMACAttackEntry
Table type	Multi-instance table
Row name	Entry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	The information of Device Node	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>	N/A
Chassis	Chassis number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094,65535.	65535 means the interface is layer 3 Ethernet interface

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	N/A
IfIndex	Interface index.	N/A	Unsigned integer.	N/A
AgeTime	The remaining aging time of ARP attack defense policy entry	N/A	AgeTime	N/A

## ARP/ArpAuthorized

This table contains the authorized ARP information.

### XML structure

```

<ARP>
  <ArpAuthorized>
    <Authorized>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </Authorized>
  </ArpAuthorized>
</ARP>

```

### Table description

Item	Description
Feature name	ARP
Table name	ArpAuthorized
Table type	Single-instance table
Row name	Authorized
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 aggregate interface/aggregate subinterface VLAN interface



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Layer 3 Ethernet interface/subinterface Layer 3 aggregate interface/aggregate subinterface VLAN interface
Enable	Whether authorized ARP is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A

## ARP/ArpDetection

This table contains information about ARP attack detection.

## XML structure

```
<ARP>
  <ArpDetection>
    <Detect>
      <VLANID></VLANID>
      <DetectionEnable></DetectionEnable>
      <RestrictedForwardingEnable></RestrictedForwardingEnable>
    </Detect>
  </ArpDetection>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpDetection
Table type	Multi-instance table
Row name	Detect
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094
DetectionEnabled	Whether ARP attack detection is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>
RestrictedForwardingEnabled	Whether ARP restricted forwarding is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>

## ARP/ArpDetectionTrust

This table contains information about ARP trusted interfaces.

## XML structure

```
<ARP>
  <ArpDetectionTrust>
    <Interface>
      <IfIndex></IfIndex>
      <TrustEnable></TrustEnable>
    </Interface>
  </ArpDetectionTrust>
</ARP>
```

## Table description

Item	Description
Feature name	ARP
Table name	ArpDetectionTrust
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports interface types:

Item	Description
	Layer 2 Ethernet interface
	Layer 2 aggregate interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Layer 2 Ethernet interface Layer 2 aggregate interface
TrustEnable	Whether the interface is configured as an ARP trusted interface	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## ARP/ArpFilterSource

This table contains information about ARP gateway protection and the protected gateway IP address.

## XML structure

```

<ARP>
  <ArpFilterSource>
    <FilterSource>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
    </FilterSource>
  </ArpFilterSource>
</ARP>

```

## Table description

Item	Description
Feature name	ARP

Item	Description
Table name	ArpFilterSource
Table type	Multi-instance table
Row name	FilterSource
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 2 aggregate interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet interface. Layer 2 aggregate interface.
Ipv4Address	The protected gateway IP address	Index	String, dotted decimal notation.	N/A

## ARP/ArpFilterBinding

This table contains the information about restricting ARP packet by source IP address and source MAC address.

## XML structure

```

<ARP>
  <ArpFilterBinding>
    <FilterBinding>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
    </FilterBinding>
  </ArpFilterBinding>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpFilterBinding
Table type	Multi-instance table
Row name	FilterBinding
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 2 aggregate interface

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.
Ipv4Address	The permitted IP address	Index	String, dotted decimal notation.
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.

## ARP/ArpSpecification

This table contains ARP specification information.

## XML structure

```
<ARP>
  <ArpSpecification>
    <SupportMultiport></SupportMultiport>
    <RateLimitDefault></RateLimitDefault>
    <RateLimitLowerLimit></RateLimitLowerLimit>
    <RateLimitUpperLimit></RateLimitUpperLimit>
    <SMACDefaultThreshold></SMACDefaultThreshold>
    <SMACMinThreshold></SMACMinThreshold>
    <SMACMaxThreshold></SMACMaxThreshold>
    <SupportDetection></SupportDetection>
```

```

    <SupportFilter></SupportFilter>
    <SupportSnooping></SupportSnooping>
    <IntervalDefault></IntervalDefault>
    <LearnMaxNumLimit></LearnMaxNumLimit>
    <LearnMaxNumDefault></LearnMaxNumDefault>
    <SupportModeUNI></SupportModeUNI>
  </ArpSpecification>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpSpecification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportMulti port	Whether the multiport ARP entry is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
RateLimitDefault	The default limit of rate	N/A	Unsigned integer.	N/A
RateLimitLowerLimit	The lower limit of rate	N/A	Unsigned integer.	0 means that ARP rate limit isn't supported.
RateLimitUpperLimit	The upper limit of rate	N/A	Unsigned integer.	0 means that ARP rate limit isn't supported.
SMACDefaultThreshold	The default of threshold	N/A	Unsigned integer.	N/A
SMACMinThreshold	The minimum of threshold.	N/A	Unsigned integer.	N/A
SMACMaxT	The maximum of	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
hreshold	threshold			
SupportDetection	Whether ARP detection is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
SupportFilter	Whether ARP filter is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
SupportSnopping	Whether ARP snooping is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
IntervalDefault	The default of interval	N/A	Unsigned integer. Value range: 0 to 200000.	N/A
LearnMaxNumLimit	The limit of max learn number	N/A	Unsigned integer.	N/A
LearnMaxNumDefault	The default of max learn number	N/A	Unsigned integer.	N/A
SupportModeUNI	Whether the ARP customer-side port feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

## ARP/ ArpSnoopingEntry

This table contains information about ARP snooping entries.

### XML structure

```

<ARP>
  <ArpSnoopingEntry>
    <SnoopingEntry>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
    </SnoopingEntry>
  </ArpSnoopingEntry>
</ARP>

```

```

    <VLANID></VLANID>
    <MacAddress></MacAddress>
    <Status></Status>
    <AgeTime></AgeTime>
  </SnoopingEntry>
</ArpSnoopingEntry>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpSnoopingEntry
Table type	Multi-instance table
Row name	SnoopingEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	The information of Device Node	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>	N/A
Chassis	Chassis number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
IfIndex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet interface Layer 2 aggregate interface
Ipv4Address	IPv4 address	Index	String, dotted decimal	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			notation.	
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
Status	State of an entry	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Valid.</li> <li>2—Invalid.</li> <li>3—Collision.</li> </ul>	N/A
AgeTime	The remaining aging time of ARP attack defense policy entry	N/A	AgeTime	N/A

## ARP/ArpSnooping

This table contains information about ARP snooping.

### XML structure

```

<ARP>
  <ArpSnooping>
    <Snooping>
      <VLANID></VLANID>
      <SnoopingEnable></SnoopingEnable>
    </Snooping>
  </ArpSnooping>
</ARP>

```

### Table description

Item	Description
Feature name	ARP
Table name	ArpSnooping
Table type	Multi-instance table

Item	Description
Row name	Snooping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094	N/A
SnoopingEnable	Whether ARP snooping is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## ARP/ArpInterface

This table contains ARP interface information.

## XML structure

```

<ARP>
  <ArpInterface>
    <Interface>
      <IfIndex></IfIndex>
      <ModeUNI></ModeUNI>
    </Interface>
  </ArpInterface>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpInterface
Table type	Multi-instance table
Row name	Interface

Item	Description
Restrictions	VLAN interfaces

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only VLAN interfaces are supported.
ModeUNI	Configure a port as a customer-side port	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Customer-side port.</li> <li><b>false</b>—Network-side port.</li> </ul>	N/A

## ARP/ArpVsiConfig

This table contains ARP VSI configuration information.

## XML structure

```

<ARP>
  <ArpVsiConfig>
    <VsiConfig>
      <VrfIndex></VrfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
      <VsiIfIndex></VsiIfIndex>
      <PortIndex></PortIndex>
      <SrvID></SrvID>
      <VsiName></VsiName>
    </VsiConfig>
  </ArpVsiConfig>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpVsiConfig
Table type	Multi-instance table
Row name	VsiConfig
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Index of the VRF	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. 0 means public network.
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
VsilfIndex	VSI interface index	N/A	Unsigned integer.	N/A
PortIndex	Port index	N/A	Unsigned integer.	The port can only be a Layer 2 Ethernet interface or a Tunnel interface.
SrvID	Service instance ID	N/A	Unsigned integer. Value range: 1 to 4096.	This field cannot be displayed when the port is a Tunnel interface. It is displayed when the port is a Layer 2 Ethernet interface.
VsiName	VSI name	N/A	String,	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 31 characters.	

## ARP/ArpRouteAdvertise

This table contains the information about ARP direct route advertisement.

### XML structure

```

<ARP>
  <ArpRouteAdvertise>
    <RouteAdvertise>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </RouteAdvertise>
  </ArpRouteAdvertise>
</ARP>

```

### Table description

Item	Description
Feature name	ARP
Table name	ArpRouteAdvertise
Table type	Multi-instance table
Row name	RouteAdvertise
Restrictions	This table supports interface types: VE-L3VPN interface VSI interface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	VE-L3VPN interface VSI interface
Enable	Whether ARP	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	direct route advertisement is enabled		<ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	

## ARP/ArpVsiFeature

This table contains ARP configuration information for VSIs.

## XML structure

```

<ARP>
  <ArpVsiFeature>
    <VsiFeature>
      <VsiName></VsiName>
      <SnoopingEnable></SnoopingEnable>
      <DetectionEnable></DetectionEnable>
    </VsiFeature>
  </ArpVsiFeature>
</ARP>

```

## Table description

Item	Description
Feature name	ARP
Table name	ArpVsiFeature
Table type	Multi-instance table
Row name	VsiFeature
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String, Length: 1 to 31 characters.	N/A
SnoopingEn	Whether ARP	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
able	snooping is enabled for the VSI		<ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>	
DetectionEnable	Whether ARP attack detection is enabled for the VSI	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>	N/A

## ARP/ArpVsiDetectionTrust

This table contains ARP trusted AC configuration information for Ethernet service instances.

### XML structure

```

<ARP>
  <ArpVsiDetectionTrust>
    <SRV>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <TrustEnable></TrustEnable>
    </SRV>
  </ArpVsiDetectionTrust>
</ARP>

```

### Table description

Item	Description
Feature name	ARP
Table name	ArpVsiDetectionTrust
Table type	Multi-instance table
Row name	SRV
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Ethernet service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
TrustEnable	Whether the Ethernet service instance is configured as an ARP trusted AC	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No (Default).</li> </ul>	N/A



# Contents

ARP .....	1
ARP/ArpTable .....	1
ARP/ArpConfig .....	1
ARP/ArpLearnLimit .....	2
ARP/ArpGratuitousInterval .....	2
ARP/ArpProxy .....	3
ARP/ArpAttackProtect .....	3
ARP/ArpRateLimit .....	3
ARP/ArpSourceMACExclude .....	4
ARP/ArpDetection .....	4
ARP/ArpFilterSource .....	4
ARP/ArpFilterBinding .....	4
ARP/ArpSnooping .....	5
ARP/ArpVsiConfig .....	5
ARP/ArpScan .....	6
ARP/ArpFixup .....	6
ARP/ArpClearTable .....	7

# ARP

## ARP/ArpTable

Message	Explanation
Invalid IP address. 非法的IP地址。	Invalid IP address configuration 无效的 IP 地址配置

## ARP/ArpConfig

Message	Explanation
VPN-Instance does not exist. 该VPN不存在。	The VPN-Instance does not exist when set the configuration. 配置时对应 VPN 不存在
Invalid MAC address. 非法的MAC地址。	Invalid MAC address configuration. 非法的 MAC 地址配置。
The VLAN doesn't exist. 该VLAN不存在。	The VLAN does not exist when set the configuration. 配置时 VLAN 不存在
Please create the VLAN interface first. 请先创建相应的VLAN接口。	The VLAN interface does not exist when set the configuration. 配置时 VLAN 接口不存在
Invalid IP address. 非法的IP地址。	Invalid IP address configuration 无效的 IP 地址配置
Can't set S-channel subinterface as the output interface. 不支持S通道子接口。	Do not support set S-channel subinterface as the output interface. 不支持 S 通道子接口。
The port doesn't belong to the VLAN, or the VLAN is not permitted on the port. 端口不属于指定VLAN或Trunk类型的端口不允许指定VLAN内的报文通过。	The port doesn't belong to the VLAN, or the VLAN is not permitted on the port. 端口不属于指定 VLAN 或 Trunk 类型的端口不允许指定 VLAN 内的报文通过。
The VPN instance of the configured entry is different from that of the interface. 配置表项的VRF与接口的VRF不相同。	The VPN instance of the configured entry is different from that of the interface. 配置表项的 VRF 与接口的 VRF 不相同。

The multiport ARP entry contains invalid parameters. 多端口参数非法。	The ARP entry does not have vlans or have port interfaces. 没有配置 VLAN 或者接口
Configuration items don't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改
Maximum number of ARP entries already reached. 已到达ARP表项的上限。	Maximum number of ARP entries already reached,p Please check configuration or specifications 已到达 ARP 表项的上限,请检查配置或者设备规格
The Ethernet service instance doesn't exist. 以太网服务实例不存在。	The Ethernet service instance doesn't exist,when set the configuration. 以太网服务实例不存在。
The Ethernet interface and Ethernet service instance are not mapped to the VSI. 以太接口和以太网服务实例与VSI未关联。	The Ethernet interface and Ethernet service instance are not mapped to the VSI,please check configuration. 以太接口和以太网服务实例与VSI未关联,请检查配置
Failed to configure the static ARP entry because it has the same IP address and output interface as an existing remote static ARP entry. 不能配置该静态ARP，因为它与远端已存在的静态ARP表项有相同IP地址和出接口。	Failed to configure the static ARP entry because it has the same IP address and output interface as an existing remote static ARP entry. 不能配置该静态ARP，因为它与远端已存在的静态ARP表项有相同IP地址和出接口。

## ARP/ArpLearnLimit

Message	Explanation
Configuration items don't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改

## ARP/ArpGratuitousInterval

Message	Explanation
Maximum number of interfaces enabled with the feature already reached. 可用接口个数超过上限。	Maximum number of interfaces enabled with the feature already reached, please modify configuration under guidance. 可用接口个数超过上限,请按照配置说明修改

--	--

## ARP/ArpProxy

Message	Explanation
Configuration items don't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改
Invalid start IPv4 address. 非法的IPv4开始地址。	Invalid start IPv4 address. 非法的IPv4开始地址。
Invalid end IPv4 address. 非法的IPv4结束地址。	Invalid end IPv4 address. 非法的IPv4结束地址。
Start IPv4 address must be lower than or equal to end IPv4 address. IPv4开始地址必须低于或者等于IPv4结束地址。	Start IPv4 address must be lower than or equal to end IPv4 address, please modify configuration under guidance. IPv4开始地址必须低于或者等于IPv4结束地址。，请按照配置说明修改

## ARP/ArpAttackProtect

Message	Explanation
Configuration items don't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改

## ARP/ArpRateLimit

Message	Explanation
Failed to set the maximum number of dynamic ARP entries. 指定ARP最大动态表项数失败。	The device returned failed when set the maximun number of dynamic ARP entries. 指定 ARP 最大动态表项数失败。
Configuration items don't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改
The value is out of range. 参数值超出范围。	Invalid configuration, please modify configuration under guidance.

	无效配置，请按照配置说明修改
--	----------------

## ARP/ArpSourceMACExclude

Message	Explanation
Maximum number of protected MAC addresses already reached. 受保护的MAC的个数达到上限。	Maximum number of protected MAC addresses already reached, please check configuration or specifications 受保护的MAC的个数达到上限,请检查配置或者设备规格

## ARP/ArpDetection

Message	Explanation
The VLAN doesn't exist. 该VLAN不存在。	The VLAN does not exist when set the configuration. 配置时 VLAN 不存在

## ARP/ArpFilterSource

Message	Explanation
Maximum number of protected gateway IP addresses already reached. 可配置的被保护网关IP地址超过上限。	Maximum number of protected gateway IP addresses already reached, Please check configuration or specifications 可配置的被保护网关IP地址超过上限,请检查配置或者设备规格
Configuration failed. Please disable ARP filtering first. 配置ARP网关保护功能失败。需要先关闭ARP过滤保护功能。	Please disable ARP filtering first. 配置ARP网关保护功能需要先关闭ARP过滤保护功能。

## ARP/ArpFilterBinding

Message	Explanation
Configuration items don't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改
Maximum number of permitted IP-to-MAC	Maximum number of permitted IP-to-MAC bindings already reached, please modify configuration under

bindings already reached. 可配置的IP地址和MAC地址超过上限。	guidance. 可配置的IP地址和MAC地址超过上限,请按照配置说明修改
Configuration failed. Please disable ARP gateway protection first. 配置ARP过滤保护功能失败。需要先关闭ARP网关保护功能。	Please disable ARP gateway protection first, please modify configuration under guidance. 配置ARP过滤保护需要先关闭ARP网关保护功能,请按照配置说明修改

## ARP/ArpSnooping

Message	Explanation
The VLAN doesn't exist. 该VLAN不存在。	The VLAN does not exist when set the configuration. 配置时 VLAN 不存在

## ARP/ArpVsiConfig

Message	Explanation
VPN-Instance does not exist. 该VRF不存在。	The VPN-Instance does not exist when set the configuration. 配置时对应 VPN 不存在
Invalid MAC address. 非法的MAC地址。	Invalid MAC address configuration. 非法的 MAC 地址配置。
Invalid IP address. 非法的IP地址。	Invalid IP address configuration 无效的 IP 地址配置
The VPN instance of the configured entry is different from that of the interface. 配置表项的VRF与接口的VRF不相同。	The VPN instance of the configured entry is different from that of the interface., please modify configuration under guidance. 配置表项的VRF与接口的VRF不相同。请按照配置说明修改
Configuration items don't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置, 请按照配置说明修改
Maximum number of ARP entries already reached. 已到达ARP表项的上限。	Maximum number of ARP entries already reached,please check configuration or specifications. 已到达 ARP 表项的上限,请检查配置或者设备规格
The VSI doesn't exist. 指定的VSI不存在。	The VSI does not exist when set the configuration. 配置时VSI不存在

The VSI interface is not associated with the VSI. 指定的VSI虚接口与VSI未绑定。	The VSI interface is not associated with the VSI, please check configuration . 指定的VSI虚接口与VSI未绑定。请检查配置。
The Ethernet service instance doesn't exist. 以太网服务实例不存在。	The Ethernet service instance doesn't exist, please check configuration. 以太网服务实例不存在,请检查配置
The Ethernet interface and Ethernet service instance are not mapped to the VSI. 以太接口和以太网服务实例与VSI未关联。	The Ethernet interface and Ethernet service instance are not mapped to the VSI, please check configuration. 以太接口和以太网服务实例与VSI未关联, 请检查配置

## ARP/ArpScan

Message	Explanation
Invalid IP address. 非法的IP地址。	Invalid IP address configuration. 非法的 IP 地址配置。
Start IP address must be lower than or equal to end IP address. 起始IP地址必须低于或者等于终止IP地址。	Start IP address must be lower than or equal to end IP address, please modify configuration under guidance. 起始IP地址必须低于或者等于终止IP地址,请按照配置说明修改
The interface is down or has no IP address configured. 扫描接口处于关闭状态或者未配置IP地址。	The interface is down or has no IP address configured, please modify configuration under guidance. 扫描接口处于关闭状态或者未配置 IP 地址, 请按照配置说明修改
The start and end IP addresses must be on the same subnet as the interface IP address. 起始IP地址和终止IP地址必须与扫描接口IP地址在相同的网段。	The start and end IP addresses must be on the same subnet as the interface IP address, please modify configuration under guidance. 起始 IP 地址和终止 IP 地址必须与扫描接口 IP 地址在相同的网段,请按照配置说明修改
ARP scanning is interrupted. 扫描表项过程中断。	ARP scanning is interrupted,please try again. 扫描表项过程中断,请再试一次

## ARP/ArpFixup

Message	Explanation
Maximum number of ARP entries already reached.	Maximum number of ARP entries already reached, please modify configuration under guidance.

已到达ARP表项的上限。	已到达 ARP 表项的上限，请检查配置或者设备规格
--------------	---------------------------

## ARP/ArpClearTable

Message	Explanation
Invalid IP address. 非法的IP地址。	Invalid IP address configuration 无效的 IP 地址配置



# Contents

- ARPSYNC .....1
  - ARPSYNC/ARPTable .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# ARPSYNC

## ARPSYNC/ARPTable

This table is used to clear all ARP table synchronization informations.

### XML structure

```
<ARPSYNC>
  <ClearARPTable>
    <Clear></Clear>
  </ClearARPTable>
</ARPSYNC>
```

### Table description

Item	Description
Feature name	ARPSYNC
Table name	ClearARPTable
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clears all ARP table synchronization informations	N/A	This column must be empty.	N/A

# Contents

ARPSYNC .....	1
ARPSYNC/ARPCConfig .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ARPSYNC/ServerList .....	2
XML structure .....	2
Table description .....	2
Columns .....	3

# ARPSYNC

## ARPSYNC/ARPCConfig

This table contains ARP table synchronization information.

### XML structure

```
<ARPSYNC>
  <ARPCConfig>
    <ARPEnable>
      <Enable></Enable>
      <Interval></Interval>
      <Timeout></Timeout>
    </ARPEnable>
  </ARPCConfig>
</ARPSYNC>
```

### Table description

Item	Description
Feature name	ARPSYNC
Table name	ARPCConfig
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ARPEnable	ARP table synchronization information.	Data structure	Members include: <ul style="list-style-type: none"><li>• Enable</li><li>• Interval</li><li>• Timeout</li></ul>	N/A
Enable	Whether to enable the rule.	N/A	Boolean: <ul style="list-style-type: none"><li>• true—Enable.</li><li>• false—Disable.</li></ul>	N/A
Interval	ARP table synchronization request interval.	N/A	Unassigned integer. Value range: 5 to 30 seconds.	N/A.

Column name	Column description	Column type	Data type and restrictions	Remarks
Timeout	Request timeout.	N/A	Unassigned integer. Value range: 1 to 5 seconds.	N/A.

## ARPSYNC/ServerList

This table contains SNMP server information.

### XML structure

```

<ARPSYNC>
  <ServerList>
    <ServerConfigInfo>
      <Index></Index>
      <SNMPVersion></SNMPVersion>
      <IPAddress></IPAddress>
      <CommunityName></CommunityName>
      <UserName></UserName>
      <SecurityParam>
        <AuthProtocol></AuthProtocol>
        <AuthKey></AuthKey>
        <PrivProtocol></PrivProtocol>
        <PrivKey></PrivKey>
      </SecurityParam>
    </ServerConfigInfo>
  </ServerList>
</ARPSYNC>

```

### Table description

Item	Description
Feature name	ARPSYNC
Table name	ServerList
Table type	Multi-instance table
Row name	ServerConfigInfo
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Index number	Index	Unassigned integer. Value range: 0 to 64.	To create an SNMP server, set this column to 64.
SNMPVersion	SNMP version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—v2c.</li> <li>3—v3.</li> </ul>	N/A
IPAddress	IP address of the SNMP server.	N/A	IPv4: String, dotted decimal notation.	IPv4 address example: 1.1.1.1.
CommunityName	SNMP v2c community name.	N/A	String, case-insensitive. Length: 1 to 32 characters.	Applicable only when 'SNMP version' is 'v2c'.
UserName	SNMP v3 user name.	N/A	String, case-insensitive. Length: 1 to 32 characters.	Applicable only when 'SNMP version' is 'v3'.
SecurityParam	Security parameters of this user.	Data structure	Members include: <ul style="list-style-type: none"> <li>AuthProtocol</li> <li>AuthKey</li> <li>PrivProtocol</li> <li>PrivKey</li> </ul>	Applicable only when 'SNMP version' is 'v3'.  'PrivProtocol' and 'PrivKey' must be specified with 'AuthProtocol' and 'AuthKey' together.
AuthProtocol	Authentication algorithm	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NoAuth.</li> <li>1—SHA.</li> <li>2—MD5.</li> </ul>	N/A
AuthKey	Authentication key	N/A	String. Length: 8 to 64 characters.	Plaintext key string. Must be specified with AuthProtocol.
PrivProtocol	Encryption algorithm for privacy	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NoPriv.</li> <li>1—AES128.</li> <li>2—DES56.</li> </ul>	N/A
PrivKey	Privacy key	N/A	String. Length: 8 to 64 characters.	Plaintext key string. Must be specified with PrivProtocol.

# Contents

ARPSYNC .....	1
ARPSYNC/ARPCConfig .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ARPSYNC/ServerList .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
ARPSYNC/ARPTable .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# ARPSYNC

## ARPSYNC/ARPCConfig

This table contains ARP table synchronization information.

### XML structure

```
<ARPSYNC>
  <ARPCConfig>
    <ARPEnable>
      <Enable></Enable>
      <Interval></Interval>
      <Timeout></Timeout>
    </ARPEnable>
  </ARPCConfig>
</ARPSYNC>
```

### Table description

Item	Description
Feature name	ARPSYNC
Table name	ARPCConfig
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ARPEnable	ARP table synchronization information.	Data structure	Members include: <ul style="list-style-type: none"><li>• Enable</li><li>• Interval</li><li>• Timeout</li></ul>	N/A
Enable	Whether to enable the rule.	N/A	Boolean: <ul style="list-style-type: none"><li>• true—Enable.</li><li>• false—Disable.</li></ul>	N/A
Interval	ARP table synchronization request interval.	N/A	Unassigned integer. Value range: 5 to 30 seconds.	N/A
Timeout	Request timeout.	N/A	Unassigned integer.	N/A



			Value range: 1 to 5 seconds.	
--	--	--	------------------------------	--

## ARPSYNC/ServerList

This table contains SNMP server information.

### XML structure

```
<ARPSYNC>
  <ServerList>
    <ServerConfigInfo>
      <Index></Index>
      <SNMPVersion></SNMPVersion>
      <IPAddress></IPAddress>
      <CommunityName></CommunityName>
      <UserName></UserName>
      <SecurityParam>
        <AuthProtocol></AuthProtocol>
        <AuthKey></AuthKey>
        <PrivProtocol></PrivProtocol>
        <PrivKey></PrivKey>
      </SecurityParam>
    </ServerConfigInfo>
  </ServerList>
</ARPSYNC>
```

### Table description

Item	Description
Feature name	ARPSYNC
Table name	ServerList
Table type	Multi-instance table
Row name	ServerConfigInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Index number	Index	Unassigned integer. Value range: 0 to 64.	To create an SNMP server, set this column to 64.
SNMPVersion	SNMP version.	N/A	Enumeration: • 2—v2c.	N/A

			<ul style="list-style-type: none"> <li>3—v3.</li> </ul>	
IPAddress	IP address of the SNMP server.	N/A	IPv4: String, dotted decimal notation	IPv4 address example: 1.1.1.1.
CommunityName	SNMP v2c community name.	N/A	String, case-insensitive. Length: 1 to 32 characters.	Applicable only when 'SNMP version' is 'v2c'.
UserName	SNMP v3 user name.	N/A	String, case-insensitive. Length: 1 to 32 characters.	Applicable only when 'SNMP version' is 'v3'.
SecurityParam	Security parameters of this user.	Data structure	Members include: <ul style="list-style-type: none"> <li>AuthProtocol.</li> <li>AuthKey.</li> <li>PrivProtocol.</li> <li>PrivKey.</li> </ul>	Applicable only when 'SNMP version' is 'v3'.  'PrivProtocol' and 'PrivKey' must be specified with 'AuthProtocol' and 'AuthKey' together.
AuthProtocol	Authentication algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NoAuth.</li> <li>1—SHA.</li> <li>2—MD5.</li> </ul>	N/A
AuthKey	Authentication key.	N/A	String. Length: 8 to 64 characters.	Plaintext key string. Must be specified with 'AuthProtocol'.
PrivProtocol	Encryption algorithm for privacy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NoPriv.</li> <li>1—AES128.</li> <li>2—DES56.</li> </ul>	N/A
PrivKey	Privacy key.	N/A	String. Length: 8 to 64 characters.	Plaintext key string. Must be specified with 'PrivProtocol'.

## ARPSYNC/ARPTable

This table contains ARP table synchronization information.

### XML structure

```

<ARPSYNC>
  <ARPTable>
    <ARPTableInfo>
      <Index></Index>
      <IPAddr></IPAddr>
      <MACAddr></MACAddr>
      <Aging></Aging>
      <Count></Count>
    </ARPTableInfo>
  </ARPTable>

```

</ARPSYNC>

## Table description

Item	Description
Feature name	ARPSYNC
Table name	ARPTable
Table type	Multi-instance table
Row name	ARPTableInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Index number	Index	Unassigned integer. Value range: 0 to 65534.	N/A
IPAddr	IP address	N/A	IPv4: String, dotted decimal notation.	N/A
MACAddr	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
Aging	Aging time	N/A	Unassigned integer. Value range: 1 to 20 minutes.	N/A
Count	Total number of ARP entries	N/A	Unassigned integer.	N/A

# Contents

ASPF.....	1
ASPF/Policies .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
ASPF/DetectL4Protocols .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
ASPF/DetectAppProtocols .....	3
XML structure.....	3
Table description.....	3
Columns.....	3
ASPF/AspfOnInterfaces .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
ASPF/AspfOnInterZones .....	6
XML structure.....	6
Table description.....	6
Columns.....	7

# ASPF

## ASPF/Policies

This table contains ASPF policy configurations.

### XML structure

```
<ASPF>
  <Policies>
    <Policy>
      <PolicyNumber></PolicyNumber>
      <ICMPErrDrop></ICMPErrDrop>
      <TCPSynCheck></TCPSynCheck>
    </Policy>
  </Policies>
</ASPF>
```

### Table description

Item	Description
Feature name	ASPF
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	ASPF policy number.	Index	Unsigned integer. Value range: 1 to 256.	N/A
ICMPErrDrop	Whether enable ICMP error message check and drop faked messages.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—YES.</li><li><b>false</b>—NO(default).</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TCPSynCheck	Whether enable TCP SYN check.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—YES</li> <li><b>false</b>—NO(default).</li> </ul>	TCP SYN check checks the first packet to establish a TCP connection whether it is a SYN packet. If the first packet is not a SYN packet, ASPF drops the packet.

## ASPF/DetectL4Protocols

This table contains the transport layer protocols inspected by ASPF policies.

### XML structure

```
<ASPF>
  <DetectL4Protocols>
    <Protocol>
      <PolicyNumber></PolicyNumber>
      <ProtocolID></ProtocolID>
      <EnableDetect></EnableDetect>
    </Protocol>
  </DetectL4Protocols>
</ASPF>
```

### Table description

Item	Description
Feature name	ASPF
Table name	DetectL4Protocols
Table type	Multi-instance table
Row name	Protocol
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	ASPF policy number.	Index	Unsigned integer. Value range: 1 to 256.	N/A
ProtocolID	The detected transport layer protocol ID.	Index	Unsigned integer. Value range: 1 to 8.	<ul style="list-style-type: none"> <li><b>1</b>—TCP.</li> <li><b>2</b>—UDP.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>• 3—UDP-Lite.</li> <li>• 4—ICMP.</li> <li>• 5—ICMPv6.</li> <li>• 6—SCTP.</li> <li>• 7—DCCP.</li> <li>• 8—RAWIP.</li> </ul>
EnableDetect	Whether enable detection.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—YES</li> <li>• false—NO(default).</li> </ul>	N/A

## ASPF/DetectAppProtocols

This table contains the application layer protocols inspected by ASPF policies.

### XML structure

```

<ASPF>
  <DetectAppProtocols>
    <Protocol>
      <PolicyNumber></PolicyNumber>
      <ProtocolID></ProtocolID>
      <EnableDetect></EnableDetect>
      <IllegalPacketAction></IllegalPacketAction>
    </Protocol>
  </DetectAppProtocols>
</ASPF>

```

### Table description

Item	Description
Feature name	ASPF
Table name	DetectAppProtocols
Table type	Multi-instance table
Row name	Protocol
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	ASPF policy	Index	Unsigned integer.	N/A

Column name	Column description number.	Column type	Data type and restrictions	Remarks
			Value range: 1 to 256.	
ProtocolID	The detected application layer protocol ID.	Index	Unsigned integer. Value range: 1 to 17.	<ul style="list-style-type: none"> <li>• 1—FTP.</li> <li>• 2—GTP.</li> <li>• 3—H323.</li> <li>• 4—RTSP.</li> <li>• 5—SIP.</li> <li>• 6—TFTP.</li> <li>• 7—ILS.</li> <li>• 8—MGCP.</li> <li>• 9—NBT.</li> <li>• 10—PPTP.</li> <li>• 11—RSH.</li> <li>• 12—SCCP.</li> <li>• 13—SQLNET.</li> <li>• 14—XDMCP.</li> <li>• 15—HTTP.</li> <li>• 16—SMTP.</li> <li>• 17—DNS.</li> </ul> <p>Support for HTTP, SMTP and DNS depends on the device model.</p>
EnableDetect	Whether enable detection.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—YES</li> <li>• <b>false</b>—NO(default).</li> </ul>	N/A
IllegalPacket Action	Action for illegal packets.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>1</b>—Drop illegal packets.</li> <li>• <b>2</b>—Log illegal packets.</li> <li>• <b>3</b>—Drop and log illegal packets.</li> </ul>	<p>Only the following application support the configuration:</p> <ul style="list-style-type: none"> <li>• 1—FTP.</li> <li>• 3—H323.</li> <li>• 5—SIP.</li> <li>• 12—SCCP.</li> <li>• 15—HTTP.</li> <li>• 16—SMTP.</li> <li>• 17—DNS.</li> </ul> <p>Support for this column depends on the device model.</p>

## ASPF/AspfOnInterfaces

This table contains ASPF policies applied to the interfaces.

### XML structure

```
<ASPF>
  <AspfOnInterfaces>
    <Interface>
```



```

<IfIndex></IfIndex>
<InPolicyNumber></InPolicyNumber>
<OutPolicyNumber></OutPolicyNumber>
</Interface>
</AspfOnInterfaces>
</ASPF>

```

## Table description

Item	Description
Feature name	ASPF
Table name	AspfOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	<b>Interface index</b>	Index	<b>Unsigned integer.</b>	<p>This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.</p> <p>To inspect the traffic through an interface, you must apply a configured ASPF policy to that interface.</p> <p>Make sure a connection initiation packet and the response packet pass through the same interface, because an ASPF stores and maintains the application layer protocol status based on interfaces.</p>
InPolicyNumber	ASPF policy applied to the inbound direction of the interface.	N/A	Unsigned integer. Value range: 1 to 256.	Up to one ASPF policy can be applied to the inbound direction of an interface.
OutPolicyNumber	ASPF policy applied to the outbound direction of the	N/A	Unsigned integer. Value range: 1 to 256.	Up to one ASPF policy can be applied to the outbound direction of an interface.

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	<b>Interface index</b>	Index	<b>Unsigned integer.</b>	<p>This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.</p> <p>To inspect the traffic through an interface, you must apply a configured ASPF policy to that interface.</p> <p>Make sure a connection initiation packet and the response packet pass through the same interface, because an ASPF stores and maintains the application layer protocol status based on interfaces.</p>
	interface.			

## ASPF/AspfOnInterZones

This table contains ASPF policies applied to the inter-Zones.

### XML structure

```

<ASPF>
  <AspfOnInterZones>
    <InterZone>
      <ZonePair>
        <SourceZone></SourceZone>
        <DestinationZone></DestinationZone>
      </ZonePair>
      <PolicyNumber></PolicyNumber>
    </InterZone>
  </AspfOnInterZones>
</ASPF>

```

### Table description

Item	Description
Feature name	ASPF
Table name	AspfOnInterZones
Table type	Multi-instance table
Row name	InterZone

Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZonePair	<b>Inter-Zone information.</b>	Data structure.	Members include: <ul style="list-style-type: none"> <li>SourceZone.</li> <li>DestinationZone.</li> </ul>	<b>N/A</b>
SourceZone	Source zone name.	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">" , ">>" and " " can't be included.
DestinationZone	Destination zone name.	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">" , ">>" and " " can't be included.
PolicyNumber	ASPF policy number.	N/A	Unsigned integer. Value range: 1 to 256.	N/A

# Contents

ASPF.....	1
ASPF/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ASPF/DetectL4Protocols .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
ASPF/DetectAppProtocols .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
ASPF/AspfOnInterfaces .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
ASPF/AspfOnInterZones .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
ASPF/Specification .....	7
XML structure .....	7
Table description .....	8
Columns .....	8

# ASPF

## ASPF/Policies

This table contains ASPF policy configurations.

### XML structure

```
<ASPF>
  <Policies>
    <Policy>
      <PolicyNumber></PolicyNumber>
      <ICMPErrDrop></ICMPErrDrop>
      <TCPSynCheck></TCPSynCheck>
    </Policy>
  </Policies>
</ASPF>
```

### Table description

Item	Description
Feature name	ASPF
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	ASPF policy number.	Index	Unsigned integer. Value range: 1 to 256.	N/A
ICMPErrDrop	Whether enable ICMP error message check and drop faked messages.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—YES.</li><li><b>false</b>—NO(default).</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TCP SYN check	Whether enable TCP SYN check.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—YES</li> <li><b>false</b>—NO(default).</li> </ul>	TCP SYN check checks the first packet to establish a TCP connection whether it is a SYN packet. If the first packet is not a SYN packet, ASPF drops the packet.

## ASPF/DetectL4Protocols

This table contains the transport layer protocols inspected by ASPF policies.

### XML structure

```
<ASPF>
  <DetectL4Protocols>
    <Protocol>
      <PolicyNumber></PolicyNumber>
      <ProtocolID></ProtocolID>
      <ProtocolName></ProtocolName>
      <EnableDetect></EnableDetect>
    </Protocol>
  </DetectL4Protocols>
</ASPF>
```

### Table description

Item	Description
Feature name	ASPF
Table name	DetectL4Protocols
Table type	Multi-instance table
Row name	Protocol
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	ASPF policy number.	Index	Unsigned integer. Value range: 1 to 256.	N/A
ProtocolID	The detected transport layer protocol ID.	Index	Unsigned integer. Value range: 1 to 8.	<ul style="list-style-type: none"> <li><b>1</b>—TCP.</li> <li><b>2</b>—UDP.</li> <li><b>3</b>—UDP-Lite.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>• 4—ICMP.</li> <li>• 5—ICMPv6.</li> <li>• 6—SCTP.</li> <li>• 7—DCCP.</li> <li>• 8—RAWIP.</li> </ul>
ProtocolName	The detected transport layer protocol name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
EnableDetect	Whether enable detection.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—YES</li> <li>• false—NO(default).</li> </ul>	N/A

## ASPF/DetectAppProtocols

This table contains the application layer protocols inspected by ASPF policies.

### XML structure

```

<ASPF>
  <DetectAppProtocols>
    <Protocol>
      <PolicyNumber></PolicyNumber>
      <ProtocolID></ProtocolID>
      <ProtocolName></ProtocolName>
      <EnableDetect></EnableDetect>
      <IllegalPacketAction></IllegalPacketAction>
    </Protocol>
  </DetectAppProtocols>
</ASPF>

```

### Table description

Item	Description
Feature name	ASPF
Table name	DetectAppProtocols
Table type	Multi-instance table
Row name	Protocol
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	ASPF policy number.	Index	Unsigned integer. Value range: 1 to 256.	N/A
ProtocolID	The detected application layer protocol ID.	Index	Unsigned integer. Value range: 1 to 17.	<ul style="list-style-type: none"> <li>• 1—FTP.</li> <li>• 2—GTP.</li> <li>• 3—H323.</li> <li>• 4—RTSP.</li> <li>• 5—SIP.</li> <li>• 6—TFTP.</li> <li>• 7—ILS.</li> <li>• 8—MGCP.</li> <li>• 9—NBT.</li> <li>• 10—PPTP.</li> <li>• 11—RSH.</li> <li>• 12—SCCP.</li> <li>• 13—SQLNET.</li> <li>• 14—XDMCP.</li> <li>• 15—HTTP.</li> <li>• 16—SMTP.</li> <li>• 17—DNS.</li> </ul> <p>Support for HTTP, SMTP and DNS depends on the device model.</p>
ProtocolName	The detected application layer protocol name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
EnableDetect	Whether enable detection.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—YES</li> <li>• <b>false</b>—NO(default).</li> </ul>	N/A
IllegalPacket Action	Action for illegal packets.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>1</b>—Drop illegal packets.</li> <li>• <b>2</b>—Log illegal packets.</li> <li>• <b>3</b>—Drop and log illegal packets.</li> </ul>	<p>Only the following application support the configuration:</p> <ul style="list-style-type: none"> <li>• <b>1</b>—FTP.</li> <li>• <b>3</b>—H323.</li> <li>• <b>5</b>—SIP.</li> <li>• <b>12</b>—SCCP.</li> <li>• <b>15</b>—HTTP.</li> <li>• <b>16</b>—SMTP.</li> <li>• <b>17</b>—DNS.</li> </ul> <p>Support for this column depends on the device model.</p>

## ASPF/AspfOnInterfaces

This table contains ASPF policies applied to the interfaces.



## XML structure

```
<ASPF>
  <AspfOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <InPolicyNumber></InPolicyNumber>
      <OutPolicyNumber></OutPolicyNumber>
    </Interface>
  </AspfOnInterfaces>
</ASPF>
```

## Table description

Item	Description
Feature name	ASPF
Table name	AspfOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	<b>Interface index</b>	Index	<b>Unsigned integer.</b>	<p>This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.</p> <p>To inspect the traffic through an interface, you must apply a configured ASPF policy to that interface.</p> <p>Make sure a connection initiation packet and the response packet pass through the same interface, because an ASPF stores and maintains the application layer protocol status based on interfaces.</p>
InPolicyNumber	ASPF policy applied to the inbound direction	N/A	Unsigned integer. Value range: 1 to 256.	Up to one ASPF policy can be applied to the inbound direction of an

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	<b>Interface index</b>	Index	<b>Unsigned integer.</b>	<p>This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.</p> <p>To inspect the traffic through an interface, you must apply a configured ASPF policy to that interface.</p> <p>Make sure a connection initiation packet and the response packet pass through the same interface, because an ASPF stores and maintains the application layer protocol status based on interfaces.</p>
	of the interface.			interface.
OutPolicyNumber	ASPF policy applied to the outbound direction of the interface.	N/A	Unsigned integer. Value range: 1 to 256.	Up to one ASPF policy can be applied to the outbound direction of an interface.

## ASPF/AspfOnInterZones

This table contains ASPF policies applied to the inter-Zones.

### XML structure

```

<ASPF>
  <AspfOnInterZones>
    <InterZone>
      <ZonePair>
        <SourceZone></SourceZone>
        <DestinationZone></DestinationZone>
      </ZonePair>
      <PolicyNumber></PolicyNumber>
    </InterZone>
  </AspfOnInterZones>
</ASPF>

```

## Table description

Item	Description
Feature name	ASPF
Table name	AspfOnInterZones
Table type	Multi-instance table
Row name	InterZone
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZonePair	<b>Inter-Zone information.</b>	Data structure.	Members include: <ul style="list-style-type: none"><li>SourceZone.</li><li>DestinationZone.</li></ul>	<b>N/A</b>
SourceZone	Source zone name.	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
DestinationZone	Destination zone name.	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
PolicyNumber	ASPF policy number.	N/A	Unsigned integer. Value range: 1 to 256.	N/A

## ASPF/Specification

This table contains specification information of the current device.

## XML structure

```
<ASPF>
  <Specification>
    <InterfaceApply></InterfaceApply>
    <ZonePairApply></ZonePairApply>
    <DetectAppAction></DetectAppAction>
    <DetectDCCP></DetectDCCP>
    <DetectDNS></DetectDNS>
    <DetectFTP></DetectFTP>
    <DetectGTP></DetectGTP>
    <DetectH323></DetectH323>
    <DetectHTTP></DetectHTTP>
    <DetectICMP></DetectICMP>
    <DetectICMPv6></DetectICMPv6>
```

```

<DetectILS></DetectILS>
<DetectMGCP></DetectMGCP>
<DetectNBT></DetectNBT>
<DetectPPTP></DetectPPTP>
<DetectRAWIP></DetectRAWIP>
<DetectRSH></DetectRSH>
<DetectRTSP></DetectRTSP>
<DetectSCCP></DetectSCCP>
<DetectSCTP></DetectSCTP>
<DetectSIP></DetectSIP>
<DetectSMTP></DetectSMTP>
<DetectSQLNET></DetectSQLNET>
<DetectTCP></DetectTCP>
<DetectTFTP></DetectTFTP>
<DetectUDP></DetectUDP>
<DetectUDPLite></DetectUDPLite>
<DetectXDMCP></DetectXDMCP>
</Specification>
</ASPF>

```

## Table description

Item	Description
Feature name	ASPF
Table name	Specification
Table type	Single-instance table
Row name	N/A
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
InterfaceApply	Support apply an ASPF policy to interfaces.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
ZonePairApply	Support apply an ASPF policy to security zone pairs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectAppAction	Whether support set illegal packet's action of application layer protocol.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectDCCP	<b>Whether support DCCP transport layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DetectDNS	<b>Whether support DNS application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectFTP	<b>Whether support FTP application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectGTP	<b>Whether support GTP application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectH323	<b>Whether support H323 application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectHTTP	<b>Whether support HTTP application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectICMP	<b>Whether support ICMP transport layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectICMPv6	<b>Whether support ICMPv6 transport layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectILS	<b>Whether support ILS application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectMGCP	<b>Whether support MGCP application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectNBT	<b>Whether support NBT application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectPPTP	<b>Whether support PPTP application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectRAWIP	<b>Whether support RAWIP transport layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectRSH	<b>Whether support RSH application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectRTSP	<b>Whether support RTSP application layer protocol detection.</b>	N/A	Boolean: • true • false	N/A
DetectSCCP	<b>Whether support SCCP application layer</b>	N/A	Boolean: • true	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	<b>protocol detection.</b>		<ul style="list-style-type: none"> <li>• <b>false</b></li> </ul>	
DetectSCTP	<b>Whether support SCTP transport layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectSIP	<b>Whether support SIP application layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectSMTP	<b>Whether support SMTP application layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectSQLNET	<b>Whether support SQLNET application layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectTCP	<b>Whether support TCP transport layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectTFTP	<b>Whether support TFTP application layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectUDP	<b>Whether support UDP transport layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectUDP-Lite	<b>Whether support UDP-Lite transport layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DetectXDMCP	<b>Whether support XDMCP application layer protocol detection.</b>	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

# Contents

ATK.....	1
ATK/ClearInterfaceAttackStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ATK/ClearLocalAttackStatistics .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
ATK/ClearZoneAttackStatistics .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
ATK/Blacklist/IPv4Blacklists .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
ATK/Blacklist/IPv6Blacklists .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
ATK/Blacklist/ClearItems .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
ATK/Blacklist/IPv4DstBlacklists .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
ATK/Blacklist/IPv6DstBlacklists .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
ATK/Blacklist/ClearDstItems .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
ATK/Blacklist/ClearStatistics .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
ATK/ClientVerify/ClearProtectHostStatistics .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
ATK/ClientVerify/ClearTrustClients .....	10
XML structure .....	10
Table description .....	10
Columns .....	11

# ATK

## ATK/ClearInterfaceAttackStatistics

This table is used to clear interface ATK statistics.

### XML structure

```
<ATK>
  <ClearInterfaceAttackStatistics>
    <Statistics>
      <IfIndex></IfIndex>
      <Clear></Clear>
    </Statistics>
  </ClearInterfaceAttackStatistics>
</ATK>
```

### Table description

Item	Description
Feature name	ATK
Table name	ClearInterfaceAttackStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
Clear	Clear interface statistics	N/A	This column must be empty.

## ATK/ClearLocalAttackStatistics

This table is used to clear local ATK statistics.



## XML structure

```
<ATK>
  <ClearLocalAttackStatistics>
    <Clear></Clear>
  </ClearLocalAttackStatistics>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	ClearLocalAttackStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clear local statistics	N/A	This column must be empty.

## ATK/ClearZoneAttackStatistics

This table is used to clear ATK statistics for a security zone.

## XML structure

```
<ATK>
  <ClearZoneAttackStatistics >
    <Statistics>
      <ZoneID></ZoneID>
      <Clear></Clear>
    </Statistics>
  </ClearZoneAttackStatistics >
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	ClearZoneAttackStatistics

Item	Description
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ZoneID	Security zone ID	Index	Unsigned integer.
Clear	Clear ATK statistics	N/A	This column must be empty.

## ATK/Blacklist/IPv4Blacklists

This table is used to clear ipv4blacklist.

## XML structure

```

<ATK>
  <Blacklist>
    <IPv4Blacklists>
      <Item>
        <VrfIndex></VrfIndex>
        <Ipv4Address></Ipv4Address>
        <DSLitePeer></DSLitePeer>
        <Clear></Clear>
      </Item>
    </IPv4Blacklists>
  </Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4Blacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Vpn index	Index	Unsigned integer.	N/A
Ipv4Address	Ip address	Index	Ipv4 address.	N/A
DSLitePeer	Ip address	Index	Ipv6 address	In DS-Lite network, this parameter refers to B4 addresses. Leave it empty in other circumstances.
Clear	Clear local statistics	N/A	This column must be empty.	N/A

## ATK/Blacklist/IPv6Blacklists

This table is used to clear ipv6blacklist.

## XML structure

```
<ATK>
  <Blacklist>
    <IPv6Blacklists>
      <Item>
        <VrfIndex></VrfIndex>
        <Ipv6Address></Ipv6Address>
        <Clear></Clear>
      </Item>
    </IPv6Blacklists>
  </Blacklist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6Blacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
VrfIndex	Vpn index	Index	Unsigned integer.
Ipv6Address	Ip address	Index	Ipv6 address.
Clear	Clear local statistics	N/A	This column must be empty.

## ATK/Blacklist/ClearItems

This table is used to clear blacklist items.

## XML structure

```
<ATK>
  <Blacklist>
    <ClearItems>
      <Item>
        <AddrFamily></AddrFamily>
        <Clear></Clear>
      </Item>
    </ClearItems>
  </Blacklist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	ClearItems
Table type	Multi-instance table
Row name	item
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
AddrFamily	Address family	Index	Enumeration: <ul style="list-style-type: none"><li>• 2—IPv4.</li><li>• 10—IPv6.</li></ul>

Column name	Column description	Column type	Data type and restrictions
Clear	Clear blacklist items	N/A	This column must be empty.

## ATK/Blacklist/IPv4DstBlacklists

This table is used to clear IPv4 destination blacklist.

### XML structure

```

<ATK>
  <Blacklist>
    <IPv4DstBlacklists>
      <Item>
        <VrfIndex></VrfIndex>
        <Ipv4Address></Ipv4Address>
        <Clear></Clear>
      </Item>
    </IPv4DstBlacklists>
  </Blacklist>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	IPv4DstBlacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Vpn index	Index	Unsigned integer.	N/A
Ipv4Address	Ip address	Index	IPv4 address.	N/A
Clear	Clear local statistics	N/A	This column must be empty.	N/A

# ATK/Blacklist/IPv6DstBlacklists

This table is used to clear IPv6 destination blacklist.

## XML structure

```
<ATK>
  <Blacklist>
    <IPv6DstBlacklists>
      <Item>
        <VrfIndex></VrfIndex>
        <Ipv6Address></Ipv6Address>
        <Clear></Clear>
      </Item>
    </IPv6DstBlacklists>
  </Blacklist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6DstBlacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
VrfIndex	Vpn index	Index	Unsigned integer.
Ipv6Address	Ip address	Index	IPv6 address.
Clear	Clear local statistics	N/A	This column must be empty.

# ATK/Blacklist/ClearDstItems

This table is used to clear destination blacklist items.

## XML structure

```
<ATK>
```

```

<Blacklist>
  <ClearDstItems>
    <Item>
      <AddrFamily></AddrFamily>
      <Clear></Clear>
    </Item>
  </ClearDstItems>
</Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	ClearDstItems
Table type	Multi-instance table
Row name	item
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
AddrFamily	Address family	Index	Enumeration: <ul style="list-style-type: none"> <li>2—IPv4.</li> <li>10—IPv6.</li> </ul>
Clear	Clear blacklist items	N/A	This column must be empty.

## ATK/Blacklist/ClearStatistics

This table is used to clear blacklist statistics.

## XML structure

```

<ATK>
  <Blacklist>
    <ClearStatistics>
      <Clear></Clear>
    </ClearStatistics>
  </Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	ClearStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clear blacklist statistics	N/A	This column must be empty.

# ATK/ClientVerify/ClearProtectHostStatistics

This table is used to clear client verification protected hosts' statistics.

## XML structure

```
<ATK>
  <ClientVerify>
    <ClearProtectHostStatistics>
      <Statistics>
        <VerifyType></VerifyType>
        <AddrFamily></AddrFamily>
        <Clear></Clear>
      </Statistics>
    </ClearProtectHostStatistics>
  </ClientVerify>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	ClearProtectHostStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None.



## Columns

Column name	Column description	Column type	Data type and restrictions
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—TCP proxy</li><li>• 1—DNS client verification.</li><li>• 2—HTTP client verification.</li><li>• 3—DNS reply verification.</li><li>• 4—SIP client verification.</li></ul>
AddrFamily	Address family	Index	Enumeration: <ul style="list-style-type: none"><li>• 2—IPv4.</li><li>• 10—IPv6.</li></ul>
Clear	Clear protected hosts' statistics	N/A	This column must be empty.

## ATK/ClientVerify/ClearTrustClients

This table is used to clear client verification authenticated clients.

## XML structure

```
<ATK>
  <ClientVerify>
    <ClearTrustClients>
      <Client>
        <VerifyType></VerifyType>
        <AddrFamily></AddrFamily>
        <Clear></Clear>
      </Client>
    </ClearTrustClients>
  </ClientVerify>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	ClearTrustClients
Table type	Multi-instance table

Item	Description
Row name	Client
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP proxy</li> <li>• 1—DNS client verification.</li> <li>• 2—HTTP client verification.</li> <li>• 3—DNS reply verification.</li> <li>• 4—SIP client verification.</li> </ul>
AddrFamily	Address family	Index	Enumeration: <ul style="list-style-type: none"> <li>• 2—IPv4.</li> <li>• 10—IPv6.</li> </ul>
Clear	Clear trust clients	N/A	This column must be empty.

# Contents

ATK.....	1
ATK/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ATK/PolicyInterfaces .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
ATK/PolicyZones .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
ATK/PolicyLocal .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
ATK/IPv4Exempts .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
ATK/IPv6Exempts .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
ATK/Scan/Policies .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
ATK/Flood/DefaultConfigs .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
ATK/Flood/IPv4ProtectHosts .....	10
XML structure .....	11
Table description .....	11
Columns .....	11
ATK/Flood/IPv6ProtectHosts .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
ATK/Flood/LearnItems .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
ATK/Signature/Detects .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
ATK/Signature/LargeICMPLength .....	19
XML structure .....	20
Table description .....	20
Columns .....	20
ATK/Signature/LevelActions .....	20
XML structure .....	20
Table description .....	21
Columns .....	21

ATK/Signature/LogAggregate .....	22
XML structure .....	22
Table description .....	22
Columns .....	22
ATK/Blacklist/IPv4Blacklists .....	22
XML structure .....	22
Table description .....	23
Columns .....	23
ATK/Blacklist/IPv6Blacklists .....	23
XML structure .....	23
Table description .....	24
Columns .....	24
ATK/Blacklist/IPv4DstBlacklists .....	24
XML structure .....	24
Table description .....	25
Columns .....	25
ATK/Blacklist/IPv6DstBlacklists .....	25
XML structure .....	25
Table description .....	26
Columns .....	26
ATK/Blacklist/InterfaceSwitches .....	26
XML structure .....	26
Table description .....	27
Columns .....	27
ATK/Blacklist/ZoneSwitches .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
ATK/Blacklist/GlobalConfigs .....	28
XML structure .....	28
Table description .....	28
Columns .....	29
ATK/Whitelist/IPv4ObjItems .....	29
XML structure .....	29
Table description .....	29
Columns .....	29
ATK/Whitelist/IPv6ObjItems .....	30
XML structure .....	30
Table description .....	30
Columns .....	30
ATK/Whitelist/InterfaceSwitches .....	31
XML structure .....	31
Table description .....	31
Columns .....	31
ATK/Whitelist/ZoneSwitches .....	32
XML structure .....	32
Table description .....	32
Columns .....	32
ATK/Whitelist/GlobalSwitches .....	33
XML structure .....	33
Table description .....	33
Columns .....	33
ATK/ClientVerify/Switches .....	33
XML structure .....	33
Table description .....	34
Columns .....	34
ATK/ClientVerify/ZoneSwitches .....	35
XML structure .....	35
Table description .....	35
Columns .....	36
ATK/ClientVerify/IPv4ProtectHosts .....	36
XML structure .....	36

Table description .....	37
Columns .....	37
ATK/ClientVerify/IPv6ProtectHosts .....	37
XML structure .....	38
Table description .....	38
Columns .....	38
ATK/TopStatisticsSwitch .....	39
XML structure .....	39
Table description .....	39
Columns .....	39

# ATK

## ATK/Policies

This table is used to operate ATK policies.

### XML structure

```
<ATK>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
    </Policy>
  </Policies>
</ATK>
```

### Table description

Item	Description
Feature name	ATK
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive

## ATK/PolicyInterfaces

This table is used to operate ATK policy appliances on interfaces.

### XML structure

```
<ATK>
  <PolicyInterfaces>
```

```

    <Apply>
      <IfIndex></IfIndex>
      <PolicyName></PolicyName>
    </Apply>
  </PolicyInterfaces>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	PolicyInterfaces
Table type	Multi-instance table
Row name	Apply
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
PolicyName	Name of Attack Defense policy	N/A	String. Length: 1 to 31 characters.	Case insensitive

## ATK/PolicyZones

This table is used to apply an attack defense policy to a security zone.

## XML structure

```

<ATK>
  <PolicyZones>
    <Apply>
      <ZoneID></ZoneID>
      <PolicyName></PolicyName>
    </Apply>
  </PolicyZones>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	PolicyZones
Table type	Multi-instance table
Row name	Apply
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZoneID	Security zone ID	Index	Unsigned integer.	N/A
PolicyName	Attack defense policy name	N/A	String. Length: 1 to 31 characters.	Case insensitive. Valid characters include letters, digits, underscores (_), and hyphens (-).

## ATK/PolicyLocal

This table is used to operate local ATK policy appliance.

## XML structure

```
<ATK>
  <PolicyLocal>
    <PolicyName></PolicyName>
  </PolicyLocal>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	PolicyLocal
Table type	Single-instance table
Row name	N/A
Restrictions	None.
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	N/A	String. Length: 1 to 31 characters.	Case insensitive

## ATK/IPv4Exempts

This table contains IPv4 exemption information

## XML structure

```
<ATK>
  <IPv4Exempts>
    <Exempt>
      <PolicyName></PolicyName>
      <AclNum></AclNum>
      <AclName></AclName>
    </Exempt>
  </IPv4Exempts>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4Exempts
Table type	Multi-instance table
Row name	Exempt
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
AclNum	Acl number	N/A	Unsigned integer. Value range: 2000 to 3999	AclNum and AclName are

Column name	Column description	Column type	Data type and restrictions	Remarks
				mutual exclusive and only one of them can be set in a single message.
AclName	Acl name	N/A	String. Length: 1 to 63 characters.	AclNum and AclName are mutual exclusive and only one of them can be set in a single message.

## ATK/IPv6Exempts

This table contains IPv6 exemption information

### XML structure

```

<ATK>
  <IPv6Exempts>
    <Exempt>
      <PolicyName></PolicyName>
      <AclNum></AclNum>
      <AclName></AclName>
    </Exempt>
  </IPv6Exempts>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	IPv6Exempts
Table type	Multi-instance table
Row name	Exempt
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
AclNum	Acl number	N/A	Unsigned integer. Value range: 2000 to 3999	AclNum and AclName are mutual exclusive and only one of them can be set in a single message.
AclName	Acl name	N/A	String. Length: 1 to 63 characters.	AclNum and AclName are mutual exclusive and only one of them can be set in a single message.

## ATK/Scan/Policies

This table contains scan policy information.

### XML structure

```
<ATK>
  <Scan>
    <Policies>
      <Policy>
        <PolicyName></PolicyName>
        <Level></Level>
        <UserDefinedCfg>
          <PortScanEnable></PortScanEnable>
          <PortScanThreshold></PortScanThreshold>
          <IPSweepEnable></IPSweepEnable>
          <IPSweepThreshold></IPSweepThreshold>
          <Period></Period>
        </UserDefinedCfg>
        <Log></Log>
        <Drop></Drop>
        <BlockSource>
          <Enable></Enable>
          <BlockTime></BlockTime>
        </BlockSource>
      </Policy>
    </Policies>
```

</Scan>  
</ATK>

## Table description

Item	Description
Feature name	ATK
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String,case-insensitive. Length: 1 to 31 characters.	N/A
Level	Scan detect level	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Don't detect.</li> <li>• 1—Low sensibility.</li> <li>• 2—Middle sensibility.</li> <li>• 3—High sensibility.</li> <li>• 4—User defined sensibility.</li> </ul>	UserDefinedCfg and its members are available only in scan detect level 4.
UserDefinedCfg	Custom scan detection configuration.	Data struct	Members include: <ul style="list-style-type: none"> <li>• PortScanEnable</li> <li>• PortScanThreshold</li> <li>• IPSweepEnable</li> <li>• IPSweepThreshold</li> </ul> Period	N/A
PortScanEnable	Port scan detection switch.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	Default is false.
PortScanThreshold	Port scan detection threshold.	N/A	Signed integer. Value range: 1 to 1000000000 pps.	Value must be set if PortScanEnable is true.
IPSweepEnable	IP sweep detection switch.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	Default is false.
IPSweepThreshold	IP sweep detection threshold.	N/A	Signed integer. Value range: 1 to 1000000000 pps.	Value must be set if IPSweepEnable is true.

Column name	Column description	Column type	Data type and restrictions	Remarks
Period	Detection cycle.	N/A	Signed integer. Value range: 1 to 1000000000 seconds.	Default detection cycle is 10 seconds.
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Default is false.
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Default is false. Drop and BlockSource are mutually exclusive and only one of them can be set in a single message.
BlockSource	Block source configs	Data struct	Members include: <ul style="list-style-type: none"> <li>• <b>Enable</b></li> <li>• <b>BlockTime</b></li> </ul>	Drop and BlockSource are mutually exclusive and only one of them can be set in a single message.
Enable	Block source switch.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Default is false.
BlockTime	Source block duration.	N/A	Unsigned integer, value range 1 to 1000 minutes.	Default is 10 minutes. When and only when Enable is true, this column is useful.

## ATK/Flood/DefaultConfigs

This table contains flood default configurations.

### XML structure

```

<ATK>
  <Flood>
    <DefaultConfigs>
      <Config>
        <PolicyName></PolicyName>
        <MainType></MainType>
        <SubType></SubType>
        <Log></Log>
        <Drop></Drop>
        <ClientVerify></ClientVerify>
        <Threshold></Threshold>

```

```

    <MonitorPort></MonitorPort>
    <NonSpecificSwitch></NonSpecificSwitch>
  </Config>
</DefaultConfigs>
</Flood>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	DefaultConfigs
Table type	Multi-instance table
Row name	Config
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Maintype	Main flood type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Transport layer flood.</li> <li>1—Application layer flood.</li> </ul>	N/A
SubType	Sub flood type	Index	Enumeration, value range varies according to MainType.  For transport layer flood: <ul style="list-style-type: none"> <li>0—SYN flood.</li> <li>1—ACK flood.</li> <li>2—SYN-ACK flood.</li> <li>3—RESET flood.</li> <li>4—FIN flood.</li> <li>5—UDP flood.</li> <li>6—ICMP flood.</li> <li>7—ICMPv6 flood.</li> </ul> For application layer flood: <ul style="list-style-type: none"> <li>0—DNS flood.</li> <li>1—HTTP flood.</li> <li>2—DNS reply flood.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>3—SIP flood.</li> </ul>	
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default is false.
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default is false.
ClientVerify	Client verification switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default is false.
Threshold	Flood detect threshold	N/A	Signed integer, value range: 1 to 1000000 pps.	Default value is 1000
MonitorPort	Monitor service port range	N/A	Port range string, port value range: 1 to 65535.	Support Application layer only for now. For http flood, default monitored port is 80. For DNS flood, default monitored port is 53. For DNS reply flood, default monitored port is 53. For SIP flood, default monitored port is 5060. For example, "80,8000-8080" can be set as default monitored ports for http flood detecting. At most specify a maximum of 32 port items.
NonSpecificSwitch	Non specific protect hosts detect switch	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li>false</li> </ul>	Default value is false which means only detect protect hosts.

## ATK/Flood/IPv4ProtectHosts

This table contains IPv4 flood protect hosts information.

## XML structure

```
<ATK>
  <Flood>
    <IPv4ProtectHosts>
      <Host>
        <PolicyName></PolicyName>
        <MainType></MainType>
        <SubType></SubType>
        <VrfName></VrfName>
        <Ipv4Address></Ipv4Address>
        <Threshold></Threshold>
        <Log></Log>
        <Drop></Drop>
        <ClientVerify></ClientVerify>
        <MonitorPort></MonitorPort>
      </Host>
    </IPv4ProtectHosts>
  </Flood>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4ProtectHosts
Table type	Multi-instance table
Row name	Host
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Maintype	Main flood type	Index	Enumeration: <ul style="list-style-type: none"><li>0—Transport layer flood.</li><li>1—Application layer flood.</li></ul>	N/A
SubType	Sub flood type	Index	Enumeration, value range varies according to MainType.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<p>For transport layer flood:</p> <ul style="list-style-type: none"> <li>• 0—SYN flood.</li> <li>• 1—ACK flood.</li> <li>• 2—SYN-ACK flood.</li> <li>• 3—RESET flood.</li> <li>• 4—FIN flood.</li> <li>• 5—UDP flood.</li> <li>• 6—ICMP flood.</li> <li>• 7—ICMPv6 flood.</li> </ul> <p>For application layer flood:</p> <ul style="list-style-type: none"> <li>• 0—DNS flood.</li> <li>• 1—HTTP flood.</li> <li>• 2—DNS reply flood.</li> <li>• 3—SIP flood.</li> </ul>	
VrfName	Vrf name	Index	String. Length: 0 to 31 characters.	Case sensitive, empty represents public vrf.
Ipv4Address	IPv4 protected host address	Index	IPv4 address.	N/A
Threshold	Flood detect threshold	N/A	Signed integer, value range: 1 to 1000000 pps.	N/A
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	No default value. Should be configured along with drop and clientverify column.
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	No default value. Should be configured along with log and clientverify column.
ClientVerify	Client verification switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	No default value. Should be configured along with log and drop column.
MonitorPort	Monitor service port range	N/A	Port range string, port value range: 1 to 65535.	Support Application layer only for now. At most specify a maximum of 24 port items.

# ATK/Flood/IPv6ProtectHosts

This table contains IPv6 flood protect hosts information.

## XML structure

```
<ATK>
  <Flood>
    <IPv6ProtectHosts>
      <Host>
        <PolicyName></PolicyName>
        <MainType></MainType>
        <SubType></SubType>
        <VrfName></VrfName>
        <Ipv6Address></Ipv6Address>
        <Threshold></Threshold>
        <Log></Log>
        <Drop></Drop>
        <ClientVerify></ClientVerify>
        <MonitorPort></MonitorPort>
      </Host>
    </IPv6ProtectHosts>
  </Flood>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6ProtectHosts
Table type	Multi-instance table
Row name	Host
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Maintype	Main flood type	Index	Enumeration: <ul style="list-style-type: none"><li>0—Transport layer flood.</li><li>1—Application layer</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			flood.	
SubType	Sub flood type	Index	<p>Enumeration, value range varies according to MainType.</p> <p>For transport layer flood:</p> <ul style="list-style-type: none"> <li>• 0—SYN flood.</li> <li>• 1—ACK flood.</li> <li>• 2—SYN-ACK flood.</li> <li>• 3—RESET flood.</li> <li>• 4—FIN flood.</li> <li>• 5—UDP flood.</li> <li>• 6—ICMP flood.</li> <li>• 7—ICMPv6 flood.</li> </ul> <p>For application layer flood:</p> <ul style="list-style-type: none"> <li>• 0—DNS flood.</li> <li>• 1—HTTP flood.</li> <li>• 2—DNS reply flood.</li> <li>• 3—SIP flood.</li> </ul>	N/A
VrfName	Vrf name	Index	String. Length: 0 to 31 characters.	Case sensitive, empty represents public vrf.
Ipv6Address	IPv6 protected host address	Index	IPv6 address.	N/A
Threshold	Flood detect threshold	N/A	Signed integer, value range: 1 to 1000000 pps.	N/A
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	No default value. Should be configured along with drop and clientverify column.
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	No default value. Should be configured along with log and clientverify column.
ClientVerify	Client verification switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	No default value. Should be configured along with log and drop column.
MonitorPort	Monitor service port range	N/A	Port range string, port value range: 1 to 65535.	Support Application layer only for now. At most specify a maximum of 24 port items.

# ATK/Flood/LearnItems

This table contains flow threshold learning information.

## XML structure

```
<ATK>
  <Flood>
    <LearnItems>
      <Item>
        <PolicyName></PolicyName>
        <Status></Status>
        <TimeValue></TimeValue>
        <Mode></Mode>
        <IntervalValue></IntervalValue>
        <AutoApply></AutoApply>
        <Scope></Scope>
      </Item>
    </LearnItems>
  </Flood>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	LearnItems
Table type	Multi-instance table
Row name	Item
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the attack defense policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Learning switch	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Default is false.
TimeValue	Time value	N/A	Unsigned integer.	Default is 1440

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 1 to 1200000 minutes.	minutes.
Mode	Learning mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Single.</li> <li>1—Cycle.</li> </ul>	N/A
IntervalValue	Interval value for cycle mode	N/A	Unsigned integer, value range: 1 to 1200000 minutes.	When and only when mode is cycle, this column is useful. Default is 1440 minutes.
AutoApply	Auto application switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default is false.
Scope	Deviation of study result	N/A	Unsigned integer. Value range: 0 to 4000.	Only when AutoApply is true, this column is useful. Default is 50.

## ATK/Signature/Detects

This table contains signature detects' information.

### XML structure

```

<ATK>
  <Signature>
    <Detects>
      <Detect>
        <PolicyName></PolicyName>
        <MainType></MainType>
        <SubType></SubType>
        <Log></Log>
        <Drop></Drop>
      </Detect>
    </Detects>
  </Signature>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	Detects

Item	Description
Table type	Multi-instance table
Row name	Detect
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Maintype	Main signature type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Named single packet attack.</li> <li>1—IP option single packet attack.</li> <li>2—ICMP single packet attack.</li> <li>3—ICMPv6 single packet attack.</li> <li>4—IPv6 extend header attack.</li> <li>5—IPv6 extend header abnormal attack.</li> <li>6—IPv6 extend header exceed attack.</li> </ul>	N/A
SubType	Sub signature type	Index	Enumeration, value range varies according to MainType.  For named single packet attack: <ul style="list-style-type: none"> <li>0—IP fragment.</li> <li>1—IP impossible.</li> <li>2—Teardrop</li> <li>3—Tiny fragment</li> <li>4—Abnormal</li> <li>5—Smurf</li> <li>6—Trace route</li> <li>7—Ping of death</li> <li>8—Large ICMP</li> <li>9—Large ICMPv6</li> <li>10—TCP invalid flags</li> <li>11—TCP null flag</li> <li>12—TCP all flags</li> <li>13—TCP SYN FIN flags</li> <li>14—TCP FIN only</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 15—Land</li> <li>• 16—Winnuke</li> <li>• 17—UDP bomb</li> <li>• 18—Snork</li> <li>• 19—Fraggle</li> </ul> <p>For IP option single packet attack, SubType is the IP option value, range: 0 to 255.</p> <ul style="list-style-type: none"> <li>• 7—Record route option.</li> <li>• 68—Timestamp option.</li> <li>• 130—Security option.</li> <li>• 131—Loose source routing option.</li> <li>• 136—Stream identifier option.</li> <li>• 137—Strict source route option.</li> <li>• 148—Route alert option.</li> </ul> <p>For ICMP single packet attack, SubType is the ICMP type value, range: 0 to 255.</p> <ul style="list-style-type: none"> <li>• 8—ICMP echo request.</li> <li>• 0—ICMP echo reply.</li> <li>• 4—ICMP source quench.</li> <li>• 3—ICMP destination unreachable.</li> <li>• 5—ICMP redirect.</li> <li>• 11—ICMP time exceeded.</li> <li>• 12—ICMP parameter problem.</li> <li>• 13—ICMP timestamp request.</li> <li>• 14—ICMP timestamp reply.</li> <li>• 15—ICMP information request.</li> <li>• 16—ICMP information reply.</li> <li>• 17—ICMP address mask request.</li> <li>• 18—ICMP address mask reply.</li> </ul> <p>For ICMPv6 single packet</p>	

Column name	Column description	Column type	Data type and restrictions	Remarks
			<p>attack, SubType is the ICMPv6 type value, range: 0 to 255.</p> <ul style="list-style-type: none"> <li>128—ICMPv6 echo request.</li> <li>129—ICMPv6 echo reply.</li> <li>130—ICMPv6 group query.</li> <li>131—ICMPv6 group report.</li> <li>132—ICMPv6 group reduction.</li> <li>1—ICMPv6 destination unreachable.</li> <li>3—ICMPv6 time exceeded.</li> <li>4—ICMPv6 parameter problem.</li> <li>2—ICMPv6 packet too big.</li> </ul> <p>For IPv6 extend header single packet attack, SubType is the header type value, range: 0 to 255.</p> <p>For IPv6 extend header abnormal attack, SubType is not needed.</p> <p>For IPv6 extend header exceed attack, SubType is the maximum number of extension headers.</p> <p>Value range: 0 to 7.</p>	
Log	Log switch	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li><b>true</b></li> <li>false</li> </ul>	Default is false.
Drop	Drop packet switch	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li><b>true</b></li> <li>false</li> </ul>	Default is false.

## ATK/Signature/LargeICMPLength

This table contains large ICMP and ICMPv6 signature information.



## XML structure

```
<ATK>
  <Signature>
    <LargeICMPLength>
      <Policy>
        <PolicyName></PolicyName>
        <IPv4Threshold></IPv4Threshold>
        <IPv6Threshold></IPv6Threshold>
      </Policy>
    </LargeICMPLength>
  </Signature>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	LargeICMPLength
Table type	Multi-instance table
Row name	Policy
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
IPv4Threshold	ICMP packet length threshold	N/A	Unsigned integer, value range: 28 to 65534 bytes.	Default is 4000 bytes.
IPv6Threshold	ICMPv6 packet length threshold	N/A	Unsigned integer, value range: 48 to 65534 bytes.	Default is 4000 bytes.

## ATK/Signature/LevelActions

This table contains signature level action information.

## XML structure

```
<ATK>
  <Signature>
```

```

<LevelActions>
  <LevelAction>
    <PolicyName></PolicyName>
    <Level></Level>
    <Log></Log>
    <Drop></Drop>
  </LevelAction>
</LevelActions>
</Signature>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	LevelActions
Table type	Multi-instance table
Row name	LevelAction
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Level	Severity level	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Information.</li> <li>1—Low.</li> <li>2—Medium.</li> <li>3—High.</li> </ul>	N/A
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li>false</li> </ul>	Default value is true
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li>false</li> </ul>	The default value varies by severity level. For information level or low level, default value is false. For medium level or high level default value is true.

# ATK/Signature/LogAggregate

This table contains signature log aggregation information.

## XML structure

```
<ATK>
  <Signature>
    <LogAggregate>
      <Enable></Enable>
    </LogAggregate>
  </Signature>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	LogAggregate
Table type	Single-instance table
Row name	N/A
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Log aggregate switch.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	Default is true.

# ATK/Blacklist/IPv4Blacklists

This table contains IPv4 blacklist information.

## XML structure

```
<ATK>
  <Blacklist>
    <IPv4Blacklists>
      <Item>
        <VrfIndex></VrfIndex>
      </Item>
    </IPv4Blacklists>
  </Blacklist>
</ATK>
```

```

        <Ipv4Address></Ipv4Address>
        <DSLitePeer></DSLitePeer>
        <TTL></TTL>
    </Item>
</IPv4Blacklists>
</Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4Blacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.	N/A
Ipv4Address	IPv4 blacklist address	Index	IPv4 address.	N/A
DSLitePeer	DS-Lite tunnel peer address	Index	IPv6 address.	In DS-Lite network, this parameter refers to B4 addresses. Leave it empty in other circumstances.
TTL	Time to live	N/A	Unsigned integer, unit second, value range: 60 to 604800 second.	N/A

## ATK/Blacklist/IPv6Blacklists

This table contains IPv6 blacklist information.

## XML structure

```

<ATK>
  <Blacklist>

```

```

<IPv6Blacklists>
  <Item>
    <VrfIndex></VrfIndex>
    <Ipv6Address></Ipv6Address>
    <TTL></TTL>
  </Item>
</IPv6Blacklists>
</Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6Blacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.
Ipv6Address	IPv6 blacklist address	Index	IPv6 address.
TTL	Time to live	N/A	Unsigned integer, unit second, value range: 60 to 604800 second.

## ATK/Blacklist/IPv4DstBlacklists

This table contains IPv4 destination blacklist information.

## XML structure

```

<ATK>
  <Blacklist>
    <IPv4DstBlacklists>
      <Item>
        <VrfIndex></VrfIndex>
        <Ipv4Address></Ipv4Address>

```

```

        <AgingTime></AgingTime>
    </Item>
</IPv4DstBlacklists>
</Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4DstBlacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Vpn index	Index	Unsigned integer, 0 represents public vrf.	N/A
Ipv4Address	IPv4 blacklist address	Index	IPv4 address.	N/A
AgingTime	Time to live	N/A	Unsigned integer, unit second, value range: 60 to 604800 second.	N/A

## ATK/Blacklist/IPv6DstBlacklists

This table contains IPv6 destination blacklist information.

## XML structure

```

<ATK>
  <Blacklist>
    <IPv6DstBlacklists>
      <Item>
        <VrfIndex></VrfIndex>
        <Ipv6Address></Ipv6Address>
        <AgingTime></AgingTime>
      </Item>
    </IPv6DstBlacklists>
  </Blacklist>
</ATK>

```

```

    </IPv6DstBlacklists>
  </Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6DstBlacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
VrfIndex	Vpn index	Index	Unsigned integer, 0 represents public vrf.
Ipv6Address	IPv6 blacklist address	Index	IPv6 address.
AgingTime	Time to live	N/A	Unsigned integer, unit second, value range: 60 to 604800 second.

## ATK/Blacklist/InterfaceSwitches

This table contains blacklist interface switch information.

## XML structure

```

<ATK>
  <Blacklist>
    <InterfaceSwitches>
      <Switch>
        <IfIndex></IfIndex>
        <Enable></Enable>
      </Switch>
    </InterfaceSwitches>
  </Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	InterfaceSwitches
Table type	Multi-instance table
Row name	Switch
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
Enable	Blacklist switch.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	Default is false.

## ATK/Blacklist/ZoneSwitches

This table is used to configure the blacklist for a security zone.

## XML structure

```
<ATK>
  <Blacklist>
    <ZoneSwitches>
      <Switch>
        <ZoneID></ZoneID>
        <Enable></Enable>
      </Switch>
    </ZoneSwitches>
  </Blacklist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	ZoneSwitches
Table type	Multi-instance table
Row name	Switch



Item	Description
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
ZoneID	Security zone ID	Index	Unsigned integer.
Enable	Whether to enable the blacklist	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables the blacklist.</li> <li><b>false</b>—Disables the blacklist (default).</li> </ul>

## ATK/Blacklist/GlobalConfigs

This table contains blacklist global configuration information.

## XML structure

```

<ATK>
  <Blacklist>
    <GlobalConfigs>
      <Enable></Enable>
      <Log></Log>
    </GlobalConfigs>
  </Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	GlobalConfigs
Table type	Single-instance table
Row name	N/A
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Global switch.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	Default is false.
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	Default is false.

## ATK/Whitelist/IPv4ObjItems

This table contains IPv4 whitelist information.

## XML structure

```
<ATK>
  <Whitelist>
    <IPv4ObjItems>
      <Item>
        <ObjGrpName></ObjGrpName>
      </Item>
    </IPv4ObjItems>
  </Whitelist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4ObjItems
Table type	Multi-instance table
Row name	Item
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ObjGrpName	Object group IP Name	Index	String, case insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 31 characters.	

## ATK/Whitelist/IPv6ObjItems

This table contains IPv6 whitelist information.

### XML structure

```

<ATK>
  <Whitelist>
    <IPv6ObjItems>
      <Item>
        <ObjGrpName></ObjGrpName>
      </Item>
    </IPv6ObjItems>
  </Whitelist>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	IPv6ObjItems
Table type	Multi-instance table
Row name	Item
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ObjGrpName	Object group IPv6 Name	Index	String, case insensitive. Length: 1 to 31 characters.	N/A

# ATK/Whitelist/InterfaceSwitches

This table is used to configure the whitelist for an interface.

## XML structure

```
<ATK>
  <Whitelist>
    <InterfaceSwitches>
      <Switch>
        <IfIndex></IfIndex>
        <Enable></Enable>
      </Switch>
    </InterfaceSwitches>
  </Whitelist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	InterfaceSwitches
Table type	Multi-instance table
Row name	Switch
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Enable	Enable or disable	N/A	Boolean:	Default is false.

Column name	Column description	Column type	Data type and restrictions	Remarks
	the whitelist function		<ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	

## ATK/Whitelist/ZoneSwitches

This table is used to configure the whitelist for a security zone.

### XML structure

```

<ATK>
  <Whitelist>
    <ZoneSwitches>
      <Switch>
        <ZoneID></ZoneID>
        <Enable></Enable>
      </Switch>
    </ZoneSwitches>
  </Whitelist>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	ZoneSwitches
Table type	Multi-instance table
Row name	Switch
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZoneID	Security zone ID	Index	Unsigned integer.	N/A
Enable	Enable or disable the whitelist	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default is false.

# ATK/Whitelist/GlobalSwitches

This table contains whitelist global switch information.

## XML structure

```
<ATK>
  <Whitelist>
    <GlobalSwitches>
      <Enable></Enable>
    </GlobalSwitches>
  </Whitelist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	GlobalSwitches
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enable or disable the global configuration.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Default is false.

# ATK/ClientVerify/Switches

This table contains client verification switch information.

## XML structure

```
<ATK>
  <ClientVerify>
    <Switches>
      <Switch>
        <IfIndex></IfIndex>
      </Switch>
    </Switches>
  </ClientVerify>
</ATK>
```

```

        <VerifyType></VerifyType>
        <VerifyMode></VerifyMode>
    </Switch>
</Switches>
</ClientVerify>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	Switches
Table type	Multi-instance table
Row name	Switch
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
VerifyType	Verification type	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 0—TCP proxy</li> <li>• 1—DNS client verification.</li> <li>• 2—HTTP client verification.</li> <li>• 3—DNS reply verification.</li> <li>• 4—SIP client verification.</li> </ul>
VerifyMode	Verification mode	N/A	<p>Enumeration, value range varies according to MainType.</p> <p>For TCP proxy:</p> <ul style="list-style-type: none"> <li>• 0—Shutdown.</li> <li>• 1—SYN cookie.</li> <li>• 2—Safe reset.</li> </ul> <p>For DNS client verification:</p> <ul style="list-style-type: none"> <li>• 0—Shutdown.</li> <li>• 1—Truncate.</li> </ul> <p>For HTTP client verification:</p>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>0—Shutdown.</li> <li>1—Redirection.</li> </ul> <p>For DNS reply verification:</p> <ul style="list-style-type: none"> <li>0—DNS request.</li> </ul> <p>For SIP client verification:</p> <ul style="list-style-type: none"> <li>0—Shutdown.</li> <li>1—Redirection.</li> </ul>

## ATK/ClientVerify/ZoneSwitches

This table is used to configure client verification for a security zone.

### XML structure

```

<ATK>
  <ClientVerify>
    <ZoneSwitches>
      <Switch>
        <ZoneID></ZoneID>
        <VerifyType></VerifyType>
        <VerifyMode></VerifyMode>
      </Switch>
    </ZoneSwitches>
  </ClientVerify>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	ZoneSwitches
Table type	Multi-instance table
Row name	Switch
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions
ZoneID	Security zone ID	Index	Unsigned integer.
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—TCP proxy.</li> <li>1—DNS client verification.</li> <li>2—HTTP client verification.</li> <li>3—DNS reply verification.</li> <li>4—SIP client verification.</li> </ul>
VerifyMode	Verification mode	N/A	Enumeration: For TCP proxy: <ul style="list-style-type: none"> <li>0—Shutdown.</li> <li>1—SYN cookie.</li> <li>2—Safe reset.</li> </ul> For DNS client verification: <ul style="list-style-type: none"> <li>0—Shutdown.</li> <li>1—Truncation.</li> </ul> For HTTP client verification: <ul style="list-style-type: none"> <li>0—Shutdown.</li> <li>1—Redirection.</li> </ul> For DNS reply verification: <ul style="list-style-type: none"> <li>0—DNS request.</li> </ul> For SIP client verification: <ul style="list-style-type: none"> <li>0—Shutdown.</li> <li>1—Redirection.</li> </ul>

## ATK/ClientVerify/IPv4ProtectHosts

This table contains IPv4 client verification protect hosts information.

## XML structure

```

<ATK>
  <ClientVerify>
    <IPv4ProtectHosts>
      <Host>
        <VerifyType></VerifyType>
        <VrfIndex></VrfIndex>
        <Ipv4Address></Ipv4Address>
        <PortNumber></PortNumber>
      </Host>
    </IPv4ProtectHosts>
  </ClientVerify>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4ProtectHosts
Table type	Multi-instance table
Row name	Host
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—TCP proxy</li><li>• 1—DNS client verification.</li><li>• 2—HTTP client verification.</li><li>• 3—DNS reply verification.</li><li>• 4—SIP client verification.</li></ul>	N/A
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.	N/A
Ipv4Address	Host address	Index	IPv4 address.	N/A
PortNumber	Port number	Index	Unsigned integer. The value range varies by verification type. For TCP proxy: 0-65535 For DNS, HTTP, DNS reply and SIP client verification: 1-65535	For TCP proxy, port number 0 is available which means that any hosts connected to any service port will be monitored. For DNS, HTTP, DNS reply and SIP client verification, port number 0 is unavailable.

## ATK/ClientVerify/IPv6ProtectHosts

This table contains IPv6 client verification protect hosts information.

## XML structure

```
<ATK>
  <ClientVerify>
    <IPv6ProtectHosts>
      <Host>
        <VerifyType></VerifyType>
        <VrfIndex></VrfIndex>
        <Ipv6Address></Ipv6Address>
        <PortNumber></PortNumber>
      </Host>
    </IPv6ProtectHosts>
  </ClientVerify>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6ProtectHosts
Table type	Multi-instance table
Row name	Host
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—TCP proxy</li><li>• 1—DNS client verification.</li><li>• 2—HTTP client verification.</li><li>• 3—DNS reply verification.</li><li>• 4—SIP client verification.</li></ul>	N/A
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.	N/A
Ipv6Address	Host address	Index	IPv6 address.	N/A
PortNumber	Port number	Index	Unsigned integer. The value range varies by verification type. For TCP proxy:	Zero can be set only when TCP proxy is specified, which means detect all

Column name	Column description	Column type	Data type and restrictions	Remarks
			0-65535 For DNS, HTTP, DNS reply and SIP client verification: 1-65535	service ports.

## ATK/TopStatisticsSwitch

This table contains ATK top statistics switch configuration.

### XML structure

```
<ATK>
  <TopStatisticsSwitch>
    <Enable></Enable>
  </TopStatisticsSwitch>
</ATK>
```

### Table description

Item	Description
Feature name	ATK
Table name	TopStatisticsSwitch
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether enable ATK top statistics function	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO</li> </ul>	N/A

# Contents

ATK.....	1
ATK/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ATK/PolicyInterfaces .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
ATK/PolicyZoneApplies .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
ATK/PolicyZones .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
ATK/PolicyApplies .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
ATK/PolicyLocal .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
ATK/IPv4Exempts .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
ATK/IPv6Exempts .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
ATK/InterfaceAttackStatistics .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
ATK/ZoneAttackStatistics .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
ATK/LocalAttackStatistics .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
ATK/Scan/Policies .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
ATK/Flood/DefaultConfigs .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
ATK/Flood/IPv4ProtectHosts .....	20
XML structure .....	20
Table description .....	20
Columns .....	21

ATK/Flood/IPv6ProtectHosts .....	22
XML structure .....	22
Table description .....	23
Columns .....	23
ATK/Flood/LearnItems .....	24
XML structure .....	24
Table description .....	25
Columns .....	25
ATK/Flood/FlowResults .....	25
XML structure .....	26
Table description .....	26
Columns .....	26
ATK/Signature/Detects .....	27
XML structure .....	28
Table description .....	28
Columns .....	28
ATK/Signature/LargeICMPLength .....	31
XML structure .....	31
Table description .....	31
Columns .....	32
ATK/Signature/LevelActions .....	32
XML structure .....	32
Table description .....	32
Columns .....	33
ATK/Signature/LogAggregate .....	33
XML structure .....	33
Table description .....	33
Columns .....	34
ATK/Blacklist/IPv4Blacklists .....	34
XML structure .....	34
Table description .....	34
Columns .....	35
ATK/Blacklist/IPv6Blacklists .....	35
XML structure .....	35
Table description .....	36
Columns .....	36
ATK/Blacklist/IPv4DstBlacklists .....	36
XML structure .....	37
Table description .....	37
Columns .....	37
ATK/Blacklist/IPv6DstBlacklists .....	38
XML structure .....	38
Table description .....	38
Columns .....	39
ATK/Blacklist/InterfaceSwitches .....	39
XML structure .....	39
Table description .....	40
Columns .....	40
ATK/Blacklist/ZoneSwitches .....	40
XML structure .....	40
Table description .....	40
Columns .....	41
ATK/Blacklist/GlobalConfigs .....	41
XML structure .....	41
Table description .....	41
Columns .....	41
ATK/Whitelist/IPv4ObjItems .....	42
XML structure .....	42
Table description .....	42
Columns .....	42
ATK/Whitelist/IPv6ObjItems .....	42
XML structure .....	43

Table description .....	43
Columns .....	43
ATK/Whitelist/InterfaceSwitches .....	43
XML structure .....	43
Table description .....	44
Columns .....	44
ATK/Whitelist/ZoneSwitches .....	44
XML structure .....	44
Table description .....	45
Columns .....	45
ATK/Whitelist/GlobalSwitches .....	45
XML structure .....	45
Table description .....	45
Columns .....	46
ATK/ClientVerify/Switches .....	46
XML structure .....	46
Table description .....	46
Columns .....	47
ATK/ClientVerify/ZoneSwitches .....	47
XML structure .....	47
Table description .....	48
Columns .....	48
ATK/ClientVerify/IPv4ProtectHosts .....	49
XML structure .....	49
Table description .....	49
Columns .....	50
ATK/ClientVerify/IPv6ProtectHosts .....	50
XML structure .....	51
Table description .....	51
Columns .....	51
ATK/ClientVerify/IPv4TrustClients .....	52
XML structure .....	52
Table description .....	53
Columns .....	53
ATK/ClientVerify/IPv6TrustClients .....	54
XML structure .....	54
Table description .....	54
Columns .....	54
ATK/Specification .....	55
XML structure .....	55
Table description .....	55
Columns .....	55
ATK/TopStatisticsSwitch .....	56
XML structure .....	56
Table description .....	56
Columns .....	56
ATK/TopStatisticsSampleTime .....	56
XML structure .....	57
Table description .....	57
Columns .....	57
ATK/TopAttackStatisticsByIP .....	57
XML structure .....	58
Table description .....	58
Columns .....	58
ATK/TopAttackStatisticsByType .....	59
XML structure .....	59
Table description .....	59
Columns .....	60
ATK/ScanAttackTypes .....	60
XML structure .....	61
Table description .....	61
Columns .....	61

ATK/FloodAttackTypes.....	61
XML structure.....	61
Table description.....	62
Columns.....	62
ATK/SignatureAttackTypes .....	62
XML structure.....	62
Table description.....	62
Columns.....	63
ATK/BlacklistTypes .....	63
XML structure.....	63
Table description.....	63
Columns.....	63



# ATK

## ATK/Policies

This table is used to operate ATK policies.

### XML structure

```
<ATK>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
    </Policy>
  </Policies>
</ATK>
```

### Table description

Item	Description
Feature name	ATK
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive

## ATK/PolicyInterfaces

This table is used to operate ATK policy appliances on interfaces.

### XML structure

```
<ATK>
  <PolicyInterfaces>
    <Apply>
```

```

    <IfIndex></IfIndex>
    <PolicyName></PolicyName>
  </Apply>
</PolicyInterfaces>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	PolicyInterfaces
Table type	Multi-instance table
Row name	Apply
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
PolicyName	Name of Attack Defense policy	N/A	String. Length: 1 to 31 characters.	Case insensitive

## ATK/PolicyZoneApplies

This table contains information about the application of an attack defense policy to security zones.

## XML structure

```

<ATK>
  <PolicyZoneApplies>
    <Apply>
      <PolicyName></PolicyName>
      <ZoneID></ZoneID>
    </Apply>
  </PolicyZoneApplies>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	PolicyZoneApplies

Item	Description
Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Attack defense policy name	Index	String. Length: 1 to 31 characters.	Case insensitive. Valid characters include letters, digits, underscores (_), and hyphens (-).
ZoneID	Security zone ID	Index	Unsigned integer.	N/A

## ATK/PolicyZones

This table contains information about the attack defense policy applied to a security zone.

## XML structure

```

<ATK>
  <PolicyZones>
    <Apply>
      <ZoneID></ZoneID>
      <PolicyName></PolicyName>
    </Apply>
  </PolicyZones>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	PolicyZones
Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZoneID	Security zone ID	Index	Unsigned integer.	N/A
PolicyName	Attack defense policy name	N/A	String. Length: 1 to 31 characters.	Case insensitive. Valid characters include letters, digits, underscores (_), and hyphens (-).

## ATK/PolicyApplies

This table is used to operate ATK policy appliances on interfaces.

## XML structure

```
<ATK>
  <PolicyApplies>
    <Entity>
      <PolicyName></PolicyName>
      <IfIndex></IfIndex>
    </Entity>
  </PolicyApplies>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	PolicyApplies
Table type	Multi-instance table
Row name	Entity
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
IfIndex	Interface index	Index	Unsigned integer.	N/A

# ATK/PolicyLocal

This table is used to operate local ATK policy appliance.

## XML structure

```
<ATK>
  <PolicyLocal>
    <PolicyName></PolicyName>
  </PolicyLocal>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	PolicyLocal
Table type	Single-instance table
Row name	N/A
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	N/A	String. Length: 1 to 31 characters.	Case insensitive

# ATK/IPv4Exempts

This table contains IPv4 exemption information

## XML structure

```
<ATK>
  <IPv4Exempts>
    <Exempt>
      <PolicyName></PolicyName>
      <AclNum></AclNum>
      <AclName></AclName>
    </Exempt>
  </IPv4Exempts>
</ATK>
```

```

    </Exempt>
  </IPv4Exempts>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4Exempts
Table type	Multi-instance table
Row name	Exempt
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
AclNum	Acl number	N/A	Unsigned integer. Value range: 2000 to 3999	AclNum and AclName are mutual exclusive and only one of them can be set in a single message.
AclName	Acl name	N/A	String. Length: 1 to 63 characters.	AclNum and AclName are mutual exclusive and only one of them can be set in a single message.

## ATK/IPv6Exempts

This table contains IPv6 exemption information

## XML structure

```

<ATK>
  <IPv6Exempts>
    <Exempt>
      <PolicyName></PolicyName>
      <AclNum></AclNum>
      <AclName></AclName>
    </Exempt>
  </IPv6Exempts>
</ATK>

```

```

    </Exempt>
  </IPv6Exempts>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6Exempts
Table type	Multi-instance table
Row name	Exempt
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
AclNum	Acl number	N/A	Unsigned integer. Value range: 2000 to 3999	AclNum and AclName are mutual exclusive and only one of them can be set in a single message.
AclName	Acl name	N/A	String. Length: 1 to 63 characters.	AclNum and AclName are mutual exclusive and only one of them can be set in a single message.

## ATK/InterfaceAttackStatistics

This table contains interface attack statistics.

## XML structure

```

<ATK>
  <InterfaceAttackStatistics>
    <Statistics>
      <IfIndex></IfIndex>
      <Chassis></Chassis>
      <Slot></Slot>
    </Statistics>
  </InterfaceAttackStatistics>
</ATK>

```

```

    <CPUID></CPUID>
    <MainType></MainType>
    <SubType></SubType>
    <AtkTimes></AtkTimes>
    <DropCnt></DropCnt>
  </Statistics>
</InterfaceAttackStatistics>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	InterfaceAttackStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
Chassis	ID of the member where the interface resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the interface	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
Maintype	Main attack type	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—Scan.</li> <li>• 1—Transport layer flood.</li> <li>• 2—Application layer flood.</li> <li>• 3—Named single packet attack.</li> <li>• 4—IP option single packet attack.</li> <li>• 5—ICMP single packet attack.</li> <li>• 6—ICMPv6 single packet attack.</li> <li>• 7—IPv6 extend header attack.</li> <li>• 8—IPv6 extend header abnormal attack.</li> <li>• 9—IPv6 extend header exceed attack.</li> </ul>
SubType	Sub attack type	Index	Enumeration, value range varies according to Maintype.  For scan:



Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>• <b>0</b>—Port scan.</li> <li>• 1—IP sweep.</li> <li>• 2—Distributed IP sweep.</li> </ul> <p>For transport layer flood:</p> <ul style="list-style-type: none"> <li>• <b>0</b>—SYN flood.</li> <li>• 1—ACK flood.</li> <li>• 2—SYN-ACK flood.</li> <li>• 3—RESET flood.</li> <li>• 4—FIN flood.</li> <li>• 5—UDP flood.</li> <li>• 6—ICMP flood.</li> <li>• 7—ICMPv6 flood.</li> </ul> <p>For application layer flood:</p> <ul style="list-style-type: none"> <li>• <b>0</b>—DNS flood.</li> <li>• 1—HTTP flood.</li> <li>• 2—DNS reply flood.</li> <li>• 3—SIP flood.</li> </ul> <p>For named single packet attack:</p> <ul style="list-style-type: none"> <li>• <b>0</b>—IP fragment.</li> <li>• 1—IP impossible.</li> <li>• 2—Teardrop</li> <li>• 3—Tiny fragment</li> <li>• 4—Abnormal</li> <li>• 5—Smurf</li> <li>• 6—Trace route</li> <li>• 7—Ping of death</li> <li>• 8—Large ICMP</li> <li>• 9—Large ICMPv6</li> <li>• 10—TCP invalid flags</li> <li>• 11—TCP null flag</li> <li>• 12—TCP all flags</li> <li>• 13—TCP SYN FIN flags</li> <li>• 14—TCP FIN only</li> <li>• 15—Land</li> <li>• 16—Winnuke</li> <li>• 17—UDP bomb</li> <li>• 18—Snork</li> <li>• 19—Fraggle</li> </ul> <p>For IP option single packet attack, SubType is the IP option value, range: 0 to 255.</p> <p>For ICMP single packet attack, SubType is the ICMP type value, range: 0 to 255.</p> <p>For ICMPv6 single packet attack, SubType is</p>

Column name	Column description	Column type	Data type and restrictions
			<p>the ICMPv6 type value, range: 0 to 255.</p> <p>For IPv6 extend header single packet attack, SubType is the header type value, range: 0 to 255.</p> <p>For IPv6 extend header abnormal attack, SubType is not needed.</p> <p>For IPv6 extend header exceed attack, SubType is the maximum number of extension headers.</p> <p>Value range: 0 to 7.</p>
AtkTimes	Attack times	N/A	Unsigned integer.
DropCnt	Dropped packet count	N/A	Unsigned integer.

## ATK/ZoneAttackStatistics

This table contains attack statistics for a security zone.

### XML structure

```

<ATK>
  <ZoneAttackStatistics>
    <Statistics>
      <ZoneID></ZoneID>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <MainType></MainType>
      <SubType></SubType>
      <AtkTimes></AtkTimes>
      <DropCnt></DropCnt>
    </Statistics>
  </ZoneAttackStatistics>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	ZoneAttackStatistics
Table type	Multi-instance table
Row name	Statistics

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ZoneID	Security zone ID	Index	Unsigned integer.
Chassis	Chassis ID	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
Maintype	Main attack type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Scan attack.</li> <li>1—Transport layer flood.</li> <li>2—Application layer flood.</li> <li>3—Named single-packet attack.</li> <li>4—IP option single-packet attack.</li> <li>5—ICMP single-packet attack.</li> <li>6—ICMPv6 single-packet attack.</li> <li>7—IPv6 extension header single-packet attack.</li> <li>8—IPv6 extend header abnormal attack.</li> <li>9—IPv6 extend header exceed attack.</li> </ul>
SubType	Attack subtype	Index	Enumeration: <ul style="list-style-type: none"> <li>For scan attacks: <ul style="list-style-type: none"> <li>0—Port scan.</li> <li>1—IP sweep.</li> <li>2—Distributed IP sweep.</li> </ul> </li> <li>For transport layer floods: <ul style="list-style-type: none"> <li>0—SYN flood.</li> <li>1—ACK flood.</li> <li>2—SYN-ACK flood.</li> <li>3—RST flood.</li> <li>4—FIN flood.</li> <li>5—UDP flood.</li> <li>6—ICMP flood.</li> <li>7—ICMPv6 flood.</li> </ul> </li> <li>For application layer floods: <ul style="list-style-type: none"> <li>0—DNS flood.</li> <li>1—HTTP flood.</li> <li>2—DNS reply flood.</li> <li>3—SIP flood.</li> </ul> </li> <li>For named single-packet attacks: <ul style="list-style-type: none"> <li>0—IP fragment attack.</li> <li>1—IP impossible attack.</li> </ul> </li> </ul>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>○ 2—Teardrop attack.</li> <li>○ 3—Tiny fragment attack.</li> <li>○ 4—IP-option-abnormal attack.</li> <li>○ 5—Smurf attack.</li> <li>○ 6—Traceroute attack.</li> <li>○ 7—Ping-of-death attack.</li> <li>○ 8—Large ICMP attack.</li> <li>○ 9—Large ICMPv6 attack.</li> <li>○ 10—TCP-invalid-flags attack.</li> <li>○ 11—TCP-null-flag attack.</li> <li>○ 12—TCP-all-flags attack.</li> <li>○ 13—TCP-SYN-FIN attack.</li> <li>○ 14—TCP-FIN-only attack.</li> <li>○ 15—Land attack.</li> <li>○ 16—WinNuke attack.</li> <li>○ 17—UDP bomb attack.</li> <li>○ 18—Snork attack.</li> <li>○ 19—Fraggle attack.</li> <li>• For IP option single-packet attacks, a subtype is an IP option value in the range of 0 to 255.</li> <li>• For ICMP single-packet attacks, a subtype is an ICMP type value in the range of 0 to 255.</li> <li>• For ICMPv6 single-packet attacks, a subtype is an ICMPv6 type value in the range of 0 to 255.</li> <li>• For IPv6 extension header single-packet attacks, a subtype is an IPv6 extension header type value in the range of 0 to 255.</li> <li>• For IPv6 extend header abnormal attack, SubType is not needed.</li> <li>• For IPv6 extend header exceed attack, SubType is the maximum number of extension headers. Value range: 0 to 7.</li> </ul>
AtkTimes	Number of times that the attack occurred	N/A	Unsigned integer.
DropCnt	Number of dropped packets	N/A	Unsigned integer.

## ATK/LocalAttackStatistics

This table contains local attack statistics.

### XML structure

```
<ATK>
  <LocalAttackStatistics>
```

```

<Statistics>
  <Chassis></Chassis>
  <Slot></Slot>
  <CPUID></CPUID>
  <MainType></MainType>
  <SubType></SubType>
  <AtkTimes></AtkTimes>
  <DropCnt></DropCnt>
</Statistics>
</LocalAttackStatistics>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	LocalAttackStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
Maintype	Main attack type	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—Scan.</li> <li>• 1—Transport layer flood.</li> <li>• 2—Application layer flood.</li> <li>• 3—Named single packet attack.</li> <li>• 4—IP option single packet attack.</li> <li>• 5—ICMP single packet attack.</li> <li>• 6—ICMPv6 single packet attack.</li> <li>• 7—IPv6 extend</li> </ul>

Column name	Column description	Column type	Data type and restrictions
			<p>header attack.</p> <ul style="list-style-type: none"> <li>• 8—IPv6 extend header abnormal attack.</li> <li>• 9—IPv6 extend header exceed attack.</li> </ul>
SubType	Sub attack type	Index	<p>Enumeration, value range varies according to MainType.</p> <p>For scan:</p> <ul style="list-style-type: none"> <li>• 0—Port scan.</li> <li>• 1—IP sweep.</li> <li>• 2—Distributed IP sweep.</li> </ul> <p>For transport layer flood:</p> <ul style="list-style-type: none"> <li>• 0—SYN flood.</li> <li>• 1—ACK flood.</li> <li>• 2—SYN-ACK flood.</li> <li>• 3—RESET flood.</li> <li>• 4—FIN flood.</li> <li>• 5—UDP flood.</li> <li>• 6—ICMP flood.</li> <li>• 7—ICMPv6 flood.</li> </ul> <p>For application layer flood:</p> <ul style="list-style-type: none"> <li>• 0—DNS flood.</li> <li>• 1—HTTP flood.</li> <li>• 2—DNS reply flood.</li> <li>• 3—SIP flood.</li> </ul> <p>For named single packet attack:</p> <ul style="list-style-type: none"> <li>• 0—IP fragment.</li> <li>• 1—IP impossible.</li> <li>• 2—Teardrop</li> <li>• 3—Tiny fragment</li> <li>• 4—Abnormal</li> <li>• 5—Smurf</li> <li>• 6—Trace route</li> <li>• 7—Ping of death</li> <li>• 8—Large ICMP</li> <li>• 9—Large ICMPv6</li> <li>• 10—TCP invalid flags</li> <li>• 11—TCP null flag</li> <li>• 12—TCP all flags</li> <li>• 13—TCP SYN FIN flags</li> <li>• 14—TCP FIN only</li> </ul>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>• 15—Land</li> <li>• 16—Winnuke</li> <li>• 17—UDP bomb</li> <li>• 18—Snork</li> <li>• 19—Fraggle</li> </ul> <p>For IP option single packet attack, SubType is the IP option value, range: 0 to 255.</p> <p>For ICMP single packet attack, SubType is the ICMP type value, range: 0 to 255.</p> <p>For ICMPv6 single packet attack, SubType is the ICMPv6 type value, range: 0 to 255.</p> <p>For IPv6 extend header single packet attack, SubType is the header type value, range: 0 to 255.</p> <p>For IPv6 extend header abnormal attack, SubType is not needed.</p> <p>For IPv6 extend header exceed attack, SubType is the maximum number of extension headers. Value range: 0 to 7.</p>
AtkTimes	Attack times	N/A	Unsigned integer.
DropCnt	Dropped packet count	N/A	Unsigned integer.

## ATK/Scan/Policies

This table contains scan policy information.

### XML structure

```
<ATK>
  <Scan>
    <Policies>
```

```

<Policy>
  <PolicyName></PolicyName>
  <Level></Level>
  </UserDefinedCfg>
    <PortScanEnable></PortScanEnable>
    <PortScanThreshold></PortScanThreshold>
    <IPSweepEnable></IPSweepEnable>
    <IPSweepThreshold></IPSweepThreshold>
    <Period></Period>
  </UserDefinedCfg>
  <Log></Log>
  <Drop></Drop>
  <BlockSource>
    <Enable></Enable>
    <BlockTime></BlockTime>
  </BlockSource>
</Policy>
</Policies>
</Scan>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String,case-insensitive. Length: 1 to 31 characters.	N/A
Level	Scan detect level	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Don't detect.</li> <li>1—Low sensibility.</li> <li>2—Middle sensibility.</li> <li>3—High sensibility.</li> <li>4—User defined sensibility.</li> </ul>	UserDefinedCfg and its members are available only in scan detect level 4.
UserDefinedCfg	Custom scan detection	Data struct	Members include: <ul style="list-style-type: none"> <li>PortScanEnable</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	configuration.		<ul style="list-style-type: none"> <li>PortScanThreshold</li> <li>IPSweepEnable</li> <li>IPSweepThreshold</li> <li>Period</li> </ul>	
PortScanEnable	Port scan detection switch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
PortScanThreshold	Port scan detection threshold.	N/A	Signed integer. Value range: 1 to 1000000000 pps.	Value must be set if PortScanEnable is true.
IPSweepEnable	IP sweep detection switch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
IPSweepThreshold	IP sweep detection threshold.	N/A	Signed integer. Value range: 1 to 1000000000 pps.	Value must be set if IPSweepEnable is true.
Period	Detection cycle	N/A	Signed integer. Value range: 1 to 1000000000 seconds.	N/A
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li>false</li> </ul>	N/A
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li>false</li> </ul>	Drop and BlockSource are mutually exclusive and only one of them can be set in a single message.
BlockSource	Block source configs	Data struct	Members include: <ul style="list-style-type: none"> <li><b>Enable</b></li> <li>BlockTime</li> </ul>	Drop and BlockSource are mutually exclusive and only one of them can be set in a single message.
Enable	Block source switch.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li>false</li> </ul>	N/A
BlockTime	Source block duration.	N/A	Unsigned integer, value range 1 to 1000 minutes.	When and only when Enable is true, this column is useful.

# ATK/Flood/DefaultConfigs

This table contains flood default configurations.

## XML structure

```
<ATK>
  <Flood>
    <DefaultConfigs>
      <Config>
        <PolicyName></PolicyName>
        <MainType></MainType>
        <SubType></SubType>
        <Log></Log>
        <Drop></Drop>
        <ClientVerify></ClientVerify>
        <Threshold></Threshold>
        <MonitorPort></MonitorPort>
        <NonSpecificSwitch></NonSpecificSwitch>
      </Config>
    </DefaultConfigs>
  </Flood>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	DefaultConfigs
Table type	Multi-instance table
Row name	Config
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Maintype	Main flood type	Index	Enumeration: <ul style="list-style-type: none"><li>0—Transport layer flood.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Application layer flood.</li> </ul>	
SubType	Sub flood type	Index	<p>Enumeration, value range varies according to MainType.</p> <p>For transport layer flood:</p> <ul style="list-style-type: none"> <li>0—SYN flood.</li> <li>1—ACK flood.</li> <li>2—SYN-ACK flood.</li> <li>3—RESET flood.</li> <li>4—FIN flood.</li> <li>5—UDP flood.</li> <li>6—ICMP flood.</li> <li>7—ICMPv6 flood.</li> </ul> <p>For application layer flood:</p> <ul style="list-style-type: none"> <li>0—DNS flood.</li> <li>1—HTTP flood.</li> <li>2—DNS reply flood.</li> <li>3—SIP flood.</li> </ul>	N/A
Log	Log switch	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default is false.
Drop	Drop packet switch	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default is false.
ClientVerify	Client verification switch	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default is false.
Threshold	Flood detect threshold	N/A	Signed integer, value range: 1 to 1000000 pps.	N/A
MonitorPort	Monitor service port range	N/A	Port range string, port value range: 1 to 65535.	Support Application layer only for now.

Column name	Column description	Column type	Data type and restrictions	Remarks
				For http flood, default monitored port is 80. For DNS flood, default monitored port is 53. For DNS reply flood, default monitored port is 53. For SIP flood, default monitored port is 5060. At most specify a maximum of 32 port items.
NonSpecificSwitch	Non specific protect hosts detect switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default value is false which means only detect protect hosts.

## ATK/Flood/IPv4ProtectHosts

This table contains IPv4 flood protect hosts information.

### XML structure

```

<ATK>
  <Flood>
    <IPv4ProtectHosts>
      <Host>
        <PolicyName></PolicyName>
        <MainType></MainType>
        <SubType></SubType>
        <VrfName></VrfName>
        <Ipv4Address></Ipv4Address>
        <Threshold></Threshold>
        <Log></Log>
        <Drop></Drop>
        <ClientVerify></ClientVerify>
        <MonitorPort></MonitorPort>
      </Host>
    </IPv4ProtectHosts>
  </Flood>
</ATK>

```

### Table description

Item	Description
Feature name	ATK

Item	Description
Table name	IPv4ProtectHosts
Table type	Multi-instance table
Row name	Host
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Maintype	Main flood type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Transport layer flood.</li> <li>1—Application layer flood.</li> </ul>	N/A
SubType	Sub flood type	Index	Enumeration, value range varies according to MainType.  For transport layer flood: <ul style="list-style-type: none"> <li>0—SYN flood.</li> <li>1—ACK flood.</li> <li>2—SYN-ACK flood.</li> <li>3—RESET flood.</li> <li>4—FIN flood.</li> <li>5—UDP flood.</li> <li>6—ICMP flood.</li> <li>7—ICMPv6 flood.</li> </ul> For application layer flood: <ul style="list-style-type: none"> <li>0—DNS flood.</li> <li>1—HTTP flood.</li> <li>2—DNS reply flood.</li> <li>3—SIP flood.</li> </ul>	N/A
VrfName	Vrf name	Index	String. Length: 0 to 31 characters.	Case sensitive, empty represents public vrf.
Ipv4Address	IPv4 protected host address	Index	IPv4 address.	N/A
Threshold	Flood detect threshold	N/A	Signed integer, value range: 1 to 1000000 pps.	N/A
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	No default value. Should be configured along with drop and

Column name	Column description	Column type	Data type and restrictions	Remarks
				clientverify column.
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	No default value. Should be configured along with log and clientverify column.
ClientVerify	Client verification switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	No default value. Should be configured along with log and drop column.
MonitorPort	Monitor service port range	N/A	Port range string, port value range: 1 to 65535.	Support Application layer only for now. At most specify a maximum of 24 port items.

## ATK/Flood/IPv6ProtectHosts

This table contains IPv6 flood protect hosts information.

### XML structure

```

<ATK>
  <Flood>
    <IPv6ProtectHosts>
      <Host>
        <PolicyName></PolicyName>
        <MainType></MainType>
        <SubType></SubType>
        <VrfName></VrfName>
        <Ipv6Address></Ipv6Address>
        <Threshold></Threshold>
        <Log></Log>
        <Drop></Drop>
        <ClientVerify></ClientVerify>
        <MonitorPort></MonitorPort>
      </Host>
    </IPv6ProtectHosts>
  </Flood>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6ProtectHosts
Table type	Multi-instance table
Row name	Host
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Maintype	Main flood type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Transport layer flood.</li> <li>1—Application layer flood.</li> </ul>	N/A
SubType	Sub flood type	Index	Enumeration, value range varies according to MainType.  For transport layer flood: <ul style="list-style-type: none"> <li>0—SYN flood.</li> <li>1—ACK flood.</li> <li>2—SYN-ACK flood.</li> <li>3—RESET flood.</li> <li>4—FIN flood.</li> <li>5—UDP flood.</li> <li>6—ICMP flood.</li> <li>7—ICMPv6 flood.</li> </ul> For application layer flood: <ul style="list-style-type: none"> <li>0—DNS flood.</li> <li>1—HTTP flood.</li> <li>2—DNS reply flood.</li> <li>3—SIP flood.</li> </ul>	N/A
VrfName	Vrf name	Index	String. Length: 0 to 31 characters.	Case sensitive, empty represents public vrf.
Ipv6Address	IPv6 protected host address	Index	IPv6 address.	N/A
Threshold	Flood detect threshold	N/A	Signed integer, value range: 1 to 1000000 pps.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	No default value. Should be configured along with drop and clientverify column.
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	No default value. Should be configured along with log and clientverify column.
ClientVerify	Client verification switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	No default value. Should be configured along with log and drop column.
MonitorPort	Monitor service port range	N/A	Port range string, port value range: 1 to 65535.	Support Application layer only for now. At most specify a maximum of 24 port items.

## ATK/Flood/LearnItems

This table contains flow threshold learning information.

### XML structure

```

<ATK>
  <Flood>
    <LearnItems>
      <Item>
        <PolicyName></PolicyName>
        <Status></Status>
        <TimeValue></TimeValue>
        <Mode></Mode>
        <IntervalValue></IntervalValue>
        <AutoApply></AutoApply>
        <Scope></Scope>
      </Item>
    </LearnItems>
  </Flood>
</ATK>

```



## Table description

Item	Description
Feature name	ATK
Table name	LearnItems
Table type	Multi-instance table
Row name	Item
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the attack defense policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Learning switch	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Default is false.
TimeValue	Time value	N/A	Unsigned integer, value range: 1 to 1200000 minutes.	Default is 1440 minutes.
Mode	Learning mode	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Single.</li><li>1—Cycle.</li></ul>	N/A
IntervalValue	Interval value for cycle mode	N/A	Unsigned integer. Value range: 1 to 1200000 minutes.	Only when the mode is cycle, this column is useful. Default is 1440 minutes.
AutoApply	Auto application switch	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Default is false.
Scope	Deviation of study result	N/A	Unsigned integer. Value range: 0 to 4000.	Only when AutoApply is true, this column is useful. Default is 50.

## ATK/Flood/FlowResults

This table contains flow threshold learning result information.

## XML structure

```
<ATK>
  <Flood>
    <FlowResults>
      <Result>
        <PolicyName></PolicyName>
        <Status></Status>
        <LastResultInterval></LastResultInterval>
        <SYN></SYN>
        <ACK></ACK>
        <SYNACK></SYNACK>
        <RST></RST>
        <FIN></FIN>
        <UDP></UDP>
        <ICMP></ICMP>
        <ICMPv6></ICMPv6>
        <DNS></DNS>
        <HTTP></HTTP>
        <DNSReply></DNSReply>
        <SIP></SIP>
      </Result>
    </FlowResults>
  </Flood>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	FlowResults
Table type	Multi-instance table
Row name	Result
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the attack defense policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Learning status	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Initialize.</li><li>1—Stop.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—learning.</li> </ul>	
LastResultInterval	Time elapsed since last result	N/A	Unsigned integer. Value range: 0 to 4294967295 second.	N/A
SYN	Learning result of SYN packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
ACK	Learning result of ACK packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
SYNACK	Learning result of SYNACK packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
RST	Learning result of RST packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
FIN	Learning result of FIN packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
UDP	Learning result of UDP packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
ICMP	Learning result of ICMP packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
ICMPv6	Learning result of ICMPv6 packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
DNS	Learning result of DNS packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
HTTP	Learning result of HTTP packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
DNSReply	Learning result of DNS reply packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A
SIP	Learning result of SIP packets	N/A	Unsigned integer. Value range: 0 to 4294967295 pps.	N/A

## ATK/Signature/Detects

This table contains signature detects' information.

## XML structure

```
<ATK>
  <Signature>
    <Detects>
      <Detect>
        <PolicyName></PolicyName>
        <MainType></MainType>
        <SubType></SubType>
        <Log></Log>
        <Drop></Drop>
        <level></level>
      </Detect>
    </Detects>
  </Signature>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	Detects
Table type	Multi-instance table
Row name	Detect
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Maintype	Main signature type	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Named single packet attack.</li><li>• 1—IP option single packet attack.</li><li>• 2—ICMP single packet attack.</li><li>• 3—ICMPv6 single packet attack.</li><li>• 4—IPv6 extend header attack.</li><li>• 5—IPv6 extend header abnormal attack.</li><li>• 6—IPv6 extend</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			header exceed attack.	
SubType	Sub signature type	Index	<p>Enumeration, value range varies according to MainType.</p> <p>For named single packet attack:</p> <ul style="list-style-type: none"> <li>• 0—IP fragment.</li> <li>• 1—IP impossible.</li> <li>• 2—Teardrop</li> <li>• 3—Tiny fragment</li> <li>• 4—Abnormal</li> <li>• 5—Smurf</li> <li>• 6—Trace route</li> <li>• 7—Ping of death</li> <li>• 8—Large ICMP</li> <li>• 9—Large ICMPv6</li> <li>• 10—TCP invalid flags</li> <li>• 11—TCP null flag</li> <li>• 12—TCP all flags</li> <li>• 13—TCP SYN FIN flags</li> <li>• 14—TCP FIN only</li> <li>• 15—Land</li> <li>• 16—Winnuke</li> <li>• 17—UDP bomb</li> <li>• 18—Snork</li> <li>• 19—Fraggle</li> </ul> <p>For IP option single packet attack, SubType is the IP option value, range: 0 to 255.</p> <ul style="list-style-type: none"> <li>• 7—Record route option.</li> <li>• 68—Timestamp option.</li> <li>• 130—Security option.</li> <li>• 131—Loose source routing option.</li> <li>• 136—Stream identifier option.</li> <li>• 137—Strict source route option.</li> <li>• 148—Route alert option.</li> </ul> <p>For ICMP single packet attack, SubType is the ICMP type value, range: 0 to 255.</p> <ul style="list-style-type: none"> <li>• 8—ICMP echo</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<p>request.</p> <ul style="list-style-type: none"> <li>• 0—ICMP echo reply.</li> <li>• 4—ICMP source quench.</li> <li>• 3—ICMP destination unreachable.</li> <li>• 5—ICMP redirect.</li> <li>• 11—ICMP time exceeded.</li> <li>• 12—ICMP parameter problem.</li> <li>• 13—ICMP timestamp request.</li> <li>• 14—ICMP timestamp reply.</li> <li>• 15—ICMP information request.</li> <li>• 16—ICMP information reply.</li> <li>• 17—ICMP address mask request.</li> <li>• 18—ICMP address mask reply.</li> </ul> <p>For ICMPv6 single packet attack, SubType is the ICMPv6 type value, range: 0 to 255.</p> <ul style="list-style-type: none"> <li>• 128—ICMPv6 echo request.</li> <li>• 129—ICMPv6 echo reply.</li> <li>• 130—ICMPv6 group query.</li> <li>• 131—ICMPv6 group report.</li> <li>• 132—ICMPv6 group reduction.</li> <li>• 1—ICMPv6 destination unreachable.</li> <li>• 3—ICMPv6 time exceeded.</li> <li>• 4—ICMPv6 parameter problem.</li> <li>• 2—ICMPv6 packet too big.</li> </ul> <p>For IPv6 extend header single packet attack, SubType is the header type value, range: 0 to 255.</p> <p>For IPv6 extend header abnormal attack, SubType</p>	

Column name	Column description	Column type	Data type and restrictions	Remarks
			is not needed.  For IPv6 extend header exceed attack, SubType is the maximum number of extension headers. Value range: 0 to 7.	
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• false</li> </ul>	Default is false.
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• false</li> </ul>	Default is false.
Level	Severity level	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Information.</li> <li>• 1—Low.</li> <li>• 2—Medium.</li> <li>• 3—High.</li> </ul>	N/A

## ATK/Signature/LargeICMPLength

This table contains large ICMP and ICMPv6 signature information.

### XML structure

```

<ATK>
  <Signature>
    <LargeICMPLength>
      <Policy>
        <PolicyName></PolicyName>
        <IPv4Threshold></IPv4Threshold>
        <IPv6Threshold></IPv6Threshold>
      </Policy>
    </LargeICMPLength>
  </Signature>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	LargeICMPLength
Table type	Multi-instance table

Item	Description
Row name	Policy
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
IPv4Threshold	ICMP packet length threshold	N/A	Unsigned integer, value range: 28 to 65534 bytes.	N/A
IPv6Threshold	ICMPv6 packet length threshold	N/A	Unsigned integer, value range: 48 to 65534 bytes.	N/A

## ATK/Signature/LevelActions

This table contains signature level action information.

## XML structure

```

<ATK>
  <Signature>
    <LevelActions>
      <LevelAction>
        <PolicyName></PolicyName>
        <Level></Level>
        <Log></Log>
        <Drop></Drop>
      </LevelAction>
    </LevelActions>
  </Signature>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	LevelActions
Table type	Multi-instance table
Row name	LevelAction
Restrictions	None.



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of Attack Defense policy	Index	String. Length: 1 to 31 characters.	Case insensitive
Level	Severity level	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Information.</li><li>• 1—Low.</li><li>• 2—Medium.</li><li>• 3—High.</li></ul>	N/A
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	Default value is true
Drop	Drop packet switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	The default value varies by severity level. For information level or low level, default value is false. For medium level or high level default value is true.

## ATK/Signature/LogAggregate

This table contains signature log aggregation information.

## XML structure

```
<ATK>
  <Signature>
    <LogAggregate>
      <Enable></Enable>
    </LogAggregate>
  </Signature>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	LogAggregate
Table type	Single-instance table
Row name	N/A

Item	Description
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Log aggregate switch.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Default is true.

## ATK/Blacklist/IPv4Blacklists

This table contains IPv4 blacklist information.

## XML structure

```

<ATK>
  <Blacklist>
    <IPv4Blacklists>
      <Item>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <VrfIndex></VrfIndex>
        <Ipv4Address></Ipv4Address>
        <DSLitePeer></DSLitePeer>
        <AddType></AddType>
        <TTL></TTL>
        <DropCnt></DropCnt>
      </Item>
    </IPv4Blacklists>
  </Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4Blacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the blacklist resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the blacklist	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.	N/A
Ipv4Address	IPv4 blacklist address	Index	IPv4 address.	N/A
DSLitePeer	DS-Lite tunnel peer address	Index	IPv6 address.	In DS-Lite network, this parameter refers to B4 addresses. Leave it empty in other circumstances.
AddType	Add type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Manual add.</li> <li>1—Automatic add.</li> </ul>	N/A
TTL	Time to live	N/A	Unsigned integer, unit second.	N/A
DropCnt	Dropped packet count	N/A	Unsigned integer.	N/A

## ATK/Blacklist/IPv6Blacklists

This table contains IPv6 blacklist information.

### XML structure

```

<ATK>
  <Blacklist>
    <IPv6Blacklists>
      <Item>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <VrfIndex></VrfIndex>
        <Ipv6Address></Ipv6Address>
        <AddType></AddType>
        <TTL></TTL>
      </Item>
    </IPv6Blacklists>
  </Blacklist>
</ATK>

```

```

        <DropCnt></DropCnt>
    </Item>
</IPv6Blacklists>
</Blacklist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6Blacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the blacklist resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the blacklist	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.
Ipv6Address	IPv6 blacklist address	Index	IPv6 address.
AddType	Add type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Manual add.</li> <li>1—Automatic add.</li> </ul>
TTL	Time to live	N/A	Unsigned integer, unit second.
DropCnt	Dropped packet count	N/A	Unsigned integer.

## ATK/Blacklist/IPv4DstBlacklists

This table contains IPv4 destination blacklist information.

## XML structure

```
<ATK>
  <Blacklist>
    <IPv4DstBlacklists>
      <Item>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <VrfIndex></VrfIndex>
        <Ipv4Address></Ipv4Address>
        <ItemType></ItemType>
        <AgingTime></AgingTime>
        <DropCnt></DropCnt>
      </Item>
    </IPv4DstBlacklists>
  </Blacklist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4DstBlacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the blacklist resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the blacklist	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.	N/A
Ipv4Address	IPv4 blacklist address	Index	IPv4 address.	N/A
ItemType	Add type	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>0—Manual add.</li> <li>1—Automatic add.</li> </ul>	
AgingTime	Time to live	N/A	Unsigned integer, unit second.	N/A
DropCnt	Dropped packet count	N/A	Unsigned integer.	N/A

## ATK/Blacklist/IPv6DstBlacklists

This table contains IPv6 destination blacklist information.

### XML structure

```

<ATK>
  <Blacklist>
    <IPv6DstBlacklists>
      <Item>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <VrfIndex></VrfIndex>
        <Ipv6Address></Ipv6Address>
        <ItemType></ItemType>
        <AgingTime></AgingTime>
        <DropCnt></DropCnt>
      </Item>
    </IPv6DstBlacklists>
  </Blacklist>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	IPv6DstBlacklists
Table type	Multi-instance table
Row name	Item
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the blacklist resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the blacklist	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.
Ipv6Address	IPv6 blacklist address	Index	IPv6 address.
ItemType	Add type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Manual add.</li><li>• 1—Automatic add.</li></ul>
AgingTime	Time to live	N/A	Unsigned integer, unit second.
DropCnt	Dropped packet count	N/A	Unsigned integer.

## ATK/Blacklist/InterfaceSwitches

This table contains blacklist interface switch information.

### XML structure

```
<ATK>
  <Blacklist>
    <InterfaceSwitches>
      <Switch>
        <IfIndex></IfIndex>
        <Enable></Enable>
      </Switch>
    </InterfaceSwitches>
  </Blacklist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	InterfaceSwitches
Table type	Multi-instance table
Row name	Switch
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
Enable	Blacklist switch.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	Default is false.

## ATK/Blacklist/ZoneSwitches

This table contains the blacklist configuration for a security zone.

## XML structure

```
<ATK>
  <Blacklist>
    <ZoneSwitches>
      <Switch>
        <ZoneID></ZoneID>
        <Enable></Enable>
      </Switch>
    </ZoneSwitches>
  </Blacklist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	ZoneSwitches
Table type	Multi-instance table
Row name	Switch
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions
ZoneID	Security zone ID	Index	Unsigned integer.
Enable	Whether the blacklist is enabled or not	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled (default).</li></ul>

## ATK/Blacklist/GlobalConfigs

This table contains blacklist global configuration information.

## XML structure

```
<ATK>
  <Blacklist>
    <GlobalConfigs>
      <Enable></Enable>
      <Log></Log>
    </GlobalConfigs>
  </Blacklist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	GlobalConfigs
Table type	Single-instance table
Row name	N/A
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Global switch.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	Default is false.
Log	Log switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li></ul>	Default is false.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>false</li> </ul>	

## ATK/Whitelist/IPv4ObjItems

This table contains IPv4 whitelist information.

### XML structure

```

<ATK>
  <Whitelist>
    <IPv4ObjItems>
      <Item>
        <ObjGrpName></ObjGrpName>
      </Item>
    </IPv4ObjItems>
  </Whitelist>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	IPv4ObjItems
Table type	Multi-instance table
Row name	Item
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ObjGrpName	Object group IP name	Index	String, case insensitive. Length: 1 to 31 characters.	N/A

## ATK/Whitelist/IPv6ObjItems

This table contains IPv6 whitelist information.

## XML structure

```
<ATK>
  <Whitelist>
    <IPv6ObjItems>
      <Item>
        <ObjGrpName></ObjGrpName>
      </Item>
    </IPv6ObjItems>
  </Whitelist>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6ObjItems
Table type	Multi-instance table
Row name	Item
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ObjGrpName	Object group IPv6 name	Index	String, case insensitive. Length: 1 to 31 characters.	N/A

## ATK/Whitelist/InterfaceSwitches

This table is used to configure the whitelist for an interface.

## XML structure

```
<ATK>
  <Whitelist>
    <InterfaceSwitches>
      <Switch>
        <IfIndex></IfIndex>
        <Enable></Enable>
      </Switch>
    </InterfaceSwitches>
  </Whitelist>
</ATK>
```

```

    </Whitelist>
  </ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	InterfaceSwitches
Table type	Multi-instance table
Row name	Switch
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Enable	Enabling status of the whitelist function	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## ATK/Whitelist/ZoneSwitches

This table is used to configure the whitelist for a security zone.

## XML structure

```

<ATK>
  <Whitelist>
    <ZoneSwitches>
      <Switch>
        <ZoneID></ZoneID>
      </Switch>
    </ZoneSwitches>
  </Whitelist>
</ATK>

```

```

        <Enable></Enable>
    </Switch>
</ZoneSwitches>
</Whitelist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	ZoneSwitches
Table type	Multi-instance table
Row name	Switch
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZoneID	Security zone ID	Index	Unsigned integer.	N/A
Enable	Enabling status of the whitelist	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## ATK/Whitelist/GlobalSwitches

This table contains whitelist global enabling status information.

## XML structure

```

<ATK>
  <Whitelist>
    <GlobalSwitches>
      <Enable></Enable>
    </GlobalSwitches>
  </Whitelist>
</ATK>

```

## Table description

Item	Description
Feature name	ATK

Item	Description
Table name	GlobalSwitches
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of the global configuration.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## ATK/ClientVerify/Switches

This table contains client verification switch information.

## XML structure

```

<ATK>
  <ClientVerify>
    <Switches>
      <Switch>
        <IfIndex></IfIndex>
        <VerifyType></VerifyType>
        <VerifyMode></VerifyMode>
      </Switch>
    </Switches>
  </ClientVerify>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	Switches
Table type	Multi-instance table
Row name	Switch
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP proxy</li> <li>• 1—DNS client verification.</li> <li>• 2—HTTP client verification.</li> <li>• 3—DNS reply verification.</li> <li>• 4—SIP client verification.</li> </ul>
VerifyMode	Verification mode	N/A	Enumeration, value range varies according to MainType. <p>For TCP proxy:</p> <ul style="list-style-type: none"> <li>• 0—Shutdown.</li> <li>• 1—SYN cookie.</li> <li>• 2—Safe reset.</li> </ul> <p>For DNS client verification:</p> <ul style="list-style-type: none"> <li>• 0—Shutdown.</li> <li>• 1—Truncate.</li> </ul> <p>For HTTP client verification:</p> <ul style="list-style-type: none"> <li>• 0—Shutdown.</li> <li>• 1—Redirection.</li> </ul> <p>For DNS reply verification:</p> <ul style="list-style-type: none"> <li>• 0—DNS request.</li> </ul> <p>For SIP client verification:</p> <ul style="list-style-type: none"> <li>• 0—Shutdown.</li> <li>• 1—Option.</li> </ul>

## ATK/ClientVerify/ZoneSwitches

This table contains the client verification configuration for a security zone.

## XML structure

```

<ATK>
  <ClientVerify>
    <ZoneSwitches>

```

```

<Switch>
  <ZoneID></ZoneID>
  <VerifyType></VerifyType>
  <VerifyMode></VerifyMode>
</Switch>
</ZoneSwitches>
</ClientVerify>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	ZoneSwitches
Table type	Multi-instance table
Row name	Switch
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ZoneID	Security zone ID	Index	Unsigned integer.
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—TCP proxy.</li> <li>1—DNS client verification.</li> <li>2—HTTP client verification.</li> <li>3—DNS reply verification.</li> <li>4—SIP client verification.</li> </ul>
VerifyMode	Verification mode	N/A	Enumeration: <p>For TCP proxy:</p> <ul style="list-style-type: none"> <li>0—Shutdown.</li> <li>1—SYN cookie.</li> <li>2—Safe reset.</li> </ul> <p>For DNS client verification:</p> <ul style="list-style-type: none"> <li>0—Shutdown.</li> <li>1—Truncation.</li> </ul> <p>For HTTP client verification:</p> <ul style="list-style-type: none"> <li>0—Shutdown.</li> <li>1—Redirection.</li> </ul> <p>For DNS reply verification:</p> <ul style="list-style-type: none"> <li>0—DNS request.</li> </ul>



Column name	Column description	Column type	Data type and restrictions
			For SIP client verification: <ul style="list-style-type: none"> <li>• 0—Shutdown.</li> <li>• 1—Option.</li> </ul>

## ATK/ClientVerify/IPv4ProtectHosts

This table contains IPv4 client verification protect hosts information.

### XML structure

```

<ATK>
  <ClientVerify>
    <IPv4ProtectHosts>
      <Host>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <VerifyType></VerifyType>
        <VrfIndex></VrfIndex>
        <Ipv4Address></Ipv4Address>
        <PortNumber></PortNumber>
        <AddType></AddType>
        <ReqCnt></ReqCnt>
        <AuthCnt></AuthCnt>
      </Host>
    </IPv4ProtectHosts>
  </ClientVerify>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	IPv4ProtectHosts
Table type	Multi-instance table
Row name	Host
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the host resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the host	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—TCP proxy</li> <li>1—DNS client verification.</li> <li>2—HTTP client verification.</li> <li>3—DNS reply verification.</li> <li>4—SIP client verification.</li> </ul>	N/A
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.	N/A
Ipv4Address	Host address	Index	IPv4 address.	N/A
PortNumber	Port number	Index	Unsigned integer. The value range varies by the verification type. For TCP proxy: 0-65535 For DNS, DNS reply, SIP and HTTP client verification: 1-65535	For TCP proxy, port number 0 is available which means that any hosts connected to any service port will be monitored. For DNS, DNS reply, SIP and HTTP client verification, port number 0 is unavailable.
AddType	Add type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Manual add.</li> <li>1—Automatic add.</li> </ul>	N/A
ReqCnt	Request count	N/A	Unsigned integer.	N/A
AuthCnt	Authenticated request count	N/A	Unsigned integer.	N/A

## ATK/ClientVerify/IPv6ProtectHosts

This table contains IPv6 client verification protect hosts information.

## XML structure

```
<ATK>
  <ClientVerify>
    <IPv6ProtectHosts>
      <Host>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <VerifyType></VerifyType>
        <VrfIndex></VrfIndex>
        <Ipv6Address></Ipv6Address>
        <PortNumber></PortNumber>
        <AddType></AddType>
        <ReqCnt></ReqCnt>
        <AuthCnt></AuthCnt>
      </Host>
    </IPv6ProtectHosts>
  </ClientVerify>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6ProtectHosts
Table type	Multi-instance table
Row name	Host
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the host resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the host	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"><li>0—TCP proxy</li><li>1—DNS client verification.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—HTTP client verification.</li> <li>3—DNS reply verification.</li> <li>4—SIP client verification.</li> </ul>	
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.	N/A
Ipv6Address	Host address	Index	IPv6 address.	N/A
PortNumber	Port number	Index	Unsigned integer. The value range varies by the verification type. For TCP proxy: 0-65535 For DNS, DNS reply, SIP and HTTP client verification: 1-65535	For TCP proxy, port number 0 is available which means that any hosts connected to any service port will be monitored. For DNS, DNS reply, SIP and HTTP client verification, port number 0 is unavailable.
AddType	Add type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Manual add.</li> <li>1—Automatic add.</li> </ul>	N/A
ReqCnt	Request count	N/A	Unsigned integer.	N/A
AuthCnt	Authenticated request count	N/A	Unsigned integer.	N/A

## ATK/ClientVerify/IPv4TrustClients

This table contains information of trust IPv4 clients verified by ClientVerify module.

### XML structure

```

<ATK>
  <ClientVerify>
    <IPv4TrustClients>
      <Client>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <VerifyType></VerifyType>
        <VrfIndex></VrfIndex>
        <Ipv4Address></Ipv4Address>
        <DSLitePeer></DSLitePeer>
        <TTL></TTL>
      </Client>
    </IPv4TrustClients>
  </ClientVerify>
</ATK>

```

```

    </Client>
  </IPv4TrustClients>
</ClientVerify>
</ATK>

```

## Table description

Item	Description
Feature name	ATK
Table name	IPv4TrustClients
Table type	Multi-instance table
Row name	Client
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the client resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the client	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP proxy</li> <li>• 1—DNS client verification.</li> <li>• 2—HTTP client verification.</li> <li>• 3—DNS reply verification.</li> <li>• 4—SIP client verification.</li> </ul>
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.
Ipv4Address	Client address	Index	IPv4 address.
DSLitePeer	DS-Lite tunnel peer address	Index	IPv6 address.
TTL	Time to live	N/A	Unsigned integer, unit second.

# ATK/ClientVerify/IPv6TrustClients

This table contains information of trust IPv6 clients verified by ClientVerify module.

## XML structure

```
<ATK>
  <ClientVerify>
    <IPv6TrustClients>
      <Client>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <VerifyType></VerifyType>
        <VrfIndex></VrfIndex>
        <Ipv6Address></Ipv6Address>
        <TTL></TTL>
      </Client>
    </IPv6TrustClients>
  </ClientVerify>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	IPv6TrustClients
Table type	Multi-instance table
Row name	Client
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the client resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the client	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
VerifyType	Verification type	Index	Enumeration: <ul style="list-style-type: none"><li>0—TCP proxy</li><li>1—DNS client</li></ul>

Column name	Column description	Column type	Data type and restrictions
			verification. <ul style="list-style-type: none"> <li>• 2—HTTP client verification.</li> <li>• 3—DNS reply verification.</li> <li>• 4—SIP client verification.</li> </ul>
VrfIndex	Vrf index	Index	Unsigned integer, 0 represents public vrf.
Ipv6Address	Client address	Index	IPv6 address.
TTL	Time to live	N/A	Unsigned integer, unit second.

## ATK/Specification

This table contains specification information of the current device.

### XML structure

```

<ATK>
  <Specification>
    <InterfaceApply></InterfaceApply>
    <LocalApply></LocalApply>
    <ClientVerify></ClientVerify>
  </Specification>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	Specification
Table type	Single-instance table
Row name	N/A
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions
InterfaceApply	Support apply a attack-defense policy to	N/A	Boolean: <ul style="list-style-type: none"> <li>• True</li> </ul>

Column name	Column description	Column type	Data type and restrictions
	interfaces		<ul style="list-style-type: none"> <li>false</li> </ul>
LocalApply	Support apply a attack-defense policy to local host	N/A	Boolean: <ul style="list-style-type: none"> <li>True</li> <li>false</li> </ul>
ClientVerify	Support client-verify feature.	N/A	Boolean: <ul style="list-style-type: none"> <li>True</li> <li>false</li> </ul>

## ATK/TopStatisticsSwitch

This table contains ATK top statistics switch configuration.

### XML structure

```

<ATK>
  <TopStatisticsSwitch>
    <Enable></Enable>
  </TopStatisticsSwitch>
</ATK>

```

### Table description

Item	Description
Feature name	ATK
Table name	TopStatisticsSwitch
Table type	Single-instance table
Row name	N/A

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether enable ATK top statistics function	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## ATK/TopStatisticsSampleTime

This table contains sample time for the top statistics in a period.



## XML structure

```
<ATK>
  <TopStatisticsSampleTime>
    <Item>
      <Type></Type>
      <Period></Period>
      <SampleTime></SampleTime>
    </Item>
  </TopStatisticsSampleTime>
</ATK>
```

## Table description

Item	Description
Feature name	Session
Table name	TopStatisticsSampleTime
Table type	Multi-instance table
Row name	Item
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Type of top statistics	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Top statistics by source address.</li><li>• <b>1</b>—Top statistics by destination address.</li></ul>	N/A
Period	Period of history session statistics	Index	Unsigned integer. Value range: 0 to 2. <ul style="list-style-type: none"><li>• <b>0</b>—1 hour.</li><li>• <b>1</b>—1 day.</li><li>• <b>2</b>—30 days.</li></ul>	N/A
SampleTime	Sample time in a period	N/A	String. Length: 1 to 32 characters.	Example: 2000-04-25 21:23:23.

## ATK/TopAttackStatisticsByIP

This table contains top statistics for attack.

## XML structure

```
<ATK>
  <TopAttackStatisticsByIP>
    <Statistics>
      <Type></Type>
      <Period></Period>
      <Sequence></Sequence>
      <Address>
        <IPv4Addr></IPv4Addr>
        <IPv6Addr></IPv6Addr>
      </Address>
      <VRF></VRF>
      <AttackType></AttackType>
      <AttackTimes></AttackTimes>
      <SampleCount></SampleCount>
    </Statistics>
  </TopAttackStatisticsByIP>
</ATK>
```

## Table description

Item	Description
Feature name	Session
Table name	TopAttackStatisticsByIP
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Type of top statistics	Index	Enumeration: <ul style="list-style-type: none"><li>0—Top statistics by source address.</li><li>1—Top statistics by destination address.</li></ul>	N/A
Period	Period of history attack statistics	Index	Enumeration: <ul style="list-style-type: none"><li>0—1 hour.</li><li>1—1 day.</li><li>2—30 days.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Sequence	Sequence number of top statistics	Index	Unsigned integer. Value range: 1 to 10.	N/A
Address	Source or destination network layer address	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4Addr.</li> <li>IPv6Addr.</li> </ul>	N/A
IPv4Addr	IPv4 address	N/A	IPv4 address.	Columns IPv4Addr and IPv6Addr are mutually exclusive.
IPv6Addr	IPv6 address	N/A	IPv6 address.	Columns IPv4Addr and IPv6Addr are mutually exclusive.
VRF	Name of the VRF instance associated with the SSL VPN gateway	N/A	String. Length: 0 to 31 characters.	If the gateway is on the public network, the length of characters is 0.
AttackType	AttackType	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
AttackTimes	Attack times	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
SampleCount	SampleCount	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

## ATK/TopAttackStatisticsByType

This table contains top statistics for attack.

### XML structure

```

<ATK>
  <TopAttackStatisticsByType>
    <Statistics>
      <Period></Period>
      <AttackType></AttackType>
      <AttackTimes></AttackTimes>
    </Statistics>
  </TopAttackStatisticsByType>
</ATK>

```

### Table description

Item	Description
Feature name	Session

Table name	TopAttackStatisticsByType
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Period	Period of history attack statistics	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—1 hour.</li> <li>• 1—1 day.</li> <li>• 2—30 days.</li> </ul>	N/A
AttackType	Attack type.	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0 ATK_TOPHIS_FLOOD_SYN</li> <li>• 1 ATK_TOPHIS_FLOOD_ACK</li> <li>• 2 ATK_TOPHIS_FLOOD_SYNACK</li> <li>• 3 ATK_TOPHIS_FLOOD_RST</li> <li>• 4 ATK_TOPHIS_FLOOD_FIN</li> <li>• 5 ATK_TOPHIS_FLOOD_UDP</li> <li>• 6 ATK_TOPHIS_FLOOD_ICMP</li> <li>• 7 ATK_TOPHIS_FLOOD_ICMPV6</li> <li>• 8 ATK_TOPHIS_FLOOD_DNS</li> <li>• 9 ATK_TOPHIS_FLOOD_HTTP</li> <li>• 10 ATK_TOPHIS_SCAN_PORT</li> <li>• 11 ATK_TOPHIS_SCAN_IP_SWEEP</li> <li>• 12 ATK_TOPHIS_SCAN_DIST</li> <li>• 13 ATK_TOPHIS_TCP_FRAGMENT</li> <li>• 14 ATK_TOPHIS_CLIENTVERIFY</li> <li>• 15 ATK_TOPHIS_BLACKLIST</li> <li>• 16 ATK_TOPHIS_BLACKLIST_USER</li> <li>• 17 ATK_TOPHIS_SIGL3</li> <li>• 18 ATK_TOPHIS_SIGL4</li> <li>• 19 AT</li> <li>• K_TOPHIS_SMURF</li> <li>• 20 ATK_TOPHIS_URPF</li> <li>• 21 ATK_TOPHIS_FLOOD_DNS_REPLY</li> <li>• 22 ATK_TOPHIS_FLOOD_SIP</li> </ul>	N/A
AttackTimes	Attack times	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## ATK/ScanAttackTypes

This table contains scan attack types information of the current device.

## XML structure

```
<ATK>
  <ScanAttackTypes>
    <AttackType>
      <Digest></Digest>
      <AttackTypeName></AttackTypeName>
    </AttackType>
  </ScanAttackTypes>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	ScanAttackTypes
Table type	Multi-instance table
Row name	AttackType
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Digest	Name of digest	Index	String. Length: 1 to 32 characters.
AttackTypeName	Name of attack type	N/A	String. Length: 1 to 32 characters.

## ATK/FloodAttackTypes

This table contains flood attack types information of the current device.

## XML structure

```
<ATK>
  <FloodAttackTypes>
    <AttackType>
      <Digest></Digest>
      <AttackTypeName></AttackTypeName>
    </AttackType>
  </FloodAttackTypes>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	FloodAttackTypes
Table type	Multi-instance table
Row name	AttackType
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Digest	Name of digest	Index	String. Length: 1 to 32 characters.
AttackTypeName	Name of attack type	N/A	String. Length: 1 to 32 characters.

## ATK/SignatureAttackTypes

This table contains signature attack types information of the current device.

## XML structure

```
<ATK>
  <SignatureAttackTypes>
    <AttackType>
      <Digest></Digest>
      <AttackTypeName></AttackTypeName>
    </AttackType>
  </SignatureAttackTypes>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	SignatureAttackTypes
Table type	Multi-instance table
Row name	AttackType
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Digest	Name of digest	Index	String. Length: 1 to 32 characters.
AttackTypeName	Name of attack type	N/A	String. Length: 1 to 32 characters.

## ATK/BlacklistTypes

This table contains blacklist types information of the current device.

## XML structure

```
<ATK>
  <BlacklistTypes>
    <Type>
      <Digest></Digest>
      <TypeName></TypeName>
    </Type>
  </BlacklistTypes>
</ATK>
```

## Table description

Item	Description
Feature name	ATK
Table name	BlacklistTypes
Table type	Multi-instance table
Row name	Type
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
Digest	Name of digest	Index	String. Length: 1 to 32 characters.
TypeName	Name of type	N/A	String. Length: 1 to 32 characters.





# Contents

ATK.....	2
ATK/IPv4Exempts.....	2
ATK/IPv6Exempts.....	2
ATK/Scan/Policies .....	2
ATK/Flood/DefaultConfigs.....	3
ATK/Flood/IPv4ProtectHosts .....	4
ATK/Flood/IPv6ProtectHosts .....	4
ATK/Signature/Detects.....	5
ATK/Blacklist/ZoneSwitches .....	5
ATK/Blacklist/IPv4Blacklists .....	6
ATK/Blacklist/IPv6Blacklists .....	6
ATK/Whitelist/ZoneSwitches.....	6
ATK/Whitelist/IPv4ObjItems .....	6
ATK/Whitelist/IPv6ObjItems .....	6
ATK/ClientVerify/IPv4ProtectHosts .....	7
ATK/ClientVerify/IPv6ProtectHosts .....	7
ATK/ClientVerify/Switches .....	7
ATK/ClientVerify/ZoneSwitches.....	8
ATK/TopStatisticsSwitch.....	8

# ATK

## ATK/IPv4Exempts

Message	Explanation
Please specify an ACL by either its number or its name. 不能同时设置ACL组名与ACL组号。	During executing create、merge or replace operation, ACL numer and ACL name are mutual exclusive and only one of them can be set in a single message. 当执行create、merge、release操作时，ACL 组号和ACL组名同一时刻只能设置其一。

## ATK/IPv6Exempts

Message	Explanation
Please specify an ACL by either its number or its name. 不能同时设置ACL组名与ACL组号。	During executing create、merge or replace operation, ACL numer and ACL name are mutual exclusive and only one of them can be set in a single message. 当执行create、merge和release操作时，ACL 组号和ACL组名同一时刻只能设置其一。

## ATK/Scan/Policies

Message	Explanation
Please specify the detection sensitivity before specifying defense actions. 未开启指定敏感度的扫描攻击防范时，不能设置行攻击防范处理行为。	During executing configuration operation(create、merge、replace、delete or remove), Please specify the detection sensitivity before specifying defense actions. 当执行配置操作（包括create、merge、release、delete和remove）时，未开启指定敏感度的扫描攻击防范时，不能设置行攻击防范处理行为。
Please specify at least one defense action. 请至少设置一个攻击防范处理行为。	During executing configuration operation(create、merge、replace、delete or remove),please specify at least one defense action. 当执行配置操作（包括create、merge、release、delete和remove）时，请至少设置一个攻击防范处理行为。
The drop and block-source actions cannot be both specified. 扫描攻击防范的执行动作不能同时设置为丢弃报文与阻塞攻击源地址。	During executing configuration operation(create、merge、replace、delete or remove),drop and BlockSource are mutual exclusive and only one of them can be set in a single message. 当执行配置操作（包括create、merge、release、delete和remove）时，扫描攻击防范的执行动作丢弃报文与阻塞攻击源地址同一时刻只能设置其一。
The blacklist aging time can only be set for the block-source action. 仅在扫描攻击防范的执行动作为阻塞源地址时才能设置黑名单的老化时间。	During executing configuration operation(create、merge、replace、delete or remove), the blacklist aging time can only be set for the block-source action. 当执行配置操作（包括create、merge、release、delete和remove）时，仅在扫描攻击防范的执行动作为阻塞源地址时才能设置黑名单

	的老化时间。
At least one of scan attack detect ways should be specified. 设置自定义级别扫描攻击防范时至少应指定端口检测和IP检测中的一种方式。	During executing configuration operation(create、merge、replace、delete or remove), at least one of scan attack detect ways should be specified. 当执行配置操作（包括create、merge、release、delete和remove）时，设置自定义级别扫描攻击防范时至少应指定端口检测和IP检测中的一种方式。
The port scan attack detect switch and the port scan attack detect threshold should all be set or neither be set. 设置自定义级别扫描攻击防范时端口扫描检测开关和端口扫描检测阈值应该同时设置或不设置。	During executing configuration operation(create、merge、replace、delete or remove), the port scan attack detect switch and the port scan attack detect threshold should all be set or neither be set. 当执行配置操作（包括create、merge、release、delete和remove）时，设置自定义级别扫描攻击防范时端口扫描检测开关和端口扫描检测阈值应该同时设置或不设置。
The IP scan attack detect switch and the IP attack detect threshold should all be set or neither be set. 设置自定义级别扫描攻击防范时IP扫描检测开关和IP扫描检测阈值应该同时设置或不设置。	During executing configuration operation(create、merge、replace、delete or remove), the IP scan attack detect switch and the IP attack detect threshold should all be set or neither be set. 当执行配置操作（包括create、merge、release、delete和remove）时，设置自定义级别扫描攻击防范时IP扫描检测开关和IP扫描检测阈值应该同时设置或不设置。
Ipsweep switch and portscan switch cannot be open when the detect level is UNDO. 级别为UNDO时，地址检测或端口检测开关不能为打开状态。	During executing configuration operation(create、merge、replace、delete or remove), IP sweep switch and port scan switch cannot be open when the detect level is UNDO. 当执行配置操作（包括create、merge、release、delete和remove）时，级别为UNDO时，地址检测或端口检测开关不能为打开状态。

## ATK/Flood/DefaultConfigs

Message	Explanation
The operation is not supported on the device. 设备不支持此操作。	During executing create、merge or replace operation, the client verification operation is must supported on the device. 当执行create、merge和release操作时，请确保设备支持客户端验证功能。
The flood attack type doesn't exist. 该泛洪攻击防范类型不存在。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, the flood attack type must exist. 当执行配置操作（包括create、merge、release、delete和remove）时，请确保相应的泛洪攻击防范类型必须存在。
Client verification is not an available defense action for this flood attack. 该类型的泛洪攻击防范的处理行为不能设置为客户端验证。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, client verification is not an available defense action for this flood attack. 当执行配置操作（包括create、merge、release、delete和remove）时，该类型的泛洪攻击防范的处理行为不能设置为客户端验证。
Only HTTP DNS DNS-REPLY and SIP flood attack defense supports port configuration. 仅HTTP泛洪攻击防范、DNS泛洪攻击防范、DNS-REPLY泛洪攻击防范和SIP泛洪攻击防范支持设置检测端口。	During executing configuration operation(create、merge、replace、delete or remove) or get operation,only HTTP DNS DNS-REPLY and SIP flood attack defense supports port configuration. 当执行配置操作（包括create、merge、release、delete和remove）时，仅HTTP泛洪攻击防范、DNS泛洪攻击防范、DNS-REPLY泛洪攻击防范和SIP泛洪攻击防范支持设置检测端口。
The number of detection ports exceeds the upper	During executing configuration operation(create、merge、replace、

limit. 检测端口数量超过上限。	delete or remove) or get operation,the number of detection ports must not exceeds the upper limit. 当执行配置操作（包括create、merge、release、delete和remove）时，请确保检测端口数量不能超过上限。
-----------------------	---

## ATK/Flood/IPv4ProtectHosts

Message	Explanation
The operation is not supported on the device. 设备不支持此操作。	During executing create、merge or replace operation, the client verification operation is must supported on the device. 当执行create、merge和release操作时，请确保设备支持客户端验证功能。
The flood attack type doesn't exist. 该泛洪攻击防范类型不存在。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, the flood attack type must exist. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，请确保相应的泛洪攻击防范类型必须存在。
Client verification is not an available defense action for this flood attack. 该类型的泛洪攻击防范的处理行为不能设置为客户端验证。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, client verification is not an available defense action for this flood attack. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，该类型的泛洪攻击防范的处理行为不能设置为客户端验证。
Only HTTP DNS DNS-REPLY and SIP flood attack defense supports port configuration. 仅HTTP泛洪攻击防范、DNS泛洪攻击防范、DNS-REPLY泛洪攻击防范和SIP范洪攻击防范支持设置检测端口。	During executing configuration operation(create、merge、replace、delete or remove) or get operation,only HTTP DNS DNS-REPLY and SIP flood attack defense supports port configuration. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，仅HTTP泛洪攻击防范、DNS泛洪攻击防范、DNS-REPLY泛洪攻击防范和SIP范洪攻击防范支持设置检测端口。
The number of detection ports exceeds the upper limit. 检测端口数量超过上限。	During executing configuration operation(create、merge、replace、delete or remove) or get operation,the number of detection ports must not exceeds the upper limit. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，请确保检测端口数量不能超过上限。
Invalid IP address. 指定的地址不合法。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, the IP address is must valid. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，指定的地址必须合法。

## ATK/Flood/IPv6ProtectHosts

Message	Explanation
The operation is not supported on the device. 设备不支持此操作。	During executing create、merge or replace operation, the client verification operation is must supported on the device. 当执行create、merge和release操作时，请确保设备支持客户端验证功能。

<p>The flood attack type doesn't exist.</p> <p>该泛洪攻击防范类型不存在。</p>	<p>During executing configuration operation(create、merge、replace、delete or remove) or get operation, the flood attack type must exist.</p> <p>当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，请确保相应的泛洪攻击防范类型必须存在。</p>
<p>Client verification is not an available defense action for this flood attack.</p> <p>该类型的泛洪攻击防范的处理行为不能设置为客户端验证。</p>	<p>During executing configuration operation(create、merge、replace、delete or remove) or get operation, client verification is not an available defense action for this flood attack.</p> <p>当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，该类型的泛洪攻击防范的处理行为不能设置为客户端验证。</p>
<p>Only HTTP DNS DNS-REPLY and SIP flood attack defense supports port configuration.</p> <p>仅HTTP泛洪攻击防范、DNS泛洪攻击防范、DNS-REPLY泛洪攻击防范和SIP泛洪攻击防范支持设置检测端口。</p>	<p>During executing configuration operation(create、merge、replace、delete or remove) or get operation,only HTTP DNS DNS-REPLY and SIP flood attack defense supports port configuration.</p> <p>当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，仅HTTP泛洪攻击防范、DNS泛洪攻击防范、DNS-REPLY泛洪攻击防范和SIP泛洪攻击防范支持设置检测端口。</p>
<p>The number of detection ports exceeds the upper limit.</p> <p>检测端口数量超过上限。</p>	<p>During executing configuration operation(create、merge、replace、delete or remove) or get operation,the number of detection ports must not exceeds the upper limit.</p> <p>当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，请确保检测端口数量不能超过上限。</p>
<p>Invalid IP address.</p> <p>指定的地址不合法。</p>	<p>During executing configuration operation(create、merge、replace、delete or remove) or get operation, the IP address is must valid.</p> <p>当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，指定的地址必须合法。</p>

## ATK/Signature/Detects

Message	Explanation
<p>The single-packet attack type doesn't exist.</p> <p>该单包攻击防范类型不存在。</p>	<p>During executing configuration operation(create、merge、replace、delete or remove) or get operation, the single-packet attack type must exist.</p> <p>当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，单包攻击防范类型必须存在。</p>

## ATK/Blacklist/ZoneSwitches

Message	Explanation
<p>The operation is not supported on Local zone.</p> <p>Local域上不支持该操作。</p>	<p>During executing configuration operation(create、merge、replace、delete or remove) or get operation, The operation is not supported on Local zone.</p> <p>当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，Local域上不支持该操作。</p>

## ATK/Blacklist/IPv4Blacklists

Message	Explanation
The VRF instance doesn't exist. 指定的VRF不存在。	During executing create、merge or replace operation, the specified VPN instance must exist. 当执行create、merge和release操作时，指定的VRF必须存在。

## ATK/Blacklist/IPv6Blacklists

Message	Explanation
The VRF instance doesn't exist. 指定的VRF不存在。	During executing create、merge or replace operation, the specified VPN instance must exist. 当执行create、merge和release操作时，指定的VRF必须存在。

## ATK/Whitelist/ZoneSwitches

Message	Explanation
The operation is not supported on Local zone. Local域上不支持该操作。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, The operation is not supported on Local zone. 当执行create、merge和release操作时，指定的VRF必须存在。

## ATK/Whitelist/IPv4ObjItems

Message	Explanation
The IP address object group doesn't exist. 该地址对象组不存在。	During executing configuration operation(create、merge、replace、delete or remove),the IP address object group must exist. 当执行配置操作（包括create、merge、release、delete和remove）时，指定的地址对象组必须存在。
The object group is not an IP address object group. 该对象组不是地址对象组。	During executing configuration operation(create、merge、replace、delete or remove),the object group is must an IP address object group. 当执行配置操作（包括create、merge、release、delete和remove）时，指定的对象组必须是地址对象组。

## ATK/Whitelist/IPv6ObjItems

Message	Explanation
The IP address object group doesn't exist. 该地址对象组不存在。	During executing configuration operation(create、merge、replace、delete or remove),the IP address object group must exist. 当执行配置操作（包括create、merge、release、delete和remove）

	时，指定的地址对象组必须存在。
The object group is not an IP address object group. 该对象组不是地址对象组。	During executing configuration operation(create、merge、replace、delete or remove),the object group is must an IP address object group. 当执行配置操作（包括create、merge、release、delete和remove）时，指定的对象组必须是地址对象组。

## ATK/ClientVerify/IPv4ProtectHosts

Message	Explanation
The VRF instance doesn't exist. 指定的VRF不存在。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, the specified VPN instance must exist. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，指定的VRF必须存在。
Invalid IP address. 指定的地址不合法。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, the IP address is must valid. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，指定的地址必须合法。

## ATK/ClientVerify/IPv6ProtectHosts

Message	Explanation
The VRF instance doesn't exist. 指定的VRF不存在。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, the specified VPN instance must exist. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，指定的VRF必须存在。
Invalid IP address. 指定的地址不合法。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, the IP address is must valid. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，指定的地址必须合法。

## ATK/ClientVerify/Switches

Message	Explanation
The verification mode is not supported. 该类型客户端验证不支持指定的工作模式。	During executing create、merge or replace operation,the verification mode is must supported. 当执行create、merge和release操作时，客户端验证需要支持指定的工作模式。

# ATK/ClientVerify/ZoneSwitches

Message	Explanation
The verification mode is not supported. 该类型客户端验证不支持指定的工作模式。	During executing create、merge or replace operation,the verification mode is must supported. 当执行create、merge和release操作时，客户端验证需要支持指定的工作模式。
The operation is not supported on Local zone. Local域上不支持该操作。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, The operation is not supported on Local zone. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，Local域上不支持该操作。

# ATK/TopStatisticsSwitch

Message	Explanation
The stop process is running. Please try it later. 关闭操作尚未执行完毕，请稍后重试。	During executing create、merge、replace or action operation, The close operation must been completed. 当执行create、merge、release及action操作时，需要等到关闭操作执行完毕。



# Contents

<b>AUDIT .....</b>	<b>1</b>
AUDIT/SignatureManualUpgrade .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AUDIT/SignatureAutoUpgradeNow .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
AUDIT/SignatureRollback .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
AUDIT/PolicyMove .....	3
XML structure .....	3
Table description .....	3
Columns .....	3

# AUDIT

## AUDIT/SignatureManualUpgrade

This table contains the information of AUDIT signatures manual upgrading.

### XML structure

```
<AUDIT>
  <SignatureManualUpgrade>
    <URL></URL>
    <Location></Location>
  </SignatureManualUpgrade>
</AUDIT>
```

### Table description

Item	Description
Feature name	AUDIT
Table name	SignatureManualUpgrade
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
URL	URL of the imported rule file	N/A	String: case-insensitive When the file is remote, Length: 1 to 255 characters. When the file is local, Length: 1 to 127 characters.	N/A
Location	The Location of the file	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—local.</li><li>• 1—remote.</li></ul>	N/A

## AUDIT/SignatureAutoUpgradeNow

This table contains the information of AUDIT signatures auto upgrading at once.

## XML structure

```
<AUDIT>
  <SignatureAutoUpgradeNow>
    <AutoUpgradeNow></AutoUpgradeNow>
  </SignatureAutoUpgradeNow>
</AUDIT>
```

## Table description

Item	Description
Feature name	AUDIT
Table name	SignatureAutoUpgradeNow
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoUpgradeNow	Auto upgrade at once	N/A	This column must be empty.	N/A

## AUDIT/SignatureRollback

This table contains the information of AUDIT signatures rollback.

## XML structure

```
<AUDIT>
  <SignatureRollback>
    <Rollback></Rollback>
  </SignatureRollback>
</AUDIT>
```

## Table description

Item	Description
Feature name	AUDIT
Table name	SignatureRollback
Table type	Single-instance table
Row name	None

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Rollback	rollback	N/A	Boolean: <ul style="list-style-type: none"> <li>true: rollback last version.</li> <li>false: rollback original version.</li> </ul>	N/A

## AUDIT/PolicyMove

This table contains information about the AUDIT's policy move.

## XML structure

```

<AUDIT>
  <PolicyMove>
    <Move>
      <SrcPolicyName></SrcPolicyName>
      <DesPolicyName></DesPolicyName>
      <MoveType></MoveType>
    </Move>
  </PolicyMove>
</AUDIT>

```

## Table description

Item	Description
Feature name	AUDIT
Table name	PolicyMove
Table type	Multi-instance table
Row name	Move
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcPolicyName	Source Policy Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
DesPolicyName	Destination	Index	String: case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
me	Policy Name		Length: 1 to 63 characters.	
MoveType	Moving type for the policy	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Move after a policy.</li> <li>• 1—Move before a policy.</li> </ul>	N/A

# Contents

AUDIT .....	1
AUDIT/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AUDIT/PolicyOptions .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
AUDIT/DefaultPolicyAction .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
AUDIT/ AppPolicyKeywordGroups .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
AUDIT/Keywords .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
AUDIT/PolicyRules .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
AUDIT/SignatureAutoUpgrading .....	7
XML structure .....	7
Table description .....	8
Columns .....	8

# AUDIT

## AUDIT/Policies

This table contains information about the AUDIT's policy.

### XML structure

```
<AUDIT>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <Disable></Disable>
      <TimeRangeName></TimeRangeName>
      <DefaultRuleAction></DefaultRuleAction>
      <PolicyType></PolicyType>
      <RuleMatchType></RuleMatchType>
    </Policy>
  </Policies>
</AUDIT>
```

### Table description

Item	Description
Feature name	AUDIT
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Disable	Set this value to true to disable the policy	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
TimeRangeName	Time Range Name	N/A	String: case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyType	Policy Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NoAudit.</li> <li>1—Audit.</li> <li>2—Deny.</li> </ul>	The policy type must be set when policy is created.
DefaultRuleAction	Default Rule Action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Permit.</li> <li>1—Deny.</li> </ul>	N/A
RuleMatchType	Rule Matching Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Order.</li> <li>1—Full.</li> </ul>	N/A

## AUDIT/PolicyOptions

This table contains some multiple option information about the AUDIT's policy.

### XML structure

```

<AUDIT>
  <PolicyOptions>
    <Option>
      <PolicyName></PolicyName>
      <OptionType></OptionType>
      <OptionValue></OptionValue>
    </Option>
  </PolicyOptions>
</AUDIT>

```

### Table description

Item	Description
Feature name	AUDIT
Table name	PolicyOptions
Table type	Multi-instance table
Row name	Option
Restrictions	None
Support for row creation and deletion	Yes

### Columns



Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy Name	Index	String: case-insensitive. Length: 1 to 63 characters.	Name can not be same with its siblings. It is Mandatory.
OptionType	Type of the option in the policy	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—SourceZones.</li> <li>• 2—DestZones.</li> <li>• 3—SourceIPv4AddressSets.</li> <li>• 4—SourceIPv6AddressSets.</li> <li>• 5—DestIPv4AddressSets.</li> <li>• 6—DestIPv6AddressSets.</li> <li>• 7—Users.</li> <li>• 8—User Groups.</li> <li>• 9—Applications.</li> <li>• 10—AppGroups.</li> <li>• 11—Service.</li> </ul>	N/A
OptionValue	Value of the special option type in the policy	Index	String: case-insensitive. Length: 1 to 63 characters (for OptionTypes 9 and 10). Length: 1 to 31 characters (for OptionTypes 1 through 6, and OptionType 11). Length: 1 to 480 characters (for OptionTypes 7 and 8).	Values of OptionTypes 7 and 8 are in Json format.

## AUDIT/DefaultPolicyAction

This table contains information about the AUDIT's default policy action.

### XML structure

```

<AUDIT>
  <DefaultPolicyAction>
    <DefaultAction>
      <Action></Action>
    </DefaultAction>
  </DefaultPolicyAction>
</AUDIT>

```

### Table description

Item	Description
Feature name	AUDIT
Table name	DefaultPolicyAction
Table type	Multi-instance table

Row name	DefaultAction
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Packet Action which not match any Audit's policy	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Permit.</li> <li>1—Deny.</li> </ul>	N/A

# AUDIT/ AppPolicyKeywordGroups

This table contains information about the AUDIT's keywordgroup.

## XML structure

```

<AUDIT>
  <AppPolicyKeywordGroups>
    <KeywordGroup>
      <KeywordGroupName></KeywordGroupName>
      <Description></Description>
      <RefCnt></RefCnt>
    </KeywordGroup>
  </AppPolicyKeywordGroups>
</AUDIT>

```

## Table description

Item	Description
Feature name	AUDIT
Table name	AppPolicyKeywordGroups
Table type	Multi-instance table
Row name	KeywordGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KeywordGroup pName	Keyword Group	Index	String: case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	Name		Length: 1 to 63 characters.	
Description	Description about keyword group	N/A	String: case-insensitive Length: 1 to 256 characters.	N/A
RefCnt	Refer count about keyword group	N/A	Unsigned integer: Value range: 0 to $2^{16} - 1$ .	N/A

## AUDIT/Keywords

This table contains information about the keywords of keywordgroup.

### XML structure

```

<AUDIT>
  <Keywords>
    <Keyword>
      <KeywordGroupName></KeywordGroupName>
      <Keyword></Keyword>
    </Keyword>
  </Keywords>
</AUDIT>

```

### Table description

Item	Description
Feature name	AUDIT
Table name	Keywords
Table type	Multi-instance table
Row name	Keyword
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KeywordGroup pName	Keyword Group Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Keyword	Keyword of matching the application behavior content	Index	String: case-sensitive. Length: 1 to 63 characters.	N/A

# AUDIT/PolicyRules

This table contains the information of a Audit Rule in specify policy.

## XML structure

```
<AUDIT>
  <PolicyRules>
    <Rule>
      <PolicyName></PolicyName>
      <RuleID></RuleID>
      <AppCategoryID></AppCategoryID>
      <AppID></AppID>
      <BehaviorID></BehaviorID>
      <BhContentID></BhContentID>
      <FilterType></FilterType>
      <MatchType></MatchType>
      <KeywordGroupName></KeywordGroupName>
      <Number></Number>
      <PktAction></PktAction>
      <AuditLogging></AuditLogging>
    </Rule>
  </PolicyRules>
</AUDIT>
```

## Table description

Item	Description
Feature name	Audit
Table name	PolicyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RuleID	Rule ID	Index	Unsigned integer: Value range: 1 to 64.	N/A
AppCategoryl	App Category	N/A	Unsigned integer:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
D	ID		Value range: 0 to $2^{32} - 1$ .	
AppID	Application layer protocol ID	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
BehaviorID	Application Behavior ID	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
BhContentID	Application behavior content ID	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
FilterType	Filter type the application behavior content	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Keyword Filter.</li> <li>1—Number Filter.</li> </ul>	N/A
KeywordGroup Name	Keyword Group Name	N/A	String: case-insensitive. Length: 1 to 63 characters.	Contain the keyword for matching application behavior content.
Number	Number	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	Number for matching the application behavior content.
MatchType	Match Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Equal.</li> <li>1—Greater.</li> <li>2—Less.</li> <li>3—Include.</li> <li>4—Greater or Equal.</li> <li>5—Less or Equal.</li> <li>6—Unequal.</li> <li>7—Exclude.</li> </ul>	N/A
PktAction	Packet Action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Permit.</li> <li>1—Deny.</li> </ul>	N/A
AuditLogging	Whether or not send the Audit Logging	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Don't Send Audit log.</li> <li>1—Send Audit log.</li> </ul>	N/A

## AUDIT/SignatureAutoUpgrading

This table contains the information of AUDIT signatures auto upgrading.

### XML structure

```

<AUDIT>
  <SignatureAutoUpgrading>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrading>

```

</AUDIT>

## Table description

Item	Description
Feature name	AUDIT
Table name	SignatureAutoUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Enabled or disabled	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A
StartTime	The time that the system auto upgrading	N/A	Date Time. Format: HH:MM:SS	N/A
Type	Type of the system auto upgrading	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Week.</li><li>• 1—periodic.</li></ul>	N/A
Day	Days	N/A	Unsigned integer: Value range: 0-6.	When Type is 0, the value range is 0 to 6. Otherwise, the value is invalid.

# Contents

AUDIT .....	1
AUDIT/ Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AUDIT/PolicyOptions .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
AUDIT/DefaultPolicyAction .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
AUDIT/AppPolicyKeywordGroups .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
AUDIT/Keywords .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
AUDIT/PolicyRules .....	5
XML structure .....	6
Table description .....	6
Columns .....	6
AUDIT/AppBehaviors .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
AUDIT/AppBehaviorContents .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
AUDIT/AppBhContentsFilterType .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
AUDIT/AppCategories .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
AUDIT/AppCategoryMembers .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
AUDIT/Behaviors .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
AUDIT/BehaviorContents .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
AUDIT/SignatureAutoUpgrading .....	13
XML structure .....	14
Table description .....	14
Columns .....	14

AUDIT/SignatureFileInfos .....	14
XML structure .....	15
Table description .....	15
Columns .....	15
AUDIT/UpdatePercentage .....	15
XML structure .....	16
Table description .....	16
Columns .....	16
AUDIT/KeywordGroupReferences .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
AUDIT/AUDITSpecification .....	17
XML structure .....	17
Table description .....	17
Columns .....	18



# AUDIT

## AUDIT/ Policies

This table contains information about the AUDIT's policy.

### XML structure

```
<AUDIT>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <Disable></Disable>
      <TimeRangeName></TimeRangeName>
      <DefaultRuleAction></DefaultRuleAction>
      <PolicyType></PolicyType>
      <RuleMatchType></RuleMatchType>
    </Policy>
  </Policies>
</AUDIT>
```

### Table description

Item	Description
Feature name	AUDIT
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Disable	Set this value to true to disable the policy	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
TimeRangeName	Time Range Name	N/A	String: case-insensitive. Length: 1 to 63 characters.	N/A
PolicyType	Policy Type	N/A	Enumeration: <ul style="list-style-type: none"><li>0—NoAudit.</li></ul>	The policy type must be set when policy is

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Audit.</li> <li>2—Deny.</li> </ul>	created.
DefaultRuleAction	Default Rule Action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Permit.</li> <li>1—Deny.</li> </ul>	N/A
RuleMatchType	Rule Matching Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Order.</li> <li>1—Full.</li> </ul>	N/A

## AUDIT/PolicyOptions

This table contains some multiple information about the AUDIT's policy.

### XML structure

```

<AUDIT>
  <PolicyOptions>
    <Option>
      <PolicyName></PolicyName>
      <OptionType></OptionType>
      <OptionValue></OptionValue>
    </Option>
  </PolicyOptions>
</AUDIT>

```

### Table description

Item	Description
Feature name	AUDIT
Table name	PolicyOptions
Table type	Multi-instance table
Row name	Option
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy Name	Index	String: case-insensitive. Length: 1 to 63 characters.	Name can not be same with its siblings. It is Mandatory

Column name	Column description	Column type	Data type and restrictions	Remarks
OptionType	Type of the option in the policy	Index	Enumeration: <ul style="list-style-type: none"> <li>1—SourceZones.</li> <li>2—DestZones.</li> <li>3—SourceIPv4AddressSets.</li> <li>4—SourceIPv6AddressSets.</li> <li>5—DestIPv4AddressSets.</li> <li>6—DestIPv6AddressSets.</li> <li>7—Users.</li> <li>8—User Groups.</li> <li>9—Applications.</li> <li>10—AppGroups.</li> <li>11—Service.</li> </ul>	N/A
OptionValue	Value of the special option type in the policy	Index	String: case-insensitive. Length: 1 to 63 characters (for OptionTypes 9 and 10). Length: 1 to 31 characters (for OptionTypes 1 through 6, and OptionType 11). Length: 1 to 480 characters (for OptionTypes 7 and 8).	Values of OptionTypes 7 and 8 are in Json format.

## AUDIT/DefaultPolicyAction

This table contains information about the AUDIT's default policy action.

### XML structure

```

<AUDIT>
  <DefaultPolicyAction>
    <DefaultAction>
      <Action></Action>
    </DefaultAction>
  </DefaultPolicyAction>
</AUDIT>

```

### Table description

Item	Description
Feature name	AUDIT
Table name	DefaultPolicyAction
Table type	Multi-instance table
Row name	DefaultAction
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Packet Action which not match any Audit's policy	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Permit.</li><li>1—Deny.</li></ul>	N/A

## AUDIT/AppPolicyKeywordGroups

This table contains information about the AUDIT's keywordgroup.

## XML structure

```
<AUDIT>
  <AppPolicyKeywordGroups>
    <KeywordGroup>
      <KeywordGroupName></KeywordGroupName>
      <Description></Description>
      <RefCnt></RefCnt>
    </KeywordGroup>
  </AppPolicyKeywordGroups>
</AUDIT>
```

## Table description

Item	Description
Feature name	AUDIT
Table name	AppPolicyKeywordGroups
Table type	Multi-instance table
Row name	KeywordGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KeywordGroup pName	Keyword Group Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description about keyword group	N/A	String: case-insensitive. Length: 1 to 256 characters.	N/A
RefCnt	Refer count about keyword	N/A	Unsigned integer: Value range: 0 to $2^{16} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	group			

## AUDIT/Keywords

This table contains information about the keywords of keywordgroup.

### XML structure

```

<AUDIT>
  <Keywords>
    <Keyword>
      <KeywordGroupName></KeywordGroupName>
      <Keyword></Keyword>
    </Keyword>
  </Keywords>
</AUDIT>

```

### Table description

Item	Description
Feature name	AUDIT
Table name	Keywords
Table type	Multi-instance table
Row name	Keyword
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KeywordGroup pName	Keyword Group Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Keyword	Keyword of matching the application behavior content	Index	String: case-sensitive. Length: 1 to 63 characters.	N/A

## AUDIT/PolicyRules

This table contains the information of a Audit Rule in specify policy.

## XML structure

```
<AUDIT>
  <PolicyRules>
    <Rule>
      <PolicyName></PolicyName>
      <RuleID></RuleID>
      <AppCategoryID></AppCategoryID>
      <AppID></AppID>
      <BehaviorID></BehaviorID>
      <BhContentID></BhContentID>
      <FilterType></FilterType>
      <MatchType></MatchType>
      <KeywordGroupName></KeywordGroupName>
      <Number></Number>
      <PktAction></PktAction>
      <AuditLogging></AuditLogging>
    </Rule>
  </PolicyRules>
</AUDIT>
```

## Table description

Item	Description
Feature name	Audit
Table name	PolicyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RuleID	Rule ID	Index	Unsigned integer: Value range: 1 to 64.	N/A
AppCategoryID	App Category ID	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
AppID	Application layer protocol ID	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
BehaviorID	Application Behavior ID	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
BhContentID	Application behavior content ID	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
FilterType	Filter type the application behavior content	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Keyword Filter.</li> <li>1—Number Filter.</li> </ul>	N/A
KeywordGroup Name	Keyword Group Name	N/A	String: case-insensitive. Length: 1 to 63 characters.	Contain the keyword for matching application behavior content.
Number	Number	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	Number for matching the application behavior content.
MatchType	Match Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Equal.</li> <li>1—Greater.</li> <li>2—Less.</li> <li>3—Include.</li> <li>4—Greater or Equal.</li> <li>5—Less or Equal.</li> <li>6—Unequal.</li> <li>7—Exclude.</li> </ul>	N/A
PktAction	Packet Action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Permit.</li> <li>1—Deny.</li> </ul>	N/A
AuditLogging	Whether or not send the Audit Logging	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Don't Send Audit log.</li> <li>1—Send Audit log.</li> </ul>	N/A

## AUDIT/AppBehaviors

This table contains the behavior of the application or application category.

### XML structure

```

<AUDIT>
  <AppBehaviors>
    <AppBehavior>
      <AppCategoryID></AppCategoryID>
      <AppID></AppID>
      <BehaviorIDs>
        <BehaviorID></BehaviorID>
      </BehaviorIDs>
    </AppBehavior>
  </AppBehaviors>
</AUDIT>

```

## Table description

Item	Description
Feature name	Audit
Table name	AppBehaviors
Table type	Multi-instance table
Row name	AppBehavior
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppCategoryID	App Category ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
AppID	Application layer protocol ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
BehaviorIDs	Behavior ID list	Data structure	Members include: <ul style="list-style-type: none"><li>BehaviorID.</li></ul>	N/A
BehaviorID	Behavior ID	N/A	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	Contains Multiple BehaviorID in the application or application category.

## AUDIT/AppBehaviorContents

This table contains the behavior Content of the application or application category.

## XML structure

```
<AUDIT>
  <AppBehaviorContents>
    <BhContent>
      <AppCategoryID></AppCategoryID>
      <AppID></AppID>
      <BehaviorID></BehaviorID>
      <BhContentIDs>
        <BhContentID></BhContentID>
      </BhContentIDs>
    </BhContent>
  </AppBehaviorContents>
</AUDIT>
```



## Table description

Item	Description
Feature name	Audit
Table name	AppBehaviorContents
Table type	Multi-instance table
Row name	BhContent
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppCategoryID	App Category ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
AppID	Application layer protocol ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
BehaviorID	Behavior ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
BhContentIDs	Behavior content ID list	Data structure	Members include: <ul style="list-style-type: none"><li>BhContentID.</li></ul>	N/A
BhContentID	Behavior content ID	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	Contains Multiple BhContentID in the application or application category.

## AUDIT/AppBhContentsFilterType

This table contains the behavior content filter type of the application or application category.

## XML structure

```
<AUDIT>
  <AppBhContentFilterType>
    <BhContentFilterType>
      <AppCategoryID></AppCategoryID>
      <AppID></AppID>
      <BehaviorID></BehaviorID>
      <BhContentID></BhContentID>
      <FilterType></FilterType>
    </BhContentFilterType>
  </AppBhContentFilterType>
</AUDIT>
```

## Table description

Item	Description
Feature name	Audit
Table name	AppBhContentFilterType
Table type	Multi-instance table
Row name	BhContentFilterType
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppCategoryID	App Category ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
AppID	Application layer protocol ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
BehaviorID	Behavior ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
BhContentID	Behavior content ID	Index	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
FilterType	Filter type the application behavior content	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Keyword Filter.</li><li>1—Number Filter.</li></ul>	N/A

## AUDIT/AppCategories

This table contains informations about the Audit's application categories.

## XML structure

```
<AUDIT>
  <AppCategories>
    <AppCategory>
      <AppCategoryID></AppCategoryID>
      <AppCategoryName></AppCategoryName>
    </AppCategory>
  </AppCategories>
</AUDIT>
```

## Table description

Item	Description
Feature name	Audit
Table name	AppCategories
Table type	Multi-instance table
Row name	AppCategory
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppCategoryID	App Category ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
AppCategory Name	App Category Name	N/A	String: case-insensitive. Length: 1 to 63 characters.	N/A

## AUDIT/AppCategoryMembers

This table contains the Audit's application protocols included in an application category.

## XML structure

```
<AUDIT>
  <AppCategoryMembers>
    <AppCategoryMember>
      <AppCategoryID></AppCategoryID>
      <AppID></AppID>
      <AppName></AppName>
    </AppCategoryMember>
  </AppCategoryMembers>
</AUDIT>
```

## Table description

Item	Description
Feature name	Audit
Table name	AppCategoryMembers
Table type	Multi-instance table
Row name	AppCategoryMember

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppCategoryID	App Category ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
AppID	Application layer protocol ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
AppName	Application layer protocol name	N/A	String: case-insensitive. Length: 1 to 63 characters.	N/A

## AUDIT/Behaviors

This table contains informations about the Audit's application behaviors

## XML structure

```

<AUDIT>
  <Behaviors>
    <Behavior>
      <BehaviorID></BehaviorID>
      <BehaviorName></BehaviorName>
    </Behavior>
  </Behaviors>
</AUDIT>

```

## Table description

Item	Description
Feature name	Audit
Table name	Behaviors
Table type	Multi-instance table
Row name	Behavior
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorID	App Behavior ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	App Behavior Name	N/A	String: case-insensitive. Length: 1 to 63 characters.	N/A

## AUDIT/BehaviorContents

This table contains informations about the Audit's application behavior contents.

### XML structure

```

<AUDIT>
  <BehaviorContents>
    <BehaviorContent>
      <BhContentID></BhContentID>
      <BhContentName></BhContentName>
    </BehaviorContent>
  </BehaviorContents>
</AUDIT>

```

### Table description

Item	Description
Feature name	Audit
Table name	BehaviorContents
Table type	Multi-instance table
Row name	BehaviorContent
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BhContentID	App Behavior Content ID	Index	Unsigned integer: Value range: 0 to $2^{32} - 1$ .	N/A
BhContentName	App Behavior Content Name	N/A	String, case-insensitive: Length: 1 to 63 characters.	N/A

## AUDIT/SignatureAutoUpgrading

This table contains the information of AUDIT signatures auto upgrading.

## XML structure

```
<AUDIT>
  <SignatureAutoUpgrading>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrading>
</AUDIT>
```

## Table description

Item	Description
Feature name	AUDIT
Table name	SignatureAutoUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Enabled or disabled	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
StartTime	The time that the system auto upgrading	N/A	Date Time. Format: HH:MM:SS.	N/A
Type	Type of the system auto upgrading	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Week.</li><li>1—periodic.</li></ul>	N/A
Day	Days	N/A	Unsigned integer: Value range: 0-6.	When Type is 0, the value range is 0 to 6. Otherwise, the value is invalid.

## AUDIT/SignatureFileInfos

This table contains the signature file information.

## XML structure

```
<AUDIT>
  <SignatureFileInfos>
    <FileInfo>
      <FileStatus></FileStatus>
      <Version></Version>
      <PublishedTime></PublishedTime>
      <Description></Description>
    </FileInfo>
  </SignatureFileInfos>
</AUDIT>
```

## Table description

Item	Description
Feature name	AUDIT
Table name	SignatureFileInfos
Table type	MultiSingle-instance table
Row name	FileInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileStatus	signature file Status	Index	Enumeration: <ul style="list-style-type: none"><li>1—current.</li><li>2—last.</li><li>3—factory.</li></ul>	N/A
Version	Version of the signature file	N/A	String: case-insensitive. Length: 1 to 31 characters.	v.v(2.1)
PublishedTime	The time when the signature is published	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	Consider time-zone.
Description	DescriptionInformation	N/A	String: case-insensitive Length: 1 to 255 characters.	N/A

## AUDIT/UpdatePercentage

This table contains the percentage of update.

## XML structure

```
<AUDIT>
  <UpdatePercentage>
    <Percentage></Percentage>
  </UpdatePercentage>
</AUDIT>
```

## Table description

Item	Description
Feature name	AUDIT
Table name	UpdatePercentage
Table Type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Percentage	the percentage of update.	N/A	Unsigned integer:	When the value range is 0 to 100,it means in upgrading, Otherwise, means error.

## AUDIT/KeywordGroupReferences

This table contains the information about the relationship between AUDIT's policys and keywordgroups.

## XML structure

```
<AUDIT>
  <KeywordGroupReferences>
    <KeywordGroupReference>
      <KeywordGroupName></KeywordGroupName>
      <PolicyName></PolicyName>
      <RuleID></RuleID>
    </KeywordGroupReference>
  </KeywordGroupReferences>
</AUDIT>
```



## Table description

Item	Description
Feature name	AUDIT
Table name	KeywordGroupReferences
Table type	Multi-instance table
Row name	KeywordGroupReference
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KeywordGroupPName	Keyword Group Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
PolicyName	Policy Name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RuleID	Rule ID	Index	Unsigned integer: Value range: 1 to 64.	N/A

## AUDIT/AUDITSpecification

This table contains the AUDIT specification information.

## XML structure

```
<AUDIT>
  <AUDITSpecification>
    <SupportDomain></SupportDomain>
  </AUDITSpecification>
</AUDIT>
```

## Table description

Item	Description
Feature name	AUDIT
Table name	AUDITSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportDomain	Whether the function of AUDIT domain is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A

# Contents

- AUDIT .....2
  - AUDIT/Policies .....2
  - AUDIT/AppPolicyKeywordGroups.....2
  - AUDIT/Keywords .....2

# AUDIT

## AUDIT/Policies

Message	Explanation
Maximum number of policy already reached. 策略数量达到上限。	The maximum number of policies cannot be exceeded. 当配置策略时，策略数量不能超过上限。

## AUDIT/AppPolicyKeywordGroups

Message	Explanation
The keyword group name cannot be a, an, or any. 关键字组名称不能是a, an, any。	The name of a keyword group cannot be a, an, or any. 当配置关键字组时，关键字组名不能是 a, an, any。
The keyword group is being used by a rule and cannot be deleted. 关键字组正在被某个规则引用，不能被删除。	A keyword group cannot be deleted when it is being used by a rule. 当删除关键字组时，这个关键字组正在被某个规则引用，不能被删除。
Maximum number of keyword groups already reached. 关键字组数量达到上限。	The maximum number of keyword groups cannot be exceeded. 当配置关键字组时，关键字组数量不能超过上限。
The keyword group already exists. 关键字组已经存在。	The keyword group already exists. 当配置关键字时，关键字组不能相同。

## AUDIT/Keywords

Message	Explanation
Maximum number of keywords already reached. 关键字数量达到上限。	The maximum number of keywords cannot be exceeded. 当配置关键字时，关键字数量不能超过上限。

# Contents

- AVC .....1
  - AVC/MoveTrafficPolicyRule .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# AVC

## AVC/MoveTrafficPolicyRule

This table contains information about the AVC's rule number information.

### XML structure

```
<AVC>
  <MoveTrafficPolicyRule>
    <Move>
      <RuleNumber></RuleNumber>
      <NextRuleNumber></NextRuleNumber>
    </Move>
  </MoveTrafficPolicyRule>
</AVC>
```

### Table description

Item	Description
Feature name	AVC
Table name	MoveTrafficPolicyRule
Table type	Multi-instance table
Row name	Move
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: 1 to 4294967295	Rule number is the match order.
NextRuleNumber	Next rule's rule number	N/A	Unsigned integer: 0 to 4294967295	Single value

# Contents

AVC .....	1
AVC/TrafficPolicyRules .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AVC/RuleOptions .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
AVC/TrafficPolicyProfiles .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
AVC/ RuleJsonOptions .....	6
XML structure .....	6
Table description .....	7
Columns .....	7

# AVC

## AVC/TrafficPolicyRules

This table contains information about the AVC's rule information.

### XML structure

```
<AVC>
  <TrafficPolicyRules>
    <Rule>
      <RuleNumber></RuleNumber>
      <ParentRuleNumber></ParentRuleNumber>
      <RuleName></RuleName>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <Action>
        <ProfileName></ProfileName>
      </Action>
      <ModelId></ModelId>
    </Rule>
  </TrafficPolicyRules>
</AVC>
```

### Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
ParentRuleNumber	Parent Rule's rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	Optional



Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Name cannot be same with its siblings. Mandatory
Enable	Set this value to true to disable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Optional
TimeRange	Time Range Name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Optional, Single value
ProfileName	TrafficPolify profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Optional
ModelId	Model rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	Optional

## AVC/RuleOptions

This table contains some multiple information about the AVC's rule option.

### XML structure

```

<AVC>
  <RuleOptions>
    <Option>
      <RuleNumber></RuleNumber>
      <OptionType></OptionType>
      <OptionVal></OptionVal>
    </Option>
  </RuleOptions>
</AVC>

```

### Table description

Item	Description
Feature name	AVC
Table name	RuleOptions
Table type	Multi-instance table
Row name	Option
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
OptionType	Type of the configuration	Index	Enumeration: <ul style="list-style-type: none"> <li>1—SourceZones.</li> <li>2—DestZones.</li> <li>3—SourceAddressSets.</li> <li>4—DestAddressSets.</li> <li>5—Users.</li> <li>6—UserGroups.</li> <li>7—Applications.</li> <li>8—AppGroups.</li> <li>9—Services.</li> <li>10—Dscp.</li> </ul>	N/A
OptionVal	Value of the special type configuration	Index	String, case-insensitive. Length: 1 to 63 characters (for OptionTypes 7 and 8). Length: 1 to 31 characters ( for OptionTypes 1 through 4, and OptionType 9). Length: 1 to 100 characters (for OptionType 10). Length: 1 to 480 characters (for OptionTypes 5 and 6).	Values of OptionTypes 5 and 6 are in Json format.

## AVC/TrafficPolicyProfiles

This table contains information about the AVC traffic policy's Control profiles.

### XML structure

```

<AVC>
  <TrafficPolicyProfiles>
    <Profile>
      <ProfileNumber></ProfileNumber>
      <ProfileName></ProfileName>
      <ReferenceMode></ReferenceMode>
      <IpAverageEnable></IpAverageEnable>
      <TotalMaxKbps></TotalMaxKbps>
      <TotalGuaranteedKbps></TotalGuaranteedKbps>
      <TotalGuaranteedKbpsPerIP></TotalGuaranteedKbpsPerIP>
      <TotalGuaranteedKbpsPerUser></TotalGuaranteedKbpsPerUser>
      <TotalMaxKbpsPerIP></TotalMaxKbpsPerIP>
      <TotalMaxKbpsPerUser></TotalMaxKbpsPerUser>
      <DnGuaranteedKbpsPerIP></DnGuaranteedKbpsPerIP>
    </Profile>
  </TrafficPolicyProfiles>
</AVC>

```

```

<UpGuaranteedKbpsPerIP></UpGuaranteedKbpsPerIP>
<DnGuaranteedKbpsPerUser></DnGuaranteedKbpsPerUser>
<UpGuaranteedKbpsPerUser></UpGuaranteedKbpsPerUser>
<DnMaxKbps></DnMaxKbps>
<UpMaxKbps></UpMaxKbps>
<DnGuaranteedKbps></DnGuaranteedKbps>
<UpGuaranteedKbps></UpGuaranteedKbps>
<DnMaxKbpsPerIP></DnMaxKbpsPerIP>
<UpMaxKbpsPerIP></UpMaxKbpsPerIP>
<DnMaxKbpsPerUser></DnMaxKbpsPerUser>
<UpMaxKbpsPerUser></UpMaxKbpsPerUser>
<Priority></Priority>
<RemarkDSCP></RemarkDSCP>
<MaxConnNum></MaxConnNum>
<MaxConnNumPerIP></MaxConnNumPerIP>
<MaxConnNumPerUser></MaxConnNumPerUser>
<MaxConnRate></MaxConnRate>
<MaxConnRatePerIP></MaxConnRatePerIP>
<MaxConnRatePerUser></MaxConnRatePerUser>
</Profile>
</TrafficPolicyProfiles>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyProfiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileNumber	Profile number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule option is the match order.
ProfileName	Profile Name, cannot be same with other profiles	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ReferenceMode	Rule shared mode	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>0—per-rule.</li> <li>1—rule-shared.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IpAverageEnable	Ip average enable	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TotalMaxKbps	Total max kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbps	Total guaranteed kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerIP	Total guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerUser	Total guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalMaxKbpsPerIP	Total max kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalMaxKbpsPerUser	Total max kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbpsPerIP	Down guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbpsPerIP	Up guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbpsPerUser	Down guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbpsPerUser	Up guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbps	Downstream Guaranteed bandwidth	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
UpGuaranteedKbps	Upstream guaranteed Kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
DnMaxKbps	Downstream Max Kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
UpMaxKbps	Upstream Max Kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
DnMaxKbpsPerIP	Downstream Max Kbps per iP	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
UpMaxKbpsPerIP	Upstream Max Kbps Per IP	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional. Per-IP and Per-User are exclusive.
DnMaxKbpsPerUser	Downstream Max Kbps per User	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional

Column name	Column description	Column type	Data type and restrictions	Remarks
UpMaxKbpsPerUser	Upstream Max Kbps PerUser	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
Priority	Stream Priority level	N/A	Unsigned integer: Value range: 1 to 7.	When the outbound bandwidth is limited, the priority of the stream is higher, the stream is prior to pass the interface.
RemarkDSCP	Dscp value	N/A	Unsigned integer: Value range: 0 to 63.	Optional
MaxConnNum	Max up connections	N/A	Unsigned integer: Value range: 1 to 12,000,000.	Optional
MaxConnNumPerIP	Max up connections per IP	N/A	Unsigned integer: Value range: 1 to 12,000,000.	Optional Per-IP and Per-User are exclusive.
MaxConnNumPerUser	Max up connections per User	N/A	Unsigned integer: Value range: 1 to 12,000,000.	Optional
MaxConnRate	Max up connections rate	N/A	Unsigned integer: Value range: 1 to 12,000,000 times per second.	Optional
MaxConnRatePerIP	Max up connections rate per IP	N/A	Unsigned integer: Value range: 1 to 12,000,000 times per second.	Optional Per-IP and Per-User are exclusive.
MaxConnRatePerUser	Max up connections rate per user	N/A	Unsigned integer: Value range: 1 to 12,000,000 times per second.	Optional

## AVC/ RuleJsonOptions

This table contains information about the AVC's rule options information.

### XML structure

```

<AVC>
  <RuleJsonOptions>
    </OptionJson>
    <RuleJsonNumber></RuleJsonNumber>
    <OptionJsonType></OptionJsonType>
    <OptionJsonVal></OptionJsonVal>
  </OptionJson>
</RuleJsonOptions>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	RuleJsonOptions
Table type	Multi-instance table
Row name	OptionJson
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleJsonNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
OptionJsonType	Type of the configuration	Index	Enumeration: <ul style="list-style-type: none"> <li>1—SourceZones.</li> <li>2—DestZones.</li> <li>3—SourceAddressSets.</li> <li>4—DestAddressSets.</li> <li>5—Users.</li> <li>6—UserGroups.</li> <li>7—Applications.</li> <li>8—AppGroups.</li> <li>9—Services.</li> <li>10—Dscp.</li> </ul>	N/A
OptionJsonVal	Json values of the special type configurations	Index	String, case-insensitive. Length: 1 to 65535 characters.	N/A

# Contents

AVC .....	1
AVC/TrafficParentRules .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AVC/TrafficPolicyChildRules .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
AVC/AvcRuleOptions .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
AVC/TrafficPolicyQuery .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
AVC/TrafficQueParentRule .....	7
XML structure .....	8
Table description .....	8
Columns .....	8
AVC/TrafficPolicyRules .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
AVC/RuleOptions .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
AVC/TrafficPolicyProfiles .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
AVC/AVCSpecification .....	14
XML structure .....	14
Table description .....	15
Columns .....	15

# AVC

## AVC/TrafficParentRules

This table contains information about parent traffic rules.

### XML structure

```
<AVC>
  <TrafficParentRules>
    <Rule>
      <Position></Position>
      <RuleNumber></RuleNumber>
      <RuleName></RuleName>
      <OptionContent></OptionContent>
      <TotalCount></TotalCount>
      <FirstSonRuleNum></FirstSonRuleNum>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <ProfileName></ProfileName>
    </Rule>
  </TrafficParentRules>
</AVC>
```

### Table description

Item	Description
Feature name	AVC
Table name	TrafficParentRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Position	Record the Number	Index	Unsigned integer: Value range: 0 to 200.	N/A
RuleNumber	Rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 65535 characters. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.
TotalCount	Total number of rules	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
FirstSonRuleNum	Return the number of the first child rule	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
Enable	Set this value to true to enable the rule	N/A	Boolean: • true. • false.	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## AVC/TrafficPolicyChildRules

This table contains information about child traffic rules.

### XML structure

```

<AVC>
  <TrafficPolicyChildRules>
    <Rule>
      <RuleNumber></RuleNumber>
      <ParentRuleNumber></ParentRuleNumber>
      <RuleName></RuleName>
      <FirstSonRuleNum></FirstSonRuleNum>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <ProfileName></ProfileName>
      <OptionContent></OptionContent>
    </Rule>
  </TrafficPolicyChildRules>

```

</AVC>

## Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyChildRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
ParentRuleNumber	Number of the parent rule	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
FirstSonRuleNum	Return the number of the first child rule	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 10240. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.

# AVC/AvcRuleOptions

This table contains match criterion types.

## XML structure

```
<AVC>
  <AvcRuleOptions>
    <AvcOption>
      <AvcRuleNumber></AvcRuleNumber>
      <AvcSeqNum></AvcSeqNum>
      <AvcOptionType></AvcOptionType>
      <AvcOptionVal></AvcOptionVal>
    </AvcOption>
  </AvcRuleOptions>
</AVC>
```

## Table description

Item	Description
Feature name	AVC
Table name	AvcRuleOptions
Table type	Multi-instance table
Row name	AvcOption
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AvcRuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
AvcSeqNum	Sequence numbers for values of a match criterion	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
AvcOptionType	Match criterion type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—SourceZones.</li><li>• 2—DestZones.</li><li>• 3—SourceAddressSets.</li><li>• 4—DestAddressSets.</li><li>• 5—Users.</li><li>• 6—UserGroups.</li><li>• 7—Applications.</li><li>• 8—AppGroups.</li><li>• 9—Services.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>10—Dscp.</li> </ul>	
AvcOptionVal	Match criterion value	N/A	String, case-insensitive. Length: 1 to 65535 characters. Content: JSON array. Such as: [Optionval1,optionval2,...].	A JSON array contains strings of 1 to 64 characters.

## AVC/TrafficPolicyQuery

This table contains information about each match criterion type.

### XML structure

```

<AVC>
  <TrafficPolicyQuery>
    <RuleQuery>
      <UserID></UserID>
      <Position></Position>
      <RuleNameFilter></RuleNameFilter>
      <EnableFilter></EnableFilter>
      <ProfileNameFilter></ProfileNameFilter>
      <TimeRangeFilter></TimeRangeFilter>
      <SrcZoneFilter></SrcZoneFilter>
      <DestZoneFilter></DestZoneFilter>
      <SrcAddrSetFilter></SrcAddrSetFilter>
      <DestAddrSetFilter></DestAddrSetFilter>
      <UserFilter></UserFilter>
      <UserGroupFilter></UserGroupFilter>
      <ApplicationFilter></ApplicationFilter>
      <AppGroupFilter></AppGroupFilter>
      <ServiceFilter></ServiceFilter>
      <DscpFilter></DscpFilter>
      <ParentRuleNumber></ParentRuleNumber>
      <RuleNumber></RuleNumber>
      <RuleName></RuleName>
      <OptionContent></OptionContent>
      <TotalCount></TotalCount>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <ProfileName></ProfileName>
      <IsExistSonFlag></IsExistSonFlag>
      <DomainFilter></DomainFilter>
    </RuleQuery>
  </TrafficPolicyQuery>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyQuery
Table type	Multi-instance table
Row name	RuleQuery
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserID	Record the user ID	Index	Unsigned integer: Value range: 1 to 65535.	N/A
Position	Record the last query position	Index	Unsigned integer: Value range: 0 to 200.	N/A
RuleNameFilter	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
EnableFilter	Set this value to true to enable the rule	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>0—Invalid.</li> <li>1—disable.</li> <li>2—enable.</li> </ul>	N/A
TimeRangeFilter	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileNameFilter	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
SrcZoneFilter	Source zone name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DestZoneFilter	Destination zone name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
SrcAddrSetFilter	Source address object name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DestAddrSetFilter	Destination address object name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
UserFilter	Username	N/A	String, case-insensitive. Length: 1 to 55 characters.	N/A
UserGroupFilter	User group name	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A
ApplicationFilter	Application name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
AppGroupFilter	Application	N/A	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceFilter	Service name	N/A	String, case-insensitive. Length: 1 to 3 characters.	N/A
DscpFilter	DSCP value	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
ParentRuleNumber	Parent rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleNumber	Child rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 65535. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.
TotalCount	Total number of rules	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IsExistSonFlag	Set this value to son traffic id to sign if this traffic has sons	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
DomainFilter	Domain value	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## AVC/TrafficQueueParentRule

This table contains information about the parent rule for a child rule.

## XML structure

```
<AVC>
  <TrafficQueParentRule>
    <QueRule>
      <RuleNumber></RuleNumber>
      <PRuleNumber></PRuleNumber>
      <RuleName></RuleName>
      <OptionContent></OptionContent>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <ProfileName></ProfileName>
    </QueRule>
  </TrafficQueParentRule>
</AVC>
```

## Table description

Item	Description
Feature name	AVC
Table name	TrafficQueParentRule
Table type	Multi-instance table
Row name	QueRule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Child rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
PRuleNumber	Parent rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 10240. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON

Column name	Column description	Column type	Data type and restrictions	Remarks
				object contains a maximum of 64 characters.
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## AVC/TrafficPolicyRules

This table contains information about the AVC's rule information.

### XML structure

```

<AVC>
  <TrafficPolicyRules>
    <Rule>
      <RuleNumber></RuleNumber>
      <ParentRuleNumber></ParentRuleNumber>
      <RuleName></RuleName>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <Action>
        <ProfileName></ProfileName>
      </Action>
      <ModelId></ModelId>
    </Rule>
  </TrafficPolicyRules>
</AVC>

```

### Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
ParentRuleNumber	Parent Rule's rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Name cannot be same with its siblings. Mandatory
Enable	Set this value to true to disable the rule	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
TimeRange	Time Range Name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ProfileName	TrafficPolify profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ModelId	Model rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A

## AVC/RuleOptions

This table contains some multiple information about the AVC's rule option.

## XML structure

```
<AVC>
  <RuleOptions>
    <Option>
      <RuleNumber></RuleNumber>
      <OptionType></OptionType>
      <OptionVal></OptionVal>
    </Option>
  </RuleOptions>
</AVC>
<AVC>
```

## Table description

Item	Description
Feature name	AVC
Table name	RuleOptions
Table type	Multi-instance table

Row name	Option
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
OptionType	Type of the configuration	Index	Enumeration: <ul style="list-style-type: none"> <li>1—SourceZones.</li> <li>2—DestZones.</li> <li>3—SourceAddressSets.</li> <li>4—DestAddressSets.</li> <li>5—Users.</li> <li>6—UserGroups.</li> <li>7—Applications.</li> <li>8—AppGroups.</li> <li>9—Services.</li> <li>10—Dscp.</li> </ul>	N/A
OptionVal	Value of the special type configuration	Index	String, case-insensitive. Length: 1 to 63 characters (for OptionTypes 7 and 8). Length: 1 to 31 characters (for OptionTypes 1 through 4, and OptionType 9). Length: 1 to 100 characters (for OptionType 10). Length: 1 to 480 characters (for OptionTypes 5 and 6).	Values of OptionTypes 5 and 6 are in Json format.

## AVC/TrafficPolicyProfiles

This table contains information about the AVC traffic policy's Control profiles.

## XML structure

```

<AVC>
  <TrafficPolicyProfiles>
    <Profile>
      <ProfileNumber></ProfileNumber>
      <ProfileName></ProfileName>
      <ReferenceMode></ReferenceMode>
      <IpAverageEnable></IpAverageEnable>
      <TotalMaxKbps></TotalMaxKbps>
      <TotalGuaranteedKbps></TotalGuaranteedKbps>
      <TotalGuaranteedKbpsPerIP></TotalGuaranteedKbpsPerIP>
      <TotalGuaranteedKbpsPerUser></TotalGuaranteedKbpsPerUser>
    </Profile>
  </TrafficPolicyProfiles>
</AVC>

```

```

<TotalMaxKbpsPerIP></TotalMaxKbpsPerIP>
<TotalMaxKbpsPerUser></TotalMaxKbpsPerUser>
<DnGuaranteedKbpsPerIP></DnGuaranteedKbpsPerIP>
<UpGuaranteedKbpsPerIP></UpGuaranteedKbpsPerIP>
<DnGuaranteedKbpsPerUser></DnGuaranteedKbpsPerUser>
<UpGuaranteedKbpsPerUser></UpGuaranteedKbpsPerUser>
<DnMaxKbps></DnMaxKbps>
<UpMaxKbps></UpMaxKbps>
<DnGuaranteedKbps></DnGuaranteedKbps>
<UpGuaranteedKbps></UpGuaranteedKbps>
<DnMaxKbpsPerIP></DnMaxKbpsPerIP>
<UpMaxKbpsPerIP></UpMaxKbpsPerIP>
<DnMaxKbpsPerUser></DnMaxKbpsPerUser>
<UpMaxKbpsPerUser></UpMaxKbpsPerUser>
<Priority></Priority>
<RemarkDSCP></RemarkDSCP>
<MaxConnNum></MaxConnNum>
<MaxConnNumPerIP></MaxConnNumPerIP>
<MaxConnNumPerUser></MaxConnNumPerUser>
<MaxConnRate></MaxConnRate>
<MaxConnRatePerIP></MaxConnRatePerIP>
<MaxConnRatePerUser></MaxConnRatePerUser>
</Profile>
</TrafficPolicyProfiles>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyProfiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileNumber	Profile number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule option is the match order.
ProfileName	Profile Name, cannot be same with other profiles	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ReferenceMo	Rule shared	N/A	Unsigned integer:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
de	mode		<ul style="list-style-type: none"> <li>0—per-rule.</li> <li>1—rule-shared.</li> </ul>	
IpAverageEnable	Ip average enable	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TotalMaxKbps	Total max kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbps	Total guaranteed kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerIP	Total guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerUser	Total guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalMaxKbpsPerIP	Total max kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalMaxKbpsPerUser	Total max kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbpsPerIP	Down guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbpsPerIP	Up guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbpsPerUser	Down guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbpsPerUser	Up guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbps	Downstream Guaranteed bandwidth	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbps	Upstream guaranteed kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnMaxKbps	Downstream Max kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpMaxKbps	Upstream Max kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnMaxKbpsPerIP	Downstream Max kbps per iP	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpMaxKbpsPerIP	Upstream Max kbps Per IP	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Per-IP and Per-User are exclusive.
DnMaxKbpsPerUser	Downstream Max kbps per	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	User			
UpMaxKbpsPerUser	Upstream Max kbps PerUser	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
Priority	Stream Priority level	N/A	Unsigned integer: Value range: 1 to 7.	When the outbound bandwidth is limited, the priority of the stream is higher, the stream is prior to pass the interface.
RemarkDSCP	Dscp value	N/A	Unsigned integer: Value range: 0 to 63.	N/A
MaxConnNum	Max up connections	N/A	Unsigned integer: Value range: 1 to 12,000,000.	N/A
MaxConnNumPerIP	Max up connections per IP	N/A	Unsigned integer: Value range: 1 to 12,000,000.	Per-IP and Per-User are exclusive
MaxConnNumPerUser	Max up connections per User	N/A	Unsigned integer: Value range: 1 to 12,000,000.	N/A
MaxConnRate	Max up connections rate	N/A	Unsigned integer: Value range:1 to 12,000,000 times per second.	N/A
MaxConnRatePerIP	Max up connections rate per IP	N/A	Unsigned integer: Value range:1 to 12,000,000 times per second.	Per-IP and Per-User are exclusive
MaxConnRatePerUser	Max up connections rate per user	N/A	Unsigned integer: Value range:1 to 12,000,000 times per second.	N/A

## AVC/AVCSpecification

This table contains the AVC specification information.

### XML structure

```

<AVC>
  <AVCSpecification>
    <SupportDomain></SupportDomain>
  </AVCSpecification>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	AVCSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportDomain	Whether the function of AVC domain is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A

# Contents

- AVC .....2
  - AVC/TrafficPolicyRules .....2
  - AVC/TrafficPolicyProfiles .....3

# AVC

## AVC/TrafficPolicyRules

Message	Explanation
Operation failed. The parent rule and the child rule cannot use the same traffic profile. 操作失败：父策略与子策略不能引用同一个带宽通道。	The parent rule and the child rule cannot use the same traffic profile. 配置父子策略时，父子策略不能引用同一个带宽通道。
Operation failed. The parent rule's guaranteed bandwidth must be greater than or equal to the child rule's guaranteed bandwidth. 操作失败：父策略的保证带宽要大于等于子策略的保证带宽。	The parent rule's guaranteed bandwidth must be greater than or equal to the child rule's guaranteed bandwidth. 配置父子策略时，父策略的保证带宽要大于等于子策略的保证带宽。
Operation failed. The maximum bandwidth of a child rule cannot be greater than that of the parent rule. 操作失败：子策略的最大带宽不能大于父策略的最大带宽。	The maximum bandwidth of a child rule cannot be greater than that of the parent rule. 配置父子策略时，子策略的最大带宽不能大于父策略的最大带宽。
Operation failed. The child rule's guaranteed bandwidth cannot be greater than parent rule's maximum bandwidth. 操作失败：子策略的保证带宽不能大于父策略的最大限制带宽。	The child rule's guaranteed bandwidth cannot be greater than parent rule's maximum bandwidth. 配置父子策略时，子策略的保证带宽不能大于父策略的最大限制带宽。
The rule name already exists. 策略名称已存在。	The rule name already exists. 配置带宽策略时，策略名称不能相同。
A level-4 rule cannot act as a parent rule. 该父策略是一个四级策略。	A level-4 rule cannot act as a parent rule. 配置子带宽策略时，不能指定一个四级策略作为父策略。
The traffic profile reference mode for the parent and child traffic rules must be the same. 父子策略引用的带宽通道的限流方式必须一致。	The traffic profile reference mode for the parent and child traffic rules must be the same. 配置子带宽策略时，父子策略引用的带宽通道的限流方式必须一致。
The guaranteed bandwidth for the parent traffic rule must be greater than or equal to the guaranteed bandwidth for its child traffic rule. 父策略引用带宽通道的的保证带宽不能小于子策略引用带宽通道的保证带宽。	The guaranteed bandwidth for the parent traffic rule must be greater than or equal to the guaranteed bandwidth for its child traffic rule. 配置子带宽策略时，父策略引用带宽通道的的保证带宽不能小于子策略引用带宽通道的保证带宽。
The maximum bandwidth for the parent traffic rule must be greater than or equal to the maximum bandwidth for its child traffic rule. 父策略引用带宽通道的的最大带宽不能小于子策略引用带宽通道的最大带宽。	When configuring the child rule, the maximum bandwidth for the parent traffic rule must be greater than or equal to the maximum bandwidth for its child traffic rule. 配置子带宽策略时，父策略引用带宽通道的的最大带宽不能小于子策略引用带宽通道的最大带宽。
The maximum bandwidth for the parent traffic rule must be greater than or equal to the guaranteed bandwidth for its child traffic rule. 父策略引用带宽通道的的最大带宽不能小于子策略引用带宽通道的保证带宽。	When configuring the child rule, the maximum bandwidth for the parent traffic rule must be greater than or equal to the guaranteed bandwidth for its child traffic rule. 配置子带宽策略时，父策略引用带宽通道的的最大带宽不能小于子



	策略引用带宽通道的保证带宽。
<p>The guaranteed bandwidth for a child traffic rule must be smaller than the guaranteed bandwidth for its parent traffic rule.</p> <p>子策略引用带宽通道的的保证带宽不能大于父策略引用带宽通道的保证带宽。</p>	<p>When configuring the child rule, the guaranteed bandwidth for a child traffic rule must be smaller than the guaranteed bandwidth for its parent traffic rule.</p> <p>配置子带宽策略时，子策略引用带宽通道的的保证带宽不能大于父策略引用带宽通道的保证带宽。</p>
<p>The guaranteed bandwidth for its child traffic rule must be smaller than the maximum bandwidth for its parent traffic rule.</p> <p>子策略引用带宽通道的的保证带宽不能大于父策略引用带宽通道的最大带宽。</p>	<p>When configuring the child rule, the guaranteed bandwidth for its child traffic rule must be smaller than the maximum bandwidth for its parent traffic rule.</p> <p>配置子带宽策略时，子策略引用带宽通道的的保证带宽不能大于父策略引用带宽通道的最大带宽。</p>
<p>The maximum bandwidth for its child traffic rule must be smaller than the maximum bandwidth for its parent traffic rule.</p> <p>子策略引用带宽通道的的最大带宽不能大于父策略引用带宽通道的最大带宽。</p>	<p>When configuring the child rule, the maximum bandwidth for its child traffic rule must be smaller than the maximum bandwidth for its parent traffic rule.</p> <p>配置子带宽策略时，子策略引用带宽通道的的最大带宽不能大于父策略引用带宽通道的最大带宽。</p>

## AVC/TrafficPolicyProfiles

Message	Explanation
<p>Operation failed. The profile has been used by a rule.</p> <p>操作失败：无法删除已经被引用的带宽通道。</p>	<p>Can't delete a profile that has been used by a rule.</p> <p>删除带宽通道时，无法删除已经被策略引用的带宽通道。</p>
<p>The profile name already exists.</p> <p>带宽通道名称已存在。</p>	<p>The profile name already exists.</p> <p>新建带宽通道时，通道名称不能相同。</p>
<p>The per-IP/per-user guaranteed bandwidth must be smaller than or equal to the per-IP/per-user maximum bandwidth.</p> <p>每IP或每用户的保证带宽不能大于每IP或每用户的最大带宽。</p>	<p>The per-IP/per-user guaranteed bandwidth must be smaller than or equal to the per-IP/per-user maximum bandwidth.</p> <p>配置带宽通道时，每IP或每用户的保证带宽要小于等于最大带宽。</p>
<p>The per-IP/per-user guaranteed bandwidth must be smaller than or equal to the total guaranteed bandwidth.</p> <p>每IP或每用户的保证带宽不能大于整体的保证带宽。</p>	<p>The per-IP/per-user guaranteed bandwidth must be smaller than or equal to the total guaranteed bandwidth.</p> <p>配置带宽通道时，每IP或每用户的保证带宽不能大于整体的保证带宽。</p>
<p>The total guaranteed bandwidth must be smaller than or equal to the total maximum bandwidth.</p> <p>整体保证带宽不能大于整体最大带宽。</p>	<p>The total guaranteed bandwidth must be smaller than or equal to the total maximum bandwidth.</p> <p>配置带宽通道时，整体保证带宽不能大于整体最大带宽。</p>
<p>The per-IP/per-user guaranteed bandwidth must be smaller than or equal to the total maximum bandwidth.</p> <p>每IP或每用户的保证带宽不能大于整体最大带宽。</p>	<p>The per-IP/per-user guaranteed bandwidth must be smaller than or equal to the total maximum bandwidth.</p> <p>配置带宽通道时，每IP或每用户的保证带宽不能大于整体最大带宽。</p>

# Contents

- Bct .....1
  - Bct/ControllerTeams .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - Bct / Controllers .....1
    - XML structure .....2
    - Table description .....2
    - Columns .....2

# Bct

## Bct/ControllerTeams

This table is used to configure Bct for a device and show Bct's state.

### XML structure

```
<Bct>
  <ControllerTeams>
    <Team>
      <TeamID></TeamID>
      <Name></Name>
    </Team>
  </ControllerTeams>
</Bct>
```

### Table description

Item	Description
Feature name	Bct
Table name	ControllerTeams
Table type	Multi-instance table
Row name	Team
Restrictions	Device support blade controller team
Support for row creation and deletion	YES

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TeamID	ControllerTeam ID	Index	Unsigned integer. Value range: 1 to 256.	N/A
Name	ControllerTeam name	Index	String. Length: 1 to 31 characters.	N/A

## Bct / Controllers

This table contains controller information.

## XML structure

```
<Bct>
  <Controllers>
    <Controller>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <TeamID></TeamID>
    </Controller>
  </Controllers>
</Bct>
```

## Table description

Item	Description
Feature name	Bct
Table name	Controllers
Table type	Multi-instance table
Row name	Controller
Restrictions	Location node to blade controller team
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Information of device node	Data structure	N/A	N/A
Chassis	Chassis number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
TeamID	Blade controller team ID	N/A	Unsigned integer. Value range: 2 to 256.	N/A

# Contents

- Bct .....1
  - Bct/ControllerTeams .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - Bct/Controllers .....1
    - XML structure .....2
    - Table description .....2
    - Columns .....2

# Bct

## Bct/ControllerTeams

This table is used to configure Bct for a device and show Bct's state.

### XML structure

```
<Bct>
  <ControllerTeams>
    <Team>
      <TeamID></TeamID>
      <Name></Name>
    </Team>
  </ControllerTeams>
</Bct>
```

### Table description

Item	Description
Feature name	Bct
Table name	ControllerTeams
Table type	Multi-instance table
Row name	Team
Restrictions	All ControllerTeams' information.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TeamID	ControllerTeam ID	Index	Unsigned integer. Value range: 1 to 256.	N/A
Name	ControllerTeam name	Index	String. Length: 1 to 31 characters.	N/A

## Bct/Controllers

This table contains controller information.

## XML structure

```
<Bct>
  <Controllers>
    <Controller>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <BelongID></BelongID>
      <NodeType></NodeType>
    </Controller>
  </Controllers>
</Bct>
```

## Table description

Item	Description
Feature name	Bct
Table name	Controllers
Table type	Multi-instance table
Row name	Controller
Restrictions	Controllers' information.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Information of device node	Data structure	N/A	N/A
Chassis	Chassis number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
BelongID	Owning blade controller team ID	N/A	Unsigned integer. Value range: 1 to 256.	N/A
NodeType	Node type	N/A	Enumeration. 1: Master 2: Standby 3: Absent.	N/A

# Contents

BFD .....	1
BFD/Base.....	1
XML structure .....	1
Table description.....	1
Columns .....	2
BFD/Interfaces .....	3
XML structure .....	3
Table description.....	4
Columns .....	4



# BFD

## BFD/Base

This table contains global BFD information.

### XML structure

```
<BFD>
  <Base>
    <MultihopMinTransmitInterval></MultihopMinTransmitInterval>
    <MultihopMinReceiveInterval></MultihopMinReceiveInterval>
    <MultihopDetectMultiplier></MultihopDetectMultiplier>
    <EchoSourceIp></EchoSourceIp>
    <EchoSourceIpv6></EchoSourceIpv6>
    <MultihopAuthentication>
      <AuthType></AuthType>
      <KeyID></KeyID>
      <KeyType></KeyType>
      <Key></Key>
    </MultihopAuthentication>
    <IpRouterAlert></IpRouterAlert>
    <InitMode></InitMode>
    <MultihopMinControlInterval></MultihopMinControlInterval>
  </Base>
</BFD>
```

### Table description

Item	Description
Feature name	BFD
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations.
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MultihopMinTransmitInterval	Minimum interval for transmitting multihop BFD control packet.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
MultihopMinReceiveInterval	Minimum interval for receiving multihop BFD control packet.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
MultihopDetectMultiplier	Multihop detection time multiplier.	N/A	Unsigned integer.	The value range for this argument varies by device model.
EchoSourceIp	Specify source IP address in BFD echo packet.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
EchoSourceIpv6	Specify source IPv6 address in BFD echo packet.	N/A	Hexadecimal string, colon-separated.	Example: 1::1. 0::0 is an invalid value.
MultihopAuthentication	Multihop Authentication.	Data structure	Members include: <ul style="list-style-type: none"> <li>• AuthenticationType.</li> <li>• KeyID.</li> <li>• KeyType.</li> <li>• Key.</li> </ul>	N/A
AuthType	Authentication Type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—simple.</li> <li>• 2—md5.</li> <li>• 3—m-md5.</li> <li>• 4—sha1.</li> <li>• 5—m-sha1.</li> <li>• 6—hmac-md5.</li> <li>• 7—hmac-m-md5.</li> <li>• 8—hmac-sha1.</li> <li>• 9—hmac-m-sha1.</li> </ul>	N/A
KeyID	Key ID.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
KeyType	Key Type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—cipher.</li> <li>• 2—plain.</li> </ul>	N/A
Key	Key.	N/A	String, case-sensitive.	If KeyType is cipher, the length are 33 to 53

Column name	Column description	Column type	Data type and restrictions	Remarks
				characters. If KeyType is plain, the length are 1 to 16 characters.
IpRouterAlert	Set the Router Alert option in BFD control packets for MPLS.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false.</b></li> </ul>	When set the ip router alert option, set the value to <b>true.</b> Otherwise, set the value to <b>false.</b>
InitMode	Specify mode before creating BFD session.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Active.</li> <li>1—Passive.</li> </ul>	N/A
MultihopMinControlInterval	Minimum interval for transmitting and receiving multihop BFD control packets.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.  It can be used on some special devices, and cannot be used with MinTransmitInterval or MinReceiveInterval at the same time on these special devices.

## BFD/Interfaces

This table contains BFD interface information.

## XML structure

```

<BFD>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <MinTransmitInterval></MinTransmitInterval>
      <MinReceiveInterval></MinReceiveInterval>
      <DetectMultiplier></DetectMultiplier>
      <MinEchoReceiveInterval></MinEchoReceiveInterval>
      <Authentication>
        <AuthType></AuthType>
        <KeyID></KeyID>
        <KeyType></KeyType>
        <Key></Key>
      </Authentication>
    </Interface>
  </Interfaces>
</BFD>

```

```

    <Demand></Demand>
    <Echo></Echo>
    <MinControlInterval></MinControlInterval>
  </Interface>
</Interfaces>
</BFD>

```

## Table description

Item	Description
Feature name	BFD
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	none
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	Some versions support interface names. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
MinTransmitInterval	Minimum interval for transmitting single-hop BFD control.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
MinReceiveInterval	Minimum interval for receiving single-hop BFD control.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
DetectMultiplier	Single-hop detection time multiplier.	N/A	Unsigned integer.	The value range for this argument varies by device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
MinEchoReceiveInterval	Minimum interval for receiving BFD echo.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
Authentication	Authentication.	Data structure	Members include: <ul style="list-style-type: none"> <li>AuthenticationType.</li> <li>KeyID.</li> <li>KeyType.</li> <li>Key.</li> </ul>	N/A
AuthType	Authentication Type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—md5.</li> <li>3—m-md5.</li> <li>4—sha1.</li> <li>5—m-sha1.</li> <li>6—hmac-md5.</li> <li>7—hmac-m-md5.</li> <li>8—hmac-sha1.</li> <li>9—hmac-m-sha1.</li> </ul>	N/A
KeyID	Key ID.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
KeyType	Key Type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—cipher.</li> <li>2—plain.</li> </ul>	N/A
Key	Key.	N/A	String, case-sensitive.	If Key Type is cipher, the length are 33 to 53 characters. If Key Type is plain, the length are 1 to 16 characters.
Demand	Specify BFD session mode.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false.</b></li> </ul>	When set the BFD Demand mode, set the value to <b>true</b> . Otherwise, set the value to <b>false</b> .
Echo	BFD echo function.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not enable echo function.</li> <li>1—enable echo receive function.</li> <li>2—enable echo send function.</li> <li>3—enable echo receive and send function.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MinControlInterval	Minimum interval for transmitting and receiving single-hop BFD control packets.	N/A	Unsigned integer. Unit: millisecond.	<p>The value range for this argument varies by device model.</p> <p>It can be used on some special devices, and cannot be used with MinTransmitInterval or MinReceiveInterval at the same time on these special devices.</p>

# Contents

BFD .....	1
BFD/Base.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
BFD/Interfaces .....	3
XML structure.....	3
Table description.....	4
Columns.....	4

# BFD

## BFD/Base

This table contains global BFD information.

### XML structure

```
<BFD>
  <Base>
    <MultihopMinTransmitInterval></MultihopMinTransmitInterval>
    <MultihopMinReceiveInterval></MultihopMinReceiveInterval>
    <MultihopDetectMultiplier></MultihopDetectMultiplier>
    <EchoSourceIp></EchoSourceIp>
    <EchoSourceIpv6></EchoSourceIpv6>
    <MultihopAuthentication>
      <AuthType></AuthType>
      <KeyID></KeyID>
      <KeyType></KeyType>
      <Key></Key>
    </MultihopAuthentication>
    <IpRouterAlert></IpRouterAlert>
    <InitMode></InitMode>
    <MultihopMinControlInterval></MultihopMinControlInterval>
  </Base>
</BFD>
```

### Table description

Item	Description
Feature name	BFD
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MultihopMinTransmitInterval	Minimum interval for transmitting multihop BFD control packets.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.



Column name	Column description	Column type	Data type and restrictions	Remarks
MultihopMinReceiveInterval	Minimum interval for receiving multihop BFD control packets.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
MultihopDetectMultiplier	Multihop detection time multiplier.	N/A	Unsigned integer.	The value range for this argument varies by device model.
EchoSourceIp	Specify source IP address in BFD echo packet.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
EchoSourceIpv6	Specify source IPv6 address in BFD echo packet.	N/A	Hexadecimal string, colon-separated.	Example: 1::1. 0::0 is an invalid value.
MultihopAuthentication	Multihop Authentication.	Data structure	Members include: <ul style="list-style-type: none"> <li>• AuthenticationType.</li> <li>• KeyID.</li> <li>• KeyType.</li> <li>• Key.</li> </ul>	N/A
AuthType	Authentication Type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—simple.</li> <li>• 2—md5.</li> <li>• 3—m-md5.</li> <li>• 4—sha1.</li> <li>• 5—m-sha1.</li> <li>• 6—hmac-md5.</li> <li>• 7—hmac-m-md5.</li> <li>• 8—hmac-sha1.</li> <li>• 9—hmac-m-sha1.</li> </ul>	N/A
KeyID	Key ID.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
KeyType	Key Type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—cipher.</li> <li>• 2—plain.</li> </ul>	N/A
Key	Key.	N/A	String, case-sensitive.	If Key Type is cipher,the length are 33 to 53 characters. If Key Type is plain,the length are 1 to 16

Column name	Column description	Column type	Data type and restrictions	Remarks
				characters.
IpRouterAlert	Set the Router Alert option in BFD control packets for MPLS.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	When set the ip router alert option, set the value to <b>true</b> . Otherwise, set the value to <b>false</b> .
InitMode	Specify mode before creating BFD session.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Active.</li> <li>1—Passive.</li> </ul>	N/A
MultihopMinControlInterval	Minimum interval for transmitting and receiving multihop BFD control packets.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.  It can be used on some special devices, and cannot be used with MinTransmitInterval or MinReceiveInterval at the same time on these special devices.

## BFD/Interfaces

This table contains BFD interface information.

## XML structure

```

<BFD>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <MinTransmitInterval></MinTransmitInterval>
      <MinReceiveInterval></MinReceiveInterval>
      <DetectMultiplier></DetectMultiplier>
      <MinEchoReceiveInterval></MinEchoReceiveInterval>
      <Authentication>
        <AuthType></AuthType>
        <KeyID></KeyID>
        <KeyType></KeyType>
        <Key></Key>
      </Authentication>
      <Demand></Demand>
    </Interface>
  </Interfaces>
</BFD>

```

```

    <Echo></Echo>
    <MinControlInterval></MinControlInterval>
  </Interface>
</Interfaces>
</BFD>

```

## Table description

Item	Description
Feature name	BFD
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	none

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
MinTransmitInterval	Minimum interval for transmitting single-hop BFD control packets.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
MinReceiveInterval	Minimum interval for receiving single-hop BFD control packets.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
DetectMultiplier	Single-hop detection time multiplier.	N/A	Unsigned integer.	The value range for this argument varies by device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
MinEchoReceiveInterval	Minimum interval for receiving BFD echo packets	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
MinEchoReceiveInterval	Minimum interval for receiving BFD echo.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.
Authentication	Authentication.	Data structure	Members include: <ul style="list-style-type: none"> <li>• AuthenticationType.</li> <li>• KeyID.</li> <li>• KeyType.</li> <li>• Key.</li> </ul>	N/A
AuthType	Authentication Type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—simple.</li> <li>• 2—md5.</li> <li>• 3—m-md5.</li> <li>• 4—sha1.</li> <li>• 5—m-sha1.</li> <li>• 6—hmac-md5.</li> <li>• 7—hmac-m-md5.</li> <li>• 8—hmac-sha1.</li> <li>• 9—hmac-m-sha1.</li> </ul>	N/A
KeyID	Key ID.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
KeyType	Key Type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—cipher.</li> <li>• 2—plain.</li> </ul>	N/A
Key	Key.	N/A	String, case-sensitive.	If Key Type is cipher,the length are 33 to 53 characters. If Key Type is plain,the length are 1 to 16 characters.
Demand	Specify BFD session mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	When set the BFD Demand mode, set the value to <b>true</b> . Otherwise, set the value to <b>false</b> .
Echo	BFD echo function.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Not enable echo function.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—enable echo receive function.</li> <li>2—enable echo send function.</li> <li>3—enable echo receive and send function.</li> </ul>	
MinControlInterval	Minimum interval for transmitting and receiving single-hop BFD control packets.	N/A	Unsigned integer. Unit: millisecond.	The value range for this argument varies by device model.  It can be used on some special devices, and cannot be used with MinTransmitInterval or MinReceiveInterval at the same time on these special devices.

# Contents

- BFD .....2
  - BFD/Base.....2
  - BFD/Interfaces .....2

# BFD

## BFD/Base

Message	Explanation
The specified configuration doesn't exist. 指定的配置不存在。	The specified configuration doesn't exist, when getting or deleting it.
Configuration already exists. 配置已经存在。	Configuration already exists, when set new configuration.
Failed to allocate memory. 分配内存失败。	No enough resource, please check your device.
Not support this value, maybe the device has no OAM CPU. 参数不支持, 当前设备可能没有OAM CPU。	The device cannot support these parameters, please use the bigger numbers.
BFD is not configured. BFD尚未配置。	BFD service has not been started.
Invalid value. 参数值无效。	Specified parameter value is not valid.
Min Control Interval not supported on the device. Please configure Min TX Interval and Min RX Interval. 本设备不支持配置Min Control Interval。请使用Min TX Interval和Min RX Interval。	The device does not support configuring the Min Control Interval parameter. Please configure Min TX Interval and Min RX Interval.
Min TX Interval and Min RX Interval not supported on the device. Please configure Min Control Interval. 本设备不支持配置Min TX Interval和Min RX Interval参数。请使用Min Control Interval。	The device does not support configuring the Min TX Interval and Min RX Interval parameters. Please configure Min Control Interval.

## BFD/Interfaces

Message	Explanation
The specified configuration doesn't exist. 指定的配置不存在。	The specified configuration doesn't exist, when getting or deleting it.
Configuration already exists. 配置已经存在。	Configuration already exists, when set new configuration.
Failed to allocate memory. 分配内存失败。	No enough resource, please check your device.
Not support this value, maybe the device has no OAM CPU. 参数不支持, 当前设备可能没有OAM CPU。	The device cannot support these parameters, please use the bigger numbers.

BFD is not configured. BFD尚未配置。	BFD service has not been started.
Invalid value. 参数值无效。	Specified parameter value is not valid.
Min Control Interval not supported on the device. Please configure Min TX Interval and Min RX Interval. 本设备不支持配置Min Control Interval。请使用Min TX Interval和Min TX Interval。	The device does not support configuring the Min Control Interval parameter. Please configure Min TX Interval and Min RX Interval.
Min TX Interval and Min RX Interval not supported on the device. Please configure Min Control Interval. 本设备不支持配置Min TX Interval和Min TX Interval参数。请使用Min Control Interval。	The device does not support configuring the Min TX Interval and Min RX Interval parameters. Please configure Min Control Interval.



# Contents

BGP .....	1
BGP/Operations .....	1
XML structure .....	1
Responded XML structure .....	1
Table description .....	1
Columns .....	2
Responded columns .....	2
BGP/FlushRoutes .....	2
XML structure .....	2
Responded XML structure .....	2
Table description .....	3
Columns .....	3
Responded columns .....	3

# BGP

## BGP/Operations

This table is a description of BGP protocol actions.

### XML structure

```
<BGP>
  <Operations>
    <Operation>
      <OperationType></OperationType>
      <Name></Name>
    </Operation>
  </Operations>
</BGP>
```

### Responded XML structure

N/A

### Table description

Item	Description
Feature name	BGP
Table name	Operations
Table type	Multi-instance table
Row name	Operation
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
OperationType	Operation type	Index	Enumeration 1 – Send update message immediately 2 – Notice BGP protocol smooth start 3 –Notice BGP protocol smooth end	The operation type specify the operation which BGP protocol should perform.
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.

## Responded columns

N/A

## BGP/FlushRoutes

This table flush routes to BGP protocol.

## XML structure

```
<BGP>
  <FlushRoutes>
    <FlushRoute>
      <Name></Name>
      <VRF></VRF>
      <OperationType></OperationType>
      <RouteType></RouteType>
      <RouteKey></RouteKey>
      <RouteSegment></RouteSegment>
      <RouteAttr></RouteAttr>
    </FlushRoute>
  </FlushRoutes>
</BGP>
```

## Responded XML structure

N/A

## Table description

Item	Description
Feature name	BGP
Table name	FlushRoutes
Table type	Multi-instance table
Row name	Operation
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
OperationType	Operation type	Index	Enumeration 1 – Add 2 – Delete	The operation type specify the operation that BGP should perform.
RouteType	Type of route	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 Unicast.</li> <li>2—IPv4 Multicast.</li> <li>3—MDT</li> <li>4—VPNv4</li> <li>5—IPv6 Unicast</li> <li>6—IPv6 Multicast.</li> <li>7—VPNv6</li> <li>8—L2VPN</li> <li>9—EVPN</li> </ul>	
RouteKey	Key of route	Index	Binary. Length: 0 to 128 characters.	An empty string indicates there is no key of the route.
RouteSegment	Route information	Index	Binary. Length: 1 to 4096 characters.	
RouteAttr	Attribute of route		Binary. Length: 1 to 4096 characters.	

## Responded columns

N/A

# Contents

BGP .....	1
BGP/Instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
BGP/VRFs .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
BGP/CfgSessionGroups .....	4
XML structure .....	4
Table description .....	5
Columns .....	6
BGP/CfgSessions .....	7
XML structure .....	7
Table description .....	8
Columns .....	9
BGP/Familys .....	11
XML structure .....	11
Table description .....	12
Columns .....	13
BGP/Networks .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
BGP/Aggregates .....	18
XML structure .....	18
Table description .....	19
Columns .....	20
BGP/NeighborGroups .....	20
XML structure .....	20
Table description .....	21
Columns .....	22
BGP/Neighbors .....	24
XML structure .....	24
Table description .....	25
Columns .....	26
BGP/Redistributes .....	28
XML structure .....	28
Table description .....	29
Columns .....	30
BGP/RedistributesAppend .....	30
XML structure .....	30
Table description .....	31
Columns .....	32

# BGP

## BGP/Instances

This table contains BGP instance information.

### XML structure

```
<BGP>
  <Instances>
    <Instance>
      <Name></Name>
      <ASNumber></ASNumber>
      <NSR></NSR>
      <SendDelayTime></SendDelayTime>
      <SendDelayPrefix></SendDelayPrefix>
      <SendDelayIPv6Prefix></SendDelayIPv6Prefix>
      <SendStartupTime></SendStartupTime>
      <StartupPolicyMed></StartupPolicyMed>
      <FlushSuboptimalRoute></FlushSuboptimalRoute>
      <RouteReplicateEnable></RouteReplicateEnable>
    </Instance>
  </Instances>
</BGP>
```

### Table description

Item	Description
Feature name	BGP
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	No
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process. When execute get

Column name	Column description	Column type	Data type and restrictions	Remarks
				bulk operation, you can only get the data of the specified BGP instance.
ASNumber	Autonomous System number		Unsigned integer. Value range: 1 to 4294967295	N/A
NSR	Nonstop Routing		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
SendDelayTime	Send delay time in seconds		Unsigned integer. Value range: 0 to 3600	The value 0 indicates that the BGP speaker never send the update message.
SendDelayPrefix	Send delay using IPv4 prefix list		String. Length: 1 to 63 characters.	N/A
SendDelayIPv6Prefix	Send delay using IPv6 prefix list		String. Length: 1 to 63 characters.	N/A
SendStartupTime	Send startup time in seconds		Unsigned integer. Value range: 0 to 3600	The value 0 indicates that the BGP speaker always send the update message with the startup policy.
StartupPolicy Med	Satrtup policy MED		Unsigned integer. Value range: 0 to 4294967295	N/A
FlushSuboptimalRoute	Flush suboptimal route to RIB		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RouteReplicateEnable	Enable mutual route replication between public and private networks		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## BGP/VRFs

This table contains BGP VRF information.

## XML structure

<BGP>

```

<VRFs>
  <VRF>
    <Name></Name>
    <VRF></VRF>
    <RouterId></RouterId>
    <Timer>
      <KeepAlive></KeepAlive>
      <HoldTime></HoldTime>
    </Timer>
    <BestRouteIgpMetricIgnore></BestRouteIgpMetricIgnore>
    <BestRouteAsPathNeglect></BestRouteAsPathNeglect>
    <BestRouteCompareMED></BestRouteCompareMED>
    <BestRouteConfederationMED></BestRouteConfederationMED>
    <BestRouteRouterIdIgnore></BestRouteRouterIdIgnore>
    <CompareDifferentAsMED></CompareDifferentAsMED>
  </VRF>
</VRFs>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	VRFs
Table type	Multi-instance table
Row name	VRF
Restrictions	No
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRFName	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.



Column name	Column description	Column type	Data type and restrictions	Remarks
RouterId	BGP Router Id		IPv4 address string	N/A
Timer	Keepalive and Holdtime	Data Structure	Include: <ul style="list-style-type: none"> <li>KeepAlive</li> <li>HoldTime</li> </ul>	N/A
KeepAlive	Keepalive Interval in Seconds		Unsigned integer. Value range: 0 to 21845	N/A
HoldTime	Holdtime in Seconds		Unsigned integer. Value range: 0 to 65535	N/A
BestRouteIgp MetricIgnore	Ignore IGP metrics during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
BestRouteAs PathNeglect	Ignore the AS-PATH attribute during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
BestRouteCompareMED	Consider MED value during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
BestRouteConfederationMED	Compare the MEDs of routes from confederation peers during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
BestRouteRouterIdIgnore	Ignore router ID during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
CompareDifferentAsMED	Compare the MEDs of routes from different ASs during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A

## BGP/CfgSessionGroups

This table contains configure information of BGP session group.

### XML structure

```
<BGP>
  <CfgSessionGroups>
```

```

<CfgSessionGroup>
  <Name></Name>
  <VRF></VRF>
  <GroupName></GroupName>
  <Type></Type>
  <ASNumber></ASNumber>
  <ConnectInterface></ConnectInterface>
  <UpdateInterval></UpdateInterval>
  <PasswordType></PasswordType>
  <Password></Password>
  <BfdType></BfdType>
  <EbgpMaxHop></EbgpMaxHop>
  <Ignore></Ignore>
  <Description></Description>
  <NexthopRecursivePolicyDisable></NexthopRecursivePolicyDisable>
  <FakeAS></FakeAS>
  <DualAS></DualAS>
  <PrependGlobalAS></PrependGlobalAS>
  <PrependFakeAS></PrependFakeAS>
</CfgSessionGroup>
</CfgSessionGroups>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	CfgSessionGroups
Table type	Multi-instance table
Row name	CfgSessionGroup
Restrictions	No
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
GroupName	Group Name	Index	String. Length: 1 to 47 characters.	N/A
Type	Internal or External		Enumeration. <ul style="list-style-type: none"> <li>0—Internal.(default)</li> <li>1—<b>External.</b></li> </ul>	N/A
ASNumber	Autonomous System number		Unsigned integer. Value range: 1 to 4294967295	N/A
ConnectInterface	Connect Interface		String. Length: 1 to 47 characters.	N/A
UpdateInterval	Route Update Interval		Unsigned integer. Value range: 0 to 600	N/A
PasswordType	Password type.		Enumeration. <ul style="list-style-type: none"> <li>1—Ciphertext.</li> <li>2—Plaintext.</li> </ul>	N/A
Password	Password.		String. Length: 1 to 80 characters for MD5 plaintext password. 33 to 137 characters for MD5 ciphertext password.	N/A
BfdType	Bfd type		Enumeration. <ul style="list-style-type: none"> <li>0—default type</li> <li>1—single-hop</li> <li>2—multi-hop</li> </ul>	The default type indicate that actual bfd type (single-hop or multi-hop) depend on different situations
EbgpMaxHop	EBGP multihop		Unsigned integer. Value range: 1 to 255	N/A
Ignore	Disable session establishment to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
Description	Peer Description		String. Length: 1 to 79 characters.	Case Sensitive

Column name	Column description	Column type	Data type and restrictions	Remarks
NextHopRecursivePolicyDisable	Disable route recursion policy control for routes received from the specified peer or peer group		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
FakeAS	Specify a virtual local AS number for the peer or peer group		Unsigned integer. Value range: 1 to 4294967295. String. Length: 3 to 11 characters. Format: AA<0-65535>.NN<0-65535>	By default, the fake AS number does not exist.
DualAS	Support both real and fake AS numbers for peer group relationship establishment		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not DualAS, the value for DualAS is 0.
PrependGlobalAS	Add the real AS number to the AS_PATH attribute in sent packets		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not PrependGlobalAS, the value for PrependGlobalAS is 0.
PrependFakeAS	Add the fake AS number to the AS_PATH attribute in received packets		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not PrependFakeAS, the value for PrependFakeAS is 0.

## BGP/CfgSessions

This table contains configure information of BGP session.

### XML structure

```

<BGP>
  <CfgSessions>
    <CfgSession>
      <Name></Name>
      <VRF></VRF>

```

```

    <SessAF></SessAF>
    <IpAddress></IpAddress>
    <Mask></Mask>
    <ASNumber></ASNumber>
    <GroupName></GroupName>
    <ConnectInterface></ConnectInterface>
    <UpdateInterval></UpdateInterval>
    <PasswordType></PasswordType>
    <Password></Password>
    <BfdType></BfdType>
    <EbgpMaxHop></EbgpMaxHop>
    <Ignore></Ignore>
    <Description></Description>
    <NexthopRecursivePolicyDisable></NexthopRecursivePolicyDisable>
    <FakeAS></FakeAS>
    <DualAS></DualAS>
    <PrependGlobalAS></PrependGlobalAS>
    <PrependFakeAS></PrependFakeAS>
  </CfgSession>
</CfgSessions>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	CfgSessions
Table type	Multi-instance table
Row name	CfgSession
Restrictions	No
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
SessAF	Address family of session	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
IpAddress	Address of session	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
Mask	Mask of session address	Index	Unsigned integer. Value range: 0 to 128,or 255	For non-dynamic peers, this is 255.For IPv4 dynamic peers,this is 0 to 32.For IPv6 dynamic peers, this is 0 to 128. Dynamic peers are not supported.
ASNumber	Autonomous System number		Unsigned integer. Value range: 1 to 4294967295	N/A
GroupName	Group Name		String. Length: 1 to 47 characters.	N/A
ConnectInterface	Connect Interface		String. Length: 1 to 47 characters.	N/A
UpdateInterval	Route Update Interval		Unsigned integer. Value range: 0 to 600	N/A
PasswordType	Password type.		Enumeration. <ul style="list-style-type: none"> <li>1—Ciphertext.</li> <li>2—Plaintext.</li> </ul>	N/A
Password	Password.		String. Length: 1 to 80 characters for MD5 plaintext password. 33 to 137 characters for MD5 ciphertext password.	N/A
BfdType	Bfd type		Enumeration. <ul style="list-style-type: none"> <li>0—default type</li> <li>1—single-hop</li> <li>2—multi-hop</li> </ul>	The default type indicate that actual bfd type (single-hop or multi-hop) depend on different

Column name	Column description	Column type	Data type and restrictions	Remarks
				situations
EbgpMaxHop	EBGP multihop		Unsigned integer. Value range: 1 to 255	N/A
Ignore	Disable session establishment to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
Description	Peer Description		String. Length: 1 to 79 characters.	Case Sensitive
NextHopRecursivePolicyDisable	Disable route recursion policy control for routes received from the specified peer or peer group		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
FakeAS	Specify a virtual local AS number for the peer or peer group		Unsigned integer. Value range: 1 to 4294967295. String. Length: 3 to 11 characters. Format: AA<0-65535>.NN<0-65535>	By default, the fake AS number does not exist.
DualAS	Support both real and fake AS numbers for peer relationship establishment		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not DualAS, the value for DualAS is 0.
PrependGlobalAS	Add the real AS number to the AS_PATH attribute in sent packets		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not PrependGlobalAS, the value for PrependGlobalAS is 0.
PrependFakeAS	Add the fake AS number to the AS_PATH attribute in received packets		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not PrependFakeAS, the value for PrependFakeAS is 0.

# BGP/Familys

This table contains address family identifier information of BGP.

## XML structure

```
<BGP>
  <Familys>
    <Family>
      <Name></Name>
      <VRF></VRF>
      <Type></Type>
      <Preference>
        <Ebgp></Ebgp>
        <Ibgp></Ibgp>
        <Local></Local>
      </Preference>
      <BalanceAsPathNeglect></BalanceAsPathNeglect>
      <BalanceAsPathRelax></BalanceAsPathRelax>
      <Balance>
        <MaxBalance></MaxBalance>
        <MaxEBGPBalance></MaxEBGPBalance>
        <MaxIBGPBalance></MaxIBGPBalance>
        <MaxEIBGPBalance></MaxEIBGPBalance>
      </Balance>
      <PolicyVpnTarget></PolicyVpnTarget>
      <ReflectBtwClients></ReflectBtwClients>
      <ReflectorClusterID></ReflectorClusterID>
      <RrFilter></RrFilter>
      <DefaultRtImport></DefaultRtImport>
      <DomainDistinguisher></DomainDistinguisher>
      <PIC></PIC>
      <VpnCrossMultipath></VpnCrossMultipath>
      <RouteSelectDelay></RouteSelectDelay>
      <AdvertiseEvpnRoute>
        <AdvertiseEvpnEnable></AdvertiseEvpnEnable>
        <AdvertiseEvpnPolicy></AdvertiseEvpnPolicy>
        <AdvertiseEvpnReplaceRt></AdvertiseEvpnReplaceRt>
      </AdvertiseEvpnRoute>
      <AdvertiseL2vpnEvpnRoute></AdvertiseL2vpnEvpnRoute>
      <AdvertiseL3vpnRoute>
        <AdvertiseL3vpnEnable></AdvertiseL3vpnEnable>
        <AdvertiseL3vpnPolicy></AdvertiseL3vpnPolicy>
        <AdvertiseL3vpnReplaceRt></AdvertiseL3vpnReplaceRt>
      </AdvertiseL3vpnRoute>
      <ImportEvpnMacIp></ImportEvpnMacIp>
      <DefaultLocalPreference></DefaultLocalPreference>
    </Family>
  </Familys>
</BGP>
```



</Famils>  
</BGP>

## Table description

Item	Description
Feature name	BGP
Table name	Family
Table type	Multi-instance table
Row name	Family
Restrictions	No
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Type	Address Family Identifier	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4 Unicast.</li> <li>• 2—IPv4 Multicast.</li> <li>• 3—MDT</li> <li>• 4—VPNv4</li> <li>• 5—IPv6 Unicast</li> <li>• 6—IPv6 Multicast.</li> <li>• 7—VPNv6</li> <li>• 8—L2VPN</li> <li>• 9—L2VPN EVPN</li> <li>• 10—Link-State</li> </ul>	N/A
Preference	Preference for BGP Routes	Data Structure	Include: <ul style="list-style-type: none"> <li>• Ebgp</li> <li>• Ibgp</li> <li>• Local</li> </ul>	N/A
Ebgp	Preference for eBGP Routes		Unsigned integer. Value range: 1 to 255	N/A
Ibgp	Preference for iBGP Routes		Unsigned integer. Value range: 1 to 255	N/A
Local	Preference for Local Routes		Unsigned integer. Value range: 1 to 255	N/A
BalanceAsPathNeglect	Ignore the AS_PATH attribute when implementing load balancing		Enumeration: <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A
BalanceAsPathRelax	Load balancing for routes that have different AS_PATH attributes of the same length		Enumeration: <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A
Balance	number of BGP ECMP routes for load balancing	Data Structure	Include: <ul style="list-style-type: none"> <li>• MaxBalance</li> <li>• MaxEBGPPBalance</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• MaxIBGPBalance</li> <li>• MaxEIBGPBalance</li> </ul>	

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxBalance	maximum number of BGP ECMP routes for load balancing		Unsigned integer. Value range: 1 to 255	N/A
MaxEBGPBalance	Maximum number of EBGP ECMP routes for load balancing		Unsigned integer. Value range: 1 to 255	EBGP load balancing and EBGP/IBGP load balancing cannot be configured at the same time
MaxIBGPBalance	Maximum number of IBGP ECMP routes for load balancing		Unsigned integer. Value range: 1 to 255	EBGP load balancing and EBGP/IBGP load balancing cannot be configured at the same time
MaxEIBGPBalance	Maximum number of ECMP routes between EBGP and IBGP routes for load balancing		Unsigned integer. Value range: 1 to 255	EBGP load balancing and EBGP/IBGP load balancing cannot be configured at the same time
PolicyVpnTarget	Filter VPN routes with VPN-Target attribute		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReflectBtwClients	Route reflection between clients		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReflectorClusterID	cluster ID of the route reflector		String, IPv4 address string or Unsigned integer. Value range: 1 to 4294967295	N/A
RrFilter	Specify reflector route Extended community filter policy		Unsigned integer. Value range: 1 to 199	Only IBGP routes whose extended community attribute matches the specified extended community list are reflected.
DefaultRtImport	Import default route		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A
DomainDistinguisher	A globally unique identifier for LS domain		String. Length: 9 to 26 characters. The format is AS<1-4294967295>:routerID <X.X.X.X>.	Example: 100:13.14.23.22
PIC	Enable Prefix		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	Independent Convergence		<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
VpnCrossMulti path	Redistribute multiple routes with the same prefix and RD to the VPN routing table		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A
RouteSelectDelay	Optimal route calculation delay time		Unsigned integer. Value range: 0 to 600 seconds.	N/A
AdvertiseEvpnRoute	Advertise BGP EVPN routes through the current address family	Data Structure	Include: <ul style="list-style-type: none"> <li>AdvertiseEvpnEnable</li> <li>AdvertiseEvpnPolicy</li> <li>AdvertiseEvpnReplaceRt</li> </ul>	N/A
AdvertiseEvpnEnable	Enable advertise BGP EVPN routes through the current address family		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseEvpnPolicy	Filter BGP EVPN routes by a routing policy		String. Length: 1 to 63 characters.	N/A
AdvertiseEvpnReplaceRt	Replace the route targets of BGP EVPN routes with those of VPN instances		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseL2vpnEvpnRoute	Advertise BGP EVPN route to the local site		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable. (default)</li> </ul>	N/A
AdvertiseL3vpnRoute	Advertise BGP L3VPN routes through the BGP EVPN address family	Data Structure	Include: <ul style="list-style-type: none"> <li>AdvertiseL3vpnEnable</li> <li>AdvertiseL3vpnPolicy</li> <li>AdvertiseL3vpnReplaceRt</li> </ul>	N/A
AdvertiseL3vpnEnable	Enable advertise BGP L3VPN routes through the		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	BGP EVPN address family			
AdvertiseL3vpnPolicy	Filter BGP L3VPN routes by a routing policy		String. Length: 1 to 63 characters.	N/A
AdvertiseL3vpnReplaceRt	Replace the route targets of BGP L3VPN routes with those of EVPN instances		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ImportEvpnMacIp	Redistribute MAC/IP advertisement routes		Enumeration: <ul style="list-style-type: none"> <li>0—Disable. (default)</li> <li>1—Enable.</li> </ul>	N/A
DefaultLocalPreference	Configure default local preference		Unsigned integer. Value range: 0 to 4294967295	The default local preference is supported only by IPv4 unicast, IPv4 multicast, IPv6 unicast, and IPv6 multicast routes.

## BGP/Networks

This table contains BGP network information.

### XML structure

```

<BGP>
  <Networks>
    <Network>
      <Name></Name>
      <VRF></VRF>
      <Family></Family>
      <IpAddress></IpAddress>
      <Mask></Mask>
      <RoutePolicy></RoutePolicy>
    </Network>
  </Networks>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	Networks
Table type	Multi-instance table
Row name	Network
Restrictions	No
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier of Network	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4 Unicast</li><li>• 2—IPv4 Multicast</li><li>• 5—IPv6 Unicast</li><li>• 6—IPv6 Multicast</li></ul>	N/A
IpAddress	Address of Network	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
Mask	Mask of Network address	Index	Unsigned integer. Value range: 0 to 128	For IPv4,this is 0 to 32.For IPv6 this is 0 to 128.
RoutePolicy	Name of the routing policy		String. Length: 1 to 63 characters.	N/A

## BGP/Aggregates

This table contains BGP aggregate information.

## XML structure

<BGP>

```

<Aggregates>
  <Aggregate>
    <Name></Name>
    <VRF></VRF>
    <Family></Family>
    <IpAddress></IpAddress>
    <Mask></Mask>
    <DetailSuppressed></DetailSuppressed>
    <AsSet></AsSet>
    <AttributePolicy></AttributePolicy>
    <OriginPolicy></OriginPolicy>
    <SuppressPolicy></SuppressPolicy>
  </Aggregate>
</Aggregates>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	Aggregates
Table type	Multi-instance table
Row name	Aggregate
Restrictions	No
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier of Aggregate	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 Unicast</li> <li>2—IPv4 Multicast</li> <li>5—IPv6 Unicast</li> <li>6—IPv6 Multicast</li> </ul>	N/A
IpAddress	Address of aggregate	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
Mask	Mask of aggregate address	Index	Unsigned integer. Value range: 0 to 128	For IPv4,this is 0 to 32.For IPv6 this is 0 to 128.
DetailSuppressed	Detail Suppressed		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
AsSet	Creating a summary route with AS set path		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.(default)</li> <li>1—Enable.</li> </ul>	N/A
AttributePolicy	Routing policy used to set the attributes of the summary route		String. Length: 1 to 63 characters.	N/A
OriginPolicy	Routing policy used to filter original specific routes to be summarized		String. Length: 1 to 63 characters.	N/A
SuppressPolicy	Routing policy used to filter specific routes to be advertised		String. Length: 1 to 63 characters.	N/A

## BGP/NeighborGroups

This table contains BGP neighbor group information.

## XML structure

<BGP>

```

<NeighborGroups>
  <NeighborGroup>
    <Name></Name>
    <VRF></VRF>
    <Family></Family>
    <GroupName></GroupName>
    <RtPolicyImport></RtPolicyImport>
    <RtPolicyExport></RtPolicyExport>
    <AllowAsLoop></AllowAsLoop>
    <ReflectClient></ReflectClient>
    <NexthopInvariable></NexthopInvariable>
    <NexthopLocal></NexthopLocal>
    <RouterMacLocal></RouterMacLocal>
    <AdvertiseCommunity></AdvertiseCommunity>
    <AdvertiseExtCommunity></AdvertiseExtCommunity>
    <ReOriginated></ReOriginated>
    <AdvEvpnRouteSuppressMac></AdvEvpnRouteSuppressMac>
    <AdvEvpnRouteSuppressPrefix></AdvEvpnRouteSuppressPrefix>
    <DefaultgatewayNoAdv></DefaultgatewayNoAdv>
    <RouteLimit>
      <Number></Number>
      <Percentage></Percentage>
      <AlertOnly></AlertOnly>
      <Discard></Discard>
      <Reconnect></Reconnect>
    </RouteLimit>
    <PreferredValue></PreferredValue>
    <NexthopVpn></NexthopVpn>
  </NeighborGroup>
</NeighborGroups>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	NeighborGroups
Table type	Multi-instance table
Row name	NeighborGroup
Restrictions	No
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier of NeighborGroup	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4 Unicast.</li> <li>• 2—IPv4 Multicast.</li> <li>• 3—MDT</li> <li>• 4—VPNv4</li> <li>• 5—IPv6 Unicast</li> <li>• 6—IPv6 Multicast.</li> <li>• 7—VPNv6</li> <li>• 8—L2VPN</li> <li>• 9—L2VPN EVPN</li> <li>• 10—Link-State</li> </ul>	N/A
GroupName	Group Name	Index	String. Length: 1 to 47 characters.	N/A
RtPolicyImport	Import Route-Policy for NeighborGroup		String. Length: 1 to 63 characters.	N/A
RtPolicyExport	Export Route-Policy for NeighborGroup		String. Length: 1 to 63 characters.	N/A
AllowAsLoop	allow a local AS number to exist in the AS_PATH attribute of routes		Unsigned integer. Value range: 1 to 10	N/A
ReflectClient	Configure the device as a route reflector and specify a peer or peer group as a client		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A
NextHopInvariable	Send original next hop for routes advertised to the peer		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	Next-hop-local conflict with next-hop-invariable .
NextHopLocal	Specify local address as the next hop of routes advertised to the peers		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	Next-hop-local conflict with next-hop-invariable

Column name	Column description	Column type	Data type and restrictions	Remarks
RouterMacLocal	Specify local MAC as the router MAC of routes advertised to and received from the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseCommunity	Send community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseExtCommunity	Send extended community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReOriginated	Re-originate EVPN routes received from the peer by modifying the L3 VXLAN ID and RD		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvEvpnRouteSuppressMac	Advertise EVPN routes to the peer excluding MAC/IP advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvEvpnRouteSuppressPrefix	Advertise EVPN routes to the peer excluding IP prefix advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
DefaultgatewayNoAdv	Advertise EVPN routes by deleting the default gateway extended community attribute		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RouteLimit	Configure the maximum number of routes that can be received from the peers	Data Structure	Include: <ul style="list-style-type: none"> <li>Number</li> <li>Percentage</li> <li>AlertOnly</li> <li>Discard</li> <li>Reconnect</li> </ul>	N/A
Number	Number of prefixes		Unsigned integer. Value range: 1 to 4294967295	N/A
Percentage	Percentage value to trigger a warning message		Unsigned integer. Value range: 1 to 100. Default is 75	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AlertOnly	Generate a log message when the route limit is exceeded		Enumeration. <ul style="list-style-type: none"> <li>0—Disable. (default)</li> <li>1—Enable.</li> </ul>	N/A
Discard	Discard routes received after the route limit is exceeded		Enumeration. <ul style="list-style-type: none"> <li>0—Disable. (default)</li> <li>1—Enable.</li> </ul>	N/A
Reconnect	Reconnect time in seconds		Unsigned integer. Value range: 1 to 65535	N/A
PreferredValue	Set a preferred value for routes received from the peers		Unsigned integer. Value range: 0 to 65535	N/A
NextHopVpn	Change the next hop of received VPNv4 routes to that of the matching VPN instance		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## BGP/Neighbors

This table contains BGP neighbor information.

### XML structure

```

<BGP>
  <Neighbors>
    <Neighbor>
      <Name></Name>
      <VRF></VRF>
      <Family></Family>
      <SessAF></SessAF>
      <IpAddress></IpAddress>
      <Mask></Mask>
      <RtPolicyImport></RtPolicyImport>
      <RtPolicyExport></RtPolicyExport>
      <AllowAsLoop></AllowAsLoop>
      <ReflectClient></ReflectClient>
      <NextHopInvariable></NextHopInvariable>
      <NextHopLocal></NextHopLocal>
      <RouterMacLocal></RouterMacLocal>
      <AdvertiseCommunity></AdvertiseCommunity>
    </Neighbor>
  </Neighbors>
</BGP>

```

```

<AdvertiseExtCommunity></AdvertiseExtCommunity>
<ReOriginated></ReOriginated>
<AdvEvpnRouteSuppressMac></AdvEvpnRouteSuppressMac>
<AdvEvpnRouteSuppressPrefix></AdvEvpnRouteSuppressPrefix>
<DefaultgatewayNoAdv></DefaultgatewayNoAdv>
<RouteLimit>
  <Number></Number>
  <Percentage></Percentage>
  <AlertOnly></AlertOnly>
  <Discard></Discard>
  <Reconnect></Reconnect>
</RouteLimit>
<PreferredValue></PreferredValue>
<NexthopVpn></NexthopVpn>
</Neighbor>
</Neighbors>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	Neighbors
Table type	Multi-instance table
Row name	Neighbor
Restrictions	No
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier of Neighbor	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4 Unicast.</li> <li>• 2—IPv4 Multicast.</li> <li>• 3—MDT</li> <li>• 4—VPNv4</li> <li>• 5—IPv6 Unicast</li> <li>• 6—IPv6 Multicast.</li> <li>• 7—VPNv6</li> <li>• 8—L2VPN</li> <li>• 9—L2VPN EVPN</li> <li>• 10—Link-State</li> </ul>	N/A
SessAF	Address family of session	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4.</li> <li>• 2—IPv6.</li> </ul>	N/A
IpAddress	Address of session	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
Mask	Mask of session address	Index	Unsigned integer. Value range: 0 to 128,or 255	For non-dynamic peers, this is 255.For IPv4 dynamic peers,this is 0 to 32.For IPv6 dynamic peers, this is 0 to 128. Dynamic peers are not supported.
RtPolicyImport	Import Route-Policy for Neighbor		String. Length: 1 to 63 characters.	N/A
RtPolicyExport	Export Route-Policy for Neighbor		String. Length: 1 to 63 characters.	N/A
AllowAsLoop	allow a local AS number to exist in the AS_PATH attribute of routes		Unsigned integer. Value range: 1 to 10	N/A
ReflectClient	Configure the device as a route reflector and specify a peer or peer group as a		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	client			
NextHopInvariable	Send original next hop for routes advertised to the peer		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Next-hop-local conflict with next-hop-invariable
NextHopLocal	Specify local address as the next hop of routes advertised to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Next-hop-local conflict with next-hop-invariable
RouterMacLocal	Specify local MAC as the router MAC of routes advertised to and received from the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseCommunity	Send community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseExtCommunity	Send extended community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReOriginated	Re-originate EVPN routes received from the peer by modifying the L3 VXLAN ID and RD		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvEvpnRouteSuppressMac	Advertise EVPN routes to the peer excluding MAC/IP advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable</li> </ul>	N/A
AdvEvpnRouteSuppressPrefix	Advertise EVPN routes to the peer excluding IP prefix advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable</li> </ul>	N/A
DefaultgatewayNoAdv	Advertise EVPN routes by deleting the default gateway extended community attribute		<ul style="list-style-type: none"> <li>Enumeration.</li> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RouteLimit	Configure the maximum	Data Structure	Include: <ul style="list-style-type: none"> <li>Number</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	number of routes that can be received from the peers		<ul style="list-style-type: none"> <li>Percentage</li> <li>AlertOnly</li> <li>Discard</li> <li>Reconnect</li> </ul>	
Number	Number of prefixes		Unsigned integer. Value range: 1 to 4294967295	N/A
Percentage	Percentage value to trigger a warning message		Unsigned integer. Value range: 1 to 100. Default is 75	N/A
AlertOnly	Generate a log message when the route limit is exceeded		Enumeration. <ul style="list-style-type: none"> <li>0—Disable. (default)</li> <li>1—Enable.</li> </ul>	N/A
Discard	Discard routes received after the route limit is exceeded		Enumeration. <ul style="list-style-type: none"> <li>0—Disable. (default)</li> <li>1—Enable.</li> </ul>	N/A
Reconnect	Reconnect time in seconds		Unsigned integer. Value range: 1 to 65535	N/A
PreferredValue	Set a preferred value for routes received from the peers		Unsigned integer. Value range: 0 to 65535	N/A
NextHopVpn	Change the next hop of received VPNv4 routes to that of the matching VPN instance		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## BGP/Redistributes

This table contains BGP redistribute information.

### XML structure

```

<BGP>
  <Redistributes>
    <Redist>
      <Name></Name>
      <VRF></VRF>
      <Family></Family>
      <Protocol></Protocol>
      <RedistName></RedistName>
    
```

```

    <AllowDirect></AllowDirect>
    <Med></Med>
    <RoutePolicy></RoutePolicy>
  </Redist>
</Redistributes>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	Redistributes
Table type	Multi-instance table
Row name	Redist
Restrictions	No
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 Unicast.</li> <li>2—IPv4 Multicast.</li> <li>5—IPv6 Unicast</li> <li>6—IPv6 Multicast.</li> </ul>	N/A
Protocol	Protocol name	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Direct.</li> <li>2—Static.</li> <li>3—RIP</li> <li>4—OSPF</li> <li>5—ISIS</li> <li>6—EIGRP</li> <li>7—UNR</li> <li>8—Guard</li> </ul>	N/A
RedistName	Redistributed process name	Index	String. Length: 0 to 31 characters.	It must be empty when the Protocol column is Direct, Static.
AllowDirect	Include direct routes.		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
Med	Value of the MED.		Unsigned integer. Value range: 0 to 4294967295	N/A
RoutePolicy	Name of the routing policy.		String. Length: 1 to 63 characters	N/A

## BGP/RedistributesAppend

This table contains BGP redistribution appended information.

## XML structure

```

<BGP>
  <RedistributesAppend>
    <Redist>
      <Name></Name>

```

```

    <VRF></VRF>
    <Family></Family>
    <Protocol></Protocol>
    <RedistName></RedistName>
    <AllowDirect></AllowDirect>
    <Med></Med>
    <RoutePolicy></RoutePolicy>
  </Redist>
</RedistributesAppend>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	RedistributesAppend
Table type	Multi-instance table
Row name	Redist
Restrictions	No
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4 Unicast.</li> <li>• 2—IPv4 Multicast.</li> <li>• 5—IPv6 Unicast</li> <li>• 6—IPv6 Multicast.</li> </ul>	N/A
Protocol	Protocol name	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—Direct.</li> <li>• 2—Static.</li> <li>• 3—RIP</li> <li>• 4—OSPF</li> <li>• 5—ISIS</li> <li>• 6—EIGRP</li> <li>• 7—UNR</li> <li>• 8—Guard</li> </ul>	N/A
RedistName	Redistributed process name	Index	String. Length: 0 to 31 characters.	It must be empty when the Protocol column is Direct, Static.
AllowDirect	Include direct routes.		Enumeration: <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A
Med	Value of the MED.		Unsigned integer. Value range: 0 to 4294967295	N/A
RoutePolicy	Name of the routing policy.		String. Length: 1 to 63 characters	N/A

# Contents

BGP .....	1
BGP/Instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
BGP/VRFs .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
BGP/CfgSessionGroups .....	4
XML structure .....	4
Table description .....	5
Columns .....	6
BGP/CfgSessions .....	7
XML structure .....	7
Table description .....	8
Columns .....	9
BGP/Sessions .....	11
XML structure .....	11
Table description .....	12
Columns .....	13
BGP/Familys .....	16
XML structure .....	16
Table description .....	17
Columns .....	18
BGP/Networks .....	22
XML structure .....	22
Table description .....	23
Columns .....	23
BGP/Aggregates .....	23
XML structure .....	23
Table description .....	24
Columns .....	25
BGP/NeighborGroups .....	25
XML structure .....	25
Table description .....	26
Columns .....	27
BGP/Neighbors .....	29
XML structure .....	29
Table description .....	30
Columns .....	31
BGP/Redistributes .....	33
XML structure .....	33
Table description .....	34
Columns .....	35
BGP/SessionCounts .....	35
XML structure .....	35
Table description .....	36
Columns .....	36
BGP/NeighborInformations .....	36
XML structure .....	36
Table description .....	37
Columns .....	38
BGP/RedistributesAppend .....	40
XML structure .....	40
Table description .....	41
Columns .....	42

# BGP

## BGP/Instances

This table contains BGP instance information.

### XML structure

```
<BGP>
  <Instances>
    <Instance>
      <Name></Name>
      <ASNumber></ASNumber>
      <NSR></NSR>
      <SendDelayTime></SendDelayTime>
      <SendDelayPrefix></SendDelayPrefix>
      <SendDelayIPv6Prefix></SendDelayIPv6Prefix>
      <SendStartupTime></SendStartupTime>
      <StartupPolicyMed></StartupPolicyMed>
      <FlushSuboptimalRoute></FlushSuboptimalRoute>
      <RouteReplicateEnable></RouteReplicateEnable>
    </Instance>
  </Instances>
</BGP>
```

### Table description

Item	Description
Feature name	BGP
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process. When execute get bulk operation, you

Column name	Column description	Column type	Data type and restrictions	Remarks
				can only get the data of the specified BGP instance.
ASNumber	Autonomous System number		Unsigned integer. Value range: 1 to 4294967295	N/A
NSR	Nonstop Routing		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
SendDelayTime	Send delay time in seconds		Unsigned integer. Value range: 0 to 3600	The value 0 indicates that the BGP speaker never send the update message.
SendDelayPrefix	Send delay using IPv4 prefix list		String. Length: 1 to 63 characters.	N/A
SendDelayIPv6Prefix	Send delay using IPv6 prefix list		String. Length: 1 to 63 characters.	N/A
SendStartupTime	Send startup time in seconds		Unsigned integer. Value range: 0 to 3600	The value 0 indicates that the BGP speaker always send the update message with the startup policy.
StartupPolicy Med	Satrtup policy MED		Unsigned integer. Value range: 0 to 4294967295	N/A
FlushSuboptimalRoute	Flush suboptimal route to RIB		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RouteReplicateEnable	Enable mutual route replication between public and private networks		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## BGP/VRFs

This table contains BGP VRF information.

## XML structure

<BGP>



```

<VRFs>
  <VRF>
    <Name></Name>
    <VRF></VRF>
    <RouterId></RouterId>
    <Timer>
      <KeepAlive></KeepAlive>
      <HoldTime></HoldTime>
    </Timer>
    <BestRouteIgpMetricIgnore></BestRouteIgpMetricIgnore>
    <BestRouteAsPathNeglect></BestRouteAsPathNeglect>
    <BestRouteCompareMED></BestRouteCompareMED>
    <BestRouteConfederationMED></BestRouteConfederationMED>
    <BestRouteRouterIdIgnore></BestRouteRouterIdIgnore>
    <CompareDifferentAsMED></CompareDifferentAsMED>

  </VRF>
</VRFs>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	VRFs
Table type	Multi-instance table
Row name	VRF
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.

Column name	Column description	Column type	Data type and restrictions	Remarks
RouterId	BGP Router Id		String,IPv4 address string	N/A
Timer	Keepalive and Holdtime	Data Structure	Include: <ul style="list-style-type: none"> <li>KeepAlive</li> <li>HoldTime</li> </ul>	N/A
KeepAlive	Keepalive Interval in Seconds		Unsigned integer. Value range: 0 to 21845	N/A
HoldTime	Holdtime in Seconds		Unsigned integer. Value range: 0, or 3 to 65535	N/A
BestRouteIgp MetricIgnore	Ignore IGP metrics during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
BestRouteAs PathNeglect	Ignore the AS-PATH attribute during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
BestRouteCompareMED	Consider MED value during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
BestRouteConfederationMED	Compare the MEDs of routes from confederation peers during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
BestRouteRouterIdIgnore	Ignore router ID during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
CompareDifferentAsMED	Compare the MEDs of routes from different ASs during optimal route selection		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## BGP/CfgSessionGroups

This table contains configure information of BGP session group.

### XML structure

```
<BGP>
  <CfgSessionGroups>
```

```

<CfgSessionGroup>
  <Name></Name>
  <VRF></VRF>
  <GroupName></GroupName>
  <Type></Type>
  <ASNumber></ASNumber>
  <ConnectInterface></ConnectInterface>
  <UpdateInterval></UpdateInterval>
  <PasswordType></PasswordType>
  <Password></Password>
  <BfdType></BfdType>
  <EbgpMaxHop></EbgpMaxHop>
  <Ignore></Ignore>
  <Description></Description>
  <NexthopRecursivePolicyDisable></NexthopRecursivePolicyDisable>
  <FakeAS></FakeAS>
  <DualAS></DualAS>
  <PrependGlobalAS></PrependGlobalAS>
  <PrependFakeAS></PrependFakeAS>
</CfgSessionGroup>
</CfgSessionGroups>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	CfgSessionGroups
Table type	Multi-instance table
Row name	CfgSessionGroup
Restrictions	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
GroupName	Group Name	Index	String. Length: 1 to 47 characters.	N/A
Type	Internal or External		Enumeration. <ul style="list-style-type: none"> <li>• 0—Internal.</li> <li>• 1—<b>External.</b></li> </ul>	N/A
ASNumber	Autonomous System number		Unsigned integer. Value range: 1 to 4294967295	N/A
ConnectInterface	Connect Interface		String. Length: 1 to 47 characters.	N/A
UpdateInterval	Route Update Interval		Unsigned integer. Value range: 0 to 600	N/A
PasswordType	Password type.		Enumeration. <ul style="list-style-type: none"> <li>• 1—Ciphertext.</li> <li>• 2—Plaintext.</li> </ul>	The password can only be displayed in cipher text.
Password	Password.		String. Length: 1 to 80 characters for MD5 plaintext password. 33 to 137 characters for MD5 ciphertext password.	
BfdType	Bfd type		Enumeration. <ul style="list-style-type: none"> <li>• 0—default type</li> <li>• 1—single-hop</li> <li>• 2—multi-hop</li> </ul>	The default type indicate that actual bfd type (single-hop or multi-hop) depend on different situations
EbgpMaxHop	EBGP multihop		Unsigned integer. Value range: 1 to 255	N/A
Ignore	Disable session establishment to the peers		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A
Description	Peer Description		String. Length: 1 to 79 characters.	Case Sensitive

Column name	Column description	Column type	Data type and restrictions	Remarks
NextHopRecursivePolicyDisable	Disable route recursion policy control for routes received from the specified peer or peer group		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
FakeAS	Specify a virtual local AS number for the peer or peer group		Unsigned integer. Value range: 1 to 4294967295. String. Length: 3 to 11 characters. Format: AA<0-65535>.NN<0-65535>	By default, the fake AS number does not exist.
DualAS	Support both real and fake AS numbers for peer group relationship establishment		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not DualAS, the value for DualAS is 0.
PrependGlobalAS	Add the real AS number to the AS_PATH attribute in sent packets		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not PrependGlobalAS, the value for PrependGlobalAS is 0.
PrependFakeAS	Add the fake AS number to the AS_PATH attribute in received packets		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not PrependFakeAS, the value for PrependFakeAS is 0.

## BGP/CfgSessions

This table contains configure information of BGP session.

### XML structure

```

<BGP>
  <CfgSessions>
    <CfgSession>
      <Name></Name>
      <VRF></VRF>

```

```

<SessAF></SessAF>
<IpAddress></IpAddress>
<Mask></Mask>
<ASNumber></ASNumber>
<GroupName></GroupName>
<ConnectInterface></ConnectInterface>
<UpdateInterval></UpdateInterval>
<PasswordType></PasswordType>
<Password></Password>
<BfdType></BfdType>
<EbgpMaxHop></EbgpMaxHop>
<Ignore></Ignore>
<Description></Description>
<NexthopRecursivePolicyDisable></NexthopRecursivePolicyDisable>
<FakeAS></FakeAS>
<DualAS></DualAS>
<PrependGlobalAS></PrependGlobalAS>
<PrependFakeAS></PrependFakeAS>
</CfgSession>
</CfgSessions>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	CfgSessions
Table type	Multi-instance table
Row name	CfgSession
Restrictions	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
SessAF	Address family of session	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
IpAddress	Address of session	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
Mask	Mask of session address	Index	Unsigned integer. Value range: 0 to 128,or 255	For non-dynamic peers, this is 255.For IPv4 dynamic peers,this is 0 to 32.For IPv6 dynamic peers, this is 0 to 128. Dynamic peers are not supported.
ASNumber	Autonomous System number		Unsigned integer. Value range: 1 to 4294967295	N/A
GroupName	Group Name		String. Length: 1 to 47 characters.	N/A
ConnectInterface	Connect Interface		String. Length: 1 to 47 characters.	N/A
UpdateInterval	Route Update Interval		Unsigned integer. Value range: 0 to 600	N/A
PasswordType	Password type.		Enumeration. <ul style="list-style-type: none"> <li>1—Ciphertext.</li> <li>2—Plaintext.</li> </ul>	The password can only be displayed in cipher text.
Password	Password.		String. Length: 1 to 80 characters for MD5 plaintext password. 33 to 137 characters for MD5 ciphertext password.	
BfdType	Bfd type		Enumeration. <ul style="list-style-type: none"> <li>0—default type</li> <li>1—single-hop</li> <li>2—multi-hop</li> </ul>	The default type indicate that actual bfd type (single-hop or multi-hop) depend on different

Column name	Column description	Column type	Data type and restrictions	Remarks
				situations
EbgpMaxHop	EBGP multihop		Unsigned integer. Value range: 1 to 255	N/A
Ignore	Disable session establishment to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A
Description	Peer Description		String. Length: 1 to 79 characters.	Case Sensitive
NexthopRecursivePolicyDisable	Disable route recursion policy control for routes received from the specified peer or peer group		Enumeration. <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A
FakeAS	Specify a virtual local AS number for the peer or peer group		Unsigned integer. Value range: 1 to 4294967295. String. Length: 3 to 11 characters. Format: AA<0-65535>.NN<0-65535>	By default, the fake AS number does not exist.
DualAS	Support both real and fake AS numbers for peer relationship establishment		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not DualAS, the value for DualAS is 0.
PrependGlobalAS	Add the real AS number to the AS_PATH attribute in sent packets		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not PrependGlobalAS, the value for PrependGlobalAS is 0.
PrependFakeAS	Add the fake AS number to the AS_PATH attribute in received packets		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	The object does not exist if FakeAS is not configured. If you configure FakeAS but not PrependFakeAS, the value for PrependFakeAS is 0.



# BGP/Sessions

This table contains state information of BGP session.

## XML structure

```
<BGP>
  <Sessions>
    <Session>
      <Name></Name>
      <VRF></VRF>
      <AF></AF>
      <IpAddress></IpAddress>
      <ASNumber></ASNumber>
      <State></State>
      <Version></Version>
      <LocalRouterID></LocalRouterID>
      <Type></Type>
      <RemoteRouterID></RemoteRouterID>
      <RcvdMsgCnt></RcvdMsgCnt>
      <SentMsgCnt></SentMsgCnt>
      <Time></Time>
      <DynamicallyPeer></DynamicallyPeer>
      <CurrentEvent></CurrentEvent>
      <LastState></LastState>
      <LocalPort></LocalPort>
      <RemotePort></RemotePort>
      <ConfiguredHoldTime></ConfiguredHoldTime>
      <ConfiguredKeepaliveTime></ConfiguredKeepaliveTime>
      <ReceivedHoldTime></ReceivedHoldTime>
      <NegotiatedHoldTime></NegotiatedHoldTime>
      <NegotiatedKeepaliveTime></NegotiatedKeepaliveTime>
      <MultiProtocolExtensionCapability></MultiProtocolExtensionCapability>
      <RouteRefreshCapability></RouteRefreshCapability>
      <GracefulRestartCapability></GracefulRestartCapability>
      <AS4Capability></AS4Capability>
      <AddressfamilyCapability>
        <Family></Family>
        <Advertised></Advertised>
        <Received></Received>
      </AddressfamilyCapability>
      <InQUpdates></InQUpdates>
      <OutQUpdates></OutQUpdates>
      <UpdateInterval></UpdateInterval>
    </Session>
  </Sessions>
</BGP>
```

# Table description

Item	Description
Feature name	BGP
Table name	Sessions
Table type	Multi-instance table
Row name	Session
Restrictions	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
AF	Address family of session	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
IpAddress	Address of session	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
ASNumber	Autonomous System number		Unsigned integer. Value range: 1 to 4294967295	N/A
State	Session state		Enumeration: <ul style="list-style-type: none"> <li>0—Idle</li> <li>1—Connect</li> <li>2—Active</li> <li>3—Opensent</li> <li>4—Openconfirm</li> <li>5—Established</li> </ul>	Established state means that the BGP session is established, but whether the address families are negotiated is unknown.
Version	BGP version		Unsigned integer. Value range:4	N/A
LocalRouterID	Local router ID		String,IPv4 address string	N/A
Type	Internal or External		Enumeration. <ul style="list-style-type: none"> <li>0—Internal.</li> <li>1—External.</li> </ul>	N/A
RemoteRouterID	Router ID of the peer		String,IPv4 address string	N/A
RcvdMsgCnt	Number of messages received		Unsigned integer. Value range: 0 to 4294967295	N/A
SentMsgCnt	Number of messages sent		Unsigned integer. Value range: 0 to 4294967295	N/A
Time	Lasting time of the current BGP session state		Unsigned integer. Value range: 0 to 4294967295. Unit is second.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DynamicallyPeer	Whether the peer is a dynamic peer		Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false.</b></li> </ul>	N/A
CurrentEvent	Current event of the BGP session between the local router and the peer		Enumeration: <ul style="list-style-type: none"> <li>• <b>0—Start</b></li> <li>• <b>1—Stop</b></li> <li>• <b>2—CRTimerExpired</b></li> <li>• <b>3—KATimerExpired</b></li> <li>• <b>4—HoldTimerExpired</b></li> <li>• <b>5—CR ACKED</b></li> <li>• <b>6—ConnConfirmed</b></li> <li>• <b>7—ConnFailed</b></li> <li>• <b>8—RecvOpen</b></li> <li>• <b>9—HeadErr</b></li> <li>• <b>10—OpenMsgErr</b></li> <li>• <b>11—RecvVerNotification</b></li> <li>• <b>12—RecvNotification</b></li> <li>• <b>13—RecvKeepalive</b></li> <li>• <b>14—RecvUpdate</b></li> <li>• <b>15—UpdateMsgErr</b></li> <li>• <b>16—RecvRouteRefresh</b></li> <li>• <b>17—Unknown</b></li> </ul>	N/A
LastState	Previous state of the BGP session		Enumeration: <ul style="list-style-type: none"> <li>• <b>0—Idle</b></li> <li>• <b>1—Connect</b></li> <li>• <b>2—Active</b></li> <li>• <b>3—Opensent</b></li> <li>• <b>4—Openconfirm</b></li> <li>• <b>5—Established</b></li> </ul>	Established state means that the BGP session is established, but whether the address families are negotiated is unknown.
LocalPort	Local TCP port numbers of the local router and its peer		Unsigned integer. Value range: 179, 1025 to 65535	N/A
RemotePort	Remote TCP port numbers of the local router and its peer		Unsigned integer. Value range: 179, 1025 to 65535	N/A
ConfiguredHoldTime	Configured holdtime in seconds		Unsigned integer. Value range: 0, or 3 to 65535	N/A
ConfiguredKeepaliveTime	Configured keepalive time in seconds		Unsigned integer. Value range: 0 to 21845	N/A
ReceivedHoldTime	Received holdtime in seconds		Unsigned integer. Value range: 0, or 3 to 65535	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
NegotiatedHoldTime	Negotiated holdtime in seconds		Unsigned integer. Value range: 0, or 3 to 65535	N/A
NegotiatedKeepaliveTime	Negotiated keepalive time in seconds		Unsigned integer. Value range: 0 to 21845	N/A
MultiProtocolExtensionCapability	Support for multiprotocol extension capability		Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false.</b></li> </ul>	N/A
RouteRefreshCapability	Support for route refresh capability		Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false.</b></li> </ul>	N/A
GracefulRestartCapability	Support for GR capability		Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false.</b></li> </ul>	N/A
AS4Capability	Support for 4-byte AS capability		Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false.</b></li> </ul>	N/A
AddressfamilyCapability	Support for address family capability	Data Structure	Include: <ul style="list-style-type: none"> <li>• Family</li> <li>• Advertised</li> <li>• Received</li> </ul>	N/A
Family	Address Family Identifier	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—IPv4 Unicast.</li> <li>• <b>2</b>—IPv4 Multicast.</li> <li>• <b>3</b>—MDT</li> <li>• <b>4</b>—VPNv4</li> <li>• <b>5</b>—IPv6 Unicast</li> <li>• <b>6</b>—IPv6 Multicast.</li> <li>• <b>7</b>—VPNv6</li> <li>• <b>8</b>—L2VPN</li> <li>• <b>9</b>—L2VPN EVPN</li> <li>• <b>10</b>—Link-State</li> </ul>	N/A
Advertised	Advertised address family identifier		Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false.</b></li> </ul>	N/A
Received	Received address family identifier		Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false.</b></li> </ul>	N/A
InQUpdates	Number of		Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	received updates to be processed.		Value range: 0 to 4294967295	
OutQUpdates	Number of updates to be sent to the peer.		Unsigned integer. Value range: 0 to 4294967295	N/A
UpdateInterval	Route update interval		Unsigned integer. Value range: • 0 to 600	N/A

## BGP/Familys

This table contains address family identifier information of BGP.

### XML structure

```

<BGP>
  <Familys>
    <Family>
      <Name></Name>
      <VRF></VRF>
      <Type></Type>
      <Preference>
        <Ebgp></Ebgp>
        <Ibgp></Ibgp>
        <Local></Local>
      </Preference>
      <BalanceAsPathNeglect></BalanceAsPathNeglect>
      <BalanceAsPathRelax></BalanceAsPathRelax>
      <Balance>
        <MaxBalance></MaxBalance>
        <MaxEBGPBalance></MaxEBGPBalance>
        <MaxIBGPBalance></MaxIBGPBalance>
        <MaxEIBGPBalance></MaxEIBGPBalance>
      </Balance>
      <PolicyVpnTarget></PolicyVpnTarget>
      <ReflectBtwClients></ReflectBtwClients>
      <ReflectorClusterID></ReflectorClusterID>
      <RrFilter></RrFilter>
      <DefaultRtImport></DefaultRtImport>
      <DomainDistinguisher></DomainDistinguisher>
      <PIC></PIC>
      <VpnCrossMultipath></VpnCrossMultipath>
      <RouteSelectDelay></RouteSelectDelay>
      <AdvertiseEvpnRoute>

```

```

    <AdvertiseEvpnEnable></AdvertiseEvpnEnable>
    <AdvertiseEvpnPolicy></AdvertiseEvpnPolicy>
    <AdvertiseEvpnReplaceRt></AdvertiseEvpnReplaceRt>
  </AdvertiseEvpnRoute>
  <AdvertiseL2vpnEvpnRoute></AdvertiseL2vpnEvpnRoute>
  <AdvertiseL3vpnRoute>
    <AdvertiseL3vpnEnable></AdvertiseL3vpnEnable>
    <AdvertiseL3vpnPolicy></AdvertiseL3vpnPolicy>
    <AdvertiseL3vpnReplaceRt></AdvertiseL3vpnReplaceRt>
  </AdvertiseL3vpnRoute>
  <ImportEvpnMacIp></ImportEvpnMacIp>
  <DefaultLocalPreference></DefaultLocalPreference>
</Family>
</Famillys>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	Family
Table type	Multi-instance table
Row name	Family
Restrictions	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Type	Address Family Identifier	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4 Unicast.</li> <li>• 2—IPv4 Multicast.</li> <li>• 3—MDT</li> <li>• 4—VPNv4</li> <li>• 5—IPv6 Unicast</li> <li>• 6—IPv6 Multicast.</li> <li>• 7—VPNv6</li> <li>• 8—L2VPN</li> <li>• 9—L2VPN EVPN</li> <li>• 10—Link-State</li> </ul>	N/A
Preference	Preference for BGP Routes	Data Structure	Include: <ul style="list-style-type: none"> <li>• Ebgp</li> <li>• Ibgp</li> <li>• Local</li> </ul>	N/A
Ebgp	Preference for eBGP Routes		Unsigned integer. Value range: 1 to 255	N/A
Ibgp	Preference for iBGP Routes		Unsigned integer. Value range: 1 to 255	N/A
Local	Preference for Local Routes		Unsigned integer. Value range: 1 to 255	N/A
BalanceAsPathNeglect	Ignore the AS_PATH attribute when implementing load balancing		Enumeration: <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A
BalanceAsPathRelax	Load balancing for routes that have different AS_PATH attributes of the same length		Enumeration: <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A
Balance	number of BGP ECMP routes for load balancing	Data Structure	Include: <ul style="list-style-type: none"> <li>• MaxBalance</li> <li>• MaxEBGPPBalance</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• MaxIBGPBalance</li> <li>• MaxEIBGPBalance</li> </ul>	

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxBalance	maximum number of BGP ECMP routes for load balancing		Unsigned integer. Value range: 1 to 255	N/A
MaxEBGPPBalance	Maximum number of EBGPP ECMP routes for load balancing		Unsigned integer. Value range: 1 to 255	EBGP load balancing and EBGPP/IBGP load balancing cannot be configured at the same time
MaxIBGPPBalance	Maximum number of IBGP ECMP routes for load balancing		Unsigned integer. Value range: 1 to 255	EBGP load balancing and EBGPP/IBGP load balancing cannot be configured at the same time
MaxEIBGPPBalance	Maximum number of ECMP routes between EBGPP and IBGP routes for load balancing		Unsigned integer. Value range: 1 to 255	EBGP load balancing and EBGPP/IBGP load balancing cannot be configured at the same time
PolicyVpnTarget	Filter VPN routes with VPN-Target attribute		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReflectBtwClients	Route reflection between clients		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReflectorClusterID	cluster ID of the route reflector		String,IPv4 address string or Unsigned integer. Value range: 1 to 4294967295	N/A
RrFilter	Specify reflector route Extended community filter policy		Unsigned integer. Value range: 1 to 199	Only IBGP routes whose extended community attribute matches the specified extended community list are reflected.
DefaultRtImport	Import default route		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A
DomainDistinguisher	A globally unique identifier for LS domain		String. Length: 9 to 26 characters. The format is AS<1-4294967295>:routerID <X.X.X.X>.	Example: 100:13.14.23.22
PIC	Enable Prefix Independent		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	Convergence		<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
VpnCrossMulti path	Redistribute multiple routes with the same prefix and RD to the VPN routing table		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RouteSelectDe lay	Optimal route calculation delay time		Unsigned integer. Value range: 0 to 600 seconds.	N/A
AdvertiseEv pnRoute	Advertise BGP EVPN routes through the current address family	Data Structure	Include: <ul style="list-style-type: none"> <li>AdvertiseEvpnEnable</li> <li>AdvertiseEvpnPolicy</li> <li>AdvertiseEvpnReplaceRt</li> </ul>	N/A
AdvertiseEv pnEnable	Enable advertisement of BGP EVPN routes through the current address family		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseEv pnPolicy	Filter BGP EVPN routes by a routing policy		String. Length: 1 to 63 characters.	N/A
AdvertiseEv pnReplaceR t	Replace the route targets of BGP EVPN routes with those of VPN instances		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseL2 vpnEvpnRou te	Advertise BGP EVPN route to the local site		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseL3 vpnRoute	Advertise BGP L3VPN routes through the BGP EVPN address family	Data Structure	Include: <ul style="list-style-type: none"> <li>AdvertiseL3vpnEnable</li> <li>AdvertiseL3vpnPolicy</li> <li>AdvertiseL3vpnReplac eRt</li> </ul>	N/A
AdvertiseL3 vpnEnable	Enable advertise BGP L3VPN routes through the BGP EVPN		Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	address family			
AdvertiseL3vpnPolicy	Filter BGP L3VPN routes by a routing policy		String. Length: 1 to 63 characters.	N/A
AdvertiseL3vpnReplaceRt	Replace the route targets of BGP L3VPN routes with those of EVPN instances		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ImportEvpnMacIp	Redistribute MAC/IP advertisement routes		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
DefaultLocalIPreference	Configure default local preference		Unsigned integer. Value range: 0 to 4294967295	The default local preference is supported only by IPv4 unicast, IPv4 multicast, IPv6 unicast, and IPv6 multicast routes.

## BGP/Networks

This table contains BGP network information.

### XML structure

```

<BGP>
  <Networks>
    <Network>
      <Name></Name>
      <VRF></VRF>
      <Family></Family>
      <IpAddress></IpAddress>
      <Mask></Mask>
      <RoutePolicy></RoutePolicy>
    </Network>
  </Networks>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	Networks
Table type	Multi-instance table
Row name	Network
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier of Aggregate	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4 Unicast</li><li>• 2—IPv4 Multicast</li><li>• 5—IPv6 Unicast</li><li>• 6—IPv6 Multicast</li></ul>	N/A
IpAddress	Address of Network	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
Mask	Mask of Network address	Index	Unsigned integer. Value range: 0 to 128	For IPv4,this is 0 to 32.For IPv6, this is 0 to 128.
RoutePolicy	Name of the routing policy		String. Length: 1 to 63 characters.	N/A

## BGP/Aggregates

This table contains BGP aggregate information.

## XML structure

```
<BGP>
  <Aggregates>
    <Aggregate>
```

```

    <Name></Name>
    <VRF></VRF>
    <Family></Family>
    <IpAddress></IpAddress>
    <Mask></Mask>
    <DetailSuppressed></DetailSuppressed>
    <AsSet></AsSet>
    <AttributePolicy></AttributePolicy>
    <OriginPolicy></OriginPolicy>
    <SuppressPolicy></SuppressPolicy>
  </Aggregate>
</Aggregates>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	Aggregates
Table type	Multi-instance table
Row name	Aggregate
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier of Aggregate	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 Unicast</li> <li>2—IPv4 Multicast</li> <li>5—IPv6 Unicast</li> <li>6—IPv6 Multicast</li> </ul>	N/A
IpAddress	Address of aggregate	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
Mask	Mask of aggregate address	Index	Unsigned integer. Value range: 0 to 128.	For IPv4,this is 0 to 32.For IPv6, this is 0 to 128.
DetailSuppressed	Detail Suppressed		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—<b>Enable.</b></li> </ul>	N/A
AsSet	Creating a summary route with AS set path		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AttributePolicy	Routing policy used to set the attributes of the summary route		String. Length: 1 to 63 characters.	N/A
OriginPolicy	Routing policy used to filter original specific routes to be summarized		String. Length: 1 to 63 characters.	N/A
SuppressPolicy	Routing policy used to filter specific routes to be advertised		String. Length: 1 to 63 characters.	N/A

## BGP/NeighborGroups

This table contains BGP neighbor group information.

## XML structure

<BGP>

```

<NeighborGroups>
  <NeighborGroup>
    <Name></Name>
    <VRF></VRF>
    <Family></Family>
    <GroupName></GroupName>
    <RtPolicyImport></RtPolicyImport>
    <RtPolicyExport></RtPolicyExport>
    <AllowAsLoop></AllowAsLoop>
    <ReflectClient></ReflectClient>
    <NexthopInvariable></NexthopInvariable>
    <NexthopLocal></NexthopLocal>
    <RouterMacLocal></RouterMacLocal>
    <AdvertiseCommunity></AdvertiseCommunity>
    <AdvertiseExtCommunity></AdvertiseExtCommunity>
    <ReOriginated></ReOriginated>
    <AdvEvpnRouteSuppressMac></AdvEvpnRouteSuppressMac>
    <AdvEvpnRouteSuppressPrefix></AdvEvpnRouteSuppressPrefix>
    <DefaultgatewayNoAdv></DefaultgatewayNoAdv>
    <RouteLimit>
      <Number></Number>
      <Percentage></Percentage>
      <AlertOnly></AlertOnly>
      <Discard></Discard>
      <Reconnect></Reconnect>
    </RouteLimit>
    <PreferredValue></PreferredValue>
    <NexthopVpn></NexthopVpn>
  </NeighborGroup>
</NeighborGroups>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	NeighborGroups
Table type	Multi-instance table
Row name	NeighborGroup
Restrictions	No



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier of NeighborGroup	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4 Unicast.</li> <li>• 2—IPv4 Multicast.</li> <li>• 3—MDT</li> <li>• 4—VPNv4</li> <li>• 5—IPv6 Unicast</li> <li>• 6—IPv6 Multicast.</li> <li>• 7—VPNv6</li> <li>• 8—L2VPN</li> <li>• 9—L2VPN EVPN</li> <li>• 10—Link-State</li> </ul>	N/A
GroupName	Group Name	Index	String. Length: 1 to 47 characters.	N/A
RtPolicyImport	Import Route-Policy for NeighborGroup		String. Length: 1 to 63 characters.	N/A
RtPolicyExport	Export Route-Policy for NeighborGroup		String. Length: 1 to 63 characters.	N/A
AllowAsLoop	allow a local AS number to exist in the AS_PATH attribute of routes		Unsigned integer. Value range: 1 to 10	N/A
ReflectClient	Configure the device as a route reflector and specify a peer or peer group as a client		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A
NextHopInvariable	Send original next hop for routes advertised to the peer		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	Next-hop-local conflict with next-hop-invariable
NextHopLocal	Specify local address as the next hop of routes advertised to the peers		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	Next-hop-local conflict with next-hop-invariable.
RouterMacLocal	Specify local MAC as the router MAC of		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	routes advertised to and received from the peers		<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
AdvertiseCommunity	Send community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseExtCommunity	Send extended community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReOriginated	Re-originate EVPN routes received from the peer by modifying the L3 VXLAN ID and RD		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvEvpnRouteSuppressMac	Advertise EVPN routes to the peer excluding MAC/IP advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvEvpnRouteSuppressPrefix	Advertise EVPN routes to the peer excluding IP prefix advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
DefaultgatewayNoAdv	Advertise EVPN routes by deleting the default gateway extended community attribute		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RouteLimit	Configure the maximum number of routes that can be received from the peers	Data Structure	Include: <ul style="list-style-type: none"> <li>Number</li> <li>Percentage</li> <li>AlertOnly</li> <li>Discard</li> <li>Reconnect</li> </ul>	N/A
Number	Number of prefixes		Unsigned integer. Value range: 1 to 4294967295	N/A
Percentage	Percentage value to trigger a warning message		Unsigned integer. Value range: 1 to 100. Default is 75	N/A
AlertOnly	Generate a log message when the route limit is		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	exceeded		<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
Discard	Discard routes received after the route limit is exceeded		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
Reconnect	Reconnect time in seconds		Unsigned integer. Value range: 1 to 65535	N/A
PreferredValue	Set a preferred value for routes received from the peers		Unsigned integer. Value range: 0 to 65535	N/A
NextHopVpn	Change the next hop of received VPNv4 routes to that of the matching VPN instance		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## BGP/Neighbors

This table contains BGP neighbor information.

### XML structure

```

<BGP>
  <Neighbors>
    <Neighbor>
      <Name></Name>
      <VRF></VRF>
      <Family></Family>
      <SessAF></SessAF>
      <IpAddress></IpAddress>
      <Mask></Mask>
      <RtPolicyImport></RtPolicyImport>
      <RtPolicyExport></RtPolicyExport>
      <AllowAsLoop></AllowAsLoop>
      <ReflectClient></ReflectClient>
      <NextHopInvariable></NextHopInvariable>
      <NextHopLocal></NextHopLocal>
      <RouterMacLocal></RouterMacLocal>
      <AdvertiseCommunity></AdvertiseCommunity>
      <AdvertiseExtCommunity></AdvertiseExtCommunity>
      <ReOriginated></ReOriginated>
      <AdvEvpnRouteSuppressMac></AdvEvpnRouteSuppressMac>
      <AdvEvpnRouteSuppressPrefix></AdvEvpnRouteSuppressPrefix>
    </Neighbor>
  </Neighbors>
</BGP>

```

```

    <DefaultgatewayNoAdv></DefaultgatewayNoAdv>
  <RouteLimit>
    <Number></Number>
    <Percentage></Percentage>
    <AlertOnly></AlertOnly>
    <Discard></Discard>
    <Reconnect></Reconnect>
  </RouteLimit>
  <PreferredValue></PreferredValue>
  <NexthopVpn></NexthopVpn>
</Neighbor>
</Neighbors>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	Neighbors
Table type	Multi-instance table
Row name	Neighbor
Restrictions	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier of Neighbor	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4 Unicast.</li> <li>• 2—IPv4 Multicast.</li> <li>• 3—MDT</li> <li>• 4—VPNv4</li> <li>• 5—IPv6 Unicast</li> <li>• 6—IPv6 Multicast.</li> <li>• 7—VPNv6</li> <li>• 8—L2VPN</li> <li>• 9—L2VPN EVPN</li> <li>• 10—Link-State</li> </ul>	N/A
SessAF	Address family of session	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4.</li> <li>• 2—IPv6.</li> </ul>	N/A
IpAddress	Address of session	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
Mask	Mask of session address	Index	Unsigned integer. Value range: 0 to 128,or 255	For non-dynamic peers, this is 255.For IPv4 dynamic peers,this is 0 to 32.For IPv6 dynamic peers, this is 0 to 128. Dynamic peers are not supported.
RtPolicyImport	Import Route-Policy for Neighbor		String. Length: 1 to 63 characters.	N/A
RtPolicyExport	Export Route-Policy for Neighbor		String. Length: 1 to 63 characters.	N/A
AllowAsLoop	allow a local AS number to exist in the AS_PATH attribute of routes		Unsigned integer. Value range: 1 to 10	N/A
ReflectClient	Configure the device as a route reflector and specify a peer or peer group as a		Enumeration. <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	client			
NextHopInvariable	Send original next hop for routes advertised to the peer		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
NextHopLocal	Specify local address as the next hop of routes advertised to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Next-hop-local conflict with next-hop-invariable.
RouterMacLocal	Specify local MAC as the router MAC of routes advertised to and received from the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseCommunity	Send community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseExtCommunity	Send extended community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReOriginated	Re-originate EVPN routes received from the peer by modifying the L3 VXLAN ID and RD		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvEvpnRouteSuppressMac	Advertise EVPN routes to the peer excluding MAC/IP advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable</li> </ul>	N/A
AdvEvpnRouteSuppressPrefix	Advertise EVPN routes to the peer excluding IP prefix advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable</li> </ul>	N/A
DefaultgatewayNoAdv	Advertise EVPN routes by deleting the default gateway extended community attribute		<ul style="list-style-type: none"> <li>Enumeration.</li> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RouteLimit	Configure the maximum number of routes	Data Structure	Include: <ul style="list-style-type: none"> <li>Number</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	that can be received from the peers		<ul style="list-style-type: none"> <li>Percentage</li> <li>AlertOnly</li> <li>Discard</li> <li>Reconnect</li> </ul>	
Number	Number of prefixes		Unsigned integer. Value range: 1 to 4294967295	N/A
Percentage	Percentage value to trigger a warning message		Unsigned integer. Value range: 1 to 100. Default is 75	N/A
AlertOnly	Generate a log message when the route limit is exceeded		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
Discard	Discard routes received after the route limit is exceeded		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
Reconnect	Reconnect time in seconds		Unsigned integer. Value range: 1 to 65535	N/A
PreferredValue	Set a preferred value for routes received from the peers		Unsigned integer. Value range: 0 to 65535	N/A
NextHopVpn	Change the next hop of received VPNv4 routes to that of the matching VPN instance		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## BGP/Redistributes

This table contains BGP redistribute information.

### XML structure

```

<BGP>
  <Redistributes>
    <Redist>
      <Name></Name>
      <VRF></VRF>
      <Family></Family>
      <Protocol></Protocol>
      <RedistName></RedistName>
    
```

```

    <AllowDirect></AllowDirect>
    <Med></Med>
    <RoutePolicy></RoutePolicy>
  </Redist>
</Redistributes>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	Redistributes
Table type	Multi-instance table
Row name	Redist
Restrictions	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 Unicast.</li> <li>2—IPv4 Multicast.</li> <li>5—IPv6 Unicast</li> <li>6—IPv6 Multicast.</li> </ul>	N/A
Protocol	Protocol name	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Direct.</li> <li>2—Static.</li> <li>3—RIP</li> <li>4—OSPF</li> <li>5—ISIS</li> <li>6—EIGRP</li> <li>7—UNR</li> <li>8—Guard</li> </ul>	N/A
RedistName	Redistributed process name	Index	String. Length: 0 to 31 characters.	It must be empty when the Protocol column is Direct, Static.
AllowDirect	Include direct routes.		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
Med	Value of the MED.		Unsigned integer. Value range: 0 to 4294967295	N/A
RoutePolicy	Name of the routing policy.		String. Length: 1 to 63 characters.	N/A

## BGP/SessionCounts

This table contains session statistics.

### XML structure

```

<BGP>
  <SessionCounts>
    <SessionCount>

```

```

    <Name></Name>
    <VRF></VRF>
    <State></State>
    <Count></Count>
  </SessionCount>
</SessionCounts>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	SessionCounts
Table type	Multi-instance table
Row name	SessionCount
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
State	Session state	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0—Idle</b></li> <li>• <b>1—Connect</b></li> <li>• <b>2—Active</b></li> <li>• <b>3—Opensent</b></li> <li>• <b>4—Openconfirm</b></li> <li>• <b>5—Established</b></li> </ul>	Established state means that the BGP session is established, but whether the address families are negotiated is unknown.
Count	Total number of sessions		Unsigned integer. Value range: 0 to 4294967295	N/A

## BGP/NeighborInformations

This table contains detailed information of BGP peer.

## XML structure

```

<BGP>

```

```

<NeighborInformations>
  <NeighborInformation>
    <Name></Name>
    <VRF></VRF>
    <Family></Family>
    <SessAF></SessAF>
    <IpAddress></IpAddress>
    <OutQPrefixCnt></OutQPrefixCnt>
    <RcvdPrefixCnt></RcvdPrefixCnt>
    <RcvdUnReachNLRI></RcvdUnReachNLRI>
    <RcvdReachNLRI></RcvdReachNLRI>
    <SentUnReachNLRI></SentUnReachNLRI>
    <SentReachNLRI></SentReachNLRI>
    <RouteLimitNumber></RouteLimitNumber>
    <Percentage></Percentage>
    <PreferredValue></PreferredValue>
    <NexthopInvariable></NexthopInvariable>
    <NexthopLocal></NexthopLocal>
    <AdvertiseCommunity></AdvertiseCommunity>
    <AdvertiseExtCommunity></AdvertiseExtCommunity>
    <ReflectClient></ReflectClient>
    <RtPolicyImport></RtPolicyImport>
    <RtPolicyExport></RtPolicyExport>
    <AllowAsLoop></AllowAsLoop>
    <RouterMacLocal></RouterMacLocal>
    <ReOriginated></ReOriginated>
    <AdvEvpnRouteSuppressMac></AdvEvpnRouteSuppressMac>
    <AdvEvpnRouteSuppressPrefix></AdvEvpnRouteSuppressPrefix>
    <DefaultgatewayNoAdv></DefaultgatewayNoAdv>
  </NeighborInformation>
</NeighborInformations>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	NeighborInformations
Table type	Multi-instance table
Row name	NeighborInformation
Restrictions	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier of neighbor	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4 Unicast.</li> <li>• 2—IPv4 Multicast.</li> <li>• 3—MDT</li> <li>• 4—VPNv4</li> <li>• 5—IPv6 Unicast</li> <li>• 6—IPv6 Multicast.</li> <li>• 7—VPNv6</li> <li>• 8—L2VPN</li> <li>• 9—L2VPN EVPN</li> <li>• 10—Link-State</li> </ul>	N/A
SessAF	Address family of session	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4.</li> <li>• 2—IPv6.</li> </ul>	N/A
IpAddress	Address of session	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
OutQPrefixCnt	Number of prefixes to be sent		Unsigned integer. Value range: 0 to 4294967295	N/A
RcvdPrefixCnt	Number of prefixes that have been received from the peer and added into the local BGP routing table		Unsigned integer. Value range: 0 to 4294967295	N/A
RcvdUnReachNLRI	Number of the unreachable routes received from the peer after the BGP session is established		Unsigned integer. Value range: 0 to 4294967295	N/A
RcvdReachNLRI	Number of the reachable routes received from the peer after the BGP session is established		Unsigned integer. Value range: <ul style="list-style-type: none"> <li>• 0 to 4294967295</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SentUnReachNLRI	Number of the unreachable routes sent to the peer after the BGP session is established		Unsigned integer. Value range: <ul style="list-style-type: none"> <li>0 to 4294967295</li> </ul>	N/A
SentReachNLRI	Number of the reachable routes sent to the peer after the BGP session is established		Unsigned integer. Value range: <ul style="list-style-type: none"> <li>0 to 4294967295</li> </ul>	N/A
RouteLimitNumber	Number of prefixes		Unsigned integer. Value range: <ul style="list-style-type: none"> <li>1 to 4294967295</li> </ul>	N/A
Percentage	Percentage value to trigger a warning message		Unsigned integer. Value range: <ul style="list-style-type: none"> <li>1 to 100. Default is 75</li> </ul>	N/A
PreferredValue	Set a preferred value for routes received from the peers		Unsigned integer. Value range: 0 to 65535	N/A
NextHopInvariable	Send original next hop for routes advertised to the peer		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Next-hop-local conflict with next-hop-invariable
NextHopLocal	Specify local address as the next hop of routes advertised to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Next-hop-local conflict with next-hop-invariable.
AdvertiseCommunity	Send community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvertiseExtCommunity	Send extended community attribute to the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReflectClient	Configure the device as a route reflector and specify a peer or peer group as a client		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RtPolicyImport	Import routing policy for peer group		String. Length: 1 to 63 characters.	N/A
RtPolicyExport	Export routing policy for peer group		String. Length: 1 to 63 characters.	N/A
AllowAsLoop	Allow a local AS		Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	number to exist in the AS_PATH attribute of routes		Value range: 1 to 10	
RouterMacLocal	Specify local MAC as the router MAC of routes advertised to and received from the peers		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ReOriginated	Re-originate EVPN routes received from the peer by modifying the L3 VXLAN ID and RD		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvEvpnRouteSuppressMac	Advertise EVPN routes to the peer excluding MAC/IP advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
AdvEvpnRouteSuppressPrefix	Advertise EVPN routes to the peer excluding IP prefix advertisement routes		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
DefaultgatewayNoAdv	Advertise EVPN routes by deleting the default gateway extended community attribute		Enumeration. <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## BGP/RedistributesAppend

This table contains BGP redistribution appended information.

### XML structure

```

<BGP>
  <RedistributesAppend>
    <Redist>
      <Name></Name>
      <VRF></VRF>
      <Family></Family>
      <Protocol></Protocol>
      <RedistName></RedistName>
      <AllowDirect></AllowDirect>
      <Med></Med>
    </Redist>
  </RedistributesAppend>
</BGP>

```

```

    <RoutePolicy></RoutePolicy>
  </Redis>
</RedistributesAppend>
</BGP>

```

## Table description

Item	Description
Feature name	BGP
Table name	RedistributesAppend
Table type	Multi-instance table
Row name	Redis
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
Family	Address Family Identifier	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4 Unicast.</li> <li>• 2—IPv4 Multicast.</li> <li>• 5—IPv6 Unicast</li> <li>• 6—IPv6 Multicast.</li> </ul>	N/A
Protocol	Protocol name	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—Direct.</li> <li>• 2—Static.</li> <li>• 3—RIP</li> <li>• 4—OSPF</li> <li>• 5—ISIS</li> <li>• 6—EIGRP</li> <li>• 7—UNR</li> <li>• 8—Guard</li> </ul>	N/A
RedistName	Redistributed process name	Index	String. Length: 0 to 31 characters.	It must be empty when the Protocol column is Direct, Static.
AllowDirect	Include direct routes.		Enumeration: <ul style="list-style-type: none"> <li>• 0—Disable.</li> <li>• 1—Enable.</li> </ul>	N/A
Med	Value of the MED.		Unsigned integer. Value range: 0 to 4294967295	N/A
RoutePolicy	Name of the routing policy.		String. Length: 1 to 63 characters.	N/A



# Contents

BGP .....	2
BGP/Instances .....	2
BGP/VRFs .....	2
BGP/CfgSessionGroups .....	3
BGP/CfgSessions .....	4
BGP/Familys .....	5
BGP/Networks .....	7
BGP/Aggregates .....	8
BGP/NeighborGroups .....	8
BGP/Neighbors .....	10
BGP/Redistributes .....	11
BGP/RedistributesAppend .....	12

# BGP

## BGP/Instances

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
BGP is disabling NSR. BGP进程正在处理NSR删除，请稍后再进行配置。	The NSR is being deleted, when replacing or deleting it.
Can't enable NSR because the address family which not support NSR has been configured. 地址族配置与NSR配置冲突，不能配置NSR。	Invalid configuration, please modify configuration under the guidance.
Centralized device doesn't support NSR. 集中式设备，无法支持NSR。	Invalid configuration, please modify configuration under the guidance.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.

## BGP/VRFs

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance RD is not configured. 该VPN没有配置RD。	Invalid configuration, please modify configuration under the guidance.
The public VRF can't be deleted. 公网VPN实例不允许删除。	Invalid configuration, please modify configuration under the guidance.
Invalid hold or keepalive time value. Keepalive定时器或Hold定时器取值错误。	Invalid configuration, please modify configuration under the guidance.
Invalid router ID. 无效的RouterID。	Invalid configuration, please modify configuration under the guidance.

# BGP/CfgSessionGroups

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance is not configured. 该VPN没有配置。	Invalid configuration, please modify configuration under the guidance.
The interface is not belong to the VRF instance. 指定接口不属于该VPN。	Invalid configuration, please modify configuration under the guidance.
When the operation is create, merge or replace, the group type must not be null. Create、merge、replace操作时，会话组类型不能为空。	Invalid configuration, please modify configuration under the guidance.
When the operation is delete or remove, the group type must be null. Delete、remove操作时，会话组类型必须为空。	Invalid configuration, please modify configuration under the guidance.
Not necessary to configure AS number for an IBGP group. 不能配置或者删除IBGP组的AS号。	Invalid configuration, please modify configuration under the guidance.
Can't change or delete AS number for a peer group that contains peers. 会话组中存在会话，不能变更或者删除会话组AS号。	Invalid configuration, please modify configuration under the guidance.
Invalid peer group name. 组名称不合法。	Invalid configuration, please modify configuration under the guidance.
The specified peer group doesn't exist. 指定的对等体组不存在。	Invalid configuration, please modify configuration under the guidance.
The interface is not belong to the VRF instance. 指定接口不属于该VPN。	Invalid configuration, please modify configuration under the guidance.
PasswordType and Password must both be configured. PasswordType和Password必须同时配置。	Invalid configuration, please modify configuration under the guidance.
Invalid ciphertext password. 密文密码不合法。	Invalid configuration, please modify configuration under the guidance.
Invalid simpletext password length. 明文密码长度不合法。	Invalid configuration, please modify configuration under the guidance.

Invalid ciphertext password length. 密文密码长度不合法。	Invalid configuration, please modify configuration under the guidance.
BFD not supported. 不支持BFD	BFD service has not been started.
When enabling dual-as, prepend-global-as, or prepend-fake-as, you must specify the fake AS number. 配置dual-as、prepend-global-as、prepend-fake-as使能时，fake-as不能为空。	Invalid configuration, please modify configuration under the guidance.
Invalid fake AS number. 指定的fake-as无效。	Invalid configuration, please modify configuration under the guidance.

## BGP/CfgSessions

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance is not configured. 该VPN没有配置。	Invalid configuration, please modify configuration under the guidance.
The interface is not belong to the VRF instance. 指定接口不属于该VPN。	Invalid configuration, please modify configuration under the guidance.
The session already exists. The AS number can't be changed. 会话已存在，不允许修改会话的AS号。	Configuration already exists, when set new configuration.
Invalid IP address. 无效的IP地址。	Invalid configuration, please modify configuration under the guidance.
Interface name is invalid, or interface failed RBAC check. 接口名称非法或者无法通过RBAC检查。	Invalid configuration, please modify configuration under the guidance.
When the operation is create, merge, or replace, the AS number must not be null. Create、merge、replace操作时，AS号不能为空。	Invalid configuration, please modify configuration under the guidance.
When the operation is delete or remove, the AS number must be null. Delete、remove操作时，AS号必须为空。	Invalid configuration, please modify configuration under the guidance.
The specified peer group doesn't exist.	Invalid configuration, please modify configuration under the

指定的对等体组不存在。	guidance.
The interface is not belong to the VRF instance. 指定接口不属于该VPN。	Invalid configuration, please modify configuration under the guidance.
PasswordType and Password must both be configured. PasswordType和Password必须同时配置。	Invalid configuration, please modify configuration under the guidance.
Invalid ciphertext password. 密文密码不合法。	Invalid configuration, please modify configuration under the guidance.
Invalid simpletext password length. 明文密码长度不合法。	Invalid configuration, please modify configuration under the guidance.
Invalid ciphertext password length. 密文密码长度不合法。	Invalid configuration, please modify configuration under the guidance.
BFD not supported. 不支持BFD	BFD service has not been started.
Not EBGp peers. 仅EBGP邻居支持本配置。	Only EBGp peers support the configuration.
When enabling dual-as, prepend-global-as, or prepend-fake-as, you must specify the fake AS number. 配置dual-as、prepend-global-as、prepend-fake-as使能时，fake-as不能为空。	Invalid configuration, please modify configuration under the guidance.
Invalid fake AS number. 指定的fake-as无效。	Invalid configuration, please modify configuration under the guidance.

## BGP/Famillys

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance is not configured. 该VPN没有配置。	Invalid configuration, please modify configuration under the guidance.
This address family doesn't support NSR. Please disable NSR first. 当前地址族不支持NSR，请先将NSR配置删除。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't exist.	Invalid configuration, please modify configuration under the guidance.

指定的地址族不存在。	
Can't configure both EIBGP load balancing and EIBGP/IBGP load balancing at the same time. EIBGP等价不能和EBGP等价、IBGP等价同时配置。	Invalid configuration, please modify configuration under the guidance.
Unsupported address family. 不支持该地址族。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the preference command. 指定地址族不支持preference命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the balance command. 指定地址族不支持balance命令。	Invalid configuration, please modify configuration under the guidance.
Number of BGP routes exceeded the maximum for load balancing. 配置的等价条数超过产品所能配置的最大值。	Invalid configuration, please modify configuration under the guidance.
You must set all of the EIBGP preference, IBGP preference, and LOCAL preference, or set none of them. EBGP preference、IBGP preference、LOCAL preference必须同时进行配置或取消配置。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support policy vpn-target command. 指定地址族不支持policy vpn-target命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support rr-filter command. 指定地址族不支持rr-filter命令。	Invalid configuration, please modify configuration under the guidance.
Cluster ID must be an IPv4 address or a number between 1 to 0xFFFFFFFF(notice that it must not be 0.0.0.0). Cluster ID必须是一个合法的IPv4地址或者32位无符号正整数(注意不能是0.0.0.0或者数字0)。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support default-route imported command. 指定的地址族不支持default-route imported命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the pic command. 指定的地址族不支持pic命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the balance as-path-neglect command. 指定的地址族不支持balance as-path-neglect命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the balance as-path-relax command. 指定的地址族不支持balance as-path-relax命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the advertise l3vpn route command. 指定的地址族不支持advertise l3vpn route命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the	Invalid configuration, please modify configuration under the

advertise l2vpn evpn command. 指定的地址族不支持advertise l2vpn evpn命令。	guidance.
The specified address family doesn't support the import evpn mac-ip command. 指定的地址族不支持import evpn mac-ip命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support advertise evpn route command. 指定的地址族不支持advertise evpn route命令。	Invalid configuration, please modify configuration under the guidance.
To configure replace-rt or advertise-policy, you must enable EVPN route advertisement for the VPNv4 or VPNv6 address family. 配置修改路由的RT或通过路由策略过滤BGP EVPN路由时需要配置允许BGP EVPN路由通过VPNv4或VPNv6地址族发布给邻居	Invalid configuration, please modify configuration under the guidance.
To configure replace-rt or advertise-policy, you must enable VPNv4 or VPNv6 route advertisement for the EVPN address family. 配置修改路由的RT或通过路由策略过滤BGP VPNv4或VPNv6路由时需要配置允许VPNv4或VPNv6路由通过EVPN地址族发布给邻居	Invalid configuration, please modify configuration under the guidance.

## BGP/Networks

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance is not configured. 该VPN没有配置。	Invalid configuration, please modify configuration under the guidance.
Invalid IP address. 无效的IP地址。	Invalid configuration, please modify configuration under the guidance.
IPv4 address mask length can't be greater than 32. IPv4地址的掩码长度不能超过32。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the network command. 指定地址族不支持network命令。	Invalid configuration, please modify configuration under the guidance.

# BGP/Aggregates

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance is not configured. 该VPN没有配置。	Invalid configuration, please modify configuration under the guidance.
Invalid IP address. 无效的IP地址。	Invalid configuration, please modify configuration under the guidance.
IPv4 address mask length can't be greater than 32. IPv4地址的掩码长度不能超过32。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the aggregate command. 指定地址族不支持aggregate命令。	Invalid configuration, please modify configuration under the guidance.

# BGP/NeighborGroups

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance is not configured. 该VPN没有配置。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the route-policy import command. 指定地址族不支持route-policy import命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the route-policy export command. 指定地址族不支持route-policy export命令。	Invalid configuration, please modify configuration under the guidance.



Reflect not for EBGp peer groups. EBGP对等体组不能配置反射	Invalid configuration, please modify configuration under the guidance.
Next-hop-local conflict with next-hop-invariable. Next-hop-local命令和next-hop-invariable命令存在冲突，不能同时配置。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the next-hop-invariable command. 指定地址族不支持next-hop-invariable命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the reflect between-clients command. 指定地址族不支持reflect between-clients命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the reflector cluster-id command. 指定地址族不支持reflector cluster-id命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the reflect-client command. 指定地址族不支持reflect-client命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the next-hop-local command. 指定地址族不支持next-hop-local命令	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the router-mac-local command. 指定地址族不支持router-mac-local命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the advertise-community command. 指定地址族不支持advertise-community命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the allow-as-loop command. 指定地址族不支持allow-as-loop命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the route-limit command. 指定地址族不支持route-limit命令。	Invalid configuration, please modify configuration under the guidance.
Invalid prefix count. 前缀数目配置错误。	Invalid configuration, please modify configuration under the guidance.
Alert-only, Discard, Reconnect can't be configured at the same time. Alert-only、Discard、Reconnect不能同时配置。	Invalid configuration, please modify configuration under the guidance.
Invalid peer group name. 组名称不合法。	Invalid configuration, please modify configuration under the guidance.
The specified peer group doesn't exist. 指定的对等体组不存在。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the next-hop-vpn command. 指定地址族不支持next-hop-vpn命令	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the	Invalid configuration, please modify configuration under the

advertise-ext-community command. 指定地址族不支持advertise-ext-community命令。	guidance.
--	-----------

## BGP/Neighbors

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance is not configured. 该VPN没有配置。	Invalid configuration, please modify configuration under the guidance.
The specified neighbor can't be enabled in the current address family. 指定的会话在该实例下不能使能。	Invalid configuration, please modify configuration under the guidance.
The specified peer doesn't exist. 指定的对等体会话不存在。	Invalid configuration, please modify configuration under the guidance.
Reflect not for EBGp peers. EBGP邻居不能配置反射	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the route-policy import command. 指定地址族不支持route-policy import命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the route-policy export command. 指定地址族不支持route-policy export命令。	Invalid configuration, please modify configuration under the guidance.
Next-hop-local conflict with next-hop-invariable. Next-hop-local命令和next-hop-invariable命令存在冲突，不能同时配置。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the next-hop-invariable command. 指定地址族不支持next-hop-invariable命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the reflect between-clients command. 指定地址族不支持reflect between-clients命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the reflector cluster-id command. 指定地址族不支持reflector cluster-id命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the reflect-client command.	Invalid configuration, please modify configuration under the guidance.

指定地址族不支持reflect-client命令。	
The specified address family doesn't support the next-hop-local command. 指定地址族不支持next-hop-local命令	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the router-mac-local command. 指定地址族不支持router-mac-local命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the advertise-community command. 指定地址族不支持advertise-community命令。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the allow-as-loop command. 指定地址族不支持allow-as-loop命令。	Invalid configuration, please modify configuration under the guidance.
Invalid IP address. 无效的IP地址。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the route-limit command. 指定地址族不支持route-limit命令。	Invalid configuration, please modify configuration under the guidance.
Invalid prefix count. 前缀数目配置错误。	Invalid configuration, please modify configuration under the guidance.
Alert-only, Discard, Reconnect can't be configured at the same time. Alert-only、Discard、Reconnect不能同时配置。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the next-hop-vpn command. 指定地址族不支持next-hop-vpn命令	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the advertise-ext-community command. 指定地址族不支持advertise-ext-community命令。	Invalid configuration, please modify configuration under the guidance.

## BGP/Redistributes

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance is not configured.	Invalid configuration, please modify configuration under the guidance.

该VPN没有配置。	
The specified address family doesn't support the import-route command. 指定地址族不支持import-route命令。	Invalid configuration, please modify configuration under the guidance.
You cannot specify a process ID when you redistribute direct or static routes. 引入协议为直连或者静态时，协议进程号必须为空。	Invalid configuration, please modify configuration under the guidance.
Invalid RIP, OSPF, or IS-IS process ID. Please specify a process ID in the range of 1 to 65535, or specify the all-processes keyword to redistribute routes from all processes of the specified protocol. RIP、OSPF或ISIS路由协议的进程号非法，请指定1~65535之间的协议进程号或指定all-processes参数引入指定路由协议所有进程的路由。	Invalid configuration, please modify configuration under the guidance.
Invalid EIGRP process ID. Please specify a process ID in the range of 1 to 65535, or specify the all-as keyword to redistribute routes from all EIGRP processes. EIGRP路由协议的进程号非法，请指定1~65535之间的协议进程号或指定all-as参数引入指定路由协议所有进程的路由。	Invalid configuration, please modify configuration under the guidance.
When the Protocol is DIRECT or STATIC, allow-direct can not be configured. 引入协议为DIRECT或者STATIC时，不能配置allow-direct。	Invalid configuration, please modify configuration under the guidance.

## BGP/RedistributesAppend

Message	Explanation
The BGP process already exists but the AS number doesn't match. BGP进程已存在，AS号不匹配。	Configuration already exists, when set new configuration.
AS number is required for BGP instance. 必须为BGP实例指定AS号。	Invalid configuration, please modify configuration under the guidance.
The VRF instance doesn't exist. 该VPN不存在。	Invalid configuration, please modify configuration under the guidance.
The VRF instance is being deleted. 该VPN正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance is not configured. 该VPN没有配置。	Invalid configuration, please modify configuration under the guidance.
The specified address family doesn't support the import-route command. 指定地址族不支持import-route命令。	Invalid configuration, please modify configuration under the guidance.
You cannot specify a process ID when you redistribute direct or static routes. 引入协议为直连或者静态时，协议进程号必须为空。	Invalid configuration, please modify configuration under the guidance.

<p>Invalid RIP, OSPF, or IS-IS process ID. Please specify a process ID in the range of 1 to 65535, or specify the all-processes keyword to redistribute routes from all processes of the specified protocol.</p> <p>RIP、OSPF或ISIS路由协议的进程号非法，请指定1~65535之间的协议进程号或指定all-processes参数引入指定路由协议所有进程的路由。</p>	<p>Invalid configuration, please modify configuration under the guidance.</p>
<p>Invalid EIGRP process ID. Please specify a process ID in the range of 1 to 65535, or specify the all-as keyword to redistribute routes from all EIGRP processes.</p> <p>EIGRP路由协议的进程号非法，请指定1~65535之间的协议进程号或指定all-as参数引入指定路由协议所有进程的路由。</p>	<p>Invalid configuration, please modify configuration under the guidance.</p>
<p>When the Protocol is DIRECT or STATIC, allow-direct can not be configured.</p> <p>引入协议为DIRECT或者STATIC时，不能配置allow-direct。</p>	<p>Invalid configuration, please modify configuration under the guidance.</p>

# Contents

BGP event stream .....	1
bgp-operations-to-controller event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	1
bgp-report-route-to-controller event .....	2
XML structure for event subscription .....	2
XML structure for event report .....	3
bgp-report-sessionstate-to-controller event .....	4
XML structure for event subscription .....	4
XML structure for event report .....	5

# BGP event stream

BGP stream description.

## bgp-operations-to-controller event

This event is used to notice to controller the operation event of BGP protocol.

### XML structure for event subscription

```
<bgp-operations-to-controller>
</bgp-operations-to-controller>

Example:
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>bgp_stream</stream>
    <filter type="subtree">
      <bgp-operations-to-controller
xmlns="http://www.h3c.com/netconf/event:1.0/BGP:1.0">
        </bgp-operations-to-controller>
      </filter>
    </create-subscription>
  </rpc>
```

#### Table description

Item	Description
Event stream name	BGP stream
Event name	bgp-operations-to-controller
Event namespace	http://www.h3c.com/netconf/event:1.0/BGP:1.0
Support for extended query	No

### XML structure for event report

```
<bgp-operations-to-controller>
  <Operation>
    <OperationType></OperationType>
    <Name></Name>
  </Operation>
</bgp-operations-to-controller>

Example:
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <bgp-operations-to-controller xmlns="http://www.h3c.com/netconf/event:1.0/BGP:1.0">
    <Operation>
      <OperationType>1</OperationType>
```

```

        <Name></Name>
    </Operation>
</bgp-operations-to-controller>
</notification>

```

### Table description

Column name	Column description	Data type and restrictions	Remarks
OperationType	Operation type	Enumeration 1 – Notice controller smooth start 2 – Notice controller smooth end 3 – Notice controller the lipc disconnect 4 – Notice controller the lipc connect successfully	The operation type specifies the operation that BGP protocol should perform.
Name	Instance name	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.

## bgp-report-route-to-controller event

This event is used to report BGP route to controller.

### XML structure for event subscription

```

<bgp-report-route-to-controller>
</bgp-report-route-to-controller>

```

Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>bgp_stream</stream>
    <filter type="subtree">
      <bgp-report-route-to-controller
xmlns="http://www.h3c.com/netconf/event:1.0/BGP:1.0">
        </bgp-report-route-to-controller>
      </filter>
    </create-subscription>
  </rpc>

```

### Table description

Item	Description
Event stream name	BGP stream
Event name	bgp-report-route-to-controller
Event namespace	http://www.h3c.com/netconf/event:1.0/BGP:1.0
Support for extended query	No



# XML structure for event report

```
<bgp-report-route-to-controller>
  <ReportRoute>
    <Name></Name>
    <VRF></VRF>
    <OperationType></OperationType>
    <RouteType></RouteType>
    <RouteKey></RouteKey>
    <RouteSegment></RouteSegment>
    <RouteAttr></RouteAttr>
  </ReportRoute>
</bgp-report-route-to-controller>
```

## Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <bgp-report-route-to-controller
xmlns="http://www.h3c.com/netconf/event:1.0/BGP:1.0">
    <ReportRoute>
      <Name></Name>
      <VRF></VRF>
      <OperationType>1</OperationType>
      <RouteType>9</RouteType>
      <RouteKey></RouteKey>
      <RouteSegment>ACcCJQAAAAEAAAPoAAAAAAAAAAAAAAAAAAwAAwpo3rjIEQCAG+</RouteSegment>
      <RouteAttr>AgAGAgEAAADI</RouteAttr>
      <RouteAttr>AwAEYgAIRA==</RouteAttr>
      <RouteAttr>CAAEAAEA/w==</RouteAttr>
    </ReportRoute>
  </bgp-report-route-to-controller>
</notification>
```

## Table description

Column name	Column description	Data type and restrictions	Remarks
Name	Instance name	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	String. Length: 0 to 31 characters.	An empty string indicates the public network.
OperationType	Operation type	Enumeration 1 – Add 2 – Delete	The operation type specifies the operation that BGP protocol should perform.
RouteType	Type of route	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4 Unicast.</li><li>• 2—IPv4 Multicast.</li><li>• 3—MDT</li><li>• 4—VPNv4</li><li>• 5—IPv6 Unicast</li><li>• 6—IPv6 Multicast.</li><li>• 7—VPNv6</li><li>• 8—L2VPN</li><li>• 9—EVPN</li></ul>	
RouteKey	Key of route	Binary. Length: 0 to 128 characters.	An empty string indicates there is no key of the route.
RouteSegment	Route information	Binary. Length: 1 to 4096 characters.	
RouteAttr	Attribute of route	Binary. Length: 1 to 4096 characters.	

## bgp-report-sessionstate-to-controller event

This event is used to report BGP session state to controller.

## XML structure for event subscription

```
<bgp-report-sessionstate-to-controller>
</bgp-report-sessionstate-to-controller>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>bgp_stream</stream>
    <filter type="subtree">
      <bgp-report-sessionstate-to-controller
xmlns="http://www.h3c.com/netconf/event:1.0/BGP:1.0">
        </bgp-report-sessionstate-to-controller>
      </filter>
    </create-subscription>
```

</rpc>

## Table description

Item	Description
Event stream name	BGP stream
Event name	bgp-report-sessionstate-to-controller
Event namespace	http://www.h3c.com/netconf/event:1.0/BGP:1.0
Support for extended query	No

## XML structure for event report

```
<bgp-report-sessionstate-to-controller>
  <ReportSessionstate>
    <Name></Name>
    <VRF></VRF>
    <AF></AF>
    <IpAddress></IpAddress>
    <CurrentState></CurrentState>
    <LastState></LastState>
  </ReportSessionstate>
</bgp-report-sessionstate-to-controller>
```

### Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2018-09-05T09:10:51</eventTime>
  <bgp-report-sessionstate-to-controller
xmlns="http://www.h3c.com/netconf/event:1.0/BGP:1.0">
    <ReportSessionstate>
      <Name></Name>
      <VRF></VRF>
      <AF>1</AF>
      <IpAddress>1.1.1.1</IpAddress>
      <CurrentState>5</CurrentState>
      <LastState>4</LastState>
    </ReportSessionstate>
  </bgp-report-sessionstate-to-controller>
</notification>
```

## Table description

Column name	Column description	Data type and restrictions	Remarks
Name	Instance name	String. Length: 0 to 31 characters.	An empty string indicates the default BGP process.
VRF	VRF name	String. Length: 0 to 31 characters.	An empty string indicates the public network.
AF	Address family of session	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4.</li> <li>• 2—IPv6.</li> </ul>
IpAddress	Address of session	<ul style="list-style-type: none"> <li>• Index</li> </ul>	String, IPv4 address string or IPv6 address string.
CurrentState	Current state of the session		Enumeration: <ul style="list-style-type: none"> <li>• 0—Idle</li> <li>• 1—Connect</li> <li>• 2—Active</li> <li>• 3—Opensent</li> <li>• 4—Openconfirm</li> <li>• 5—Established</li> </ul>
LastState	Previous state of the session		Enumeration: <ul style="list-style-type: none"> <li>• 0—Idle</li> <li>• 1—Connect</li> <li>• 2—Active</li> <li>• 3—Opensent</li> <li>• 4—Openconfirm</li> <li>• 5—Established</li> </ul>

# Contents

Bridge.....	1
Bridge/Base.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Bridge/Instances.....	1
XML structure.....	2
Table description.....	2
Columns.....	2

# Bridge

## Bridge/Base

This table contains global bridge information.

### XML structure

```
<Bridge>
  <Base>
    <TunnelSkip></TunnelSkip>
  </Base>
</Bridge>
```

### Table description

Item	Description
Feature name	Bridge
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelSkip	Skip the tunnel encapsulation fields during packet parsing	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

## Bridge/Instances

This table contains information about individual bridge instances. There are four types of bridge instances. In a forward-type bridge instance, two member interfaces are required. In other types of bridge instances, only one member interface is required.

## XML structure

```
<Bridge>
  <Instances>
    <Instance>
      <BridgeID></BridgeID>
      <Mode></Mode>
      <IfIndex1></IfIndex1>
      <IfIndex2></IfIndex2>
      <Bypass></Bypass>
    </Instance>
  </Instances>
</Bridge>
```

## Table description

Item	Description
Feature name	Bridge
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	This table supports the interface only in un-shared mode.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BridgeID	Bridge ID	Index	Unsigned integer. <b>Value range: 0-128.</b>	The value 0 means to create a new bridge instance.
Mode	Mode of the bridge instance.	N/A	Unsigned integer. Value range:1 to 4.	The mode of bridge instance: 1: inter-vlan 2: reflect 3: blackhole 4: forward
IfIndex1	Interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. Applicable to only Ethernet and POS

Column name	Column description	Column type	Data type and restrictions	Remarks
				interfaces.
IfIndex2	Interface index	N/A	Unsigned integer.	I Some versions support interface name. For relevant information, see the XSD document of your product. Applicable to only Ethernet and POS interfaces.
Bypass	Status of the security service processing bypass feature.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A



# Contents

Bridge.....	1
Bridge/Base.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Bridge/Instances.....	1
XML structure.....	2
Table description.....	2
Columns.....	2
Bridge/Specification.....	3
XML structure.....	3
Table description.....	3
Columns.....	3

# Bridge

## Bridge/Base

This table contains global bridge information.

### XML structure

```
<Bridge>
  <Base>
    <TunnelSkip></TunnelSkip>
  </Base>
</Bridge>
```

### Table description

Item	Description
Feature name	Bridge
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelSkip	Skip the tunnel encapsulation fields during packet parsing	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

## Bridge/Instances

This table contains information about individual bridge instances. There are four types of bridge instances. In a forward-type bridge instance, two member interfaces are required. In other types of bridge instances, only one member interface is required.

## XML structure

```
<Bridge>
  <instances>
    <Instance>
      <BridgeID></BridgeID>
      <Mode></Mode>
      <IfIndex1></IfIndex1>
      <IfIndex2></IfIndex2>
      <Bypass></Bypass>
    </Instance>
  </Instances>
</Bridge>
```

## Table description

Item	Description
Feature name	Bridge
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	This table supports the interface only in un-shared mode.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BridgeID	Bridge ID	Index	Unsigned integer. <b>Value range: 0-128.</b>	The value 0 means to create a new bridge instance.
Mode	Mode of the bridge instance.	N/A	Unsigned integer. Value range:1 to 4.	The mode of bridge instance: 1: inter-vlan 2: reflect 3: blackhole 4: forward
IfIndex1	Interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. Applicable to only Ethernet and POS interfaces.
IfIndex2	Interface index	N/A	Unsigned integer.	Some versions support interface

Column name	Column description	Column type	Data type and restrictions	Remarks
				name. For relevant information, see the XSD document of your product. Applicable to only Ethernet and POS interfaces.
Bypass	Status of the security service processing bypass feature.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## Bridge/Specification

This table contains bridge specification information of the current device.

### XML structure

```

<Bridge>
  <Specification>
    <SupportInline></SupportInline>
  </Specification>
</Bridge>

```

### Table description

Item	Description
Feature name	Bridge
Table name	Specification
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
SupportInline	Support for the inline-forward configurations.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false.</b></li> </ul>

# Contents

BufferMonitor .....	1
BufferMonitor/GlobalConfigurations .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
BufferMonitor/BoardConfigurations .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
BufferMonitor/BoardQueConfigurations .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
BufferMonitor/PortQueConfigurations .....	4
XML structure .....	4
Table description .....	4
Columns .....	5

# BufferMonitor

## BufferMonitor/GlobalConfigurations

This table is used to configure the global configurations for buffer monitor.

### XML structure

```
<BufferMonitor>
  <GlobalConfigurations>
    <DropAlarmEnable></DropAlarmEnable>
    <DropAlarmInterval></DropAlarmInterval>
    <IngressAlarmEnable></IngressAlarmEnable>
    <IngressAlarmInterval></IngressAlarmInterval>
    <EgressAlarmEnable></EgressAlarmEnable>
    <EgressAlarmInterval></EgressAlarmInterval>
    <HeadroomAlarmEnable></HeadroomAlarmEnable>
    <HeadroomAlarmInterval></HeadroomAlarmInterval>
  </GlobalConfigurations>
</BufferMonitor>
```

### Table description

Item	Description
Feature name	BufferMonitor
Table name	GlobalConfigurations
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	None

### Columns

Column name	Column description	Column type	Data type and restrictions
DropAlarmEnable	Drop alarm enable status	N/A	Enumeration: 1 ENABLE. 2 DISABLE.
DropAlarmInterval	Drop alarm suppression interval.	N/A	Unsigned integer. Value range: 0 to 60.

Column name	Column description	Column type	Data type and restrictions
IngressAlarmEnable	Ingress threshold alarm enable status	N/A	Enumeration: 1 ENABLE. 2 DISABLE.
IngressAlarmInterval	Ingress threshold alarm suppression interval.	N/A	Unsigned integer. Value range: 0 to 60.
EgressAlarmEnable	Egress threshold alarm enable status	N/A	Enumeration: 1 ENABLE. 2 DISABLE.
EgressAlarmInterval	Egress threshold alarm suppression interval.	N/A	Unsigned integer. Value range: 0 to 60.
HeadroomAlarmEnable	Headroom threshold alarm enable status	N/A	Enumeration: 1 ENABLE. 2 DISABLE.
HeadroomAlarmInterval	Headroom threshold alarm suppression interval.	N/A	Unsigned integer. Value range: 0 to 60.

## BufferMonitor/BoardConfigurations

This table is used to configure the node's configuration for buffer monitor.

### XML structure

```

<BufferMonitor>
  <BoardConfigurations>
    <BoardConfiguration>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <HeadroomThreshold></HeadroomThreshold>
    </BoardConfiguration>
  </BoardConfigurations>
</BufferMonitor>

```

### Table description

Item	Description
Feature name	BufferMonitor
Table name	BoardConfigurations
Table type	Multi-instance table
Row name	BoardConfiguration
Restrictions	None

Item	Description
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
HeadroomThreshold	Headroom threshold in ratio.	N/A	Unsigned integer. Value range: 1 to 100.

## BufferMonitor/BoardQueueConfigurations

This table is used to configurate the queue of node for buffer monitor.

## XML structure

```

<BufferMonitor>
  <BoardQueueConfigurations>
    <BoardQueueConfiguration>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <QueueIndex></QueueIndex>
      <IngressThreshold></IngressThreshold>
      <EgressThreshold></EgressThreshold>
    </BoardQueueConfiguration>
  </BoardQueueConfigurations>
</BufferMonitor>

```

## Table description

Item	Description
Feature name	BufferMonitor
Table name	BoardQueueConfigurations
Table type	Multi-instance table
Row name	BoardQueueConfiguration
Restrictions	None



Item	Description
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
QueueIndex	Queue index	Index	Unsigned integer. Value range: 0 to 7.
IngressThreshold	Ingress threshold in ratio.	N/A	Unsigned integer. Value range: 1 to 100.
EgressThreshold	Egress threshold in ratio.	N/A	Unsigned integer. Value range: 1 to 100.

## BufferMonitor/PortQueueConfigurations

This table is used to configure the queue of interface for buffer monitor..

## XML structure

```

<BufferMonitor>
  <PortQueueConfigurations>
    <PortQueueConfiguration>
      <IfIndex></IfIndex>
      <QueueIndex></QueueIndex>
      <IngressThreshold></IngressThreshold>
      <EgressThreshold></EgressThreshold>
      <HeadroomThreshold></HeadroomThreshold>
    </PortQueueConfiguration>
  </PortQueueConfigurations>
</BufferMonitor>

```

## Table description

Item	Description
Feature name	BufferMonitor
Table name	PortQueueConfigurations

Item	Description
Table type	Multi-instance table
Row name	PortQueConfiguration
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
QueIndex	Queue index	Index	Unsigned integer. Value range: 0 to 7.
IngressThresh hold	Ingress threshold in ratio.	N/A	Unsigned integer. Value range: 1 to 100.
EgressThresh old	Egress threshold in ratio.	N/A	Unsigned integer. Value range: 1 to 100.
HeadroomThr eshold	Headroom threshold in ratio.	N/A	Unsigned integer. Value range: 1 to 100.

# Contents

BufferMonitor .....	1
BufferMonitor/EgressDrops .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
BufferMonitor/BoardEgressDrops .....	2
XML structure .....	2
Table description .....	2
Columns .....	3

# BufferMonitor

## BufferMonitor/EgressDrops

This table is used to get the egress drops data for buffer monitor.

### XML structure

```
<BufferMonitor>
  <EgressDrops>
    <EgressDrop>
      <IfIndex/>
      <IfName/>
      <UnicastDroppedPkts/>
      <UnicastDroppedBytes/>
      <MulticastDroppedPkts/>
      <MulticastDroppedBytes/>
      <DroppedPkts/>
      <DroppedBytes/>
    </EgressDrop>
  </EgressDrops>
</BufferMonitor>
```

### Table description

Item	Description
Feature name	BufferMonitor
Table name	EgressDrops
Table type	Multi-instance table
Row name	EgressDrop
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2
UnicastDroppedPk	Number of packets	N/A	Unsigned integer64

Column name	Column description	Column type	Data type and restrictions
ts	lost in outgoing unicast queue		
UnicastDroppedBytes	Number of bytes lost in outgoing unicast queue	N/A	Unsigned integer64
MulticastDroppedPkts	Number of packets lost in outgoing Multicast queue	N/A	Unsigned integer64
MulticastDroppedBytes	Number of bytes lost in outgoing Multicast queue	N/A	Unsigned integer64
DroppedPkts	Number of packets lost in specific interface	N/A	Unsigned integer64
DroppedBytes	Number of bytes lost in specific interface	N/A	Unsigned integer64

## BufferMonitor/BoardEgressDrops

This table is used to get the slot egress drops data for buffer monitor.

### XML structure

```

<BufferMonitor>
  <BoardEgressDrops>
    <BoardEgressDrop>
      <Chassis/>
      <Slot/>
      <Cpu/>
      <DroppedPkts/>
      <DroppedBytes/>
    </BoardEgressDrop>
  </BoardEgressDrops>
</BufferMonitor>

```

### Table description

Item	Description
Feature name	BufferMonitor
Table name	BoardEgressDrops
Table type	Multi-instance table
Row name	BoardEgressDrop
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Chassis number	Index	Unsigned integer.
Slot	Slot number	Index	Unsigned integer.
Cpu	Cpu number	Index	Unsigned integer.
DroppedPkts	Number of packets lost in Egress direction at whole slot	N/A	Unsigned integer64
DroppedBytes	Number of bytes lost in Egress direction at whole slot	N/A	Unsigned integer64

# Contents

- BufferMonitor event stream .....1
  - BoardOverrunEvent event.....1
    - XML structure for event subscription .....1
    - XML structure for event report .....2
  - PortQueOverrunEvent event.....3
    - XML structure for event subscription .....3
    - XML structure for event report .....4
  - PortQueDropEvent event.....5
    - XML structure for event subscription .....5
    - XML structure for event report .....6

批注 [Is1]: Need confirmed by product

## BufferMonitor event stream

### BoardOverrunEvent event

This event is used to report counters of board overrun threshold.

### XML structure for event subscription

```
<BoardOverrunEvent>
  <BoardOverrun>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <AlarmType></AlarmType>
  </BoardOverrun>
</BoardOverrunEvent>
```

#### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>BufferMonitor</stream>
    <filter>
      <BoardOverrunEvent xmlns="http://www.h3c.com/netconf/event:1.0/BufferMonitor:1.0">
        <BoardOverrun>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
          <AlarmType>1</AlarmType>
        </BoardOverrun>
      </BoardOverrunEvent>
    </filter>
  </create-subscription>
</rpc>]]>]]>
```

#### Table description

Item	Description
Event stream name	BufferMonitor
Event name	BoardOverrunEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/BufferMonitor:1.0
Support for extended query	No



## Columns

Column name	Column description	Data type and restrictions	Support for extended query	Remarks
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.	No	N/A
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.	No	N/A
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	No	N/A
AlarmType	Alarm type.	Unsigned integer.	1—for Headroom overrun	Alarm type.

## XML structure for event report

```

<BoardOverrunEvent>
  <BoardOverrun>
    <Chassis/>
    <Slot/>
    <CPUID/>
    <AlarmType/>
    <CurrentValue/>
    <CurrentRatio/>
    <Threshold/>
  </BoardOverrun>
</BoardOverrunEvent>

```

## Table description

Column name	Column description	Data type and restrictions	Remarks
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	N/A
AlarmType	Alarm type.	Unsigned integer.	1—for Headroom overrun
CurrentValue	Current value.	Unsigned integer. Value range: 0 to 65535.	
CurrentRatio	Current usage ratio.	Unsigned integer. Value range: 1 to 100.	

Column name	Column description	Data type and restrictions	Remarks
Threshold	Threshold usage ratio.	Unsigned integer. Value range: 1 to 100.	

## PortQueOverrunEvent event

This event is used to report counters of interface's queue overrun threshold.

### XML structure for event subscription

```

<PortQueOverrunEvent>
  <PortQueOverrun>
    <IfIndex></IfIndex>
    <QueIndex></QueIndex>
    <AlarmType></AlarmType>
    <IfName></IfName>
  </PortQueOverrun>
</PortQueOverrunEvent>

```

#### Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>BufferMonitor</stream>
    <filter>
      <PortQueOverrunEvent xmlns="http://www.h3c.com/netconf/event:1.0/BufferMonitor:1.0">
        <PortQueOverrun>
          <IfIndex>20</IfIndex>
          <QueIndex>1</QueIndex>
          <AlarmType>2</AlarmType>
          <IfName>GigabitEthernet2/0/2</IfName>
        </PortQueOverrun>
      </PortQueOverrunEvent>
    </filter>
  </create-subscription>
</rpc>]]>]]>

```

#### Table description

Item	Description
Event stream name	BufferMonitor
Event name	PortQueOverrunEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/BufferMonitor:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended query	Remarks
IfIndex	Interface index	Unsigned integer.	No	N/A
QueIndex	Queue index	Unsigned integer.	No	N/A
AlarmType	Alarm type.	Unsigned integer.	No	1— for ingress overrun 2— for egress overrun 3— for headroom overrun
IfName	Full name of an interface	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	No	N/A

## XML structure for event report

```

<PortQueOverrunEvent>
  <IfIndex></IfIndex>
  <QueIndex></QueIndex>
  <AlarmType></AlarmType>
  <CurrentValue><CurrentValue>
  <CurrentRatio></CurrentRatio>
  <Threshold></Threshold>
  <IfName></IfName>
</PortQueOverrunEvent>

```

## Table description

Column name	Column description	Data type and restrictions	Remarks
IfIndex	Interface index	Unsigned integer.	N/A
QueIndex	Queue index	Unsigned integer.	N/A
AlarmType	Alarm type.	Unsigned integer.	1— for ingress overrun 2— for egress overrun 3— for headroom overrun
CurrentValue	Current value.	Unsigned integer.	
CurrentRatio	Current usage ratio.	Unsigned integer. Value range: 1 to 100.	
Threshold	Threshold usage ratio.	Unsigned integer. Value range: 1 to 100.	
IfName	Full name of an interface	String. Length: 2 to 47 characters. Example:	N/A

# PortQueDropEvent event

This event is used to report counters of interface's queue drop threshold.

## XML structure for event subscription

```
<PortQueDropEvent>
  <PortQueDrop>
    <IfIndex></IfIndex>
    <QueIndex></QueIndex>
    <AlarmType></AlarmType>
    <IfName></IfName>
  </PortQueDrop>
</PortQueDropEvent>
```

Example :

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>BufferMonitor</stream>
    <filter>
      <PortQueDropEvent xmlns="http://www.h3c.com/netconf/event:1.0/BufferMonitor:1.0">
        <PortQueDrop>
          <IfIndex>20</IfIndex>
          <QueIndex>1</QueIndex>
          <AlarmType>2</AlarmType>
          <IfName>GigabitEthernet2/0/2</IfName>
        </PortQueDrop>
      </PortQueDropEvent>
    </filter>
  </create-subscription>
</rpc>]]>]]>
```

Table description

Item	Description
Event stream name	BufferMonitor
Event name	PortQueDropEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/BufferMonitor:1.0
Support for extended query	No

Columns

Column name	Column description	Data type and restrictions	Support for extended query	Remarks
IfIndex	Interface index	Unsigned integer.	No	N/A
QueIndex	Queue index	Unsigned integer.	No	N/A
AlarmType	Alarm type.	Unsigned integer.	No	1— for ingress

Column name	Column description	Data type and restrictions	Support for extended query	Remarks
				drops 2— for egress drops
IfName	Full name of an interface	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	No	N/A

## XML structure for event report

```

<PortQueDropEvent>
  <IfIndex></IfIndex>
  <QueIndex></QueIndex>
  <AlarmType></AlarmType>
  <DropCounters></DropCounters>
  <IfName></IfName>
</PortQueDropEvent>

```

### Table description

Column name	Column description	Data type and restrictions	Remarks
IfIndex	Interface index	Unsigned integer.	N/A
QueIndex	Queue indexes	Unsigned integer.	N/A
AlarmType	Alarm type.	Unsigned integer.	1— for ingress drops 2— for egress drops
DropCounters	Current value.	Unsigned integer.	
IfName	Full name of an interface	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A

# Contents

BYOD .....	1
BYOD/DhcpOption55Rules .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
BYOD/UserAgentRules .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
BYOD/MacRules .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
BYOD/AuthorizationInfos .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# BYOD

## BYOD/DhcpOption55Rules

BYOD DHCP Option 55 rule table for endpoint identification.

### XML structure

```
<BYOD>
  <DhcpOption55Rules>
    <DhcpOption55Rule>
      <DhcpOption55Value></DhcpOption55Value>
      <DeviceType></DeviceType>
    </DhcpOption55Rule>
  </DhcpOption55Rules>
</BYOD>
```

### Table description

Item	Description
Feature name	BYOD
Table name	DhcpOption55Rules
Table type	Multi-instance table
Row name	DhcpOption55Rule
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
DhcpOption55Value	DHCP Option 55 value.	Index	String. Length: 1 to 255 characters.
DeviceType	Device type.	N/A	String. Length: 1 to 127 characters.

## BYOD/UserAgentRules

BYOD HTTP user agent rule table for endpoint identification.

## XML structure

```
<BYOD>
  <UserAgentRules>
    <UserAgentRule>
      <UserAgentValue></UserAgentValue>
      <DeviceType></DeviceType>
    </UserAgentRule>
  </UserAgentRules>
</BYOD>
```

## Table description

Item	Description
Feature name	BYOD
Table name	UserAgentRules
Table type	Multi-instance table
Row name	UserAgentRule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
UserAgentValue	HTTP user agent value.	Index	String. Length: 1 to 255 characters.
DeviceType	Device type.	N/A	String. Length: 1 to 127 characters.

## BYOD/MacRules

BYOD MAC address rule table for endpoint identification.

## XML structure

```
<BYOD>
  <MacRules>
    <MacRule>
      <MacAddr></MacAddr>
      <MacMask></MacMask>
      <DeviceType></DeviceType>
```



```

    </MacRule>
  </MacRules>
</BYOD>

```

## Table description

Item	Description
Feature name	BYOD
Table name	MacRules
Table type	Multi-instance table
Row name	MacRule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddr	MAC address.	Index	String, six groups of two hexadecimal digits, hyphen-separated. Length: 1 to 17 characters.	For example, 00-0c-af-e3-5d-c0.
MacMask	MAC address mask.	Index	String, six groups of two hexadecimal digits, hyphen-separated. Length: 1 to 17 characters.	The significant bits must be consecutive Fs. For example, ff-ff-ff-00-00-00.
DeviceType	Device type.	N/A	String. Length: 1 to 127 characters.	N/A

## BYOD/AuthorizationInfos

BYOD authorization information table.

## XML structure

```

<BYOD>
  <AuthorizationInfos>
    <AuthorizationInfo>
      <UserGroupName></UserGroupName>
      <DeviceType></DeviceType>
      <AuthorizationData>
        <AclNumber></AclNumber>
      </AuthorizationData>
    </AuthorizationInfo>
  </AuthorizationInfos>
</BYOD>

```

```

    <CallbackNumber></CallbackNumber>
    <SessTimeout></SessTimeout>
    <IdleTimeout></IdleTimeout>
    <PrimaryDNSServer></PrimaryDNSServer>
    <PrimaryDNSIPv6Server></PrimaryDNSIPv6Server>
    <SecondaryDNSServer></SecondaryDNSServer>
    <SecondaryDNSIPv6Server></SecondaryDNSIPv6Server>
    <URL></URL>
    <UserProfile></UserProfile>
    <VLANID></VLANID>
    <VRF></VRF>
    <IpPool></IpPool>
    <Ipv6Pool></Ipv6Pool>
    <SSLVPNPolicy></SSLVPNPolicy>
  </AuthorizationData>
  <AuthorizationIPv6PrefixInfo>
    <IPv6Address></IPv6Address>
    <IPv6PrefixLength></IPv6PrefixLength>
  </AuthorizationIPv6PrefixInfo>
</AuthorizationInfo>
</AuthorizationInfos>
</BYOD>

```

## Table description

Item	Description
Feature name	BYOD
Table name	AuthorizationInfos
Table type	Multi-instance table
Row name	AuthorizationInfo
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserGroupName	User group name.	Index	String. Length: 1 to 32 characters.	N/A
DeviceType	Device type.	Index	String. Length: 1 to 127 characters.	N/A
Authorization Data	Authorization information.	Data structure	Members include: <ul style="list-style-type: none"> <li>AclNumber.</li> <li>CallbackNumber.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• FTPHomeDir.</li> <li>• IdleTimeout.</li> <li>• PrimaryDNSServer.</li> <li>• SecondaryDNSServer.</li> <li>• URL.</li> <li>• UserProfile.</li> <li>• VLANID.</li> <li>• VRF.</li> <li>• IpPool.</li> <li>• Ipv6Pool.</li> </ul>	
AcINumber	ACL number.	N/A	Unsigned integer. Value range: 2000 to 5999.	N/A
CallbackNumber	Callback number.	N/A	String. Length: 1 to 64 characters.	N/A
SessTimeout	Session timeout.	N/A	Unsigned integer. Value range: 1 to 1440, in minutes.	N/A
IdleTimeout	Idle timeout timer.	N/A	Unsigned integer. Value range: 1 to 120, in minutes.	N/A
PrimaryDNSServer	Primary DNS server.	N/A	IPv4: String, dotted decimal notation.	N/A
PrimaryDNSIpv6Server	Primary DNS Ipv6 server.	N/A	IPv6: Hexadecimal string, colon-separated.	
SecondaryDNSServer	Secondary DNS server.	N/A	IPv4: String, dotted decimal notation.	N/A
SecondaryDNSIpv6Server	Secondary DNS Ipv6 Server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
URL	URL information.	N/A	String. Length: 1 to 255 characters.	N/A
UserProfile	User profile name.	N/A	String. Length: 1 to 32 characters.	The name can contain digits, letters, and underscores (_), but the name can't start with a digit.
VLANID	ID of the authorization VLAN.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	Name of the authorization VPN instance.	N/A	String. Length: 1 to 31 characters.	N/A
IpPool	Available IP pool name.	N/A	String. Length: 1 to 31 characters.	N/A
Ipv6Pool	Available IPv6 pool name.	N/A	String. Length: 1 to 63 characters.	N/A
SSLVPNPolic	Name of the SSL	N/A	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
y	VPN policy assigned to the local user.		Length: 1 to 31 characters.	
AuthorizationIpv6PrefixInfo	Available IPv6 prefix.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address.</li> <li>Ipv6PrefixLength.</li> </ul>	N/A
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	For example, 2003:10::1:1. This column is effective only when the Ipv6PrefixLength column is set.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 1 to 128.	This column is effective only when the Ipv6Address column is set.

# Contents

BYOD .....	1
BYOD/DhcpOption55Rules .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
BYOD/UserAgentRules .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
BYOD/MacRules .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
BYOD/AuthorizationInfos .....	4
XML structure .....	4
Table description .....	4
Columns .....	5

# BYOD

## BYOD/DhcpOption55Rules

BYOD DHCP Option 55 rule table for endpoint identification.

### XML structure

```
<BYOD>
  <DhcpOption55Rules>
    <DhcpOption55Rule>
      <DhcpOption55Value></DhcpOption55Value>
      <DeviceType></DeviceType>
      <RuleClass></RuleClass>
    </DhcpOption55Rule>
  </DhcpOption55Rules>
</BYOD>
```

### Table description

Item	Description
Feature name	BYOD
Table name	DhcpOption55Rules
Table type	Multi-instance table
Row name	DhcpOption55Rule
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
DhcpOption55Value	DHCP Option 55 value.	Index	String. Length: 1 to 255 characters.
DeviceType	Device type.	N/A	String. Length: 0 to 127 characters.
RuleClass	Rule class.	N/A	Boolean: <ul style="list-style-type: none"><li>• True.</li><li>• False.</li></ul>

# BYOD/UserAgentRules

BYOD HTTP user agent rule table for endpoint identification.

## XML structure

```
< BYOD>
  <UserAgentRules>
    <UserAgentRule>
      <UserAgentValue></UserAgentValue>
      <DeviceType></DeviceType>
      <RuleClass></RuleClass>
    </UserAgentRule>
  </UserAgentRules>
</BYOD>
```

## Table description

Item	Description
Feature name	BYOD
Table name	UserAgentRules
Table type	Multi-instance table
Row name	UserAgentRule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
UserAgentValue	HTTP user agent value.	Index	String. Length: 1 to 255 characters.
DeviceType	Device type.	N/A	String. Length: 1 to 127 characters.
RuleClass	Rule class.	N/A	Boolean: <ul style="list-style-type: none"><li>• True.</li><li>• False.</li></ul>

# BYOD/MacRules

BYOD MAC address rule table for endpoint identification.

# XML structure

```
< BYOD>
  <MacRules>
    <MacRule>
      <MacAddr></MacAddr>
      <MacMask></MacMask>
      <DeviceType></DeviceType>
      <RuleClass></RuleClass>
    </MacRule>
  </MacRules>
</BYOD>
```

## Table description

Item	Description
Feature name	BYOD
Table name	MacRules
Table type	Multi-instance table
Row name	MacRule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddr	MAC address.	Index	String, six groups of two hexadecimal digits, hyphen-separated. Length: 1 to 17 characters.	For example, 00-0c-af-e3-5d-c0.
MacMask	MAC address mask.	Index	String, six groups of two hexadecimal digits, hyphen-separated. Length: 1 to 17 characters.	The significant bits must be consecutive Fs. For example, ff-ff-ff-00-00-00.
DeviceType	Device type.	N/A	String. Length: 1 to 127 characters.	N/A
RuleClass	Rule class.	N/A	Boolean: <ul style="list-style-type: none"><li>• True.</li><li>• False.</li></ul>	N/A



# BYOD/AuthorizationInfos

BYOD authorization information table.

## XML structure

```
<BYOD>
  <AuthorizationInfos>
    <AuthorizationInfo>
      <UserGroupName></UserGroupName>
      <DeviceType></DeviceType>
      <AuthorizationData>
        <AclNumber></AclNumber>
        <CallbackNumber></CallbackNumber>
        <SessTimeout></SessTimeout>
        <IdleTimeout></IdleTimeout>
        <PrimaryDNSServer></PrimaryDNSServer>
        <PrimaryDNSIpv6Server></PrimaryDNSIpv6Server>
        <SecondaryDNSServer></SecondaryDNSServer>
        <SecondaryDNSIpv6Server></SecondaryDNSIpv6Server>
        <URL></URL>
        <UserProfile></UserProfile>
        <VLANID></VLANID>
        <VRF></VRF>
        <IpPool></IpPool>
        <Ipv6Pool></Ipv6Pool>
        <SSLVPNPolicy></SSLVPNPolicy>
      </AuthorizationData>
      <AuthorizationIpv6PrefixInfo>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </AuthorizationIpv6PrefixInfo>
    </AuthorizationInfo>
  </AuthorizationInfos>
</BYOD>
```

## Table description

Item	Description
Feature name	BYOD
Table name	AuthorizationInfos
Table type	Multi-instance table

Row name	AuthorizationInfo
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserGroupName	User group name.	Index	String. Length: 1 to 32 characters.	N/A
DeviceType	Device type.	Index	String. Length: 1 to 127 characters.	N/A
Authorization Data	Authorization information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• AclNumber.</li> <li>• CallbackNumber.</li> <li>• FTPHomeDir.</li> <li>• IdleTimeout.</li> <li>• PrimaryDNSServer.</li> <li>• SecondaryDNSServer.</li> <li>• URL.</li> <li>• UserProfile.</li> <li>• VLANID.</li> <li>• VRF.</li> <li>• IpPool.</li> <li>• Ipv6Pool.</li> </ul>	N/A
AclNumber	ACL number.	N/A	Unsigned integer. Value range: 2000 to 5999.	N/A
CallbackNumber	Callback number.	N/A	String. Length: 1 to 64 characters.	N/A
SessTimeout	Session timeout.	N/A	Unsigned integer. Value range: 1 to 1440, in minutes.	N/A
IdleTimeout	Idle timeout timer.	N/A	Unsigned integer. Value range: 1 to 120, in minutes.	N/A
PrimaryDNSServer	Primary DNS server.	N/A	IPv4: String, dotted decimal notation.	N/A
PrimaryDNSIpv6Server	Primary DNS Ipv6 server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
SecondaryDNSServer	Secondary DNS server.	N/A	IPv4: String, dotted decimal notation.	N/A
SecondaryDNSIpv6Server	Secondary DNS Ipv6 server.	N/A	Ipv6: Hexadecimal string, colon-separated.	N/A
URL	URL information.	N/A	String. Length: 1 to 255 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
UserProfile	User profile name.	N/A	String. Length: 1 to 32 characters.	The name can contain digits, letters, and underscores (_), but the name can't start with a digit.
VLANID	ID of the authorization VLAN.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	Name of the authorization VPN instance.	N/A	String. Length: 1 to 31 characters.	N/A
IpPool	Available IP pool name.	N/A	String. Length: 1 to 31 characters.	N/A
Ipv6Pool	Available IPv6 pool name.	N/A	String. Length: 1 to 63 characters.	N/A
SSLVPNPolicy	Name of the SSL VPN policy assigned to the local user.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
AuthorizationIpv6PrefixInfo	Available IPv6 prefix.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address.</li> <li>Ipv6PrefixLength.</li> </ul>	N/A
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	For example, 2003:10::1:1.  This column is effective only when the Ipv6PrefixLength column is set.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 1 to 128.	This column is effective only when the Ipv6Address column is set.

# Contents

- BYOD .....1
  - BYOD/DhcpOption55Rules .....1
  - BYOD/UserAgentRules .....1
  - BYOD/MacRules.....1

# BYOD

## BYOD/DhcpOption55Rules

Message	Explanation
Operation not supported. 不支持该操作。	Predefined rules prohibit modification, please check your rules.

## BYOD/UserAgentRules

Message	Explanation
Operation not supported. 不支持该操作。	Predefined rules prohibit modification, please check your rules.

## BYOD/MacRules

Message	Explanation
Operation not supported. 不支持该操作。	Predefined rules prohibit modification, please check your rules.
Wrong Mask. 错误的MAC地址掩码。	Invalid MAC mask, please check your MAC Mask.
Wrong MAC address. 错误的MAC地址。	Invalid MAC address, please check your MAC address.

# Contents

- CAR .....1
  - CAR/GlobalPolicies .....1
  - XML structure .....1
  - Table description .....1
  - Columns .....1

# CAR

## CAR/GlobalPolicies

This table contains information about global committed access rate (CAR) policies.

### XML structure

```
<CAR>
  <GlobalPolicies>
    <Policy>
      <Name></Name>
      <CountClear></CountClear>
    </Policy>
  </GlobalPolicies>
</CAR>
```

### Table description

Item	Description
Feature name	ACL
Table name	GlobalPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Global CAR policy name	Index	String. Length: 1 to 31 characters. The string must start with an English letter.	N/A
CountClear	Resets counters	N/A	This column must be empty.	N/A

# Contents

CAR .....	1
CAR/CarLists .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
CAR/CarPolicies .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
CAR/GlobalPolicies .....	10
XML structure .....	10
Table description .....	11
Columns .....	11



# CAR

## CAR/CarLists

This table contains information about committed access rate (CAR) lists.

### XML structure

```
<CAR>
  <CarLists>
    <List>
      <CarlID></CarlID>
      <Mac></Mac>
      <DscpList>
        <Dscp></Dscp>
      </DscpList>
      <ExpList>
        <Exp></Exp>
      </ExpList>
      <IPPrecedenceList>
        <IPPrecedence></IPPrecedence>
      </IPPrecedenceList>
      <DestIPRange>
        <DestIPStart></DestIPStart>
        <DestIPEnd></DestIPEnd>
      </DestIPRange>
      <SrcIPRange>
        <SrcIPStart></SrcIPStart>
        <SrcIPEnd></SrcIPEnd>
      </SrcIPRange>
      <DestIPSubnet>
        <DestSubnetIP></DestSubnetIP>
        <DestMaskLength></DestMaskLength>
      </DestIPSubnet>
      <SrcIPSubnet>
        <SrcSubnetIP></SrcSubnetIP>
        <SrcMaskLength></SrcMaskLength>
      </SrcIPSubnet>
      <SrcIPObjGroup></SrcIPObjGroup>
      <DestIPObjGroup></DestIPObjGroup>
      <Mode></Mode>
      <Trange></Trange>
    </List>
  </CarLists>
</CAR>
```

## Table description

Item	Description
Feature name	CAR
Table name	CarLists
Table type	Multi-instance table
Row name	List
Restrictions	Only one match column can be configured once.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CarIID	CAR list number	Index	Unsigned integer. Value range: 1 to 199.	N/A
Mac	Match the MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
Dscp	Match DSCP values.	N/A	Unsigned integer. Value range: 0 to 63.	You can specify up to 8 <b>Dscp</b> for a rule
Exp	Match MPLS EXP value.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>Exp</b> for a rule
IPPrecedence	Match IP precedence.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>IPPrecedence</b> for a rule
DestIPRange	Match destination IP by range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>DestIPStart</b></li> <li><b>DestIPEnd</b></li> </ul>	The two members must both be specified.
DestIPStart	Start IP of range.	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
DestIPEnd	End IP of range.	N/A	String, dotted decimal notation.	Example: 10.153.93.60. <b>DestIPEnd</b> must be bigger than <b>DestIPStart</b> .
SrcIPRange	Match source IP by range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>SrcIPStart</b></li> <li><b>SrcIPEnd</b></li> </ul>	The two members must both be specified.
SrcIPStart	Start IP of range.	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
SrcIPEnd	End IP of range.	N/A	String, dotted decimal notation.	Example: 10.153.93.60. <b>SrcIPEnd</b> must be bigger than <b>SrcIPStart</b> .

DestIPSubnet	Match destination IP by subnet.	Data structure	Members include: <ul style="list-style-type: none"> <li>• <b>DestSubnetIP</b></li> <li>• <b>DestMaskLength</b></li> </ul>	The two members must both be specified.
DestSubnetIP	Subnet IP.	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
DestMaskLength	MaskLength.	N/A	Unsigned integer.	The maximum value is 31. The minimum value varies by device model.
SrcIPSubnet	Match source IP by subnet.	Data structure	Members include: <ul style="list-style-type: none"> <li>• <b>SrcSubnetIP</b></li> <li>• <b>SrcMaskLength</b></li> </ul>	The two members must both be specified.
SrcSubnetIP	Subnet IP.	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
SrcMaskLength	MaskLength.	N/A	Unsigned integer.	The maximum value is 31. The minimum value varies by device model.
SrcIPObjGroup	Match source IP by object group.	N/A	String case insensitive. Length: 1 to 31 characters.	The object group name can't contain '?'. The character '\r\n' in object group name can't be treated as escape character.
DestIPObjGroup	Match destination IP by object group.	N/A	String case insensitive. Length: 1 to 31	The object group name can't contain '?'. The character '\r\n' in object group name can't be treated as escape character.
Mode	Match Mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—PerAddress.</li> <li>• <b>2</b>—SharedBandwidth.</li> </ul>	It can be specified when <b>SrcIPSubnet</b> or <b>DestIPSubnet</b> or <b>SrcIPRange</b> or <b>DestIPRange</b> is specified.  When the <b>Mode</b> column is 1, Per-IP address rate is limited within the network segment, and traffic of all IP addresses within the network segment doesn't share the remaining bandwidth.  When the <b>Mode</b> column is 2, Per-IP address rate is limited within the network segment, and traffic of all IP addresses within the network segment shares the remaining bandwidth.
Trange	Name of the time range	N/A	String, case-insensitive. Length: 1 to 32 characters.	The time range name cannot be <b>all</b> and the '?' should not be used. The character '\r\n' in time range name can't be

				treated as escape character.
--	--	--	--	------------------------------

## CAR/CarPolicies

This table contains information about CAR policies.

### XML structure

```

<CAR>
  <CarPolicies>
    <Policy>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <Type></Type>
      <Value></Value>
      <BandwithUnit></BandwithUnit>
      <Name></Name>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenAction>
        <GreenActionType></GreenActionType>
        <GreenActionValue></GreenActionValue>
      </GreenAction>
      <YellowAction>
        <YellowActionType></YellowActionType>
        <YellowActionValue></YellowActionValue>
      </YellowAction>
      <RedAction>
        <RedActionType></RedActionType>
        <RedActionValue></RedActionValue>
      </RedAction>
    </Policy>
  </CarPolicies>
</CAR>

```

### Table description

Item	Description
Feature name	CAR
Table name	CarPolicies
Table type	Multi-instance table
Row name	Policy

Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
Type	Match type	Index	Enumeration : <ul style="list-style-type: none"> <li>1—IPv4Acl</li> <li>2—IPv6Acl</li> <li>3—CarI</li> <li>4—Any</li> </ul>	N/A
Value	Match type value	Index	Unsigned integer.	When <b>Type</b> is <b>1</b> , the value is 2000~5999. When <b>Type</b> is <b>2</b> , the value is 2000~3999. When <b>Type</b> is <b>3</b> , the value is 1~199. When <b>Type</b> is <b>4</b> , this column only can be configured as 0.
BandwidthUnit	Specify the bandwidth unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—kbps</li> <li>3—percent.</li> </ul>	If this column is not configured, the default bandwidth unit is kbps.
Name	Aggregate CAR policy name	N/A	String. Length: 1 to 31 characters. The string must start with an English letter.	This column cannot be configured together with the other column. This column support only when BandwidthUnit is 3.
CIR	Committed information rate	N/A	Unsigned integer.	Required when the <b>Name</b> is not specified. When BandwidthUnit is 3, the value range is 1 to 100.
CBS	Committed burst size	N/A	Unsigned integer.	When BandwidthUnit is 3, the value range is 50 to 2000.
EBS	Excess burst size	N/A	Unsigned integer.	If <b>CBS</b> or <b>PIR</b> is not configured, <b>EBS</b> cannot be configured. When BandwidthUnit is 3, the value range is 0 to

Column name	Column description	Column type	Data type and restrictions	Remarks
				2000.
PIR	Peak information rate	N/A	Unsigned integer.	When BandwidthUnit is 3, the value range is 1 to 100.
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>GreenActionType</b></li> <li><b>GreenActionValue</b></li> </ul>	GreenActionValue is required when GreenActionType is not 1, 10 or 19.
GreenActionType	Action type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass</li> <li><b>3</b>—remark-precedence-pass</li> <li><b>4</b>—remark-mpls-exp-pass</li> <li><b>5</b>—remark-dot1p-pass</li> <li><b>6</b>—remark-atm-clp-pass</li> <li><b>7</b>—remark-fr-de-pass</li> <li><b>8</b>—remark-local-prec-pass</li> <li><b>10</b>—discard</li> <li><b>11</b>—remark-dscp-continue</li> <li><b>12</b>—remark-precedence-continue</li> <li><b>13</b>—remark-mpls-exp-continue</li> <li><b>14</b>—remark-dot1p-continue</li> <li><b>15</b>—remark-atm-clp-continue.</li> <li><b>16</b>—remark-fr-de-continue.</li> <li><b>17</b>—remark-local-prec-continue.</li> <li><b>19</b>—continue.</li> </ul>	<p>The default GreenActionType is pass.</p> <p>When <b>GreenActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>GreenActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>12</b>, remark IP precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>14</b>, remark 802.1p</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>16</b>, remark DE bit of the FR packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>
GreenActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>GreenActionType</b> is <b>1, 10</b> or <b>19</b>, <b>GreenActionValue</b> is invalid.</p> <p>When <b>GreenActionType</b> is <b>6, 7, 15, 16</b>, <b>GreenActionValue</b> is 0~1.</p> <p>When <b>GreenActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>GreenActionValue</b> is 0~7.</p> <p>When <b>GreenActionType</b> is <b>2, 11</b>, <b>GreenActionValue</b> is 0~63.</p>
YellowAction	Specify behavior for Yellow packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>YellowActionType</b></li> <li><b>YellowActionValue</b></li> </ul>	YellowActionValue is required when GreenActionType is not 1, 10 or 19.
YellowActionType	Action type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass</li> <li><b>3</b>—remark-precedence-pass</li> <li><b>4</b>—remark-mpls-exp-pass</li> <li><b>5</b>—remark-dot1p-pass</li> <li><b>6</b>—remark-atm-clp-pass</li> <li><b>7</b>—remark-fr-de-pass</li> <li><b>8</b>—remark-local-prec-pass</li> <li><b>10</b>—discard</li> </ul>	<p>The default YellowActionType is pass.</p> <p>When <b>YellowActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>YellowActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• <b>11</b>—remark-dscp-continue</li> <li>• <b>12</b>—remark-precedence-continue</li> <li>• <b>13</b>—remark-mpls-exp-continue</li> <li>• <b>14</b>—remark-dot1p-continue</li> <li>• <b>15</b>—remark-atm-clp-continue.</li> <li>• <b>16</b>—remark-fr-de-continue.</li> <li>• <b>17</b>—remark-local-precedence-continue.</li> <li>• <b>19</b>—continue.</li> </ul>	<p>When <b>YellowActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>YellowActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>YellowActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>12</b>, remark IP precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>14</b>, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>16</b>, remark DE bit of the FR packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>
YellowActionValue	Action value	N/A	Unsigned integer.	When <b>YellowActionType</b> is <b>1</b> , <b>10</b> or <b>19</b> ,



Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 63.	<p><b>YellowActionValue</b> is invalid.</p> <p>When <b>YellowActionType</b> is <b>6, 7, 15, 16</b>, <b>YellowActionValue</b> is 0~1.</p> <p>When <b>YellowActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>YellowActionValue</b> is 0~7.</p> <p>When <b>YellowActionType</b> is <b>2, 11</b>, <b>YellowActionValue</b> is 0~63.</p>
RedAction	Specify behavior for Red packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>RedActionType</b></li> <li><b>RedActionValue</b></li> </ul>	RedActionValue is required when GreenActionType is not 1, 10 or 19.
RedActionType	Action type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass</li> <li><b>3</b>—remark-precedence-pass</li> <li><b>4</b>—remark-mpls-exp-pass</li> <li><b>5</b>—remark-dot1p-pass</li> <li><b>6</b>—remark-atm-clp-pass</li> <li><b>7</b>—remark-fr-de-pass</li> <li><b>8</b>—remark-local-prec-pass</li> <li><b>10</b>—discard</li> <li><b>11</b>—remark-dscp-continue</li> <li><b>12</b>—remark-precedence-continue</li> <li><b>13</b>—remark-mpls-exp-continue</li> <li><b>14</b>—remark-dot1p-continue</li> <li><b>15</b>—remark-atm-clp-continue</li> <li><b>16</b>—remark-fr-de-continue</li> <li><b>17</b>—remark-local-prec-continue.</li> <li><b>19</b>—continue.</li> </ul>	<p>The default RedActionType is discard.</p> <p>When <b>RedActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>RedActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>RedActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>12</b>, remark IP precedence of the packet and continue</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>14</b>, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>16</b>, remark DE bit of the FR packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>
RedActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>RedActionType</b> is <b>1, 10 or 19</b>, <b>RedActionValue</b> is invalid.</p> <p>When <b>RedActionType</b> is <b>6, 7, 15, 16</b>, <b>RedActionValue</b> is 0~1.</p> <p>When <b>RedActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>RedActionValue</b> is 0~7.</p> <p>When <b>RedActionType</b> is <b>2, 11</b>, <b>RedActionValue</b> is 0~63.</p>

## CAR/GlobalPolicies

This table contains information about global CAR policies.

### XML structure

```
<CAR>
  <GlobalPolicies>
```

```

<Policy>
  <Name></Name>
  <Type></Type>
  <CIR></CIR>
  <CBS></CBS>
  <EBS></EBS>
  <PIR></PIR>
  <GreenAction>
    <GreenActionType></GreenActionType>
    <GreenActionValue></GreenActionValue>
  </GreenAction>
  <YellowAction>
    <YellowActionType></YellowActionType>
    <YellowActionValue></YellowActionValue>
  </YellowAction>
  <RedAction>
    <RedActionType></RedActionType>
    <RedActionValue></RedActionValue>
  </RedAction>
</Policy>
</GlobalPolicies>
</CAR>

```

## Table description

Item	Description
Feature name	CAR
Table name	GlobalPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Global CAR policy name	Index	String. Length: 1 to 31 characters. The string must start with an English letter.	N/A
Type	Global CAR type	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—Aggregate CAR.</li> <li>2—Hierarchical CAR.</li> </ul>	Required. This column cannot be modified.
CIR	Committed	N/A	Unsigned integer.	Required.

Column name	Column description	Column type	Data type and restrictions	Remarks
	information rate			The value range for this column depends on the device model.
CBS	Committed burst size	N/A	Unsigned integer.	The value range for this column depends on the device model.
EBS	Excess burst size	N/A	Unsigned integer.	If <b>CBS</b> or <b>PIR</b> is not configured, <b>EBS</b> cannot be configured. The value range for this column depends on the device model.
PIR	Peak information rate	N/A	Unsigned integer.	The value range for this column depends on the device model.
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>GreenActionType</b></li> <li><b>GreenActionValue</b></li> </ul>	GreenActionValue is required when GreenActionType is not 1, 10 or 19.
GreenActionType	Action type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—pass.</li> <li>2—remark-dscp-pass</li> <li>3—remark-precedence-pass</li> <li>4—remark-mpls-exp-pass</li> <li>5—remark-dot1p-pass</li> <li>6—remark-atm-clp-pass</li> <li>7—remark-fr-de-pass</li> <li>8—remark-local-prec-pass</li> <li>10—discard</li> <li>11—remark-dscp-continue</li> <li>12—remark-precedence-continue</li> <li>13—remark-mpls-exp-continue</li> <li>14—remark-dot1p-continue</li> <li>15—remark-atm-clp-continue.</li> <li>16—remark-fr-de-continue.</li> <li>17—remark-local-prec-continue.</li> <li>19—continue.</li> </ul>	<p>The default GreenActionType is pass.</p> <p>When <b>GreenActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>GreenActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>When <b>GreenActionType</b> is <b>12</b>, remark IP precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>14</b>, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>16</b>, remark DE bit of the FR packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>
GreenActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>GreenActionType</b> is <b>1, 10</b> or <b>19</b>, <b>GreenActionValue</b> is invalid.</p> <p>When <b>GreenActionType</b> is <b>6, 7, 15, 16</b>, <b>GreenActionValue</b> is 0~1.</p> <p>When <b>GreenActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>GreenActionValue</b> is 0~7.</p> <p>When <b>GreenActionType</b> is <b>2, 11</b>, <b>GreenActionValue</b> is 0~63.</p>
YellowAction	Specify behavior for yellow packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>YellowActionType</b></li> <li><b>YellowActionValue</b></li> </ul>	YellowActionValue is required when GreenActionType is not 1, 10 or 19.
YellowActionType	Action type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> </ul>	The default YellowActionType is pass.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 2—remark-dscp-pass</li> <li>• 3—remark-precedence-pass</li> <li>• 4—remark-mpls-exp-pass</li> <li>• 5—remark-dot1p-pass</li> <li>• 6—remark-atm-clp-pass</li> <li>• 7—remark-fr-de-pass</li> <li>• 8—remark-local-prec-pass</li> <li>• 10—discard</li> <li>• 11—remark-dscp-continue</li> <li>• 12—remark-precedence-continue</li> <li>• 13—remark-mpls-exp-continue</li> <li>• 14—remark-dot1p-continue</li> <li>• 15—remark-atm-clp-continue.</li> <li>• 16—remark-fr-de-continue.</li> <li>• 17—remark-local-prec-continue.</li> <li>• 19—continue.</li> </ul>	<p>When <b>YellowActionType</b> is 1, send the packet.</p> <p>When <b>YellowActionType</b> is 2, remark DSCP value of the packet and send it.</p> <p>When <b>YellowActionType</b> is 3, remark IP precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is 4, remark EXP of the MPLS packet and send it.</p> <p>When <b>YellowActionType</b> is 5, remark 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is 6, remark CLP bit of the ATM packet and send it.</p> <p>When <b>YellowActionType</b> is 7, remark DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is 8, drop the packet.</p> <p>When <b>YellowActionType</b> is 10, remark local precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is 11, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is 12, remark IP precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is 13, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is 14, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is 15, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is 16, remark DE bit of the FR packet and continue to process it using the next</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>CAR policy.</p> <p>When <b>YellowActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>
YellowActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>YellowActionType</b> is <b>1, 10</b> or <b>19</b>, <b>YellowActionValue</b> is invalid.</p> <p>When <b>YellowActionType</b> is <b>6, 7, 15, 16</b>, <b>YellowActionValue</b> is 0~1.</p> <p>When <b>YellowActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>YellowActionValue</b> is 0~7.</p> <p>When <b>YellowActionType</b> is <b>2, 11</b>, <b>YellowActionValue</b> is 0~63.</p>
RedAction	Specify behavior for red packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li><b>RedActionType</b></li> <li><b>RedActionValue</b></li> </ul>	RedActionValue is required when GreenActionType is not 1, 10 or 19.
RedActionType	Action type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass</li> <li><b>3</b>—remark-precedence-pass</li> <li><b>4</b>—remark-mpls-exp-pass</li> <li><b>5</b>—remark-dot1p-pass</li> <li><b>6</b>—remark-atm-clp-pass</li> <li><b>7</b>—remark-fr-de-pass</li> <li><b>8</b>—remark-local-prec-pass</li> <li><b>10</b>—discard</li> <li><b>11</b>—remark-dscp-continue</li> <li><b>12</b>—remark-precedence-continue</li> <li><b>13</b>—remark-mpls-exp-continue</li> <li><b>14</b>—remark-dot1p-continue</li> <li><b>15</b>—remark-atm-clp-continue</li> <li><b>16</b>—remark-fr-de-contin</li> </ul>	<p>The default RedActionType is discard.</p> <p>When <b>RedActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>RedActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is <b>8</b>, drop the packet.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
			<p>ue</p> <ul style="list-style-type: none"> <li>17—remark-local-prec-c ontinue.</li> <li>19—continue.</li> </ul>	<p>When <b>RedActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>12</b>, remark IP precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>14</b>, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>16</b>, remark DE bit of the FR packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>
RedActionValue	Action value	N/A	<p>Unsigned integer. Value range: 0 to 63.</p>	<p>When <b>RedActionType</b> is <b>1, 10</b> or <b>19</b>, <b>RedActionValue</b> is invalid.</p> <p>When <b>RedActionType</b> is <b>6, 7, 15, 16</b>, <b>RedActionValue</b> is 0~1.</p> <p>When <b>RedActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>RedActionValue</b> is 0~7.</p> <p>When <b>RedActionType</b> is <b>2, 11</b>, <b>RedActionValue</b> is 0~63.</p>





# Contents

CAR .....	1
CAR/CarLists .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
CAR/CarPolicies .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
CAR/Capability .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
CAR/GlobalPolicies .....	12
XML structure .....	12
Table description .....	13
Columns .....	13

# CAR

## CAR/CarLists

This table contains information about committed-access-rate list.

### XML structure

```
<CAR>
  <CarLists>
    <List>
      <CarlID></CarlID>
      <Mac></Mac>
      <DscpList>
        <Dscp></Dscp>
      </DscpList>
      <ExpList>
        <Exp></Exp>
      </ExpList>
      <IPPrecedenceList>
        <IPPrecedence></IPPrecedence>
      </IPPrecedenceList>
      <DestIPRange>
        <DestIPStart></DestIPStart>
        <DestIPEnd></DestIPEnd>
      </DestIPRange>
      <SrcIPRange>
        <SrcIPStart></SrcIPStart>
        <SrcIPEnd></SrcIPEnd>
      </SrcIPRange>
      <DestIPSubnet>
        <DestSubnetIP></DestSubnetIP>
        <DestMaskLength></DestMaskLength>
      </DestIPSubnet>
      <SrcIPSubnet>
        <SrcSubnetIP></SrcSubnetIP>
        <SrcMaskLength></SrcMaskLength>
      </SrcIPSubnet>
      <SrcIPObjGroup></SrcIPObjGroup>
      <DestIPObjGroup></DestIPObjGroup>
      <Mode></Mode>
      <Trange></Trange>
    </List>
  </CarLists>
</CAR>
```

## Table description

Item	Description
Feature name	CAR
Table name	CarLists
Table type	Multi-instance table
Row name	List
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CarIID	CAR list number	Index	Unsigned integer. Value range: 1 to 199.	N/A
Mac	Match the MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
Dscp	Match DSCP values.	N/A	Unsigned integer. Value range: 0 to 63.	You can specify up to 8 <b>Dscp</b> for a rule
Exp	Match MPLS EXP value.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>Exp</b> for a rule
IPPrecedence	Match IP precedence.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>IPPrecedence</b> for a rule
DestIPRange	Match destination IP by range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>DestIPStart</b></li> <li><b>DestIPEnd</b></li> </ul>	The two members must both be specified.
DestIPStart	Start IP of range.	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
DestIPEnd	End IP of range.	N/A	String, dotted decimal notation.	Example: 10.153.93.60. <b>DestIPEnd</b> must be bigger than <b>DestIPStart</b> .
SrcIPRange	Match source IP by range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>SrcIPStart</b></li> <li><b>SrcIPEnd</b></li> </ul>	The two members must both be specified.
SrcIPStart	Start IP of range.	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
SrcIPEnd	End IP of range.	N/A	String, dotted decimal notation.	Example: 10.153.93.60. <b>SrcIPEnd</b> must be bigger than <b>SrcIPStart</b> .
DestIPSubnet	Match destination IP by	Data structure	Members include: <ul style="list-style-type: none"> <li><b>DestSubnetIP</b></li> </ul>	The two members must both be specified.

	subnet.		<ul style="list-style-type: none"> <li>DestMaskLength</li> </ul>	
DestSubnetIP	Subnet IP.	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
DestMaskLength	MaskLength.	N/A	Unsigned integer.	The maximum value is 31. The minimum value varies by device model.
SrcIPSubnet	Match source IP by subnet.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcSubnetIP</li> <li>SrcMaskLength</li> </ul>	The two members must both be specified.
SrcSubnetIP	Subnet IP.	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
SrcMaskLength	MaskLength.	N/A	Unsigned integer.	The maximum value is 31. The minimum value varies by device model.
SrcIPObjGroup	Match source IP by object group.	N/A	String case insensitive. Length: 1 to 31 characters.	The object group name cannot contain '?'. The character '\n' in object group name can't be treated as escape character.
DestIPObjGroup	Match destination IP by object group.	N/A	String case insensitive. Length: 1 to 31	The object group name can't contain '?'. The character '\n' in object group name can't be treated as escape character.
Mode	Match Mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PerAddress.</li> <li>2—SharedBandwidth.</li> </ul>	When the <b>Mode</b> column is 1, Per-IP address rate is limited within the network segment, and traffic of all IP addresses within the network segment doesn't share the remaining bandwidth. When the <b>Mode</b> column is 2, Per-IP address rate is limited within the network segment, and traffic of all IP addresses within the network segment shares the remaining bandwidth.
Trange	Name of the time range	N/A	String, case-insensitive. Length: 1 to 32 characters.	The time range name cannot be <b>all</b> and the '?' <b>should not be used</b> . The character '\n' in time range name can't be treated as escape character.

# CAR/CarPolicies

This table contains information about committed-access-rate policy.

## XML structure

```
<CAR>
  <CarPolicies>
    <Policy>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <Type></Type>
      <Value></Value>
      <BandwithUnit></BandwithUnit>
      <Name></Name>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenAction>
        <GreenActionType></GreenActionType>
        <GreenActionValue></GreenActionValue>
      </GreenAction>
      <YellowAction>
        <YellowActionType></YellowActionType>
        <YellowActionValue></YellowActionValue>
      </YellowAction>
      <RedAction>
        <RedActionType></RedActionType>
        <RedActionValue></RedActionValue>
      </RedAction>
      <GreenPkts></GreenPkts>
      <GreenBytes></GreenBytes>
      <YellowPkts></YellowPkts>
      <YellowBytes></YellowBytes>
      <RedPkts></RedPkts>
      <RedBytes></RedBytes>
    </Policy>
  </CarPolicies>
</CAR>
```

## Table description

Item	Description
Feature name	CAR
Table name	CarPolicies
Table type	Multi-instance table

Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
Type	Match type	Index	Enumeration : <ul style="list-style-type: none"> <li>1—IPv4Acl</li> <li>2—IPv6Acl</li> <li>3—Carl</li> <li>4—Any</li> </ul>	N/A
Value	Match type value	Index	Unsigned integer.	N/A
BandwidthUnit	Specify the bandwidth unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—kbps</li> <li>3—percent.</li> </ul>	N/A
Name	Aggregate CAR policy name	N/A	String. Length: 1 to 31 characters.  The string must start with an English letter.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li>GreenActionType</li> <li>GreenActionValue</li> </ul>	N/A
GreenActionType	Action type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pass.</li> <li>2—remark--dscp--pass</li> <li>3—remark--precedence--pass</li> <li>4—remark--mpls--exp--pass</li> <li>5—remark-dot1p-pass</li> </ul>	When <b>GreenActionType</b> is 1, send the packet. When <b>GreenActionType</b> is 2, remark DSCP value of the packet and send it. When <b>GreenActionType</b> is 3, remark IP precedence of the packet and send it.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• <b>6</b>—remark-atm-clp-pass</li> <li>• <b>7</b>—remark-fr-de-pass</li> <li>• <b>8</b>—remark-local-prec-pass</li> <li>• <b>10</b>—discard</li> <li>• <b>11</b>—remark-dscp-continue</li> <li>• <b>12</b>—remark-precedence-continue</li> <li>• <b>13</b>—remark-mpls-exp-continue</li> <li>• <b>14</b>—remark-dot1p-continue</li> <li>• <b>15</b>—remark-atm-clp-continue.</li> <li>• <b>16</b>—remark-fr-de-continue.</li> <li>• <b>17</b>—remark-local-prec-continue.</li> <li>• <b>19</b>—continue</li> </ul>	<p>When <b>GreenActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>12</b>, remark IP precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>14</b>, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>16</b>, remark DE bit of the FR packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>



Column name	Column description	Column type	Data type and restrictions	Remarks
GreenActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>GreenActionType</b> is <b>1, 10</b> or <b>19</b>, <b>GreenActionValue</b> is invalid.</p> <p>When <b>GreenActionType</b> is <b>6, 7, 15, 16</b>, <b>GreenActionValue</b> is 0~1.</p> <p>When <b>GreenActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>GreenActionValue</b> is 0~7.</p> <p>When <b>GreenActionType</b> is <b>2, 11</b>, <b>GreenActionValue</b> is 0~63.</p>
YellowAction	Specify behavior for yellow packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>YellowActionType</b></li> <li><b>YellowActionValue</b></li> </ul>	N/A
YellowActionType	Action type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass</li> <li><b>3</b>—remark-precedence-pass</li> <li><b>4</b>—remark-mpls-exp-pass</li> <li><b>5</b>—remark-dot1p-pass</li> <li><b>6</b>—remark-atm-clp-pass</li> <li><b>7</b>—remark-fr-de-pass</li> <li><b>8</b>—remark-local-prec-pass</li> <li><b>10</b>—discard</li> <li><b>11</b>—remark-dscp-continue</li> <li><b>12</b>—remark-precedence-continue</li> <li><b>13</b>—remark-mpls-exp-continue</li> <li><b>14</b>—remark-dot1p-continue</li> <li><b>15</b>—remark-atm-clp-continue.</li> <li><b>16</b>—remark-fr-de-continue.</li> <li><b>17</b>—remark-local-prec-continue.</li> <li><b>19</b>—continue</li> </ul>	<p>When <b>YellowActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>YellowActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>YellowActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>YellowActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>YellowActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>12</b>, remark IP precedence of the packet and continue to process it</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>14</b>, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>16</b>, remark DE bit of the FR packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>YellowActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>
YellowActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>YellowActionType</b> is <b>1, 10</b> or <b>19</b>, <b>YellowActionValue</b> is invalid.</p> <p>When <b>YellowActionType</b> is <b>6, 7, 15, 16</b>, <b>YellowActionValue</b> is 0~1.</p> <p>When <b>YellowActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>YellowActionValue</b> is 0~7.</p> <p>When <b>YellowActionType</b> is <b>2, 11</b>, <b>YellowActionValue</b> is 0~63.</p>
RedAction	Specify behavior for red packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>RedActionType</b></li> <li><b>RedActionValue</b></li> </ul>	N/A
RedActionType	Action type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass</li> <li><b>3</b>—remark-precedence-pass</li> <li><b>4</b>—remark-mpls-exp-pass</li> </ul>	<p>When <b>RedActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>RedActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>3</b>, remark IP precedence</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• <b>5</b>—remark-dot1p-pass</li> <li>• <b>6</b>—remark-atm-clp-pass</li> <li>• <b>7</b>—remark-fr-de-pass</li> <li>• <b>8</b>—remark-local-prec-pass</li> <li>• <b>10</b>—discard</li> <li>• <b>11</b>—remark-dscp-continue</li> <li>• <b>12</b>—remark-precedence-continue</li> <li>• <b>13</b>—remark-mpls-exp-continue</li> <li>• <b>14</b>—remark-dot1p-continue</li> <li>• <b>15</b>—remark-atm-clp-continue.</li> <li>• <b>16</b>—remark-fr-de-continue.</li> <li>• <b>17</b>—remark-local-prec-continue.</li> <li>• <b>19</b>—continue</li> </ul>	<p>of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>RedActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>12</b>, remark IP precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>14</b>, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>16</b>, remark DE bit of the FR packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>19</b>, continue to process the packet using the next</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				CAR policy.
RedActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	When <b>RedActionType</b> is <b>1, 10</b> or <b>19</b> , <b>RedActionValue</b> is invalid. When <b>RedActionType</b> is <b>6, 7, 15, 16</b> , <b>RedActionValue</b> is 0~1. When <b>RedActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b> , <b>RedActionValue</b> is 0~7. When <b>RedActionType</b> is <b>2, 11</b> , <b>RedActionValue</b> is 0~63.
GreenPkts	Number of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenBytes	Bytes of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPkts	Number of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowBytes	Bytes of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPkts	Number of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedBytes	Bytes of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## CAR/Capability

This table contains capability information about committed-access-rate.

## XML structure

```

<CAR>
  <Capability>
    <MQCTokenPara></MQCTokenPara>
    <CIRMin></CIRMin>
    <CIRMax></CIRMax>
    <CIRGranularity></CIRGranularity>
    <CBSMin></CBSMin>
    <CBSMax></CBSMax>
    <CBSGranularity></CBSGranularity>
    <EBSMin></EBSMin>
    <EBSMax></EBSMax>
    <EBSGranularity></EBSGranularity>
    <PIRMin></PIRMin>
    <PIRMax></PIRMax>
  </Capability>
</CAR>

```

```

    <PIRGranularity></PIRGranularity>
  </Capability>
</CAR>

```

## Table description

Item	Description
Feature name	CAR
Table name	Capability
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MQCTokenPara	Token bucket capability	N/A	Each bit represents a type as follows: <ul style="list-style-type: none"> <li>1—CBS</li> <li>2—EBS</li> <li>4—PIR</li> </ul>	The value of this column depends on the device model.
CIRMin	Minimum CIR value in kbps	N/A	Unsigned integer.	The value of this column depends on the device model.
CIRMax	Maximum CIR value in kbps	N/A	Unsigned integer.	The value of this column depends on the device model.
CIRGranularity	Granularity of CIR in kbps	N/A	Unsigned integer.	The value of this column depends on the device model.
CBSMin	Minimum CBS value in bytes	N/A	Unsigned integer.	The value of this column depends on the device model.
CBSMax	Maximum CBS value in bytes	N/A	Unsigned integer.	The value of this column depends on the device model.
CBSGranularity	Granularity of CBS in bytes	N/A	Unsigned integer.	The value of this column depends on the device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
EBSMin	Minimum EBS value in bytes	N/A	Unsigned integer.	The value of this column depends on the device model.
EBSMax	Maximum EBS value in bytes	N/A	Unsigned integer.	The value of this column depends on the device model.
EBSGranularity	Granularity of EBS in bytes	N/A	Unsigned integer.	The value of this column depends on the device model.
PIRMin	Minimum PIR value in kbps	N/A	Unsigned integer.	The value of this column depends on the device model.
PIRMax	Maximum PIR value in kbps	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
PIRGranularity	Granularity of PIR in kbps	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.

## CAR/GlobalPolicies

This table contains information about global committed access rate (CAR) policies.

### XML structure

```

<CAR>
  <GlobalPolicies>
    <Policy>
      <Name></Name>
      <Type></Type>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenAction>
        <GreenActionType></GreenActionType>
        <GreenActionValue></GreenActionValue>
      </GreenAction>
      <YellowAction>
        <YellowActionType></YellowActionType>
        <YellowActionValue></YellowActionValue>
      </YellowAction>
    </Policy>
  </GlobalPolicies>
</CAR>

```

```

</YellowAction>
<RedAction>
  <RedActionType></RedActionType>
  <RedActionValue></RedActionValue>
</RedAction>
<GreenPkts></GreenPkts>
<GreenBytes></GreenBytes>
<YellowPkts></YellowPkts>
<YellowBytes></YellowBytes>
<RedPkts></RedPkts>
<RedBytes></RedBytes>
</Policy>
</GlobalPolicies>
</CAR>

```

## Table description

Item	Description
Feature name	CAR
Table name	GlobalPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Global CAR policy name	Index	String. Length: 1 to 31 characters. The string must start with an English letter.	N/A
Type	CAR type	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—Aggregate CAR.</li> <li>2—Hierarchical CAR.</li> </ul>	Required.
CIR	Committed information rate	N/A	Unsigned integer.	Required.
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	If <b>CBS</b> or <b>PIR</b> is not configured, <b>EBS</b> cannot be configured.
PIR	Peak information rate	N/A	Unsigned integer.	N/A
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>GreenActionType</b></li> </ul>	GreenActionValue is required when GreenActionType is not 1,

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>GreenActionValue</b></li> </ul>	10 or 19.
GreenActionType	Action type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass</li> <li><b>3</b>—remark-precedence-pass</li> <li><b>4</b>—remark-mpls-exp-pass</li> <li><b>5</b>—remark-dot1p-pass</li> <li><b>6</b>—remark-atm-clp-pass</li> <li><b>7</b>—remark-fr-de-pass</li> <li><b>8</b>—remark-local-prec-pass</li> <li><b>10</b>—discard</li> <li><b>11</b>—remark-dscp-continue</li> <li><b>12</b>—remark-precedence-continue</li> <li><b>13</b>—remark-mpls-exp-continue</li> <li><b>14</b>—remark-dot1p-continue</li> <li><b>15</b>—remark-atm-clp-continue.</li> <li><b>16</b>—remark-fr-de-continue.</li> <li><b>17</b>—remark-local-prec-continue.</li> <li><b>19</b>—continue.</li> </ul>	<p>When <b>GreenActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>GreenActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>12</b>, remark IP precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>14</b>, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>16</b>, remark DE bit of the FR packet and continue to</p>



Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>
GreenActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>GreenActionType</b> is <b>1, 10</b> or <b>19</b>, <b>GreenActionValue</b> is invalid.</p> <p>When <b>GreenActionType</b> is <b>6, 7, 15, 16</b>, <b>GreenActionValue</b> is 0~1.</p> <p>When <b>GreenActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>GreenActionValue</b> is 0~7.</p> <p>When <b>GreenActionType</b> is <b>2, 11</b>, <b>GreenActionValue</b> is 0~63.</p>
YellowAction	Specify behavior for yellow packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>YellowActionType</b></li> <li><b>YellowActionValue</b></li> </ul>	YellowActionValue is required when GreenActionType is not 1, 10 or 19.
YellowActionType	Action type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass</li> <li><b>3</b>—remark-precedence-pass</li> <li><b>4</b>—remark-mpls-exp-pass</li> <li><b>5</b>—remark-dot1p-pass</li> <li><b>6</b>—remark-atm-clp-pass</li> <li><b>7</b>—remark-fr-de-pass</li> <li><b>8</b>—remark-local-prec-pass</li> <li><b>10</b>—discard</li> <li><b>11</b>—remark-dscp-continue</li> <li><b>12</b>—remark-precedence-continue</li> <li><b>13</b>—remark-mpls-exp-continue</li> <li><b>14</b>—remark-dot1p-continue</li> <li><b>15</b>—remark-atm-clp-continue.</li> <li><b>16</b>—remark-fr-de-contin</li> </ul>	<p>When <b>YellowActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>YellowActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>YellowActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>YellowActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>YellowActionType</b></p>

Column name	Column description	Column type	Data type and restrictions	Remarks
			ue. <ul style="list-style-type: none"> <li>17—remark-local-prec-c ontinue.</li> <li>19—continue.</li> </ul>	is <b>10</b> , remark local precedence of the packet and send it.  When <b>YellowActionType</b> is <b>11</b> , remark DSCP value of the packet and continue to process it using the next CAR policy.  When <b>YellowActionType</b> is <b>12</b> , remark IP precedence of the packet and continue to process it using the next CAR policy.  When <b>YellowActionType</b> is <b>13</b> , remark EXP of the MPLS packet and continue to process it using the next CAR policy.  When <b>YellowActionType</b> is <b>14</b> , remark 802.1p priority value of the packet and continue to process it using the next CAR policy.  When <b>YellowActionType</b> is <b>15</b> , remark CLP bit of the ATM packet and continue to process it using the next CAR policy.  When <b>YellowActionType</b> is <b>16</b> , remark DE bit of the FR packet and continue to process it using the next CAR policy.  When <b>YellowActionType</b> is <b>17</b> , remark local precedence of the packet and continue to process it using the next CAR policy.  When <b>YellowActionType</b> is <b>19</b> , continue to process the packet using the next CAR policy.
YellowActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	When <b>YellowActionType</b> is <b>1, 10</b> or <b>19</b> , <b>YellowActionValue</b> is invalid.  When <b>YellowActionType</b> is <b>6, 7, 15, 16</b> , <b>YellowActionValue</b> is 0~1.  When <b>YellowActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b> , <b>YellowActionValue</b> is 0~7.  When <b>YellowActionType</b> is <b>2, 11</b> , <b>YellowActionValue</b> is 0~63.

Column name	Column description	Column type	Data type and restrictions	Remarks
RedAction	Specify behavior for red packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>RedActionType</b></li> <li><b>RedActionValue</b></li> </ul>	RedActionValue is required when GreenActionType is not 1, 10 or 19.
RedActionType	Action type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass</li> <li><b>3</b>—remark-precedence-pass</li> <li><b>4</b>—remark-mpls-exp-pass</li> <li><b>5</b>—remark-dot1p-pass</li> <li><b>6</b>—remark-atm-clp-pass</li> <li><b>7</b>—remark-fr-de-pass</li> <li><b>8</b>—remark-local-prec-pass</li> <li><b>10</b>—discard</li> <li><b>11</b>—remark-dscp-continue</li> <li><b>12</b>—remark-precedence-continue</li> <li><b>13</b>—remark-mpls-exp-continue</li> <li><b>14</b>—remark-dot1p-continue</li> <li><b>15</b>—remark-atm-clp-continue</li> <li><b>16</b>—remark-fr-de-continue</li> <li><b>17</b>—remark-local-prec-continue.</li> <li><b>19</b>—continue.</li> </ul>	<p>When <b>RedActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>RedActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is <b>8</b>, drop the packet.</p> <p>When <b>RedActionType</b> is <b>10</b>, remark local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>11</b>, remark DSCP value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>12</b>, remark IP precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>13</b>, remark EXP of the MPLS packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>14</b>, remark 802.1p priority value of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>15</b>, remark CLP bit of the ATM packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p><b>16</b>, remark DE bit of the FR packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>17</b>, remark local precedence of the packet and continue to process it using the next CAR policy.</p> <p>When <b>RedActionType</b> is <b>19</b>, continue to process the packet using the next CAR policy.</p>
RedActionValue	Action value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>RedActionType</b> is <b>1, 10</b> or <b>19</b>, <b>RedActionValue</b> is invalid.</p> <p>When <b>RedActionType</b> is <b>6, 7, 15, 16</b>, <b>RedActionValue</b> is 0~1.</p> <p>When <b>RedActionType</b> is <b>3, 4, 5, 8, 12, 13, 14, 17</b>, <b>RedActionValue</b> is 0~7.</p> <p>When <b>RedActionType</b> is <b>2, 11</b>, <b>RedActionValue</b> is 0~63.</p>
GreenPkts	Number of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenBytes	Bytes of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPkts	Number of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowBytes	Bytes of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPkts	Number of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedBytes	Bytes of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

# Contents

CAR .....1

    CAR.....1

# CAR

## CAR

Message	Explanation
PIR can't be smaller than CIR. PIR的值不能小于CIR。	Configure a CAR action, PIR can't be smaller than CIR. 配置流量监管动作，峰值速率不能小于承诺信息速率。
The end address should be larger than the start address. 结束地址值应该大于起始地址值。	Configure a CAR list, The end address should be larger than the start address. 配置CAR列表，IP地址段终止地址必须大于IP地址段起始地址。
The number of IP addresses in the IP address range exceeds %u. IP地址的数量超出了个数为%u的限制。	Configure a CAR list, The number of IP addresses in the IP address range has max number. 配置CAR列表，IP地址段数量存在上限。
Total UNI bandwidth can't be greater than NNI bandwidth. 下行接口总带宽不能超过上行接口带宽。	Total UNI bandwidth can't be greater than NNI bandwidth. 配置带宽保证组，下行接口总带宽不能超过上行接口带宽。
Please remove UNI configuration of this interface first. 请先删除下行接口配置。	Del if CAR, remove UNI configuration of this interface first. 删除接口CAR配置时需要保证此接口不是带宽保证组的下行口。
The maximum number of CAR policies that can be configured has been reached. CAR策略的数目已经达到最大值。	The maximum number of CAR policies that can be configured has been reached. 接口下配置流量监管的数量存在上限。
CIR or PIR must be configured in the same unit (percentage or kbps) as it was previously configured. 必须与之前配置的CIR或者PIR配置相同单位（percentage or kbps）	CIR or PIR must be configured in the same unit (percentage or kbps) as it was previously configured. 接口下配置流量监管的单位需要保持一致。
Percentage-based CAR can be only used on interface. 百分比CAR只能被应用到接口。	Percentage-based CAR can be only used on interface. 百分比CAR只能被应用到接口。

# Contents

- CCdefense .....1
  - CCdefense/MovePolicyRule.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# CCdefense

## CCdefense/MovePolicyRule

This table is used to number the rules in a CC attack defense policy.

### XML structure

```
<CCdefense>
  <MovePolicyRule>
    <Move>
      <PolicyName></PolicyName>
      <RuleId></RuleId>
      <NextRuleId></NextRuleId>
    </Move>
  </MovePolicyRule>
</CCdefense>
```

### Table description

Item	Description
Feature name	CCdefense
Table name	MovePolicyRule
Table type	Single-instance table
Row name	Move
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
RuleId	Rule ID	Index	Unsigned integer. Value range: 1 to 64.	Single value.
NextRuleId	ID of the next rule	N/A	Unsigned integer. Value range: 1 to 64.	Single value.



# Contents

CCdefense .....	1
CCdefense/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
CCdefense/RuleInPolicy .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
CCdefense/CcOnWafPolicy .....	4
XML structure .....	4
Table description .....	4
Columns .....	4

# CCdefense

## CCdefense/Policies

This table contains Challenge Collapsar (CC) attack defense policy information.

### XML structure

```
<CCdefense>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <Description></Description>
      <Frequency></Frequency>
      <ExceptionIPv4List>
        <Ipv4address></Ipv4address>
      </ExceptionIPv4List>
      <ExceptionIPv6List>
        <Ipv6address></Ipv6address>
      </ExceptionIPv6List>
    </Policy>
  </Policies>
</CCdefense>
```

### Table description

Item	Description
Feature name	CCdefense
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Description	Description of the policy	N/A	String, case-sensitive. Length: 1 to 255 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Frequency	Value of the frequency	N/A	Unsigned integer. Value range: 10 to 720.	Default is 300.
Ipv4address	Source IPv4 address	N/A	String, decimal notation. Length: 1 to 15 characters.	N/A
Ipv6address	Source IPv6 address	N/A	Hexadecimal string, colon-separated. Length: 1 to 45 characters.	N/A

## CCdefense/RuleInPolicy

This table contains information about the rules in a CC attack defense policy.

### XML structure

```

<CCdefense>
  <RuleInPolicy>
    <Rule>
      <PolicyName></PolicyName>
      <RuleID></RuleID>
      <RuleName></RuleName>
      <RequestMethod></RequestMethod>
      <SrcIpType></SrcIpType>
      <RequestRate></RequestRate>
      <RequestConcentration></RequestConcentration>
      <RequestNumber></RequestNumber>
      <Action></Action>
      <BlockTime></BlockTime>
      <LoggingEnable></LoggingEnable>
      <DestIPv4List>
        <DestIpv4Address></DestIpv4Address>
      </DestIPv4List>
      <DestIPv6List>
        <DestIpv6Address></DestIpv6Address>
      </DestIPv6List>
      <DestPortList>
        <DestPort></DestPort>
      </DestPortList>
      <UriStringList>
        <UriString></UriString>
      </UriStringList>
    </Rule>
  </RuleInPolicy>
</CCdefense>

```

## Table description

Item	Description
Feature name	CCdefense
Table name	RuleInPolicy
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
RuleID	RuleID	Index	Unsigned integer. Value range: 1 to 64.	N/A
RuleName	Rule Name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
RequestMethod	Request method name	N/A	Unsigned integer. Value range: 0 to 255.	N/A
SrclpType	Host type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Convention.</li> <li>1—X-Forwarded-For.</li> </ul>	Default is 0.
RequestRate	Request rate	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RequestConcentration	Request concentration	N/A	Unsigned Integer. Value range: 0 to 100.	N/A
RequestNumber	Request number	N/A	Unsigned Integer. Value range: 10 to 65535.	N/A
Action	Actions for the rule in policy	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Permit.</li> <li>2—Block.</li> </ul>	N/A
BlockTime	Lifetime of the cached entries	N/A	Unsigned integer. Value range: 0 to 86400.	N/A
LoggingEnable	logging switch	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Default is 0.
DestIpv4Addresses	Destination IPv6 address	N/A	String, decimal notation. Length: 1 to 15 characters.	N/A
DestIpv6Addresses	Destination IPv6 address	N/A	Hexadecimal string, colon-separated.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 45 characters.	
DestPort	Destination port	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
UriString	URI string	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## CCdefense/CcOnWafPolicy

This table contains information about a CC attack defense policy used by a Waf policy.

### XML structure

```
<CCdefense>
  <CCOnWafPolicy>
    <Policy>
      <WafPolicyName></WafPolicyName>
      <CCPolicyName></CCPolicyName>
    </Policy>
  </CCOnWafPolicy>
</CCdefense>
```

### Table description

Item	Description
Feature name	CCdefense
Table name	CcOnWafPolicy
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
WafPolicyName	Name of the WAF policy	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
CCPolicyName	Name of the CC policy	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

# Contents

CCdefense .....	1
CCdefense/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
CCdefense/RuleInPolicy .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
CCdefense/CcOnWafPolicy .....	4
XML structure .....	4
Table description .....	4
Columns .....	4

# CCdefense

## CCdefense/Policies

This table contains Challenge Collapsar (CC) attack defense policy information.

### XML structure

```
<CCdefense>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <Description></Description>
      <Frequency></Frequency>
      <ExceptionIPv4List>
        <Ipv4address></Ipv4address>
      </ExceptionIPv4List>
      <ExceptionIPv6List>
        <Ipv6address></Ipv6address>
      </ExceptionIPv6List>
    </Policy>
  </Policies>
</CCdefense>
```

### Table description

Item	Description
Feature name	CC defense
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Description	Description of	N/A	String, case-sensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the policy		Length: 1 to 255 characters.	
Frequency	Value of the frequency	N/A	Unsigned integer. Value range: 10 to 720.	Default is 300.
Ipv4address	Source IPv4 address	N/A	String, decimal notation. Length: 1 to 15 characters.	N/A
Ipv6address	Source IPv6 address	N/A	Hexadecimal string, colon-separated. Length: 1 to 45 characters.	N/A

## CCdefense/RuleInPolicy

This table contains information about the rules in a CC attack defense policy.

### XML structure

```

<CCdefense>
  <RuleInPolicy>
    <Rule>
      <PolicyName></PolicyName>
      <RuleID></RuleID>
      <RuleName></RuleName>
      <RequestMethod></RequestMethod>
      <SrcIpType></SrcIpType>
      <RequestRate></RequestRate>
      <RequestConcentration></RequestConcentration>
      <RequestNumber></RequestNumber>
      <Action></Action>
      <BlockTime></BlockTime>
      <LoggingEnable></LoggingEnable>
      <DestIPv4List>
        <DestIpv4Address></DestIpv4Address>
      </DestIPv4List>
      <DestIPv6List>
        <DestIpv6Address></DestIpv6Address>
      </DestIPv6List>
      <DestPortList>
        <DestPort></DestPort>
      </DestPortList>
      <UriStringList>
        <UriString></UriString>
      </UriStringList>
    </Rule>
  </RuleInPolicy>

```



</CCdefense>

## Table description

Item	Description
Feature name	CCdefense
Table name	RuleInPolicy
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
RuleID	RuleID	Index	Unsigned integer. Value range: 0 to 64.	N/A
RuleName	Rule Name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
RequestMethod	Request method name	N/A	Unsigned integer. Value range: 0 to 255.	N/A
SrcIpType	Host type	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Convention.</li><li>1—X-Forwarded-For.</li></ul>	Default is 0.
RequestRate	Request rate	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RequestConcentration	Request concentration	N/A	Unsigned Integer. Value range: 0 to 100.	N/A
RequestNumber	Request number	N/A	Unsigned Integer. Value range: 10 to 65535.	N/A
Action	Actions for the rule in policy	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Permit.</li><li>2—Block.</li></ul>	Default is 1.
BlockTime	Lifetime of the cached entries	N/A	Unsigned integer. Value range: 0 to 86400.	Default is 300.
LoggingEnable	logging switch	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	Default is 0.
DestIpv4Address	Destination	N/A	String, decimal notation.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
s	IPv6 address		Length: 1 to 15 characters.	
DestIpv6Addresses	Destination IPv6 address	N/A	Hexadecimal string, colon-separated. Length: 1 to 45 characters.	N/A
DestPort	Destination port	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
UriString	URI string	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## CCdefense/CcOnWafPolicy

This table contains information about a CC attack defense policy used by a WAF policy..

### XML structure

```

<CCdefense>
  <CCOnWafPolicy>
    <Policy>
      <WafPolicyName></WafPolicyName>
      <CCPolicyName></CCPolicyName>
    </Policy>
  </CCOnWafPolicy>
</CCdefense>

```

### Table description

Item	Description
Feature name	CC defense
Table name	CcOnWafPolicy
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
WafPolicyName	Name of the WAF policy	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
CCPolicyName	Name of the CC policy	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

---

# Contents

- CELLULAR ..... 1
  - CELLULAR/CellularVerificationEnable ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1

# CELLULAR

## CELLULAR/CellularVerificationEnable

This table is used to enable or disable pin verification in a specific cellular interface.

### XML structure

```
<Cellular>
  <CellularVerificationEnable>
    <VerificationEnable>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <PinCode></PinCode>
    </VerificationEnable>
  </CellularVerificationEnable>
</Cellular>
```

### Table description

Item	Description
Feature name	Cellular
Table name	CellularVerificationEnable
Table type	Multi-instance table
Row name	VerificationEnable
Restrictions	This table supports interface types: Cellular interface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enable or disable pin verification	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>false</b>—Disable</li> <li>• <b>true</b>—Enable</li> </ul>	N/A
PinCode	Pin Code	N/A	String of digits Length: 4 to 6	Pin code may be required, It is determined by the device.

---

# Contents

CELLULAR.....	1
CELLULAR/CellularMode.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
CELLULAR/CellularApnProfile.....	2
XML structure.....	2
Table description.....	2
Columns.....	3
CELLULAR/CellularApplyProfile.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
CELLULAR/CellularProfile.....	4
XML structure.....	4
Table description.....	5
Columns.....	5

# CELLULAR

## CELLULAR/CellularMode

This table contains the information about network connection mode.

### XML structure

```
<Cellular>
  <CellularMode>
    <Mode>
      <IfIndex></IfIndex>
      <ModeType></ModeType>
    </Mode>
  </CellularMode>
</Cellular>
```

### Table description

Item	Description
Feature name	Cellular
Table name	CellularMode
Table type	Multi-instance table
Row name	Mode
Restrictions	This table supports interface types: Cellular interface
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
ModeType	network connection mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—1XRTT.</li> <li>• 2—EVDO.</li> <li>• 3—HYBRID.</li> <li>• 4—GSMONLY.</li> <li>• 5—GSMPREFER.</li> <li>• 6—WCDMAONLY.</li> <li>• 7—WCDMAPREFER.</li> <li>• 8—TDONLY.</li> <li>• 9—TDPREFER.</li> <li>• 10—LTEONLY.</li> <li>• 11—AUTO.</li> </ul>	Which mode is supported depends on the device. The default ModeType depends on the modem model.

## CELLULAR/CellularApnProfile

This table contains the information about network cellular apn-profile.

### XML structure

```

<Cellular>
  <CellularApnProfile>
    <ApnProfile>
      <ProfileName></ProfileName>
      <ProfileType></ProfileType>
      <Apn></Apn>
      <AuthType></AuthType>
      <UserName></UserName>
      <PassWord></PassWord>
    </ApnProfile>
  </CellularApnProfile>
</Cellular>

```

### Table description

Item	Description
Feature name	Cellular
Table name	CellularApnProfile
Table type	Multi-instance table
Row name	ApnProfile
Restrictions	N/A
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Profile name	Index	String. case-sensitive. Length: 1 to 31 characters.	N/A
ProfileType	Access point type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—dynamic.</li><li>• 1—static.</li></ul>	When the ProfileType is dynamic, apn is not needed, otherwise apn is required.
Apn	Access point name	N/A	String. case-sensitive. Length: 1 to 100 characters.	Only when the ProfileType is static, the Apn is required.
AuthType	Specifies the authentication mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—pap.</li><li>• 2—chap.</li><li>• 3—pap and chap</li></ul>	When choosing the AuthType, UserName and PassWord is required.
UserName	User name	N/A	String. case-sensitive. Length: 1 to 32 characters.	N/A
PassWord	Password string	N/A	String. case-sensitive. Length: 1 to 32 characters.	N/A

## CELLULAR/CellularApplyProfile

This table contains the information about cellular apply profile to an interface.

## XML structure

```
<Cellular>
  <CellularApplyProfile>
    <ApplyProfile>
      <IfIndex></IfIndex>
      <MainProfile></MainProfile>
      <BackupProfile></BackupProfile>
    </ApplyProfile>
  </CellularApplyProfile>
</Cellular>
```

## Table description

Item	Description
Feature name	Cellular
Table name	CellularApplyProfile
Table type	Multi-instance table
Row name	ApplyProfile
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
MainProfile	Main parameter profile	N/A	String. case-sensitive. Length: 1 to 31 characters.	Configure the main apn profile first.
BackupProfile	Backup parameter profile	N/A	String. case-sensitive. Length: 1 to 31 characters.	N/A

## CELLULAR/CellularProfile

This table contains the information about network cellular profile.

## XML structure

```
<Cellular>
  <CellularProfile>
    <Profile>
      <IfIndex></IfIndex>
      <ProfileNum></ProfileNum>
      <ProfileType></ProfileType>
      <Apn></Apn>
```

```

    <AuthType></AuthType>
    <UserName></UserName>
    <PassWord></PassWord>
  </Profile>
</CellularProfile>
</Cellular>

```

## Table description

Item	Description
Feature name	Cellular
Table name	CellularProfile
Table type	Multi-instance table
Row name	Profile
Restrictions	This table supports interface types: Cellular interface
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface				Some versions support interface name. For relevant information, see the XSD document of your product. For information about Interface, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
IfIndex	Interface index.	Index	Unsigned integer.	
ProfileNum	Modem parameter number	Index	Unsigned integer Value range: 1 to 255.	N/A
ProfileType	Access point type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—dynamic.</li> <li>1—static.</li> </ul>	When the ProfileType is dynamic, apn is not needed, otherwise apn is required.
Apn	Access point name	N/A	String. case-sensitive. Length: 1 to 100 characters.	Only when the ProfileType is static, the Apn is required.
AuthType	Specifies the	N/A	Enumeration:	When AuthType is none,

Column name	Column description	Column type	Data type and restrictions	Remarks
	authentication mode		<ul style="list-style-type: none"> <li>• <b>0</b>—none.</li> <li>• <b>1</b>—pap.</li> <li>• <b>2</b>— chap</li> <li>• <b>3</b>— pap and chap</li> </ul>	UserName is not required, otherwise UserName is required.
UserName	User name	N/A	String. case-sensitive. Length: 1 to 32 characters.	N/A
PassWord	Password string	N/A	String. case-sensitive. Length: 1 to 32 characters.	PassWord can not be returned when you get data.

---

# Contents

CELLULAR.....	1
CELLULAR/CellularMode.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
CELLULAR/CellularVerificationDis.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
CELLULAR/CellularApnProfile.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
CELLULAR/CellularApplyProfile.....	4
XML structure.....	5
Table description.....	5
Columns.....	5
CELLULAR/CellularProfile.....	6
XML structure.....	6
Table description.....	6
Columns.....	6

# CELLULAR

## CELLULAR/CellularMode

This table contains the information about network connection mode.

### XML structure

```
<Cellular>
  <CellularMode>
    <Mode>
      <IfIndex></IfIndex>
      <ModeType></ModeType>
      <ModeSupport></ModeSupport>
    </Mode>
  </CellularMode>
</Cellular>
```

### Table description

Item	Description
Feature name	Cellular
Table name	CellularMode
Table type	Multi-instance table
Row name	Mode
Restrictions	This table supports interface types: Cellular interface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
ModeType	Network connection mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Unknown.</li> <li>• 1—CDMA-1x RTT.</li> <li>• 2—CDMA-EVDO.</li> <li>• 3—Hybrid.</li> <li>• 4—GSM.</li> <li>• 5—GSM-Preference.</li> <li>• 6—WCDMA.</li> <li>• 7—WCD-Preference.</li> <li>• 8—TD-SCDMA.</li> <li>• 9—TD-Preference.</li> <li>• 10—LTE.</li> <li>• 11—Auto.</li> </ul>	Some devices get the ModeType is unknown, when they don't have SIM/UM card.
ModeSupport	The modem support mode	N/A	Unsigned integer.	ModeSupport is bitmap. Only be used to get the support network connection mode. Auto: 1 CDMA-1x RTT: 1 << 1 CDMA-EVDO: 1 << 2 Hybrid: 1 << 3 GSM: 1 << 4 GSM-Preference: 1 << 5 WCDMA: 1 << 6 WCD-Preference: 1 << 7 TD-SCDMA: 1 << 8 TD-Preference: 1 << 9 LTE: 1 << 10

## CELLULAR/CellularVerificationDis

This table contains the information about pin verification.

### XML structure

```

<Cellular>
  <CellularVerificationDis>
    <VerificationDis>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <UimStatus></UimStatus>
      <RemainNum></RemainNum>
    </VerificationDis>
  </CellularVerificationDis>
</Cellular>

```

```

    </CellularVerificationDis>
</Cellular>

```

## Table description

Item	Description
Feature name	Cellular
Table name	CellularVerificationDis
Table type	Multi-instance table
Row name	VerificationDis
Restrictions	This table supports interface types: Cellular interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
lIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about lIndex, see "Appendix" in lfmgr NETCONF XML API Configuration Reference.
Enable	Enable or disable pin verification	N/A	Boolean: <ul style="list-style-type: none"> <li><b>false</b>—Disable</li> <li><b>true</b>—Enable</li> </ul>	N/A
UimStatus	PIN status	N/A	Unsigned integer.	N/A
RemainNum	Remaining retries available for entering the PIN or PUK.	N/A	Unsigned integer.	N/A

## CELLULAR/CellularApnProfile

This table contains the information about network cellular apn-profile.

## XML structure

```

<Cellular>
  <CellularApnProfile>
    <ApnProfile>

```



```

    <ProfileName></ProfileName>
    <ProfileType></ProfileType>
    <Apn></Apn>
    <AuthType></AuthType>
    <UserName></UserName>
    <PassWord></PassWord>
  </ApnProfile>
</CellularApnProfile>
</Cellular>

```

## Table description

Item	Description
Feature name	Cellular
Table name	CellularApnProfile
Table type	Multi-instance table
Row name	ApnProfile
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
ProfileName	Profile name	Index	String, case-sensitive. Length: 1 to 31 characters.
ProfileType	Access point type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—dynamic.</li> <li>• <b>1</b>—static.</li> </ul>
Apn	Access point name	N/A	String, case-sensitive. Length: 1 to 100 characters.
AuthType	Specifies the authentication mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—pap.</li> <li>• <b>2</b>—chap.</li> <li>• <b>3</b>—pap and chap</li> </ul>
UserName	User name	N/A	String, case-sensitive. Length: 1 to 80 characters.
PassWord	Password string	N/A	String, case-sensitive. Length: 1 to 32 characters.

## CELLULAR/CellularApplyProfile

This table contains the information about cellular apply profile to an interface.

## XML structure

```
<Cellular>
  <CellularApplyProfile>
    <ApplyProfile>
      <IfIndex></IfIndex>
      <MainProfile></MainProfile>
      <BackupProfile></BackupProfile>
    </ApplyProfile>
  </CellularApplyProfile>
</Cellular>
```

## Table description

Item	Description
Feature name	Cellular
Table name	CellularApplyProfile
Table type	Multi-instance table
Row name	ApplyProfile
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
MainProfile	Main parameter profile	N/A	String. case-sensitive. Length: 1 to 31 characters.	N/A
BackupProfile	Backup parameter profile	N/A	String. case-sensitive. Length: 1 to 31 characters.	N/A

# CELLULAR/CellularProfile

This table contains the information about network cellular profile.

## XML structure

```
<Cellular>
  <CellularProfile>
    <Profile>
      <IfIndex></IfIndex>
      <ProfileNum></ProfileNum>
      <ProfileType></ProfileType>
      <Apn></Apn>
      <AuthType></AuthType>
      <UserName></UserName>
      <PassWord></PassWord>
    </Profile>
  </CellularProfile>
</Cellular>
```

## Table description

Item	Description
Feature name	Cellular
Table name	CellularProfile
Table type	Multi-instance table
Row name	Profile
Restrictions	This table supports interface types: Cellular interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileNum	Modem parameter number	Index	Unsigned integer Value range: 1 to 255.	N/A
ProfileType	Access point type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—dynamic.</li> <li>• <b>1</b>—static.</li> </ul>	When the ProfileType is dynamic, apn is not needed, otherwise apn is required.
Apn	Access point name	N/A	String. case-sensitive. Length: 1 to 100 characters.	Only when the ProfileType is static, the Apn is required.
AuthType	Specifies the authentication mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—none.</li> <li>• <b>1</b>—pap.</li> <li>• <b>2</b>—chap</li> <li>• <b>3</b>—pap and chap</li> </ul>	When AuthType is none, UserName is not required, otherwise UserName is required.
UserName	User name	N/A	String. case-sensitive. Length: 1 to 32 characters.	N/A
PassWord	Password string	N/A	String. case-sensitive. Length: 1 to 32 characters.	PassWord can not be returned when you get data.

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# Contents

Comware 7 Cellular NETCONF XML API Error Message Reference.....	1
Cellular/CellularVerify .....	1
Cellular/UnLock .....	2
Cellular/CellularVerificationEnable .....	2
Cellular/CellularMode .....	3
Cellular/CellularVerificationDis.....	4
Cellular/CellularProfile.....	4
Cellular/CellularApnProfile.....	5
Cellular/CellularApplyProfile.....	5
Cellular/CellularModemReboot .....	5

# Comware 7 Cellular NETCONF XML API Error Message Reference

## Cellular/CellularVerify

Message	Explanation
Failed to process the command, because another command is being processed. 正在使用中，配置失败。	Another command is being processed. 有未执行完的配置。
This command is not supported. 不支持此命令。	The device does not support this command. 设备不支持这个命令。
CELLULAR is not configured. CELLULAR口未配置。	The cellular need to be configured. 需要配置cellular接口。
UIM card has been locked. Please verify PIN first. UIM卡锁定，请先解锁。	UIM card has been locked. UIM卡被锁定。
SIM card has been locked. Please verify PIN first. SIM卡锁定，请先解锁。	SIM card has been locked. SIM卡被锁定。
Please enable PIN verification first. 请先使能PIN认证功能	Need to be enable PIN verification. 需要使能PIN认证。
Failed to change the PIN, and the number of retries remaining is x. 改变PIN码失败剩余次数x次。	The SIM card will be locked after a certain number of failed to change the PIN 更改PIN失败x次后SIM卡会被锁定。
Failed to change the PIN. 改变PIN码失败。	Failed to change the PIN. 改变PIN码失败。
PIN has been locked. Please use PUK to unlock PIN. PIN锁定，请先使用PUK解锁。	PIN has been locked. PIN被锁定。
3G Modem has no PIN verification requirement. 3G上网卡没有PIN认证需求。	It does not need to be enable PIN verification. 不需要PIN认证。
Failed to verify PIN, and the number of retries remaining is x. 认证PIN失败剩余次数x次。	The SIM card will be locked after a certain number of failed to verify PIN 认证PIN失败x次后SIM卡会被锁定。
Failed to verify PIN. 认证PIN失败。	PIN Code is error. PIN码错误。
No 3G/4G modem on this interface. 3G/4G Modem不存在。	No 3G/4G modem on this interface. 3G/4G Modem不存在。
3G/4G Modem is being initialized. Please wait. 正在初始化3G/4G上网卡，请稍等片刻。	3G/4G Modem is in the process of being started. 3G/4G上网卡正在启动。
3G/4G Modem is abnormal.	3G/4G Modem is in wrong state.

3G/4G上网卡异常。

3G/4G上网卡状态异常。

## Cellular/UnLock

Message	Explanation
Operation failed because there is no PIN unlocking requirement. 操作失败，没有PIN码解锁请求。	3G modem has no PIN unlocking requirement. 3G Modem没有PIN码解锁要求。
Failed to unlock the PIN, and the number of retries remaining is x. 解锁失败，剩余解锁次数x。.	The SIM card will be locked after a certain number of failed to unlock the PIN 解锁PIN失败x次后SIM卡会被锁定。
Failed to unlock the PIN. PIN码解锁失败。	PIN Code is error. PIN码错误。
PIN Code is invalid. PIN码不合法。	PIN Code is error. PIN码错误。
PUK Code is invalid. PUK码不合法。	PUK Code is error. PUK码错误。
No 3G/4G modem on this interface. 3G/4G Modem不存在。	The operation can't be used on the interface which has not a 3G/4G modem. 没有3G/4G modem的接口不能执行这个操作。
3G/4G Modem is being initialized. Please wait. 正在初始化3G/4G上网卡，请稍等。	3G/4G Modem is in the process of being started. 3G/4G上网卡正在启动。
3G/4G Modem is abnormal. 3G/4G上网卡异常。	3G/4G Modem is in wrong state. 3G/4G上网卡状态异常。
Failed to process the command, because another command is being processed. 正在使用中，配置失败。	Another command is being processed. 有未执行完的配置。
This command is not supported. 不支持此命令。	The device does not support this command. 设备不支持这个命令。

## Cellular/CellularVerificationEnable

Message	Explanation
UIM card has been locked. Please verify PIN first. UIM卡锁定，请先解锁。	UIM card has been locked. UIM卡被锁定。
SIM card has been locked. Please verify PIN first. SIM卡锁定，请先解锁。	SIM card has been locked. SIM卡锁定。
PIN has been locked. Please use PUK to unlock PIN. PIN锁定，请先使用PUK解锁。	PIN has been locked. PIN码被锁定。

PIN is not required. 不需要PIN码。	No need to enter a PIN. 不需要输入PIN码。
PIN is required. 需要PIN码。	need to enter a PIN. 需要输入PIN码。
Failed to enable PIN verification, and the number of retries remaining is x. 开启PIN认证失败，剩余次数：x次。	The SIM card will be locked after a certain number of failed to enable PIN verification. 开启认证PIN失败x次后，SIM卡会被锁定。
Failed to disable PIN verification, and the number of retries remaining is x. 关闭PIN认证失败，剩余次数：x次。	The SIM card will be locked after a certain number of failed to disable PIN verification. 关闭认证PIN失败x次后，SIM卡会被锁定。
Failed to enable PIN verification. 开启PIN认证失败。	Failed to enable PIN verification. 开启PIN认证失败。
Failed to disable PIN verification. 关闭PIN认证失败。	Failed to disable PIN verification. 关闭PIN认证失败。
The configuration doesn't meet the requirements. 不符合配置要求。	The configuration parameter is incomplete. 配置参数不全。
PIN Code is invalid. PIN码不合法。	PIN Code is error. PIN码错误。
No 3G/4G modem on this interface. 3G/4G Modem不存在。	The operation can't be used on the interface which has not a 3G/4G modem. 没有3G/4G modem的接口不能执行这个操作。
3G/4G Modem is being initialized. Please wait. 正在初始化3G/4G上网卡，请稍等片刻。	3G/4G Modem is in the process of being started. 3G/4G上网卡正在启动。
3G/4G Modem is abnormal. 3G/4G上网卡异常。	3G/4G Modem is in wrong state. 3G/4G上网卡状态异常。
Failed to process the command, because another command is being processed. 正在使用中，配置失败。	Another command is being processed. 有未执行完的配置。
This command is not supported. 不支持此命令。	The device does not support this command. 设备不支持这个命令。

## Cellular/CellularMode

Message	Explanation
Failed to get the network connection mode. 获取网络连接模式失败。	Failed to get the network connection mode. 获取网络连接模式失败。
Don't support the mode. 不支持此连接模式。	Don't support the mode. 不支持此连接模式。
No 3G/4G modem on this interface. 3G/4G Modem不存在。	The operation can't be used on the interface which has not a 3G/4G modem.



3G/4G Modem is being initialized. Please wait. 正在初始化3G/4G上网卡，请稍等片刻。	没有3G/4G modem的接口不能执行这个操作。
3G/4G Modem is abnormal. 3G/4G上网卡异常。	3G/4G Modem is in the process of being started. 3G/4G上网卡正在启动。
Failed to process the command, because another command is being processed. 正在使用中，配置失败。	3G/4G Modem is in wrong state. 3G/4G上网卡状态异常。
This command is not supported. 不支持此命令。	Another command is being processed. 有未执行完的配置。
	The device does not support this command. 设备不支持这个命令。

## Cellular/CellularVerificationDis

Message	Explanation
Failed to get pin verification. 获取PIN认证失败。	Failed to get pin verification. 获取PIN认证失败。
No 3G/4G modem on this interface. 3G/4G Modem不存在。	The operation can't be used on the interface which has not a 3G/4G modem. 没有3G/4G modem的接口不能执行这个操作。
3G/4G Modem is being initialized. Please wait. 正在初始化3G/4G上网卡，请稍等片刻。	3G/4G Modem is in the process of being started. 3G/4G上网卡正在启动。
3G/4G Modem is abnormal. 3G/4G上网卡异常。	3G/4G Modem is in wrong state. 3G/4G上网卡状态异常。
Failed to process the command, because another command is being processed. 正在使用中，配置失败。	Another command is being processed. 有未执行完的配置。
This command is not supported. 不支持此命令。	The device does not support this command. 设备不支持这个命令。

## Cellular/CellularProfile

Message	Explanation
Failed to create a parameter profile of 3G/4G Modem. 创建3G/4G Modem参数模板失败。	Failed to create a parameter profile of 3G/4G Modem. 创建3G/4G Modem参数模板失败。
Failed to delete a parameter profile of 3G/4G Modem. 删除3G/4G Modem参数模板失败。	Failed to delete a parameter profile of 3G/4G Modem. 删除3G/4G Modem参数模板失败。
The configuration doesn't meet the requirements. 不符合配置要求。	The configuration parameter is incomplete. 配置参数不全。

No 3G/4G modem on this interface. 3G/4G Modem不存在。	The operation can't be used on the interface which has not a 3G/4G modem. 没有3G/4G modem的接口不能执行这个操作。
3G/4G Modem is being initialized. Please wait. 正在初始化3G/4G上网卡，请稍等片刻。	3G/4G Modem is in the process of being started. 3G/4G上网卡正在启动。
3G/4G Modem is abnormal. 3G/4G上网卡异常。	3G/4G Modem is in wrong state. 3G/4G上网卡状态异常。
Failed to process the command, because another command is being processed. 正在使用中，配置失败。	Another command is being processed. 有未执行完的配置。
This command is not supported. 不支持此命令。	The device does not support this command. 设备不支持这个命令。

## Cellular/CellularApnProfile

Message	Explanation
The configuration doesn't meet the requirements. 不符合配置要求。	The configuration parameter is incomplete. 配置参数不全。
The apn profile has been applied by interface, delete the applying first. 该参数模板已被接口应用，请先删除应用。	The apn profile has been applied by interface. 模板已在其他接口上使用。

## Cellular/CellularApplyProfile

Message	Explanation
The configuration doesn't meet the requirements. 不符合配置要求。	The configuration parameter is incomplete. 配置参数不全。
Please configure the apn profile first. 请先配置参数模板。	This message means apn profile not be configured. apn profile模板不存在。

## Cellular/CellularModemReboot

Message	Explanation
Cellular feature is not enabled. CELLULAR特性未启动。	This message means cellular not be configured. 没有cellular特性。
Failed to reboot 3G/4G Modem. 3G/4G Modem重启失败。	3G/4G Modem reboot failed. 3G/4G Modem重启失败。



# Contents

CFD .....	1
CFD/Y1731Statistics.....	1
XML structure .....	1
Table description.....	2
Columns.....	2
CFD/Y1731Statistics/DmTwoways .....	3
XML structure .....	3
Table description.....	3
Columns.....	3
CFD/Y1731Statistics/DmTwoways/MepIDs .....	3
XML structure .....	3
Table description.....	3
Columns.....	4
CFD/Y1731Statistics/Slms .....	4
XML structure .....	4
Table description.....	4
Columns.....	5
CFD/Y1731Statistics/Slms/MepIDs.....	5
XML structure .....	5
Table description.....	5
Columns.....	5
CFD/Y1731Statistics/Dlms .....	6
XML structure .....	6
Table description.....	6
Columns.....	6
CFD/Y1731Statistics/Dlms/MepIDs .....	7
XML structure .....	7
Table description.....	7
Columns.....	7

# CFD

## CFD/Y1731Statistics

This table contains CFD Statistics information.

### XML structure

```
<CFD>
  <Y1731Statistics>
    <DmTwoways>
      <DmTwoway>
        <ServiceInstance></ServiceInstance>
        <MepIDs>
          <MepID>
            <MepID></MepID>
            <DelayStatistics>
              <TestIndex></TestIndex>
              <Delay></Delay>
              <DelayVar></DelayVar>
            </DelayStatistics>
            <AverageDelay></AverageDelay>
            <AverageDelayVar></AverageDelayVar>
          </MepID>
        </MepIDs>
      </DmTwoway>
    </DmTwoways>
    <Slms>
      <Slm>
        <ServiceInstance></ServiceInstance>
        <MepIDs>
          <MepID>
            <MepID></MepID>
            <LossStatistics>
              <TestIndex></TestIndex>
              <FarEndLoss></FarEndLoss>
              <FarEndLossRate></FarEndLossRate>
              <NearEndLoss></NearEndLoss>
              <NearEndLossRate></NearEndLossRate>
            </LossStatistics>
            <FarEndLossAverage></FarEndLossAverage>
            <FarEndLossAverageRate></FarEndLossAverageRate>
            <NearEndLossAverage></NearEndLossAverage>
            <NearEndLossAverageRate></NearEndLossAverageRate>
          </MepID>
        </MepIDs>
      </Slm>
    </Slms>
  </Y1731Statistics>
</CFD>
```

```

    </Slm>
  </Slms>
  <Dlms>
    <Dlm>
      <ServiceInstance></ServiceInstance>
      <MepIDs>
        <MepID>
          <MepID></MepID>
          <LossStatistics>
            <TestIndex></TestIndex>
            <FarEndLoss></FarEndLoss>
            <FarEndLossRate></FarEndLossRate>
            <NearEndLoss></NearEndLoss>
            <NearEndLossRate></NearEndLossRate>
          </LossStatistics>
          <FarEndLossAverage></FarEndLossAverage>
          <FarEndLossAverageRate></FarEndLossAverageRate>
          <NearEndLossAverage></NearEndLossAverage>
          <NearEndLossAverageRate></NearEndLossAverageRate>
        </MepID>
      </MepIDs>
    </Dlm>
  </Dlms>
</Y1731Statistics>
</CFD>

```

## Table description

Item	Description
Feature name	CFD
Table name	Y1731Statistics
Table type	Single-instance table
Row name	N/A
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
DmTwoways	DmTwoways table	Sublist	N / A
Slms	Slms table	Sublist	N / A
Dlms	Dlms table	Sublist	N / A

# CFD/Y1731Statistics/DmTwoways

This table contains two-way DM information.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	DmTwoways
Table type	Multi-instance table
Row name	DmTwoway
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceInstance	Specify a service instance	index	Unsigned integer: <b>Value range:1 to 32767</b>
MepIDs	MEP ID	Sublist	N/A

# CFD/Y1731Statistics/DmTwoways/MepIDs

This table contains two-way DM information for a MEP.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	MepIDs
Table type	Multi-instance table
Row name	MepID
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
MepID	Specify a MEP	Index	Unsigned short. <b>Value range:1 to 8191.</b>
DelayStatistics	N/A	Data structure	Members include: <ul style="list-style-type: none"><li>• TestIndex.</li><li>• Delay.</li><li>• DelayVar.</li></ul>
TestIndex	Specify a test index	N/A	Unsigned integer: <b>Length:32bits</b>
Delay	Specify delay time in us	N/A	Unsigned integer: <b>Length: 64 bits.</b>
DelayVar	Specify delay time variation in us	N/A	Unsigned integer: <b>Length: 64 bits.</b>
AverageDelay	Specify average delay time in us	N/A	Unsigned integer: <b>Length: 64 bits.</b>
AverageDelayVar	Specify average delay time variation in us	N/A	Unsigned integer: <b>Length: 64 bits.</b>

## CFD/Y1731Statistics/SImS

This table contains SLM information.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	SImS
Table type	Multi-instance table
Row name	SIm
Restrictions	NO



## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceInstance	Specify a service instance	index	Unsigned integer: <b>Value range:1 to 32767</b>
MepIDs	MEP ID	Sublist	N/A

## CFD/Y1731Statistics/Slms/MepIDs

This table contains SLM information for a MEP.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	MepIDs
Table type	Multi-instance table
Row name	MepID
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
MepID	Specify a MEP	Index	Unsigned short. <b>Value range:1 to 8191.</b>
LossStatistics	N/A	Data structure	Members include: <ul style="list-style-type: none"><li>• TestIndex.</li><li>• FarEndLoss</li><li>• NearEndLoss</li><li>• FarEndLossRate</li><li>• NearEndLossRate</li></ul>
TestIndex	Specify a test index	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLoss	Specify packet loss on the target MEP	N/A	Unsigned integer: <b>Length: 32 bits</b>
NearEndLoss	Specify packet loss on the source MEP	N/A	Unsigned integer: <b>Length:32bits</b>

Column name	Column description	Column type	Data type and restrictions
FarEndLossRate	Specify packet loss rate on the target MEP	N/A	String
NearEndLossRate	Specify packet loss rate on the source MEP	N/A	String
FarEndLossAverage	Specify average packet loss on the target MEP	N/A	Unsigned integer: <b>Length:32bits</b>
NearEndLossAverage	Specify average packet loss on the source MEP	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLossAverageRate	Specify average packet loss rate on the target MEP	N/A	String
NearEndLossAverageRate	Specify average packet loss rate on the source MEP	N/A	String

## CFD/Y1731Statistics/Dlms

This table contains DLM information.

### XML structure

Please refer to the XML structure of Y1731Statistics.

### Table description

Item	Description
Feature name	CFD
Table name	Dlms
Table type	Multi-instance table
Row name	Dlm
Restrictions	NO

### Columns

Column name	Column description	Column type	Data type and restrictions
ServiceInstance	Specify a service instance	index	Unsigned integer: <b>Value range:1 to 32767</b>
MepIDs	MEP ID	Sublist	N/A

# CFD/Y1731Statistics/Dlms/MepIDs

This table contains DLM information for a MEP.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	MepIDs
Table type	Multi-instance table
Row name	MepID
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
MepID	Specify a MEP	index	Unsigned short. <b>Value range:1 to 8191.</b>
LossStatistics	N/A	Data structure	Members include: <ul style="list-style-type: none"><li>• TestIndex.</li><li>• FarEndLoss</li><li>• NearEndLoss</li><li>• FarEndLossRate</li><li>• NearEndLossRate</li></ul>
TestIndex	Specify a test index	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLoss	Specify packet loss on the target MEP	N/A	Unsigned integer: <b>Length:32bits</b>
NearEndLoss	Specify packet loss on the source MEP	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLossRate	Specify packet loss rate on the target MEP	N/A	String
NearEndLossRate	Specify packet loss rate on the source MEP	N/A	String
FarEndLossAverage	Specify average packet loss on the target MEP	N/A	Unsigned integer: <b>Length:32bits</b>

Column name	Column description	Column type	Data type and restrictions
NearEndLossAverage	Specify average packet loss on the source MEP	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLossAverageRate	Specify average packet loss rate on the target MEP	N/A	String
NearEndLossAverageRate	Specify average packet loss rate on the source MEP	N/A	String

# Contents

- CMTNLMGR .....1
  - Cmtnlmgr/CloudDomain .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# CMTNLMGR

## Cmtnlmgr/CloudDomain

This table contains information about cloud domains.

### XML structure

```
<Cmtnlmgr>
  <CloudDomainName>
    <DomainName></DomainName>
  </CloudDomainName>
</Cmtnlmgr>
```

### Table description

Item	Description
Feature name	Cmtnlmgr
Table name	CloudDomainName
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Name of the cloud domain.	N/A	String, case-sensitive. Length: 1 to 253 characters.	N/A

# Contents

CMTNLMGR .....	1
Cmtnlmgr/CloudAccount .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Cmtnlmgr/CloudConnect .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
Cmtnlmgr/CloudDomain .....	2
XML structure .....	2
Table description .....	3
Columns .....	3

# CMTNLMGR

## Cmtnlmgr/CloudAccount

This table contains information about cloud accounts.

### XML structure

```
<Cmtnlmgr>
  <CloudAccount>
    <CloudAccountEntry>
      <CloudAccountName></CloudAccountName>
      <CloudConnectionState></CloudConnectionState>
    </CloudAccountEntry>
  </CloudAccount>
</Cmtnlmgr>
```

### Table description

Item	Description
Feature name	Cmtnlmgr
Table name	CloudAccount
Table type	Single-instance table
Row name	CloudAccountEntry
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CloudAccountName	Name of the cloud account.	Index	String, case-sensitive. Length: 1 to 128 characters.	N/A
CloudConnectionState	Connection state of the cloud.	N/A	Enumeration. <ul style="list-style-type: none"><li>1—Online</li><li>2—Offline</li></ul>	N/A

## Cmtnlmgr/CloudConnect

This table contains connection information for the cloud.



## XML structure

```
<Cmtnlmgr>
  <CloudConnect>
    <CloudConnectEntry>
      <LastConnectTime></LastConnectTime>
      <LastSyncTime></LastSyncTime>
    </CloudConnectEntry>
  </CloudConnect>
</Cmtnlmgr>
```

## Table description

Item	Description
Feature name	Cmtnlmgr
Table name	CloudConnect
Table type	Single-instance table
Row name	CloudConnectEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LastConnectTime	Last connection time of the device.	N/A	String, case-sensitive. Length: 1 to 128 characters.	N/A
LastSyncTime	Last synchronization time of the device.	N/A	String, case-sensitive. Length: 1 to 128 characters.	N/A

## Cmtnlmgr/CloudDomain

This table contains information about cloud domains.

## XML structure

```
<Cmtnlmgr>
  <CloudDomainName>
    <DomainName></DomainName>
  </CloudDomainName>
</Cmtnlmgr>
```

## Table description

Item	Description
Feature name	Cmtnlmgr
Table name	CloudDomainName
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Name of the cloud domain	N/A	String, case-sensitive. Length: 1 to 253 characters.	N/A

# Contents

- Collaboration/ClearInactivePorts ..... 1
  - XML structure ..... 1
  - Table description ..... 1
  - Columns ..... 1

# Collaboration/ClearInactivePorts

This table remove ineffective ports from all collaboration groups

## XML structure

```
<Collaboration>
  <ClearInactivePorts>
    <Clear></Clear>
  </ClearInactivePorts>
</Collaboration>
```

## Table description

Item	Description
Feature name	Collaboration
Table name	ClearInactivePorts
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Remove ineffective ports from all collaboration groups	N/A	This column must be empty.

# Contents

Collaboration .....	1
Collaboration/Global .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Collaboration/Groups .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
Collaboration/Interfaces .....	2
XML structure .....	2
Table description .....	3
Columns .....	3

# Collaboration

## Collaboration/Global

This table contains Collaboration group global information.

### XML structure

```
<Collaboration>
  <Global>
    <Enable></Enable>
  </Global>
</Collaboration>
```

### Table description

Item	Description
Feature name	Collaboration
Table name	Global
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Whether Collaboration group is enabled globally.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled. (default).</li><li><b>false</b>—Disabled.</li></ul>

## Collaboration/Groups

This table contains information about Collaboration group.

### XML structure

```
<Collaboration>
  <Groups>
    <Group>
```

```

        <ID></ID>
        <UpDelay></UpDelay>
    </Group>
</Groups>
</Collaboration>

```

## Table description

Item	Description
Feature name	Collaboration
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	The maximum collaboration group ID varies by device model.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Collaboration group ID.	Index	Unsigned integer Length: 32 bits.	The maximum collaboration group ID varies by device model.
UpDelay	Updelay timer in seconds	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:</b> 0 to 3600.</li> <li>Default: 0.</li> </ul>	The up delay is the time that the interfaces in the collaboration group wait before they come up when the device restarts.

## Collaboration/Interfaces

This table contains information about port of Collaboration group.

## XML structure

```

<Collaboration>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <ID></ID>
    </Interface>
  </Interfaces>
</Collaboration>

```

## Table description

Item	Description
Feature name	Collaboration
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports Layer 2/3 Ethernet interface, Layer 2/3 aggregate interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	In certain versions, this column supports interface name-to-index conversion. See the product xsd before use. See Table 1 for the format.
ID	Collaboration group ID.	N/A	Unsigned integer. • Default: 0.	The maximum collaboration group ID varies by device model..

**Table 1 Interface operation status**

Value	Operation status	Remarks
1	Single interface index	<IfIndex>1</IfIndex>
2	Single interface name	<IfIndex>GigabitEthernet 0/0/2</IfIndex>
3	Multiple interface names	<IfIndex>GigabitEthernet 0/0/2 to GigabitEthernet 0/0/3, GigabitEthernet 1/0/2 to GigabitEthernet 1/0/3, serial0/0/2</IfIndex>
4	Interface range name	<IfIndex>RangeName</IfIndex>
5	Mixture of interface range name and interface names	<IfIndex>RangeName ,GigabitEthernet 0/0/2 to GigabitEthernet 0/0/3, GigabitEthernet 1/0/2 to GigabitEthernet 1/0/3, serial0/0/2</IfIndex>



# Contents

Collaboration .....	1
Collaboration/Global .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Collaboration/Groups .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
Collaboration/Interfaces .....	3
XML structure .....	3
Table description .....	3
Columns .....	3

# Collaboration

## Collaboration/Global

This table contains Collaboration group global information.

### XML structure

```
<Collaboration>
  <Global>
    <Enable></Enable>
    <MaxGroupId></MaxGroupId>
  </Global>
</Collaboration>
```

### Table description

Item	Description
Feature name	Collaboration
Table name	Global
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Whether Collaboration group is enabled globally.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>
MaxGroupId	The max Collaboration group id	N/A	Unsigned integer Length: 32 bits.

## Collaboration/Groups

This table contains information about Collaboration group.

### XML structure

```
<Collaboration>
  <Groups>
```

```

<Group>
  <ID></ID>
  <Status></Status>
  <UpDelay></UpDelay>
  <LastUpTime></LastUpTime>
  <LastDownTime></LastDownTime>
</Group>
</Groups>
</Collaboration>

```

## Table description

Item	Description
Feature name	Collaboration
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Collaboration group ID.	Index	Unsigned integer Length: 32 bits.	The maximum collaboration group ID varies by device model.
Status	The status of Collaboration group	N/A	Unsigned integer. Length: 8 bits. Enumeration: <ul style="list-style-type: none"> <li>0—N/A.</li> <li>1—DOWN.</li> <li>2—UP</li> <li>3—UP-Pending.</li> </ul>	N/A
UpDelay	Updelay timer in seconds	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:</b> 0 to 3600.</li> <li>Default: 0.</li> </ul>	The up delay is the time that the interfaces in the collaboration group wait before they come up when the device restarts.
LastUpTime	Group last up time	N/A	DateTime.	N/A
LastDownTime	Group last down time	N/A	DateTime.	N/A

# Collaboration/Interfaces

This table contains information about port of Collaboration group.

## XML structure

```
<Collaboration>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <ID></ID>
      <Status></Status>
    </Interface>
  </Interfaces>
</Collaboration>
```

## Table description

Item	Description
Feature name	Collaboration
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	In certain versions, this column supports interface name-to-index conversion. See the product xsd before use. See Table 1 for the format.
ID	Collaboration group ID.	N/A	Unsigned integer Length: 32 bits.	The maximum collaboration group ID varies by device model.
Status	The status of ports	N/A	Unsigned integer. Length: 8 bits. Enumeration: <ul style="list-style-type: none"><li>• 0—UP.</li><li>• 1—DOWN.</li><li>• 2—Collaboration-down</li><li>• 3—Not available</li></ul>	

**Table 1 Interface operation status**

Value	Operation status	Remarks
1	Single interface index	<IfIndex>1</IfIndex>
2	Single interface name	<IfIndex>GigabitEthernet 0/0/2</IfIndex>
3	Multiple interface names	<IfIndex>GigabitEthernet 0/0/2 to GigabitEthernet 0/0/3, GigabitEthernet 1/0/2 to GigabitEthernet 1/0/3, serial0/0/2</IfIndex>
4	Interface range name	<IfIndex>RangeName</IfIndex>
5	Mixture of interface range name and interface names	<IfIndex>RangeName ,GigabitEthernet 0/0/2 to GigabitEthernet 0/0/3, GigabitEthernet 1/0/2 to GigabitEthernet 1/0/3, serial0/0/2</IfIndex>

# Contents

Configuration.....	1
Configuration/Files .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Configuration/MDCOrContextFiles.....	2
XML structure.....	2
Table description.....	2
Columns.....	2

# Configuration

## Configuration/Files

This table contains configuration file information.

### XML structure

```
<Configuration>
  <Files>
    <File>
      <Name></Name>
      <NextMain></NextMain>
      <NextBackup></NextBackup>
    </File>
  </Files>
</Configuration>
```

### Table description

Item	Description
Feature name	Configuration
Table name	Files
Table type	Multi-instance table
Row name	File
Restrictions	Configuration file must have the suffix .cfg, and must already exist in the root directory of storage medium.

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	Full path and filename. Example: flash:/startup.cfg chassis3#slot1#flash:/main.cfg	Index	String. Length: 1 to 255 characters.
NextMain	Whether the configuration file is the main next-startup configuration file.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>
NextBackup	Whether the configuration file is the backup next-startup configuration file.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>

# Configuration/MDCOrContextFiles

This table contains information about an MDC or a context.

## XML structure

```
<Configuration>
  <MDCOrContextFiles>
    <MDCOrContextFile>
      <MDCOrContextID></MDCOrContextID>
      <Name></Name>
      <Save></Save>
      <Overwrite></Overwrite>
    </MDCOrContextFile>
  </MDCOrContextFiles>
</Configuration>
```

## Table description

Item	Description
Feature name	Configuration
Table name	MDCOrContextFiles
Table type	Multi-instance table
Row name	MDCOrContextFile
Restrictions	On the default MDC or context, all MDCs or contexts can be operated. On a non-default MDC or context, only the current MDC or context can be operated.

## Columns

Column name	Column description	Column type	Data type and restrictions
MDCOrContextID	MDC or context index	Index	Unsigned integer.
Name	Full path and filename. Example: chassis3#slot1#flash:/main.cfg flash:/startup.cfg main.cfg	Index	String. Length: 1 to 300 characters. This directory must be the root directory of the active MPU. <b>The filename (without the chassisN#slotN# field) must not exceed 255 characters.</b>
Save	Save configuration.	N/A	This column must be empty.
Overwrite	Whether to overwrite the configuration file if it has already existed.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>



Column name	Column description	Column type	Data type and restrictions
			This column must coexist with the <b>Save</b> column.

# Contents

Configuration.....	1
Configuration/System.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Configuration/ArchiveLocal .....	1
XML structure.....	1
Table description.....	2
Columns.....	2
Configuration/ArchiveServer.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
Configuration/ReplaceServer.....	4
XML structure.....	4
Table description.....	4
Columns.....	5

# Configuration

## Configuration/System

This table contains configuration information.

### XML structure

```
<Configuration>
  <System>
    <Encryption></Encryption>
  </System>
</Configuration>
```

### Table description

Item	Description
Feature name	Configuration
Table name	System
Table type	Single-instance
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Encryption	Encryption mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Unencrypted</li><li>• 1—Private-key encryption</li><li>• 2—Public-key encryption</li></ul>

## Configuration/ArchiveLocal

This table contains configuration local archivel information.

### XML structure

```
<Configuration>
  <ArchiveLocal>
    <Interval></Interval>
    <Count></Count>
  </ArchiveLocal>
</Configuration>
```

```

    <DirPath></DirPath>
    <Prefix></Prefix>
  </ArchiveLocal>
</Configuration>

```

## Table description

Item	Description
Feature name	Configuration
Table name	ArchiveLocal
Table type	Single-instance
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Time interval to automatic backup.	N/A	Unsigned integer. Value range: 10 to 525600.
Count	Save the maximum number of backup files locally.	N/A	Unsigned integer. Value range: 1 to 10.
DirPath	Local save path.	N/A	String. Length: 1 to 63 characters.
Prefix	Local save file prefix.	N/A	String. Length: 1 to 30 characters.

## Configuration/ArchiveServer

This table contains configuration server archive information.

## XML structure

```

<Configuration>
  <ArchiveServer>
    <ArchiveHost>
      <ServerType></ServerType>
      <AddressType></AddressType>
      <Address></Address>
      <VRF></VRF>
      <Interval></Interval>
      <UserName></UserName>
      <Password></Password>
      <Port></Port>
    </ArchiveHost>
  </ArchiveServer>
</Configuration>

```

```

    <DirPath></DirPath>
    <Prefix></Prefix>
  </ArchiveHost>
</ArchiveServer>
</Configuration>

```

## Table description

Item	Description
Feature name	Configuration
Table name	ArchiveServer
Table type	Single-instance
Row name	ArchiveHost
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerType	Type of the server.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—FTP</li> <li>2—TFTP</li> </ul>	N/A
AddressType	Type of the address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPV4</li> <li>2—IPV6</li> </ul>	N/A
Address	Address of the remote manage.	Index	String. Length: 1 to 253 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	N/A
Interval	Time interval to automatic backup.	N/A	Unsigned integer. Value range: 10 to 525600.	N/A
UserName	User name.	N/A	String. Length: 1 to 63 characters.	N/A
Password	Password.	N/A	String. Length: 1 to 63 characters.	N/A
Port	Port Number.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
DirPath	Server save path.	N/A	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 63 characters.	
Prefix	Server save file prefix.	N/A	String. Length: 1 to 30 characters.	N/A

## Configuration/ReplaceServer

This table contains configuration server replace information.

### XML structure

```

<Configuration>
  <ReplaceServer>
    <ReplaceHost>
      <ServerType></ServerType>
      <AddressType></AddressType>
      <Address></Address>
      <VRF></VRF>
      <UserName></UserName>
      <Password></Password>
      <Port></Port>
      <DirPath></DirPath>
      <RollbackName></RollbackName>
    </ReplaceHost>
  </ReplaceServer>
</Configuration>

```

### Table description

Item	Description
Feature name	Configuration
Table name	ReplaceServer
Table type	Single-instance
Row name	ReplaceHost
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerType	Type of the server.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—FTP</li> <li>2—TFTP</li> </ul>	N/A
AddressType	Type of the address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPV4</li> <li>2—IPV6</li> </ul>	N/A
Address	Address of the remote manage.	Index	String. Length: 1 to 253 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	N/A
UserName	User name.	N/A	String. Length: 1 to 63 characters.	N/A
Password	Password.	N/A	String. Length: 1 to 63 characters.	N/A
Port	Port Number.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
DirPath	Server save path.	N/A	String. Length: 1 to 63 characters.	N/A
RollbackName	Server Rollback.	N/A	String. Length: 1 to 255 characters.	N/A

# Contents

Configuration.....	1
Configuration/System.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Configuration/Files.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
Configuration/MDCOrContextFiles.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
Configuration/ArchiveLocal.....	3
XML structure.....	4
Table description.....	4
Columns.....	4
Configuration/ArchiveServer.....	4
XML structure.....	4
Table description.....	5
Columns.....	5
Configuration/ReplaceServer.....	6
XML structure.....	6
Table description.....	6
Columns.....	7



# Configuration

## Configuration/System

This table contains configuration information.

### XML structure

```
<Configuration>
  <System>
    <Encryption></Encryption>
  </System>
</Configuration>
```

### Table description

Item	Description
Feature name	Configuration
Table name	System
Table type	Single-instance
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Encryption	Encryption mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Unencrypted</li><li>1—Private-key encryption</li><li>2—Public-key encryption</li></ul>

## Configuration/Files

This table contains configuration file information.

### XML structure

```
<Configuration>
  <Files>
    <File>
      <Name></Name>
      <Running></Running>
      <NextMain></NextMain>
    </File>
  </Files>
</Configuration>
```

```

        <NextBackup></NextBackup>
    </File>
</Files>
</Configuration>

```

## Table description

Item	Description
Feature name	Configuration
Table name	Files
Table type	Multi-instance table
Row name	File
Restrictions	Configuration file must have the suffix .cfg, and must already exist in the root directory of storage medium.

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Full path and filename. Example: <ul style="list-style-type: none"> <li>flash:/startup.cfg</li> <li>chassis3#slot1#flash:/main.cfg</li> </ul>	Index	String. Length: 1 to 255 characters.
Running	Whether the configuration file is the current startup configuration file.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
NextMain	Whether the configuration file is the main next-startup configuration file.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
NextBackup	Whether the configuration file is the backup next-startup configuration file.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>

## Configuration/MDCOrContextFiles

This table contains configuration file information for an MDC or a context.

## XML structure

```

<Configuration>
  <MDCOrContextFiles>
    <MDCOrContextFile>
      <MDCOrContextID></MDCOrContextID>
      <Name></Name>
    </MDCOrContextFile>
  </MDCOrContextFiles>
</Configuration>

```

```

    <Running></Running>
    <NextMain></NextMain>
    <NextBackup></NextBackup>
  </MDCOrContextFile>
</MDCOrContextFiles>
</Configuration>

```

## Table description

Item	Description
Feature name	Configuration
Table name	MDCOrContextFiles
Table type	Multi-instance table
Row name	MDCOrContextFile
Restrictions	<p>On the default MDC or context, information about all MDCs or contexts can be queried.</p> <p>On a non-default MDC or context, only information about the current MDC or context can be queried.</p>

## Columns

Column name	Column description	Column type	Data type and restrictions
MDCOrContextID	MDC or context index	Index	Unsigned integer.
Name	<p>Full path and filename. Example:</p> <ul style="list-style-type: none"> <li>flash:/startup.cfg</li> <li>chassis3#slot1#flash:/main.cfg</li> </ul>	Index	String. Length: 1 to 300 characters.
Running	Whether the configuration file is the current startup configuration file.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
NextMain	Whether the configuration file is the main next-startup configuration file.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
NextBackup	Whether the configuration file is the backup next-startup configuration file.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>

## Configuration/ArchiveLocal

This table contains configuration local archivel information.

## XML structure

```
<Configuration>
  <ArchiveLocal>
    <Interval></Interval>
    <Count></Count>
    <DirPath></DirPath>
    <Prefix></Prefix>
  </ArchiveLocal>
</Configuration>
```

## Table description

Item	Description
Feature name	Configuration
Table name	ArchiveLocal
Table type	Single-instance
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Time interval to automatic backup.	N/A	Unsigned integer. Value range: 10 to 525600.
Count	Save the maximum number of backup files locally.	N/A	Unsigned integer. Value range: 1 to 10.
DirPath	Local save path.	N/A	String. Length: 1 to 63 characters.
Prefix	Local save file prefix.	N/A	String. Length: 1 to 30 characters.

## Configuration/ArchiveServer

This table contains configuration server archive information.

## XML structure

```
<Configuration>
  <ArchiveServer>
    <ArchiveHost>
      <ServerType></ServerType>
      <AddressType></AddressType>
      <Address></Address>
    </ArchiveHost>
  </ArchiveServer>
</Configuration>
```

```

<VRF></VRF>
<Interval></Interval>
<UserName></UserName>
<Password></Password>
<Port></Port>
<DirPath></DirPath>
<Prefix></Prefix>
</ArchiveHost>
</ArchiveServer>
</Configuration>

```

## Table description

Item	Description
Feature name	Configuration
Table name	ArchiveServer
Table type	Single-instance
Row name	ArchiveHost
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerType	Type of the server.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—FTP</li> <li>2—TFTP</li> </ul>	N/A
AddressType	Type of the address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4</li> <li>2—IPv6</li> </ul>	N/A
Address	Address of the remote manage.	Index	String. Length: 1 to 253 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	N/A
Interval	Time interval to automatic backup.	N/A	Unsigned integer. Value range: 10 to 525600.	N/A
UserName	User name.	N/A	String. Length: 1 to 63 characters.	N/A
Password	Password.	N/A	String. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Port	Port Number.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
DirPath	Server save path.	N/A	String. Length: 1 to 63 characters.	N/A
Prefix	Server save file prefix.	N/A	String. Length: 1 to 30 characters.	N/A

## Configuration/ReplaceServer

This table contains configuration server replace information.

### XML structure

```

<Configuration>
  <ReplaceServer>
    <ReplaceHost>
      <ServerType></ServerType>
      <AddressType></AddressType>
      <Address></Address>
      <VRF></VRF>
      <UserName></UserName>
      <Password></Password>
      <Port></Port>
      <DirPath></DirPath>
      <RollbackName></RollbackName>
    </ReplaceHost>
  </ReplaceServer>
</Configuration>

```

### Table description

Item	Description
Feature name	Configuration
Table name	ReplaceServer
Table type	Single-instance
Row name	ReplaceHost
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerType	Type of the server.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—FTP</li> <li>2—TFTP</li> </ul>	N/A
AddressType	Type of the address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPV4</li> <li>2—IPV6</li> </ul>	N/A
Address	Address of the remote manage.	Index	String. Length: 1 to 253 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	N/A
UserName	User name.	N/A	String. Length: 1 to 63 characters.	N/A
Password	Password.	N/A	String. Length: 1 to 63 characters.	N/A
Port	Port Number.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
DirPath	Server save path.	N/A	String. Length: 1 to 63 characters.	N/A
RollbackName	Server Rollback.	N/A	String. Length: 1 to 255 characters.	N/A

# Contents

Configuration.....2

    Configuration/Files .....2



# Configuration

## Configuration/Files

Message	Explanation
The file name is invalid or the file is not in the root directory! 文件名称不合法或者文件不在主用主控板存储介质的根目录下。	Startup configuration file must be in the root directory. 文件名有非法字符或者文件不在主用主控板存储介质的根目录下。
The file does not exist or is not as the same as the file on the active MPU. 文件不存在或者备用主控板的文件与主用主控板的文件不同。	Startup configuration file must be the same on all boards. 主用主控板和备用控制板的启动配置文件保持完全相同。
Please specify one or both of the NextMain and NextBackup columns. 未配置NextMain或NextBackup列。	Please specify the main next-startup configuration file or the backup next-startup configuration file. 请配置NextMain或NextBackup配置文件。

# Contents

- Configuration event stream .....1
  - SaveEvent event .....1
    - XML structure for event subscription.....1
    - XML structure for event report.....1
  - ConfigurationEvent event.....2
    - XML structure for event subscription.....2
    - XML structure for event report.....2

# Configuration event stream

## SaveEvent event

This event is used to report configuration saving operations.

## XML structure for event subscription

```
<SaveEvent>
</SaveEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Configuration</stream>
    <filter type="subtree">
      <SaveEvent xmlns="http://www.h3c.com/netconf/event:1.0/Configuration:1.0">
      </SaveEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	Configuration
Event name	SaveEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Configuration:1.0
Support for extended query	No

## XML structure for event report

```
<SaveEvent>
  <FileName>
  </FileName>
</SaveEvent>
```

### Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <SaveEvent xmlns="http://www.h3c.com/netconf/event:1.0/Configuration:1.0">
    <FileName>flash:/123.cfg</FileName>
  </SaveEvent>
</notification>
```

## Columns

Column name	Column description	Data type and restrictions
FileName	File path and name	String. Length: 1 to 511 characters.

## ConfigurationEvent event

This event is used to report configuration change information.

## XML structure for event subscription

```
<ConfigurationEvent>  
</ConfigurationEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"  
  xmlns:xs="http://www.h3c.com/netconf/base:1.0">  
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">  
    <stream>Configuration</stream>  
    <filter type="subtree">  
      <ConfigurationEvent  
xmlns="http://www.h3c.com/netconf/event:1.0/Configuration:1.0">  
        </ConfigurationEvent >  
      </filter>  
    </create-subscription>  
  </rpc>
```

## Table description

Item	Description
Event stream name	Configuration
Event name	ConfigurationEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Configuration:1.0
Support for extended query	No

## XML structure for event report

```
<ConfigurationEvent>  
  <User></User>  
  <IpAddress></IpAddress>  
  <ConfigSource></ConfigSource>  
  <ConfigResult></ConfigResult>  
  <Context></Context>  
</ConfigurationEvent>
```

### Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
```

```

<eventTime>2016-07-21T09:10:51</eventTime>
<ConfigurationEvent xmlns="http://www.h3c.com/netconf/event:1.0/Configuration:1.0">
  <User>**</User>
  <IpAddress>**</IpAddress>
  <ConfigSource>CLI</ConfigSource>
  <ConfigResult>Success</ConfigResult>
  <Context>[system]:display this</Context>
</ConfigurationEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Remarks
User	User-name of the configuration operator	String. Length: 1 to 255 characters.	If the user logged in through, for example, a console port, the value of this field is **
IpAddress	IP address of the configuration operator	String. Length: 1 to 255 characters.	If the user logged in through, for example, a console port, the value of this field is **
ConfigSource	Source of the configuration	String. Length: 1 to 255 characters.	The device supports only the CLI in the current software version.
ConfigResult	Configuration result	String. Length: 1 to 255 characters.	The values include <b>Success</b> and <b>Failed</b> .
Context	Executed command and the view of the command	String. Length: 1 to 1023 characters.	N/A

# Contents

Context .....	1
Context/ContextInformations .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Context/Resources/Disks .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
Context/Resources/Memories .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
Context/Resources/CPUs .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
Context/Resource/Throughputs .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
Context/Resource/ObjectPolicyRules .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
Context/Resource/Sessions .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
Context/Allocations .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
Context/LocationBladeControllerTeams(discard) .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
Context/Resource/SSLVPNs .....	11
XML structure .....	11
Table description .....	12
Columns .....	12

# Context

## Context/ContextInformations

This table is used to configure contexts for a device and show context's state.

### XML structure

```
<Context>
  <ContextInformations>
    <ContextInformation>
      <ContextID></ContextID>
      <Name></Name>
      <State></State>
      <Description></Description>
      <Mode></Mode>
      <Belongto></Belongto>
      <BladeControllerTeam></BladeControllerTeam>
    </ContextInformation>
  </ContextInformations>
</Context>
```

### Table description

Item	Description
Feature name	Context
Table name	ContextInformations
Table type	Multi-instance table
Row name	ContextInformation
Restrictions	firewall card:to start or stop a context should act in mdc the context belongedto ;Other actions only support default MDC. centralized firewall and packaging firewall:Only support default Context.
Support for row creation and deletion	YES

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context index	Index	Unsigned integer.	0 means the system assigns the lowest ID number

Column name	Column description	Column type	Data type and restrictions	Remarks
				among the available IDs to the Context.
Name	Full name of an context	N/A	String. Length: 1 to 15 characters.	firewall card: There is no default context. centralized firewall and packaging firewall:The name of default context is Admin
State	State of the MDC	N/A	Enumeration: 1: start 2: stop	start—Start the context. stop—Stop the context.
Description	Description of context	N/A	String. Length: 1 to 255 characters.	N/A
Belongto	Name of context's parentMDC	N/A	String. Length: 1 to 15 characters.	firewall card: Name of context's parentMDC. centralized firewall and packaging firewall: not support
Mode	Vlan mode of a context.	N/A	Enumeration: 1: VLAN shared 2: VLAN unshared	VLAN shared: Vlans can be allocated to different context sharely. VLAN unshared: 4k vlans belong to the context unsharely. Default : mode is VLAN SHARED, firewall card and centralized firewall: the mode can't be customized packaging firewall: the mode can be customized.
BladeControllerTeam	BladeControllerTeam ID	N/A	Unsigned integer. Value range: 1 to 256.	Location: Authorize the context to use the resource of BladeControllerTeams.

## Context/Resources/Disks

This table contains disk information.



## XML structure

```
<Context>
  <Resources>
    <Disks>
      <Disk>
        <ContextID></ContextID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <ReservedRatio></ReservedRatio>
        <QuotaRatio></QuotaRatio>
      </Disk>
    </Disks>
  </Resources>
</Context>
```

## Table description

Item	Description
Feature name	Context
Table name	Disks
Table type	Multi-instance table
Row name	Disk
Restrictions	firewall card: Only can be configured in default MDC. centralized firewall and packaging firewall:Disk resource of user contexts can be configured by the default context, while disk resource of default context can't be configured.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context index	Index	Unsigned integer.	N/A
Chassis	Chassis number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ReservedR	reserve resources of	N/A	Unsigned integer.	Not support yet.

Column name	Column description	Column type	Data type and restrictions	Remarks
atio	disk(%)		Value range: 0 to 100.	
QuotaRatio	The total limit resources of disk.(%)	N/A	Positive integer. Value range: 1 to 100.	The default value is 100.

## Context/Resources/Memories

This table contains memory information.

### XML structure

```

<Context>
  <Resources>
    <Memories>
      <Memory>
        <ContextID></ContextID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <ReservedRatio></ReservedRatio>
        <QuotaRatio></QuotaRatio>
      </Memory>
    </Memories>
  </Resources>
</Context>

```

### Table description

Item	Description
Feature name	Context
Table name	Memories
Table type	Multi-instance table
Row name	Memory
Restrictions	firewall card: Only can be configured in default MDC. centralized firewall and packaging firewall: Memory resource of user contexts can be configured by the default context, while memory resource of default context can't be configured.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context index	Index	Unsigned integer.	N/A
Chassis	Chassis number of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ReservedRatio	reserve resources of memory(%)	N/A	Unsigned integer. Value range: 0 to 100.	Not support yet.
QuotaRatio	The total limit resources of memory(%)	N/A	Unsigned integer. Value range: 1 to 100.	The default value is 100.

## Context/Resources/CPU

This table contains cpu information.

## XML structure

```
<Context>
  <Resources>
    <CPUs>
      <CPU>
        <ContextID></ContextID>
        <Weight></Weight>
      </CPU>
    </CPUs>
  </Resources>
</Context>
```

## Table description

Item	Description
Feature name	Context
Table name	CPUs
Table type	Multi-instance table
Row name	CPU
Restrictions	firewall card: Only can be configured in default MDC.

	centralized firewall and packaging firewall:CPU resource of user contexts can be configured by the default context, while CPU resource of default context can't be configured.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context index	Index	Unsigned integer.	N/A
Weight	CPU weight-maximum of available resources of CPU. UNITS : weight	N/A	Positive integer. Value range:1-10	Limit maximum of cpu resource. Default:Each context has a CPU weight of 10.

## Context/Resource/Throughputs

This table contains information of throughputs.

## XML structure

```

<Context>
  <Resources>
    <Throughputs>
      <Throughput>
        <ContextID></ContextID>
        <ThroughputValue>
          <Unit></Unit>
          <Value></Value>
        </ThroughputValue>
      </Throughput>
    </Throughputs>
  </Resources>
</Context>

```

## Table description

Item	Description
Feature name	Context
Table name	Throughputs
Table type	Multi-instance table
Row name	Throughput
Restrictions	Only the default context supports.

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
ThroughputValue	Throughputs value	Data structure	Members include: <ul style="list-style-type: none"> <li>Unit.</li> <li>Value.</li> </ul>	"Unit" should be configed together with "value"
Unit	Unit of throughput	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: kbps</li> <li>2: pps</li> </ul>	N/A
Value	Value of throughput	N/A	Unsigned integer. Value range: 1000 to 100000000.	N/A

## Context/Resource/ObjectPolicyRules

This table contains information of Object Policy Rules.

## XML structure

```

<Context>
  <Resources>
    <ObjectPolicyRules>
      <ObjectPolicyRule>
        <ContextID></ContextID>
        <Max></Max>
      </ObjectPolicyRule>
    </ObjectPolicyRules>
  </Resources>
</Context>

```

## Table description

Item	Description
Feature name	Context
Table name	ObjectPolicyRules
Table type	Multi-instance table
Row name	ObjectPolicyRule
Restrictions	Only the default context supports.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
Max	Maxnum of ObjectPolicyRules	N/A	Positive integer.	The value range depends on the device model.

## Context/Resource/Sessions

This table contains information of sessions.

## XML structure

```

<Context>
  <Resources>
    <Sessions>
      <Session>
        <ContextID></ContextID>
        <MaxNum></MaxNum>
        <MaxRate></MaxRate>
      </Session>
    </Sessions>
  </Resources>
</Context>

```

## Table description

Item	Description
Feature name	Context
Table name	Sessions
Table type	Multi-instance table
Row name	Session
Restrictions	Only the default context supports.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
MaxNum	Maxnum of sessions	N/A	Positive integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxRate	Maxnum of transfer rate:1/s	N/A	Positive integer.	N/A

## Context/Allocations

This table contains physical interface.

### XML structure

```

<Context>
  <Allocations>
    <Allocation>
      <ContextID></ContextID>
      <UnsharedInterfaceList></UnsharedInterfaceList>
      <SharedInterfaceList></SharedInterfaceList>
      <VLAN></VLAN>
    </Allocation>
  </Allocations>
</Context>

```

### Table description

Item	Description
Feature name	Context
Table name	Allocations
Table type	Multi-instance table
Row name	Allocation
Restrictions	firewall card : only support MDC. centralized firewall and packaging firewall:Only support default Context.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context ID	N/A	Unsigned integer.	N/A
UnsharedInterfaceList	List of unshared interfaces	N/A	String.	firewall card :not support centralized firewall and packaging firewall:allocate

Column name	Column description	Column type	Data type and restrictions	Remarks
				unshared interfaces. Different interfaces combinations(a single interface or interface list)are separated by comma',',interface lists are separated by 'to '(There is a space on both sides of the word 'to'). reference: GigabitEthernet4/5/0/1 to GigabitEthernet4/5/0/24 , GigabitEthernet4/5/0/48
SharedInterfaceList	List of shared interfaces	N/A	String.	firewall card :not support centralized firewall and packaging firewall:allocate shared interfaces. Different interfaces combinations(a single interface or interface list)are separated by comma',',interface lists are separated by 'to '(There is a space on both sides of the word 'to'). reference: GigabitEthernet4/5/0/1 to GigabitEthernet4/5/0/24 , GigabitEthernet4/5/0/48
VLAN	Vlan list	N/A	Numeric string separated by comma and minus,end of which can't be comma or minus,can't contain blank. Such as: 1,2,3,5-8,10-20	N/A

## Context/LocationBladeControllerTeams(discard)

This table contains location state of a BladeControllerTeam.

### XML structure

```

<Context>
  <LocationBladeControllerTeams>
    <LocationBCT>
      <ContextID></ContextID>
      <BladeControllerTeam></BladeControllerTeam>
      <State></State>
    </LocationBCT>
  </LocationBladeControllerTeams>
</Context>

```



## Table description

Item	Description
Feature name	Context
Table name	LocationBladeControllerTeams
Table type	Multi-instance table
Row name	LocationBCT
Restrictions	firewall card: query all contexts' information in the default MDC. centralized firewall and packaging firewall: query all contexts' information in the default Context.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
BladeControllerTeam	BladeControllerTeam ID	Index	Unsigned integer. Value range: 1 to 256.	
State	Configure State of location	N/A	Enumeration: 1: location 2: undo location	Location: Authorize the context to use the resource of BladeControllerTeams. the default context is authorized to use resource of all the bladecontroller teams

## Context/Resource/SSLVPNs

This table contains information about SSL VPNs.

## XML structure

```
<Context>
  <Resources>
    <SSLVPNs>
      <SSLVPN>
        <ContextID></ContextID>
        <MaxUserNum></MaxUserNum>
      </SSLVPN>
    </SSLVPNs>
  </Resources>
</Context>
```

## Table description

Item	Description
Feature name	Context
Table name	SSLVPNs
Table type	Multi-instance table
Row name	SSLVPN
Restrictions	Only the default context supports SSL VPN.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
MaxUserNum	Maximum number of SSL VPN users	N/A	Unsigned integer. Value range: 1 to 1048575.	N/A

# Contents

Context .....	1
Context/ContextInformations .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Context/Resources/Disks .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
Context/Resources/Memories .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
Context/Resources/CPUs .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
Context/Resource/Throughputs .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
Context/Resource/ObjectPolicyRules .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
Context/Resource/Sessions .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
Context/InterfaceAllocations .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
Context/VLANAllocations .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
Context/Capabilities .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
Context/LocationBladeControllerTeams(discard) .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
Context/Resource/SSLVPNs .....	14
XML structure .....	14
Table description .....	14
Columns .....	14

# Context

## Context/ContextInformations

This table is used to configure contexts for a device and show context's state.

### XML structure

```
<Context>
  <ContextInformations>
    <ContextInformation>
      <ContextID></ContextID>
      <Name></Name>
      <Description></Description>
      <Belongto></Belongto>
      <Mode></Mode>
      <Status></Status>
      <BladeControllerTeam></BladeControllerTeam>
    </ContextInformation>
  </ContextInformations>
</Context>
```

### Table description

Item	Description
Feature name	Context
Table name	ContextInformations
Table type	Multi-instance table
Row name	ContextInformation
Restrictions	firewall card:query contexts' infomation in mdc the context belongedto ; query all contexts' information in the default MDC. centralized firewall and packaging firewall:query all contexts' information in the default Context.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context index	Index	Unsigned integer.	N/A
Name	Full name of an Context	N/A	String. Length: 1 to 15 characters.	firewall card:There is no default context.

Column name	Column description	Column type	Data type and restrictions	Remarks
				centralized firewall and packaging firewall: The name of default context is Admin
Description	Description of context	N/A	String. Length: 1 to 255 characters.	N/A
Belongto	Name of context's parentMDC	N/A	String. Length: 1 to 15 characters.	firewall card: Name of context's parentMDC. centralized firewall and packaging firewall: blank
Mode	Vlan mode of a context.	N/A	Enumeration: 1: VLAN shared 2: VLAN unshared	VLAN shared: Vlans can be allocated to different context sharely. VLAN unshared: 4k vlans belong to the context unsharely. Default : mode is VLAN SHARED, firewall card and centralized firewall: the mode can't be customized packaging firewall: the mode can be customized.
Status	Status of the context	N/A	Enumeration: <ul style="list-style-type: none"> <li>1: inactive</li> <li>2: starting</li> <li>3: active</li> <li>4: stopping</li> <li>5: updating</li> </ul>	<ul style="list-style-type: none"> <li>inactive—The context is stopped or not started yet.</li> <li>starting—The device is executing the context start command to start the context.</li> <li>active—The context is operating correctly.</li> <li>stopping—The device is executing the undo context start command to stop the context.</li> <li>updating—The context is updating.</li> </ul>
BladeControll	BladeControllerT	N/A	Unsigned integer.	Location: Authorize

Column name	Column description	Column type	Data type and restrictions	Remarks
erTeam	eam ID		Value range: 0 to 256.	the context to use the resource of BladeControllerTeams. 0 means the context dose not location bladecontrollerteam

## Context/Resources/Disks

This table contains disk information.

## XML structure

```

<Context>
  <Resources>
    <Disks>
      <Disk>
        <ContextID></ContextID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Partition></Partition>
        <Quota></Quota>
        <Reserved></Reserved>
        <Used></Used>
        <Available></Available>
      </Disk>
    </Disks>
  </Resources>
</Context>

```

## Table description

Item	Description
Feature name	Context
Table name	Disks
Table type	Multi-instance table
Row name	Disk
Restrictions	firewall card:query contexts'disk resource in mdc the context belonged to ; query all contexts' disk resource in the default MDC.

Item	Description
	centralized firewall and packaging firewall:query all contexts' disk resource in the default Context.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context index	Index	Unsigned integer.	N/A
Chassis	Chassis number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Partition	Instance name of disk resource	Index	String. Length: 1 to 31 characters.	N/A
Quota	The total limit resources of disk(KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.	Limit maximum of disk resource.
Reserved	reserve resources of disk(KB)	N/A	Unsigned integer.	Limit minimum of disk resource. 0 means the context doesn't have reserve resource of disk.
Used	Current usage of disk resources(KB)	N/A	Unsigned integer.	N/A
Available	Current available resources of disk(KB)	N/A	Unsigned integer.	The minimum between(Quota-Used)and idle resource of disk.

## Context/Resources/Memories

This table contains memory information.

## XML structure

```

<Context>
  <Resources>
    <Memories>
      <Memory>
        <ContextID></ContextID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>

```

```

    <Quota></Quota>
    <Reserved></Reserved>
    <Used></Used>
    <Available></Available>
  </Memory>
</Memories>
</Resources>
</Context>

```

## Table description

Item	Description
Feature name	Context
Table name	Memories
Table type	Multi-instance table
Row name	Memory
Restrictions	<p>firewall card:query contexts' memory resource in mdc the context belonged to ; query all contexts' memory resource in the default MDC.</p> <p>centralized firewall and packaging firewall:query all contexts' memory resource in the default Context.</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context index	Index	Unsigned integer.	N/A
Chassis	Chassis number of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Quota	The total limit resources of memory(KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.	Limit maximum of disk resource.
Reserved	reserve resources of memory(KB)	N/A	Unsigned integer.	Limit minimum of disk resource. 0 means the context doesn't have reserve resource of memory.
Used	Current usage of memory resources(KB)	N/A	Unsigned integer.	N/A
Available	Current available	N/A	Unsigned integer.	The minimum



Column name	Column description	Column type	Data type and restrictions	Remarks
	resources of memory(KB)			between(Quota-Used)and idle resource of disk.

## Context/Resources/CPU

This table contains cpu information.

### XML structure

```

<Context>
  <Resources>
    <CPUs>
      <CPU>
        <ContextID></ContextID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Weight></Weight>
        <Usage></Usage>
      </CPU>
    </CPUs>
  </Resources>
</Context>

```

### Table description

Item	Description
Feature name	Context
Table name	CPUs
Table type	Multi-instance table
Row name	CPU
Restrictions	firewall card:query contexts' cpu resource in mdc the context belonged to ; query all contexts' cpu resource in the default MDC. centralized firewall and packaging firewall:query all contexts' cpu resource in the default Context.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context index	Index	Unsigned integer.	N/A
Chassis	Chassis number of	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	CPU resource		Value range: 0 to 65535.	
Slot	Slot number of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Weight	CPU weight-maximum of available resources of CPU(weight)	N/A	Positive integer. Value range:1-10	Limit maximum of cpu resource. Default:Each context has a CPU weight of 10.
Usage	Current usage of CPUresources(%)	N/A	Unsigned integer. Value range: 0 to 100.	N/A

## Context/Resource/Throughputs

This table contains information of throughputs.

### XML structure

```

<Context>
<Resources>
  <Throughputs>
    <Throughput>
      <ContextID></ContextID>
      <ThroughputValue>
        <Unit></Unit>
        <Value></Value>
      </ThroughputValue>
    </Throughput>
  </Throughputs>
</Resources>
</Context>

```

### Table description

Item	Description
Feature name	Context
Table name	Throughputs
Table type	Multi-instance table
Row name	Throughput
Restrictions	Only the default context supports.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
ThroughputValue	Throughputs value	Data structure	Members include: <ul style="list-style-type: none"><li>Unit.</li><li>Value.</li></ul>	N/A
Unit	Unit of throughput	N/A	Enumeration: <ul style="list-style-type: none"><li>1: kbps</li><li>2: pps</li></ul>	N/A
Value	Value of throughput	N/A	Unsigned integer. Value range: 1000 to 100000000.	0 means no restrictions

## Context/Resource/ObjectPolicyRules

This table contains information of Object Policy Rules.

### XML structure

```
<Context>
<Resources>
  <ObjectPolicyRules>
    <ObjectPolicyRule>
      <ContextID></ContextID>
      <Max></Max>
    </ObjectPolicyRule>
  </ObjectPolicyRules>
</Resources>
</Context>
```

### Table description

Item	Description
Feature name	Context
Table name	ObjectPolicyRules
Table type	Multi-instance table
Row name	ObjectPolicyRule
Restrictions	Only the default context supports.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
Max	Maxnum of ObjectPolicyRules	N/A	Positive integer.	The value range depends on the device model. 0 means no restrictions

## Context/Resource/Sessions

This table contains information of sessions.

## XML structure

```

<Context>
  <Resources>
    <Sessions>
      <Session>
        <ContextID></ContextID>
        <MaxNum></MaxNum>
        <MaxRate></MaxRate>
      </Session>
    </Sessions>
  </Resources>
</Context>

```

## Table description

Item	Description
Feature name	Context
Table name	Sessions
Table type	Multi-instance table
Row name	Session
Restrictions	Only the default context supports.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
MaxNum	Maxnum of sessions	N/A	Positive integer.	0 means no restrictions
MaxRate	Maxnum of	N/A	Positive integer.	0 means no restrictions

Column name	Column description	Column type	Data type and restrictions	Remarks
	transfer rate:1/s			

## Context/InterfaceAllocations

This table contains physical interface.

### XML structure

```

<Context>
  <InterfaceAllocations>
    <InterfaceAllocation>
      <IfName></IfName>
      <ContextID></ContextID>
      <AllocType></AllocType>
    </InterfaceAllocation>
  </InterfaceAllocations>
</Context>

```

### Table description

Item	Description
Feature name	Context
Table name	InterfaceAllocations
Table type	Multi-instance table
Row name	Interface
Restrictions	Default Context can query the contexts' information of all the interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfName	Full name of an interface	Index	String. Length: 2 to 47 characters.	N/A
ContextID	Context ID	Index	Unsigned integer.	N/A
AllocType	Interface assignment type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0: Invalid</li> <li>1: The interface has not been allocated.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2: The allocation type is shared.</li> <li>3: The allocation type is exclusive.</li> </ul>	

## Context/VLANAllocations

This table contains informations of vlans.

### XML structure

```

<Context>
  <VLANAllocations>
    <VLANAllocation>
      <VLANID></VLANID>
      <ContextID></ContextID>
      <ContextIDList></ContextIDList>
    </VLANAllocation>
  </VLANAllocations>
</Context>

```

### Table description

Item	Description
Feature name	Context
Table name	VLANAllocations
Table type	Multi-instance table
Row name	VLANAllocation
Restrictions	Default Context can query the contexts' information of all the vlans.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	Vlan Index	Index	Positive integer.	firewall card :There is not default context. centralized firewall and packaging firewall:the default Context's ID is 1.
ContextID	Context ID	N/A	Unsigned integer.	The minimal Context ID of the VLAN
ContextIDList	Context ID List	N/A	String.	Example: 2,3,5-8,10-20.

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 65535 characters.  It is a comma-separated list of Context ID items. An item can be an individual Context ID or a Context ID range. Use a hyphen (-) to separate the start and end Context IDs of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	Available Context IDs are in the ContextID column in the Context/ContextInformation table.

## Context/Capabilities

This table contains capability information of context.

### XML structure

```

<Context>
  <Capabilities>
    <BelongtoSupport></BelongtoSupport>
    <ModeSupport></ModeSupport>
  </Capabilities>
</Context>

```

### Table description

Item	Description
Feature name	Context
Table name	Capabilities
Table type	Multi-instance table
Row name	N/A
Restrictions	Only support the default context.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BelongtoSupport	Check whether belongto can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
ModeSupport	Check whether vlan mode can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# Context/LocationBladeControllerTeams(discard)

This table contains location state of a BladeControllerTeam.

## XML structure

```
<Context>
  <LocationBladeControllerTeams>
    <LocationBCT>
      <ContextID></ContextID>
      <BladeControllerTeam></BladeControllerTeam>
      <State></State>
    </LocationBCT>
  </LocationBladeControllerTeams>
</Context>
```

## Table description

Item	Description
Feature name	Context
Table name	LocationBladeControllerTeams
Table type	Multi-instance table
Row name	LocationBCT
Restrictions	firewall card: query all contexts' information in the default MDC. centralized firewall and packaging firewall:query all contexts' information in the default Context.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
BladeControllerTeam	BladeControllerTeam ID	N/A	Unsigned integer. Value range: 1 to 256.	
State	Configure State of location	N/A	Enumeration: 1: location 2: undo location	Location: Authorize the context to use the resource of BladeControllerTeams. the default context is authorized to use resource of all the bladecontrollerteams



# Context/Resource/SSLVPNs

This table contains information about SSL VPNs.

## XML structure

```
<Context>
  <Resources>
    <SSLVPNs>
      <SSLVPN>
        <ContextID></ContextID>
        <MaxUserNum></MaxUserNum>
      </SSLVPN>
    </SSLVPNs>
  </Resources>
</Context>
```

## Table description

Item	Description
Feature name	Context
Table name	SSLVPNs
Table type	Multi-instance table
Row name	SSLVPN
Restrictions	Only the default context supports SSL VPN.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	context index	Index	Unsigned integer.	N/A
MaxUserNum	Maximum number of SSL VPN users	N/A	Unsigned integer. Value range: 1 to 1048575.	0 means no limit on the number of SSL VPN users.

# Contents

- Context .....1
  - Context/ContextInformations ..... 1
  - Context/Resources/Disks.....2
  - Context/Resources/Memories.....2
  - Context/Resources/CPUs .....2
  - Context/LocationBladeControllerTeams(discard) .....3
  - Context/Allocation .....3

# Context

## Context/ContextInformations

Message	Explanation
Not enough resources available for this context. 资源不足，操作失败。	Not enough resources available for this context. 资源不足，操作失败。
Number of contexts exceeded the limit. 创建Context失败，因为创建的Context数目已经达到上限。	Number of contexts exceeded the limit. 创建Context失败，因为创建的Context数目已经达到上限。
Another context is using the ID. 另外一个Context正在使用该ID。	Another context is using the ID when creating a context. Please switch a new one. 当创建context时，另外一个Context正在使用该ID。请换一个新的id。
The name is already exists. 该名称已经存在。	The name is already exists when creating a new context. 当创建context时，该名称已经存在。
Operation failed. The context is already started. 设置Context归属于某个MDC失败，因为Context已经启动。	Operation failed. The context is already started. 设置Context归属于某个MDC失败，因为Context已经启动。
The MDC is not authorized to use the blade controller team. " 设置Context归属于某个MDC失败，因为指定MDC并没有进驻该Context已经进驻的安全引擎组。	The MDC is not authorized to use the blade controller team. 设置Context归属于某个MDC失败，因为指定MDC并没有进驻该Context已经进驻的安全引擎组。
The context doesn't belong to the MDC. 启动Context失败，因为该Context并不属于当前MDC。	The context doesn't belong to the MDC. 启动Context失败，因为该Context并不属于当前MDC。
This context has been assigned to another blade controller team. 该Context已经进驻其他安全引擎组。	This context has been assigned to another blade controller team. 该Context已经进驻其他安全引擎组。
Restoring context configuration. Please try again later. Context正在配置恢复，请稍候。	Restoring context configuration. Please try again later. Context正在配置恢复，请稍候。
Context is busy. Please try again later. Context正在忙，请稍后重试。	The context is starting or stopping. Please try again later if need do some set operations. Context正在启动或者停止，如果要配置操作请稍后重试。
The context name and ID must identify the same context. 输入的Context名称有误，请输入与ID对应的名称。	The context name and ID must identify the same context. 输入的Context名称有误，请输入与ID对应的名称。
The mode is wrong. Please input the right mode according to the context ID. 输入的mode值有误，请输入与ID对应的mode值。	The mode is wrong. Please input the right mode according to the context ID. 输入的Vlan mode值有误，请输入与ID对应的Vlan mode值。
Invalid context ID or context name.	Invalid context ID or context name.

输入了无效的Context ID 或者名称。	输入了无效的Context ID 或者名称。
The default context can't be deleted. 不允许删除缺省Context。	The default context can't be deleted. 不允许删除缺省Context。
The default context can't be deleted. 不允许删除缺省Context。	The default context can't be deleted. 不允许删除缺省Context。

## Context/Resources/Disks

Message	Explanation
Not enough disk space available. 磁盘资源不足。	Not enough disk space available when limit the disk space. Please set the limit bigger. 磁盘资源不足， 请设置大一点的磁盘空间。
The context is not authorized to use this blade controller. Context没有进驻该安全引擎。	The context is not authorized to use this blade controller. So it cannot be limited the disk resource. Context没有进驻该安全引擎， 所以不能设置磁盘资源。
Restoring context configuration. Please try again later. Context正在配置恢复， 请稍候。	Restoring context configuration. Please try again later. Context正在配置恢复， 请稍候。
Context is busy. Please try again later. Context正在忙， 请稍后重试。	The context is starting or stopping. Please try again later if need do some set operations. Context正在启动或者停止， 如果要做配置操作请稍后重试。

## Context/Resources/Memories

Message	Explanation
The context is not authorized to use this blade controller. Context没有进驻该安全引擎。	The context is not authorized to use this blade controller. So it cannot be limited the memory resource. Context没有进驻该安全引擎， 所以不能设置内存资源。
Restoring context configuration. Please try again later. Context正在配置恢复， 请稍候。	Restoring context configuration. Please try again later. Context正在配置恢复， 请稍候。
Context is busy. Please try again later. Context正在忙， 请稍后重试。	The context is starting or stopping. Please try again later if need do some set operations. Context正在启动或者停止， 如果要做配置操作请稍后重试。

## Context/Resources/CPU's

Message	Explanation
Restoring context configuration. Please try again later. Context正在配置恢复， 请稍候。	Restoring context configuration. Please try again later. Context正在配置恢复， 请稍候。

Context is busy. Please try again later. Context正在忙，请稍后重试。	The context is starting or stopping. Please try again later if need do some set operations. Context正在启动或者停止，如果要做配置操作请稍后重试。
---	---

## Context/LocationBladeControllerTeams(discard)

Message	Explanation
Authorization failed. Invalid blade-controller-team ID. 操作失败，该安全引擎组ID无效。	Authorization failed. Invalid blade-controller-team ID. 操作失败，该安全引擎组ID无效。
This context has been assigned to another blade controller team. 该Context已经进驻其他安全引擎组。	This context has been assigned to another blade controller team. 该Context已经进驻其他安全引擎组。
The MDC this context belongs to is not authorized to use the blade controller team. 该Context的归属MDC没有进驻该安全引擎组。	The MDC this context belongs to is not authorized to use the blade controller team. 该Context的归属MDC没有进驻该安全引擎组。
Restoring context configuration. Please try again later. Context正在配置恢复，请稍候。	Restoring context configuration. Please try again later. Context正在配置恢复，请稍候。
Context is busy. Please try again later. Context正在忙，请稍后重试。	The context is starting or stopping. Please try again later if need do some set operations. Context正在启动或者停止，如果要做配置操作请稍后重试。

## Context/Allocation

Message	Explanation
Some interfaces are duplicated. 接口列表中包含重复的接口。	Some interfaces are duplicated. 接口列表中包含重复的接口。
Some VLANs are used by another context. VLAN列表中有VLAN已经被分配到其它Context。	Some VLANs are used by another context. VLAN列表中有VLAN已经被分配到其它Context。
Some interfaces name are invalid. 接口列表中包含非法的接口名。	Some interfaces name are invalid. 接口列表中包含非法的接口名。
Some interfaces have been allocated as other mode. 接口列表中有接口已经被分配为其它模式，分配模式冲突。	Some interfaces have been allocated as other mode. 接口列表中有接口已经被分配为其它模式，分配模式冲突。
Some type of interfaces can not be allocated to a context exclusively. 接口列表中有接口已经被分配为其它模式，分配模式冲突。	Some type of interfaces can not be allocated to a context exclusively. 接口列表中有接口已经被分配为其它模式，分配模式冲突。
Layer-2 Ethernet interface can not be allocated to a VLAN-shared context exclusively. 二层接口不能独占分配给VLAN-shared Context。	Layer-2 Ethernet interface can not be allocated to a VLAN-shared context exclusively. 二层接口不能独占分配给VLAN-shared Context。

<p>Layer-2 Ethernet interface can not be allocated to a VLAN-unshared context in sharing mode.</p> <p>二层接口不能共享分配给VLAN-unshared Context。</p>	<p>Layer-2 Ethernet interface can not be allocated to a VLAN-unshared context in sharing mode.</p> <p>二层接口不能共享分配给VLAN-unshared Context。</p>
<p>Subinterfaces can not be allocated exclusively.</p> <p>接口列表中包含的子接口不能再被独占分配。</p>	<p>Subinterfaces can not be allocated exclusively.</p> <p>接口列表中包含的子接口不能再被独占分配。</p>
<p>Some interfaces' sub interface has been allocated.</p> <p>接口列表中有接口的子接口已经被分配，接口不能再被分配。</p>	<p>Some interfaces' sub interface has been allocated.</p> <p>接口列表中有接口的子接口已经被分配，接口不能再被分配。</p>
<p>Some interfaces' aggregate interface has been allocated.</p> <p>接口列表中有聚合成员口的聚合口已经被分配，聚合成员口不能再被分配。</p>	<p>Some interfaces' aggregate interface has been allocated.</p> <p>接口列表中有聚合成员口的聚合口已经被分配，聚合成员口不能再被分配。</p>
<p>Some interfaces' member interface has been allocated.</p> <p>接口列表中有聚合口的成员口已经被分配，聚合口不能再被分配。</p>	<p>Some interfaces' member interface has been allocated.</p> <p>接口列表中有聚合口的成员口已经被分配，聚合口不能再被分配。</p>
<p>Failed to allocate nonexistent VLANs.</p> <p>无法分配不存在的VLAN。</p>	<p>Failed to allocate nonexistent VLANs.</p> <p>无法分配不存在的VLAN。</p>
<p>Default VLAN can not be allocated.</p> <p>默认VLAN不能被分配</p>	<p>Default VLAN can not be allocated.</p> <p>默认VLAN不能被分配</p>
<p>Failed to allocate VLANs because some of them are configured as port PVIDs.</p> <p>VLAN分配失败，其中部分由于已配置成端口PVID</p>	<p>Failed to allocate VLANs because some of them are configured as port PVIDs.</p> <p>VLAN分配失败，其中部分由于已配置成端口PVID</p>
<p>Failed to allocate VLANs because some of them have VLAN interfaces.</p> <p>VLAN分配失败，其中部分由于已存在对应的VLAN接口</p>	<p>Failed to allocate VLANs because some of them have VLAN interfaces.</p> <p>VLAN分配失败，其中部分由于已存在对应的VLAN接口</p>
<p>VLAN interface can not be allocated to a VLAN-unshared context in sharing mode.</p> <p>VLAN分配失败，VLAN接口不能共享分配给VLAN-unshared Context</p>	<p>VLAN interface can not be allocated to a VLAN-unshared context in sharing mode.</p> <p>VLAN分配失败，VLAN接口不能共享分配给VLAN-unshared Context</p>
<p>Failed to allocate the interfaces in sharing mode because some of them are members of Reth groups.</p> <p>指定的接口中包含冗余组的成员接口，冗余组成员接口不能被共享分配。</p>	<p>Failed to allocate the interfaces in sharing mode because some of them are members of Reth groups.</p> <p>指定的接口中包含冗余组的成员接口，冗余组成员接口不能被共享分配。</p>
<p>Failed to allocate the interfaces in sharing mode because some of them are members of aggregation groups.</p> <p>指定的接口中包含聚合组的成员接口，聚合组成员接口不能被共享分配。</p>	<p>Failed to allocate the interfaces in sharing mode because some of them are members of aggregation groups.</p> <p>指定的接口中包含聚合组的成员接口，聚合组成员接口不能被共享分配。</p>



# Contents

CP .....	1
CP/ClearPolicyStats .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
CP/ClearAllPolicyStats .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
CP/ClearPolicies .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
CP/ClearAllPolicies .....	3
XML structure .....	3
Table description .....	3
Columns .....	4



# CP

## CP/ClearPolicyStats

This table is used to clear statistics for the caching policy.

### XML structure

```
<CP>
  <ClearPolicyStats>
    <ClearPolicyStat>
      <Name></Name>
      <Clear></Clear>
    </ClearPolicyStat>
  </ClearPolicyStats>
</CP>
```

### Table description

Item	Description
Feature name	CP
Table name	ClearPolicyStats
Table type	Multi-instance table
Row name	ClearPolicyStat
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the caching policy.	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Clear	Clears statistics for the specified policy.	N/A	This column must be empty.	N/A

## CP/ClearAllPolicyStats

This table is used to clear statistics for all caching policies.

## XML structure

```
<CP>
  <ClearAllPolicyStats>
    <Clear></Clear>
  </ClearAllPolicyStats>
</CP>
```

## Table description

Item	Description
Feature name	CP
Table name	ClearAllPolicyStats
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clears statistics for all caching policies.	N/A	This column must be empty.	N/A

## CP/ClearPolicies

This table is used to clear the caching policy.

## XML structure

```
<CP>
  <ClearPolicies>
    <ClearPolicy>
      <Name></Name>
      <Clear></Clear>
    </ClearPolicy>
  </ClearPolicies>
</CP>
```

## Table description

Item	Description
Feature name	CP
Table name	ClearPolicies
Table type	Multi-instance table
Row name	ClearPolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the caching policy.	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Clear	Clears files the specified policy.	N/A	This column must be empty.	N/A

## CP/ClearAllPolicies

This table is used to clear all caching policies.

## XML structure

```
<CP>
  <ClearAllPolicies>
    <Clear></Clear>
  </ClearAllPolicies>
</CP>
```

## Table description

Item	Description
Feature name	CP
Table name	ClearAllPolicies
Table type	Single-instance table
Row name	N/A
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clears files for all caching policies.	N/A	This column must be empty.	N/A

# Contents

- CP .....1
  - CP/Polycys.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1
  - CP/HTTPMatchRules.....2
    - XML structure.....2
    - Table description.....2
    - Columns.....3

# CP

## CP/Polycys

This table contains information about a caching policy.

### XML structure

```
<CP>
  <Polycys>
    <Policy>
      <Name></Name>
      <Type></Type>
      <Size></Size>
      <FileSize></FileSize>
      <DefaultAgeTime></DefaultAgeTime>
    </Policy>
  </Polycys>
</CP>
```

### Table description

Item	Description
Feature name	CP
Table name	Polycys
Table type	Multi-instance table
Row name	Policy
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the caching policy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the caching policy.	N/A	Enumeration: • 0—HTTP.	This column is required. Once created, this column cannot be changed..
Size	Size of the caching policy.	N/A	Unsigned integer. Value range: 8 to 64.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit: MB. By default, the value is 64M.	
FileSize	Maximum total size of the files that can be cached.	N/A	Unsigned integer. Value range: 1 to 4096. Unit: KB. By default, the value is 2048KB.	N/A
DefaultAgeTime	Default aging time of the caching policy.	N/A	Unsigned integer. Value range: 1 to 1440. Unit: Minute. By default, the value is 60.	N/A

## CP/HTTPMatchRules

This table contains information about an HTTP match rule.

### XML structure

```

<CP>
  <HTTPMatchRules>
    <HTTPMatchRule>
      <Policy></Policy>
      <ID></ID>
      <Type></Type>
      <URI></URI>
    </HTTPMatchRule>
  </HTTPMatchRules>
</CP>

```

### Table description

Item	Description
Feature name	CP
Table name	HTTPMatchRules
Table type	Multi-instance table
Row name	HTTPMatchRule
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	Name of the policy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range:1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—URI.</li></ul>	N/A
URI	Regular expression matched the URI.	N/A	String. Length: 1 to 255 characters.	This column can be configured only when the type is URI (0).



# Contents

CP .....	1
CP/Polycys .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
CP/HTTPMatchRules .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
CP/PolicyStats .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# CP

## CP/Polycys

This table contains information about a caching policy.

### XML structure

```
<CP>
  <Polycys>
    <Policy>
      <Name></Name>
      <Type></Type>
      <Size></Size>
      <FileSize></FileSize>
      <DefaultAgeTime></DefaultAgeTime>
    </Policy>
  </Polycys>
</CP>
```

### Table description

Item	Description
Feature name	CP
Table name	Polycys
Table type	Multi-instance table
Row name	Policy

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the caching policy.	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the caching policy.	N/A	Enumeration: • 0—HTTP.	This column is required. Once created, this column cannot be changed.
Size	Size of the caching policy.	N/A	Unsigned integer. Value range: 8 to 64.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit: MB.	
FileSize	Maximum total size of the files that can be cached.	N/A	Unsigned integer. Value range: 1 to 4096. Unit: KB.	N/A
DefaultAgeTime	Default aging time of the caching policy.	N/A	Unsigned integer. Value range: 1 to 1440. Unit: minutes.	N/A

## CP/HTTPMatchRules

This table contains information about an HTTP match rule.

### XML structure

```

<CP>
  <HTTPMatchRules>
    <HTTPMatchRule>
      <Policy></Policy>
      <ID></ID>
      <Type></Type>
      <URI></URI>
    </HTTPMatchRule>
  </HTTPMatchRules>
</CP>

```

### Table description

Item	Description
Feature name	CP
Table name	HTTPMatchRules
Table type	Multi-instance table
Row name	HTTPMatchRule

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	Name of the policy.	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—URI.</li></ul>	N/A
URI	Regular expression used for URI matching.	N/A	String. Length: 1 to 255 characters.	This column can be configured only if the type is URI (0).

## CP/PolicyStats

This table contains statistics about the caching Policy.

## XML structure

```
<CP>
  <PolicyStats>
    <PolicyStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <MatchedReqs></MatchedReqs>
    </PolicyStat>
  </PolicyStats>
</CP>
```

## Table description

Item	Description
Feature name	CP
Table name	PolicyStats
Table type	Multi-instance table
Row name	PolicyStat

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the caching policy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ChassisID	Member ID of the device in the IRF fabric.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Slot number of the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	CPU number.	Index	Unsigned integer. Value range: 0 to 255.	N/A
MatchedReqs	Number of matches	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

# Contents

- CP .....1**
  - CP/Polycys ..... 1
  - CP/HTTPMatchRules..... 1

# CP

## CP/Policys

Message	Explanation
The cache policy name has been used by another cache policy. 缓存策略名称与已存在的其他类型缓存策略重名。	The cache policy name has been used by another cache policy. 缓存策略名称与已存在的其他类型缓存策略重名。

## CP/HTTPMatchRules

Message	Explanation
The URI already exists. URI已存在。	The URI already exists. URI 已存在。

# Contents

- CustomLog ..... 1
  - CustomLog/LogHost ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 2
  - CustomLog/LogAttribute ..... 4
    - XML structure ..... 4
    - Table description ..... 4
    - Columns ..... 5



# CustomLog

## CustomLog/LogHost

This table contains custom log hosts information.

### XML structure

```
<CustomLog>
  <LogHosts>
    <Host>
      <Address></Address>
      <VRF></VRF>
      <Port></Port>
      <OutputLog>
        <CmccSessionlog></CmccSessionlog>
        <CmccUserlog></CmccUserlog>
        <TelecomSessionlog></TelecomSessionlog>
        <TelecomUserlog></TelecomUserlog>
        <UnicomSessionlog></UnicomSessionlog>
        <UnicomUserlog></UnicomUserlog>
        <Sessionlog></Sessionlog>
        <PacketFilterlog></PacketFilterlog>
        <ATKlog></ATKlog>
        <AFTlog></AFTlog>
        <DPIDebuglog></DPIDebuglog>
        <DPIUfltlog></DPIUfltlog>
        <DPINetSharelog></DPINetSharelog>
        <SCDlog></SCDlog>
        <DPIIPSlog></DPIIPSlog>
        <DPIIPReputationlog></DPIIPReputationlog>
      </OutputLog>
    </Host>
  </LogHosts>
</CustomLog>
```

### Table description

Item	Description
Feature name	CustomLog
Table name	LogHosts
Table type	Multi-instance table
Row name	Host
Restrictions	The device supports up to four log hosts.

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Address of the log host	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Host name: Case-insensitive string. Host name length: 1 to 253 characters.	IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8 HostName example: www. example.com
VRF	VPN instance name	Index	String. Length: 0 to 31 characters.	If the log host is on the public network, the length of characters is 0.
Port	Port number of the log host	Index	Unsigned integer. Value range: 1 to 65535. Default: 514.	N/A
OutputLog	Type of logs to be sent to the log host	Data structure	Members include: <ul style="list-style-type: none"> <li>• CmccSessionlog</li> <li>• CmccUserlog</li> <li>• TelecomSessionlog</li> <li>• TelecomUserlog</li> <li>• UnicomSessionlog</li> <li>• UnicomUserlog</li> <li>• Sessionlog</li> <li>• PacketFilterlog</li> <li>• ATKlog</li> <li>• AFTlog</li> <li>• DPIAuditlog</li> <li>• DPIUfltlog</li> <li>• DPINetSharelog</li> <li>• SCDlog</li> <li>• DPIIPReputationlog</li> </ul>	N/A
CmccSessionlog	Enabling status of outputting session-based custom NAT444 logs in CMCC format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>	N/A
CmccUserlog	Enabling status of outputting user-based custom NAT444 logs in CMCC format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TelecomSessionlog	Enabling status of outputting session-based custom NAT444 logs in Telecom format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
TelecomUserlog	Enabling status of outputting user-based custom NAT444 logs in Telecom format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
UnicomSessionlog	Enabling status of outputting session-based custom NAT444 logs in Unicom format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
UnicomUserlog	Enabling status of outputting user-based custom NAT444 logs in Unicom format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
Sessionlog	Enabling status of outputting session logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
PacketFilterlog	Enabling status of outputting packet filter logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
ATKlog	Enabling status of outputting ATK logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
AFTlog	Enabling status of outputting AFT logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPIAuditlog	Enabling status of outputting DPI audit logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPIUfltlog	Enabling status of outputting DPI URL filter logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPINetSharelog	Enabling status of outputting DPI netshare control	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	logs to the log host		<ul style="list-style-type: none"> <li><b>false</b>—Disabled.</li> </ul>	
SCDlog	Enabling status of outputting server connection detection logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPIIPSlog	Enabling status of outputting DPI IPS logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPIIPReputati onlog	Enabling status of outputting DPI IPReputation logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## CustomLog/LogAttribute

This table contains global attributes about custom log.

### XML structure

```

<CustomLog>
  <LogAttribute>
    <LogFormat></LogFormat>
    <Timestamp></Timestamp>
    <SourceInterface></SourceInterface>
    <SessionLogFormat></SessionLogFormat>
    <PacketFilterLogFormat></PacketFilterLogFormat>
    <ATKLogFormat></ATKLogFormat>
    <AFTLogFormat></AFTLogFormat>
    <DPIDebugLogFormat></DPIDebugLogFormat>
    <DPIAuditLogFormat></DPIAuditLogFormat>
    <DPIUfltLogFormat></DPIUfltLogFormat>
    <DPINetShareLogFormat></DPINetShareLogFormat>
    <SCDLogFormat></SCDLogFormat>
    <DPIIPSLogFormat></DPIIPSLogFormat>
    <DPIIPSUpdateLogFormat></DPIIPSUpdateLogFormat>
    <DPIIPReputationLogFormat></DPIIPReputationLogFormat>
  </LogAttribute>
</CustomLog>

```

### Table description

Item	Description
Feature name	CustomLog

Table name	LogAttribute
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LogFormat	Format for outputting NAT444 custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output NAT444 logs with Unicom format.</li> <li>1—Output NAT444 logs with Telecom format.</li> <li>2—Output NAT444 logs with CMCC format.</li> <li>3—Do not output NAT444 logs. (Default).</li> </ul>	N/A
Timestamp	Timestamp type of NAT444 custom log	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Greenwich Mean Time(GMT). (Default)</li> <li>1—Local time of device.</li> </ul>	N/A
SourceInterface	Name of source Interface address for output custom NAT444 logs	N/A	String Length: 2 to 47 characters.	Example: Ethernet0/0/0 Only interfaces that support IP address configuration can be specified.
SessionLogFormat	Format for outputting session custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format session logs.</li> <li>1—Do not output session logs (Default).</li> </ul>	N/A
PacketFilterLogFormat	Format for outputting packet filter custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format packet filter logs.</li> <li>1—Do not output packet filter logs (Default).</li> </ul>	N/A
ATKLogFormat	Format for outputting ATK custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format ATK logs.</li> <li>1—Do not output ATK logs (Default).</li> </ul>	N/A
AFTLogFormat	Format for outputting AFT custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format AFT logs.</li> <li>1—Do not output AFT logs (Default).</li> </ul>	N/A
DPIAuditLogF	Format for	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
format	outputting DPI audit custom logs		<ul style="list-style-type: none"> <li>0—Output standard H3C format DPI audit logs.</li> <li>1—Do not output DPI audit logs (Default).</li> </ul>	
DPIUfltLogFormat	Format for outputting DPI URL filter custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format DPI URL filter logs.</li> <li>1—Do not output DPI URL filter logs (Default).</li> </ul>	N/A
DPINetShareLogFormat	Format for outputting DPI netshare control logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format DPI netshare control logs.</li> <li>1—Do not output DPI netshare control logs (default).</li> </ul>	N/A
SCDLogFormat	Format for outputting server connection detection logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format server connection detection logs.</li> <li>1—Do not output server connection detection logs (default).</li> </ul>	N/A
DPIIPSLogFormat	Format for outputting DPI IPS custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format DPI IPS logs.</li> <li>1—Do not output DPI IPS logs (default).</li> <li>2—Output SGCC format DPI IPS logs.</li> </ul>	N/A
DPIIPSUpdateLogFormat	Format for outputting DPI IPS signature update logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output SGCC format DPI IPS signature update logs.</li> <li>1—Do not output DPI IPS signature update logs (default).</li> </ul>	N/A
DPIIPReputationLogFormat	Format for outputting DPI IPReputation logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format DPI IPReputation logs.</li> <li>1—Do not output DPI IPReputation logs (default).</li> </ul>	N/A

# Contents

- CustomLog ..... 1
  - CustomLog/LogHost ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 2
  - CustomLog/LogAttribute ..... 4
    - XML structure ..... 4
    - Table description ..... 5
    - Columns ..... 5

# CustomLog

## CustomLog/LogHost

This table contains custom log hosts information.

### XML structure

```
<CustomLog>
  <LogHosts>
    <Host>
      <Address></Address>
      <VRF></VRF>
      <Port></Port>
      <OutputLog>
        <CmccSessionlog></CmccSessionlog>
        <CmccUserlog></CmccUserlog>
        <TelecomSessionlog></TelecomSessionlog>
        <TelecomUserlog></TelecomUserlog>
        <UnicomSessionlog></UnicomSessionlog>
        <UnicomUserlog></UnicomUserlog>
        <Sessionlog></Sessionlog>
        <PacketFilterlog></PacketFilterlog>
        <ATKlog></ATKlog>
        <AFTlog></AFTlog>
        <DPIDebuglog></DPIDebuglog>
        <DPIUfltlog></DPIUfltlog>
        <DPINetSharelog></DPINetSharelog>
        <SCDlog></SCDlog>
        <DPIIPSlog></DPIIPSlog>
        <DPIIPReputationlog></DPIIPReputationlog>
      </OutputLog>
    </Host>
  </LogHosts>
</CustomLog>
```

### Table description

Item	Description
Feature name	CustomLog
Table name	LogHosts
Table type	Multi-instance table
Row name	Host
Restrictions	The device supports up to four log hosts.



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Address of the log host	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Host name: Case-insensitive string. Host name length: 1 to 253 characters.	IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8 HostName example: www.example.com
VRF	VPN instance name	Index	String. Length: 0 to 31 characters.	If the log host is on the public network, the length of characters is 0.
Port	Port number of the log host	Index	Unsigned integer. Value range: 1 to 65535.	N/A
OutputLog	Type of logs to be sent to the log host	Data structure	Members include: <ul style="list-style-type: none"> <li>• CmccSessionlog</li> <li>• CmccUserlog</li> <li>• TelecomSessionlog</li> <li>• TelecomUserlog</li> <li>• UnicomSessionlog</li> <li>• UnicomUserlog</li> <li>• Sessionlog</li> <li>• PacketFilterlog</li> <li>• ATKlog</li> <li>• AFTlog</li> <li>• DPIAuditlog</li> <li>• DPIUfltlog</li> <li>• DPINetSharelog</li> <li>• SCDlog</li> <li>• DPIIPReputationlog</li> </ul>	N/A
CmccSessionlog	Enabling status of outputting session-based custom NAT444 logs in CMCC format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>	N/A
CmccUserlog	Enabling status of outputting user-based custom NAT444 logs in CMCC format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TelecomSessionlog	Enabling status of outputting session-based custom NAT444 logs in Telecom format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
TelecomUserlog	Enabling status of outputting user-based custom NAT444 logs in Telecom format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
UnicomSessionlog	Enabling status of outputting session-based custom NAT444 logs in Unicom format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
UnicomUserlog	Enabling status of outputting user-based custom NAT444 logs in Unicom format to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
Sessionlog	Enabling status of outputting session logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
PacketFilterlog	Enabling status of outputting packet filter logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
ATKlog	Enabling status of outputting attack defense logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
AFTlog	Enabling status of outputting AFT logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPIAuditlog	Enabling status of outputting DPI audit logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPIUfltlog	Enabling status of outputting DPI URL filter logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPINetSharel	Enabling status of outputting DPI	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
og	netshare control logs to the log host		<ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	
SCDlog	Enabling status of outputting server connection detection logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPIIPSlog	Enabling status of outputting DPI IPS logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
DPIIPReputati onlog	Enabling status of outputting DPI IPReputation logs to the log host	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## CustomLog/LogAttribute

This table contains global attributes about custom log.

### XML structure

```

<CustomLog>
  <LogAttribute>
    <LogFormat></LogFormat>
    <Timestamp></Timestamp>
    <SourceInterface></SourceInterface>
    <SessionLogFormat></SessionLogFormat>
    <PacketFilterLogFormat></PacketFilterLogFormat>
    <ATKLogFormat></ATKLogFormat>
    <AFTLogFormat></AFTLogFormat>
    <DPIDebugLogFormat></DPIDebugLogFormat>
    <DPIDebugLogFormat></DPIDebugLogFormat>
    <DPINetShareLogFormat></DPINetShareLogFormat>
    <SCDLogFormat></SCDLogFormat>
    <DPIIPSLogFormat></DPIIPSLogFormat>
    <DPIIPSUpdateLogFormat></DPIIPSUpdateLogFormat>
    <DPIIPReputationLogFormat></DPIIPReputationLogFormat>
  </LogAttribute>
</CustomLog>

```

## Table description

Item	Description
Feature name	CustomLog
Table name	LogAttribute
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LogFormat	The format for outputting NAT444 custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output NAT444 logs with Unicom format.</li> <li>1—Output NAT444 logs with Telecom format.</li> <li>2—Output NAT444 logs with CMCC format.</li> <li>3—Do not output NAT444 logs.</li> </ul>	N/A
Timestamp	The timestamp type of NAT444 custom log	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Greenwich Mean Time (GMT).</li> <li>1—Local time of device.</li> </ul>	N/A
SourceInterface	The name of source Interface for output custom NAT444 logs	N/A	String Length: 2 to 47 characters.	Example: Ethernet0/0/0 Only interfaces that support IP address configuration can be specified.
SessionLogFormat	Format for outputting session custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format session logs.</li> <li>1—Do not output session logs.</li> </ul>	N/A
PacketFilterLogFormat	Format for outputting packet filter custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format packet filter logs.</li> <li>1—Do not output packet filter logs.</li> </ul>	N/A
ATKLogFormat	Format for outputting ATK custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format ATK logs.</li> <li>1—Do not output ATK logs.</li> </ul>	N/A
AFTLogFormat	Format for outputting AFT	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	custom logs		format AFT logs. <ul style="list-style-type: none"> <li>1—Do not output AFT logs.</li> </ul>	
DPIAuditLogFormat	Format for outputting DPI audit custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format DPI audit logs.</li> <li>1—Do not output DPI audit logs.</li> </ul>	N/A
DPIUfltLogFormat	Format for outputting DPI URL filter custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format DPI URL filter logs.</li> <li>1—Do not output DPI url filter logs.</li> </ul>	N/A
DPINetShareLogFormat	Format for outputting DPI netshare control logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format DPI netshare control logs.</li> <li>1—Do not output DPI netshare control logs.</li> </ul>	N/A
SCDLogFormat	Format for outputting server connection detection logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format server connection detection logs.</li> <li>1—Do not output server connection detection logs.</li> </ul>	N/A
DPIIPSLogFormat	Format for outputting DPI IPS custom logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format DPI IPS logs.</li> <li>1—Do not output DPI IPS logs.</li> <li>2—Output SGCC format DPI IPS logs.</li> </ul>	N/A
DPIIPSUpdateLogFormat	Format for outputting DPI IPS signature update logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output SGCC format DPI IPS signature update logs.</li> <li>1—Do not output DPI IPS signature update logs.</li> </ul>	N/A
DPIIPReputationLogFormat	Format for outputting DPI IPReputation logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Output standard H3C format DPI IPReputation logs.</li> <li>1—Do not output DPI IPReputation logs.</li> </ul>	N/A

# Contents

- CWMP .....1
  - CWMP/Configuration .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# CWMP

## CWMP/Configuration

This table contains information about the CWMP Global Settings.

### XML structure

```
<CWMP>
  <Configuration>
    <Status></Status>
    <ACS>
      <URL></URL>
      <UserName></UserName>
      <Password></Password>
    </ACS>
    <CPE>
      <UserName></UserName>
      <Password></Password>
      <ConnectInterface></ConnectInterface>
      <InformPeriodicStatus></InformPeriodicStatus>
      <InformPeriodicInterval></InformPeriodicInterval>
    </CPE>
  </Configuration>
</CWMP>
```

### Table description

Item	Description
Feature name	CWMP
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Status	Status of the CWMP	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>enable</b>.</li><li>• <b>disable</b>(default).</li></ul>

Column name	Column description	Column type	Data type and restrictions
ACS	ACS Settings	Data structure	Members include: <ul style="list-style-type: none"> <li>URL.</li> <li>UserName.</li> <li>Password.</li> </ul>
URL	Status of the log buffer	N/A	String. Length: 8 to 255 characters. Must match the following formats: <a href="http://host[:port]/path">http://host[:port]/path</a> or <a href="https://host[:port]/path">https://host[:port]/path</a>
UserName	User name to access ACS	N/A	String. Length: 1 to 255 characters.
Password	Password to access ACS	N/A	String. Length: 1 to 255 characters. Only support password in plain text.
CPE	CPE Settings	Data structure	Members include: <ul style="list-style-type: none"> <li>UserName.</li> <li>Password.</li> <li>ConnectInterface.</li> <li>InformPeriodicStatus.</li> <li>InformPeriodicInterval.</li> </ul>
UserName	User name to access CPE	N/A	String. Length: 1 to 255 characters. Case-insensitive and contains no comma(,),equal(=),double quotation marks(") ,
Password	Password to access CPE	N/A	String. Length: 1 to 255 characters. Only support password in plain text.
ConnectInterface	CPE use this interface to send packets	N/A	String. Length: 2 to 47 characters.
InformPeriodicStatus	Enable or disable the periodic Inform feature of the CPE.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>enable</b>.</li> <li><b>disable</b>(default).</li> </ul>
InformPeriodicInterval	Configure the periodic Inform interval of the CPE.	N/A	Unsigned integer. Value range: 10 to 86400.



# Contents

- CWMP ..... 1
  - CWMP/Configuration ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1

# CWMP

## CWMP/Configuration

This table contains information about the CWMP Global Settings.

### XML structure

```
<CWMP>
  <Configuration>
    <Status></Status>
    <ACS>
      <URL></URL>
      <UserName></UserName>
    </ACS>
    <CPE>
      <UserName></UserName>
      <ConnectInterface></ConnectInterface>
      <InformPeriodicStatus></InformPeriodicStatus>
      <InformPeriodicInterval></InformPeriodicInterval>
    </CPE>
  </Configuration>
</CWMP>
```

### Table description

Item	Description
Feature name	CWMP
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Status	Status of the CWMP	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>enable</b>.</li><li>• <b>disable</b>(default).</li></ul>
ACS	ACS Settings	Data structure	Members include: <ul style="list-style-type: none"><li>• URL.</li><li>• UserName.</li></ul>

Column name	Column description	Column type	Data type and restrictions
URL	Status of the log buffer	N/A	String. Length: 8 to 255 characters.
UserName	User name to access ACS	N/A	String. Length: 1 to 255 characters.
CPE	CPE Settings	Data structure	Members include: <ul style="list-style-type: none"> <li>• UserName.</li> <li>• ConnectInterface.</li> <li>• InformPeriodicStatus.</li> <li>• InformPeriodicInterval.</li> </ul>
UserName	User name to access CPE	N/A	String. Length: 1 to 255 characters.
ConnectInterface	CPE use this interface to send packets	N/A	String. Length: 2 to 47 characters.
InformPeriodicStatus	Enable or disable the periodic Inform feature of the CPE.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>enable</b>.</li> <li>• <b>disable</b>(default).</li> </ul>
InformPeriodicInterval	Configure the periodic Inform interval of the CPE.	N/A	Unsigned integer. Value range: 10 to 86400.

# Contents

CWMP .....2

    CWMP/Configuration .....2

# CWMP

## CWMP/Configuration

Message	Explanation
Failed to enable CWMP. CWMP启动失败。	Failed to start CWMP. 启动 CWMP 服务失败。
Please enable CWMP first. 请先使能CWMP。	First enable CWMP to do the replace, remove and delete operation. 请先使能CWMP，再做replace、remove或删除操作。
Please check that CWMP is enabled and the operations do not include disabling CWMP. CWMP未使能或者包含了关闭CWMP操作导致失败。	When CWMP is set to disable, it is forbidden to set other parameters. CWMP未使能时，不能设置CWMP相关参数。
The specified interface is not supported. 指定的接口不支持。	The specified interface type is not supported. 设备不支持制定接口类型。

# Contents

DaeProxy .....	1
DaeProxy/DaeProxyService .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DaeProxy/DaeProxyClients .....	1
XML structure .....	2
Table description .....	2
Columns .....	2

# DaeProxy

## DaeProxy/DaeProxyService

The status table of the RADIUS Dynamic Authorization Extensions (DAE) proxy service.

### XML structure

```
<DaeProxy>
  <DaeProxyService>
    <Status></Status>
    <ServerPort></ServerPort>
  </DaeProxyService>
</DaeProxy>
```

### Table description

Item	Description
Feature name	DaeProxy
Table name	DaeProxyService
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Status of the RADIUS DAE proxy service.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	Default: false.
ServerPort	UDP port number of the RADIUS DAE server feature.	N/A	Unsigned integer. Value range: 1 to 65535.	Default: 3799. This column takes effect only when the Status column is true.

## DaeProxy/DaeProxyClients

Client information table of the RADIUS DAE proxy service.

## XML structure

```
<DaeProxy>
  <DaeProxyClients>
    <DaeProxyClient>
      <IpType></IpType>
      <IpAddress></IpAddress>
      <Key></Key>
    </DaeProxyClient>
  </DaeProxyClients>
</DaeProxy>
```

## Table description

Item	Description
Feature name	DaeProxy
Table name	DaeProxyClients
Table type	Multi-instance table
Row name	DaeProxyClient
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpType	Type of the DAE client IP address.	Index	Enumeration: <ul style="list-style-type: none"><li>0—IPv4.</li><li>1—IPv6</li></ul>	<b>Only support IPv4 at present.</b>
IpAddress	IP address of the DAE client.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	<b>If the IpType value is 0, this column represents the IPv4 address of the client. For example, 1.0.0.1.</b> <b>If the IpType value is 1, this column represents the IPv6 address of the client. For example, 2001:12::1:2.</b>
Key	Shared key of the RADIUS packets exchanged between the DAE server and	N/A	In non-FIPS mode, a plaintext shared key is a string of 1 to 64 characters. In FIPS mode, a plaintext shared key is a string of 15 to	<b>The shared key is in plain text.</b>



Column name	Column description	Column type	Data type and restrictions	Remarks
	client.		64 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	

# Contents

DaeProxy .....	1
DaeProxy/DaeProxyService .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DaeProxy/DaeProxyClients .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
DaeProxy/Statistic .....	3
XML structure .....	3
Table description .....	3
Columns .....	3

# DaeProxy

## DaeProxy/DaeProxyService

The status table of the RADIUS Dynamic Authorization Extensions (DAE) proxy service.

### XML structure

```
<DaeProxy>
  <DaeProxyService>
    <Status></Status>
    <ServerPort></ServerPort>
  </DaeProxyService>
</DaeProxy>
```

### Table description

Item	Description
Feature name	DaeProxy
Table name	DaeProxyService
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Status of the RADIUS DAE proxy service.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	Default: false.
ServerPort	UDP port number of the RADIUS DAE server feature.	N/A	Unsigned integer. Value range: 1 to 65535.	Default: 3799. This column takes effect only when the Status column is true.

## DaeProxy/DaeProxyClients

Client information table of the RADIUS DAE proxy service.

## XML structure

```
<DaeProxy>
  <DaeProxyClients>
    <DaeProxyClient>
      <IpType></IpType>
      <IpAddress></IpAddress>
      <Key></Key>
    </DaeProxyClient>
  </DaeProxyClients>
</DaeProxy>
```

## Table description

Item	Description
Feature name	DaeProxy
Table name	DaeProxyClients
Table type	Multi-instance table
Row name	DaeProxyClient
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpType	Type of the DAE client IP address.	Index	Enumeration: <ul style="list-style-type: none"><li>0—IPv4.</li><li>1—IPv6.</li></ul>	Only support IPv4 at present.
IpAddress	IP address of the DAE client.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	<b>If the IpType value is 0, this column represents the IPv4 address of the client. For example, 1.0.0.1.</b>  If the IpType value is 1, this column represents the IPv6 address of the client. For example, 2001:12::1:2.
Key	Shared key of the RADIUS packets exchanged between the DAE server and client.	N/A	In non-FIPS mode, a plaintext shared key is a string of 1 to 64 characters. In FIPS mode, a plaintext shared key is a string of 15 to 64 characters that must contain digits, uppercase	The shared key is in plain text.

Column name	Column description	Column type	Data type and restrictions	Remarks
			letters, lowercase letters, and special characters.	

## DaeProxy/Statistic

RADIUS DAE proxy statistics table.

### XML structure

```

<DaeProxy>
  <Statistic>
    <DmReq></DmReq>
    <DmAck></DmAck>
    <DmNak></DmNak>
    <CoaReq></CoaReq>
    <CoaAck></CoaAck>
    <CoaNak></CoaNak>
    <ReTrans></ReTrans>
    <FindNasFail></FindNasFail>
    <SendToNasFail></SendToNasFail>
  </Statistic>
</DaeProxy>

```

### Table description

Item	Description
Feature name	DaeProxy
Table name	Statistic
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
DmReq	Number of DM request packets.	N/A	Unsigned integer.
DmAck	Number of DM ACK packets.	N/A	Unsigned integer.
DmNak	Number of DM	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	NAK packets.		
CoaReq	Number of CoA request packets.	N/A	Unsigned integer.
CoaAck	Number of CoA ACK packets.	N/A	Unsigned integer.
CoaNak	Number of CoA NAK packets.	N/A	Unsigned integer.
ReTrans	Number of packets that the DAE client retransmits to the DAE server.	N/A	Unsigned integer.
FindNasFail	Number of packets for which the device can't locate the DAE server.	N/A	Unsigned integer.
SendToNasFail	Number of packets failed to send to the DAE server.	N/A	Unsigned integer.

# Contents

DaeProxy .....	2
DaeProxy/DaeProxyService .....	2
DaeProxy/DaeProxyClients .....	2

# DaeProxy

## DaeProxy/DaeProxyService

Message	Explanation
Can't set the DAE listening port when disabling RADIUS DAE proxy. " 关闭RADIUS DAE代理功能的同时不能设置DAE服务器的监听端口。	Can't set the DAE listening port when disabling RADIUS DAE proxy. " 关闭RADIUS DAE代理功能的同时不能设置DAE服务器的监听端口。
Can't set the DAE listening port when RADIUS DAE proxy is disabled. RADIUS DAE代理功能处于关闭状态时不能设置DAE服务器的监听端口。	Can't set the DAE listening port when RADIUS DAE proxy is disabled. RADIUS DAE代理功能处于关闭状态时不能设置DAE服务器的监听端口。

## DaeProxy/DaeProxyClients

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。



# Contents

DFILTER .....	1
DFILTER/Policy .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DFILTER/PolicyInProfile .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
DFILTER/RuleInPolicy .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
DFILTER/KGroup .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
DFILTER/PatternInKGroup .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
DFILTER/PrePatternInKGroup .....	5
XML structure .....	5
Table description .....	6
Columns .....	6

# DFILTER

## DFILTER/Policy

This table contains data filter policie information.

### XML structure

```
<DFILTER>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <PolicyDescription></PolicyDescription>
    </Policy>
  </Policies>
</DFILTER>
```

### Table description

Item	Description
Feature name	DFILTER
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the data filter policy	Index	String, case-insensitive Length: 1 to 31 characters.	N/A
PolicyDescription	Description of the data filter policy	N/A	String, case-sensitive Length: 1 to 255 characters.	N/A

## DFILTER/PolicyInProfile

This table contains data filter policies applied to the profile.

## XML structure

```
<DFILTER>
  <PolicyInProfile>
    <Profile>
      <ProfileName></ProfileName>
      <PolicyName></PolicyName>
    </Profile>
  </PolicyInProfile>
</DFILTER>
```

## Table description

Item	Description
Feature name	DFILTER
Table name	PolicyInProfile
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the profile	Index	String, case-insensitive Length: 1 to 100 characters.	N/A
PolicyName	Name of the policy	NA	String, case-insensitive Length: 1 to 31 characters.	N/A

## DFILTER/RuleInPolicy

This table contains the information of rules in a data filter policy.

## XML structure

```
<DFILTER>
  <RuleInPolicy>
    <Rule>
      <PolicyName></PolicyName>
      <RuleName></RuleName>
      <KGroupName></KGroupName>
      <Application></Application>
      <Direction></Direction>
```

```

    <Action></Action>
    <Logging></Logging>
  </Rule>
</RuleInPolicy>
</DFILTER>

```

## Table description

Item	Description
Feature name	DFILTER
Table name	RuleInPolicy
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
RuleName	Name of the rule	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
KGroupName	Name of the keyword-group	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
Application	Application of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—HTTP</li> <li>2—FTP</li> <li>4—SMTP</li> <li>8—IMAP</li> <li>16—POP3</li> <li>32—NFS</li> <li>64—SMB</li> <li>128—RTMP</li> </ul>	Examples: 3—Application is HTTP and FTP.
Direction	Direction of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—upload</li> <li>1—download</li> <li>2—both</li> </ul>	Default is 0.
Action	Action for packets matching the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—drop</li> <li>1—permit</li> </ul>	Default is 0.
Logging	Logging or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# DFILTER/KGroup

This table contains data filter keyword group information.

## XML structure

```
<DFILTER>
  <KGroups>
    <KGroup>
      <KGroupName></KGroupName>
      <KGroupDescription></KGroupDescription>
    </KGroup>
  </KGroups>
</DFILTER>
```

## Table description

Item	Description
Feature name	DFILTER
Table name	KGroups
Table type	Multi-instance table
Row name	KGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KGroupName	Name of the keyword group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
KGroupDescription	Description of the keyword group	N/A	String, case-sensitive Length: 1 to 255 characters.	N/A

# DFILTER/PatternInKGroup

This table contains information about user-defined pattern in a data filter keyword group.

## XML structure

```
<DFILTER>
  <PatternInKGroups>
```

```

<PatternInKGroup>
  <KGroupName></KGroupName>
  <PatternName></PatternName>
  <PatternType></PatternType>
  <PatternValue></PatternValue>
</PatternInKGroup>
</PatternInKGroups>
</DFILTER>

```

## Table description

Item	Description
Feature name	DFILTER
Table name	PatternInKGroups
Table type	Multi-instance table
Row name	PatternInKGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KGroupName	Name of the keyword group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternName	Name of the user-defined pattern	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternType	Type of the user-defined pattern	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Text.</li> <li>1—Regex.</li> </ul>	N/A
PatternValue	Value of the user-defined pattern	N/A	String. Length: 3 to 245 characters.	N/A

## DFILTER/PrePatternInKGroup

This table contains information about pre-defined pattern in a data filter keyword group.

## XML structure

```

<DFILTER>
  <PrePatternInKGroups>
    <PrePatternInKGroup>
      <KGroupName></KGroupName>

```

```

        <PatternName></PatternName>
    </PrePatternInKGroup>
</PrePatternInKGroups>
</DFILTER>

```

## Table description

Item	Description
Feature name	DFILTER
Table name	PrePatternInKGroups
Table type	Multi-instance table
Row name	PrePatternInKGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KGroupName	Name of the keyword group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternName	Name of the pre-defined pattern	Index	String, case-insensitive. Length: 1 to 31 characters.	The pattern name includes bank-card-number, credit-card-number, id-card-number and phone-number

# Contents

DFILTER .....	1
DFILTER/Policy .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DFILTER/PolicyInProfile .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
DFILTER/RuleInPolicy .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
DFILTER/KGroup .....	3
XML structure .....	4
Table description .....	4
Columns .....	4
DFILTER/PatternInKGroup .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
DFILTER/PrePatternInKGroup .....	5
XML structure .....	5
Table description .....	6
Columns .....	6



# DFILTER

## DFILTER/Policy

This table contains data filter policie information.

### XML structure

```
<DFILTER>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <PolicyDescription></PolicyDescription>
    </Policy>
  </Policies>
</DFILTER>
```

### Table description

Item	Description
Feature name	DFILTER
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the data filter policy	Index	String, case-insensitive Length: 1 to 31 characters.	N/A
PolicyDescription	Description of the data filter policy	N/A	String, case-sensitive Length: 1 to 255 characters.	N/A

## DFILTER/PolicyInProfile

This table contains data filter policies applied to the profile.

### XML structure

```
<DFILTER>
```

```

<PolicyInProfile>
  <Profile>
    <ProfileName></ProfileName>
    <PolicyName></PolicyName>
  </Profile>
</PolicyInProfile>
</DFILTER>

```

## Table description

Item	Description
Feature name	DFILTER
Table name	PolicyInProfile
Table type	Multi-instance table
Row name	Profile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the profile	Index	String, case-insensitive Length: 1 to 100 characters.	N/A
PolicyName	Name of the policy	NA	String, case-insensitive Length: 1 to 31 characters.	N/A

## DFILTER/RuleInPolicy

This table contains information about rules in a data filter policy.

## XML structure

```

<DFILTER>
  <RuleInPolicy>
    <Rule>
      <PolicyName></PolicyName>
      <RuleName></RuleName>
      <KGroupName></KGroupName>
      <Application></Application>
      <Direction></Direction>
      <Action></Action>
      <Logging></Logging>
    </Rule>
  </RuleInPolicy>
</DFILTER>

```

## Table description

Item	Description
Feature name	DFILTER
Table name	RuleInPolicy
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
RuleName	Name of the rule	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
KGroupName	Name of the keyword-group	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
Application	Application of the rule	N/A	Enumeration: <ul style="list-style-type: none"><li>1—HTTP</li><li>2—FTP</li><li>4—SMTP</li><li>8—IMAP</li><li>16—POP3</li><li>32—NFS</li><li>64—SMB</li><li>128—RTMP</li></ul>	Examples: <ul style="list-style-type: none"><li>3—Application is HTTP and FTP.</li></ul>
Direction	Direction of the rule	N/A	Enumeration: <ul style="list-style-type: none"><li>0—upload.</li><li>1—download</li><li>2—both</li></ul>	Default is 0.
Action	Action for packets matching the rule	N/A	Enumeration: <ul style="list-style-type: none"><li>0—drop.</li><li>1—permit</li></ul>	Default is 0.
Logging	Logging or not	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A

## DFILTER/KGroup

This table contains data filter keyword groups information.

## XML structure

```
<DFILTER>
  <KGroups>
    <KGroup>
      <KGroupName></KGroupName>
      <KGroupDescription></KGroupDescription>
    </KGroup>
  </KGroups>
</DFILTER>
```

## Table description

Item	Description
Feature name	DFILTER
Table name	KGroups
Table type	Multi-instance table
Row name	KGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KGroupName	Name of the keyword group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
KGroupDescription	Description of the keyword group	N/A	String, case-sensitive Length: 1 to 255 characters.	N/A

## DFILTER/PatternInKGroup

This table contains information about user-defined pattern in a data filter keyword group.

## XML structure

```
<DFILTER>
  <PatternInKGroups>
    <PatternInKGroup>
      <KGroupName></KGroupName>
      <PatternName></PatternName>
      <PatternType></PatternType>
      <PatternValue></PatternValue>
    </PatternInKGroup>
  </PatternInKGroups>
```

</DFILTER>

## Table description

Item	Description
Feature name	DFILTER
Table name	PatternInKGroups
Table type	Multi-instance table
Row name	PatternInKGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KGroupName	Name of the keyword group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternName	Name of the user-defined pattern	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternType	Type of the user-defined pattern	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Text.</li><li>1—Regex.</li></ul>	N/A
PatternValue	Value of the user-defined pattern	N/A	String. Length: 3 to 245 characters.	N/A

## DFILTER/PrePatternInKGroup

This table contains information about pre-defined pattern in a data filter keyword group.

## XML structure

```
<DFILTER>
  <PrePatternInKGroups>
    <PrePatternInKGroup>
      <KGroupName></KGroupName>
      <PatternName></PatternName>
    </PrePatternInKGroup>
  </PrePatternInKGroups>
</DFILTER>
```

## Table description

Item	Description
Feature name	DFILTER
Table name	PrePatternInKGroups
Table type	Multi-instance table
Row name	PrePatternInKGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
KGroupName	Name of the keyword group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternName	Name of the pre-defined pattern	Index	String, case-insensitive. Length: 1 to 31 characters.	The pattern name includes bank-card-number, credit-card-number, id-card-number and phone-number

# Contents

- DFILTER .....1
  - DFILTER/Policy .....1
  - DFILTER/RuleInPolicy .....1
  - DFILTER/KGroup.....1

# DFILTER

## DFILTER/Policy

Message	Explanation
The signature file is updating. Please try again later. 特征库正在升级，请稍等。	Please try later. 正在升级，稍后再试。
The default policy cannot be created. 默认策略不允许创建。	The default policy cannot be created. 默认策略不允许创建。
The default policy cannot be deleted. 默认策略不允许删除。	The default policy cannot be deleted. 默认策略不允许删除。
The default policy cannot be modified. 默认策略不允许修改。	The default policy cannot be modified. 默认策略不允许修改。
The policy is being used by a DPI application profile and cannot be deleted. 策略已被某个App-profile引用，不能被删除。	A policy cannot be deleted when it is being used by a DPI application profile. 不能删除被引用的策略。

## DFILTER/RuleInPolicy

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍等。	Please try later. 正在升级，稍后再试。
Maximum number of rules has already reached. 策略下的规则数目已达到上限。	The maximum number of rules has already reached. 可配置的规则数已达上限。

## DFILTER/KGroup

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍等。	Please try later. 正在升级，稍后再试。
The default keyword group cannot be created. 默认关键字组不允许创建。	The default keyword group cannot be created. 默认关键字组不允许创建。
The default keyword group cannot be deleted. 默认关键字组不允许删除。	The default keyword group cannot be deleted. 默认关键字组不允许删除。
The default keyword group cannot be used by a non-default policy. 默认关键字组不允许被非默认策略引用。	The default keyword group cannot be used by a non-default policy. 默认关键字组不允许被非默认策略引用。
The default keyword group cannot be modified.	The default keyword group cannot be modified.



默认关键字组不允许修改。	默认关键字组不允许修改。
The keyword group is being used by a rule and cannot be deleted. 关键字组已被某个规则引用，不能被删除。	A keyword group cannot be deleted when it is used by a rule. 不能删除被引用的关键字组。
Maximum number of patterns has already reached. 关键字组下的关键字数目已达到上限。	The maximum number of patterns has already reached. 可配置的关键字数已达上限。
Invalid regular pattern expression. 无效的正则表达式。	The regular pattern is not valid. 配置的正则表达式不合法。

# Contents

DDNS .....	1
DDNS/DDNSPolicy .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DDNS/DDNSIfApply .....	4
XML structure .....	4
Table description .....	4
Columns .....	5

# DDNS

## DDNS/DDNSPolicy

This table contains DNS policy configuration information.

### XML structure

```
<DDNS>
  <DDNSPolicy>
    <Policy>
      <PolicyName></PolicyName>
      <URL></URL>
      <IntervalDay></IntervalDay>
      <IntervalHour></IntervalHour>
      <IntervalMinute></IntervalMinute>
      <Username></Username>
      <Password></Password>
      <Method></Method>
      <SSLClientPolicy></SSLClientPolicy>
    </Policy>
  </DDNSPolicy>
</DDNS>
```

### Table description

Item	Description
Feature name	DDNS
Table name	DDNSPolicy
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	DDNS policy name	Index	String, case insensitive. Length: 1 to 32 characters.	N/A
URL	URL address	N/A	String, case	The URL addresses configured for update requests depend

Column name	Column description	Column type	Data type and restrictions	Remarks																														
	for DDNS update requests		sensitive. Length: 1 to 240 characters.	<p>on the DDNS servers. Common DDNS server URL address format are shown in following table.</p> <table><tr><th>DDNS server</th><th>URL addresses for DDNS update requests</th></tr><tr><td>www.3322.org</td><td>http://members.3322.org/dyndns/update?system=dyndns&amp;hostname=&lt;h&gt;&amp;myip=&lt;a&gt;</td></tr><tr><td>DYNDNS</td><td>http://members.dyndns.org/nic/update?system=dyndns&amp;hostname=&lt;h&gt;&amp;myip=&lt;a&gt;</td></tr><tr><td>DYNS</td><td>http://www.dyns.cx/postscript.php?host=&lt;h&gt;&amp;ip=&lt;a&gt;</td></tr><tr><td>ZONE EDIT</td><td>http://dynamic.zoneedit.com/auth/dynamic.html?host=&lt;h&gt;&amp;dnsto=&lt;a&gt;</td></tr><tr><td>TZO</td><td>http://cgi.tzo.com/webclient/signedon.html?TZOName=&lt;h&gt;IPAddress=&lt;a&gt;</td></tr><tr><td>EASY DNS</td><td>http://members.easydns.com/dyn/ez-ipupdate.php?action=edit&amp;myip=&lt;a&gt;&amp;host_id=&lt;h&gt;</td></tr><tr><td>HEIP V6TB</td><td>http://dyn.dns.he.net/nic/update?hostname=&lt;h&gt;&amp;myip=&lt;a&gt;</td></tr><tr><td>CHANGE-IP</td><td>http://nic.changeip.com/nic/update?hostname=&lt;h&gt;&amp;offline=1</td></tr><tr><td>NO-IP</td><td>http://dynupdate.no-ip.com/nic/update?hostname=&lt;h&gt;&amp;myip=&lt;a&gt;</td></tr><tr><td>DHS</td><td>http://members.dhs.org/nic/hosts?domain=dyn.dhs.org&amp;hostname=&lt;h&gt;&amp;hostscmd=edit&amp;hostscmdstage=2&amp;type=1&amp;ip=&lt;a&gt;</td></tr><tr><td>HP</td><td>https://server-name/nic/update?group=group-name&amp;myip=&lt;a&gt;</td></tr><tr><td>ODS</td><td>ods://update.ods.org</td></tr><tr><td>GNU DIP</td><td>gnudip://server-name</td></tr><tr><td>PeanutHull</td><td>oray://phservice2.oray.net</td></tr></table> <p>No username or password is included in the URL address. To configure the username and password, use the username command and the password command.</p> <p>HP and GNUDIP are common DDNS update protocols. The <i>server-name</i> parameter is the domain name or IP address of the service provider's server using one of the update protocols.</p> <p>The URL address for an update request can start with:</p> <p>http://—The HTTP-based DDNS server.</p> <p>https://—The HTTPS-based DDNS server.</p> <p>ods://—The TCP-based ODS server.</p> <p>gnudip://—The TCP-based GNUDIP server.</p> <p>oray://—The TCP-based DDNS server.</p> <p>members.3322.org and phservice2.oray.net are the domain names of DDNS servers. The domain names of PeanutHull DDNS servers can be phservice2.oray.net.</p>	DDNS server	URL addresses for DDNS update requests	www.3322.org	http://members.3322.org/dyndns/update?system=dyndns&hostname=<h>&myip=<a>	DYNDNS	http://members.dyndns.org/nic/update?system=dyndns&hostname=<h>&myip=<a>	DYNS	http://www.dyns.cx/postscript.php?host=<h>&ip=<a>	ZONE EDIT	http://dynamic.zoneedit.com/auth/dynamic.html?host=<h>&dnsto=<a>	TZO	http://cgi.tzo.com/webclient/signedon.html?TZOName=<h>IPAddress=<a>	EASY DNS	http://members.easydns.com/dyn/ez-ipupdate.php?action=edit&myip=<a>&host_id=<h>	HEIP V6TB	http://dyn.dns.he.net/nic/update?hostname=<h>&myip=<a>	CHANGE-IP	http://nic.changeip.com/nic/update?hostname=<h>&offline=1	NO-IP	http://dynupdate.no-ip.com/nic/update?hostname=<h>&myip=<a>	DHS	http://members.dhs.org/nic/hosts?domain=dyn.dhs.org&hostname=<h>&hostscmd=edit&hostscmdstage=2&type=1&ip=<a>	HP	https://server-name/nic/update?group=group-name&myip=<a>	ODS	ods://update.ods.org	GNU DIP	gnudip://server-name	PeanutHull	oray://phservice2.oray.net
DDNS server	URL addresses for DDNS update requests																																	
www.3322.org	http://members.3322.org/dyndns/update?system=dyndns&hostname=<h>&myip=<a>																																	
DYNDNS	http://members.dyndns.org/nic/update?system=dyndns&hostname=<h>&myip=<a>																																	
DYNS	http://www.dyns.cx/postscript.php?host=<h>&ip=<a>																																	
ZONE EDIT	http://dynamic.zoneedit.com/auth/dynamic.html?host=<h>&dnsto=<a>																																	
TZO	http://cgi.tzo.com/webclient/signedon.html?TZOName=<h>IPAddress=<a>																																	
EASY DNS	http://members.easydns.com/dyn/ez-ipupdate.php?action=edit&myip=<a>&host_id=<h>																																	
HEIP V6TB	http://dyn.dns.he.net/nic/update?hostname=<h>&myip=<a>																																	
CHANGE-IP	http://nic.changeip.com/nic/update?hostname=<h>&offline=1																																	
NO-IP	http://dynupdate.no-ip.com/nic/update?hostname=<h>&myip=<a>																																	
DHS	http://members.dhs.org/nic/hosts?domain=dyn.dhs.org&hostname=<h>&hostscmd=edit&hostscmdstage=2&type=1&ip=<a>																																	
HP	https://server-name/nic/update?group=group-name&myip=<a>																																	
ODS	ods://update.ods.org																																	
GNU DIP	gnudip://server-name																																	
PeanutHull	oray://phservice2.oray.net																																	

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>phddns60.oray.net, client.oray.net, ph031.oray.net, and so on. Determine the domain name in the URL according to the actual situation.</p> <p>The port number in the URL address is optional. If no port number is specified, the default port number is used. HTTP uses port 80, HTTPS uses port 443, and the PeanutHull server uses port 6060.</p> <p>The system automatically performs the following operations:</p> <p>Fills &lt;h&gt; with the FQDN that is specified when the DDNS policy is applied to the interface.</p> <p>Fills &lt;a&gt; with the primary IP address of the interface to which the DDNS policy is applied.</p> <p>You might also manually specify an FQDN and an IP address in &lt;h&gt; and &lt;a&gt;, respectively. After that, the FQDN that is specified when the DDNS policy is applied becomes ineffective. However, manual configuration of &lt;h&gt; and &lt;a&gt; is not recommended.</p> <p>You cannot specify an FQDN and IP address in the URL address for contacting the PeanutHull server. Alternatively, you can specify an FQDN when applying the DDNS policy to an interface. The system automatically uses the primary IP address of the interface to which the DDNS policy is applied as the IP address for DDNS update.</p> <p>To avoid misinterpretation, do not include colons (:), at signs (@), and question marks (?) in your login ID or password, even if you can do so.</p> <p>If you use the url command multiple times with different URL addresses, the most recent configuration takes effect.</p>
IntervalDay	Interval for sending DDNS update requests after DDNS update is enabled (Day)	N/A	Unsigned integer. Value range: 0 to 365 days. Default: 0.	<p>It must be configured together with the IntervalHour column and IntervalMinute column.</p> <p>If you set the interval to 0, the device does not periodically initiate DDNS update request. However, it initiates a DDNS update request in either of the following situations:</p> <ul style="list-style-type: none"> <li>When the primary IP address of the interface changes.</li> <li>When the link state of the interface changes from down to up.</li> </ul>
IntervalHour	Interval for sending DDNS update requests after DDNS update is enabled (Hour)	N/A	Unsigned integer. Value range: 0 to 23 hours. Default: 1.	It must be configured together with the IntervalDay column and IntervalMinute column.
IntervalMinute	Interval for sending DDNS update requests after DDNS update is enabled (minute)	N/A	Unsigned integer. Value range: 0 to 59 minutes. Default: 0.	It must be configured together with the IntervalDay column and IntervalHour column.

Column name	Column description	Column type	Data type and restrictions	Remarks
Username	Username to be included in the URL address for DDNS update requests	N/A	String, case sensitive. Length: 1 to 32 characters.	N/A
Password	Password to be included in the URL address for DDNS update requests	N/A	String, case sensitive. Length: 1 to 32 characters.	Support for configuring in plain text only.
Method	Transmission method for sending DDNS update requests to HTTP/HTTPS-based DDNS servers	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Http-get (default).</li> <li>1—Http-post.</li> </ul>	N/A
SSLClient Policy	Associate a specific SSL client policy with a DDNS policy	N/A	String, case insensitive. Length: 1 to 31 characters.	The SSL client policy is effective only for HTTPS-based DDNS update requests.

## DDNS/DDNSIfApply

This table contains DDNS policy applying configuration information.

## XML structure

```

<DDNS>
  <DDNSIfApply>
    <IfApply>
      <IfIndex></IfIndex>
      <PolicyName></PolicyName>
      <FQDN></FQDN>
    </IfApply>
  </DDNSIfApply>
</DDNS>

```

## Table description

Item	Description
Feature name	DDNS

Table name	DDNSIfApply
Table type	Multi-instance table
Row name	IfApply
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
PolicyName	DDNS policy name	Index	String, case insensitive. Length: 1 to 32 characters.	N/A
FQDN	Type of the DNS server IP address	N/A	String, case insensitive. Length: 1 to 253 characters.	Specifies the FQDN to replace <h> in the URL for DDNS update. It can include letters, digits, hyphens (-), underscores (_), and dots (.).

# Contents

DDNS .....	1
DDNS/DDNSPolicy .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DDNS/DDNSIfApply .....	4
XML structure .....	4
Table description .....	4
Columns .....	5



# DDNS

## DDNS/DDNSPolicy

This table contains DNS policy configuration information.

### XML structure

```
<DDNS>
  <DDNSPolicy>
    <Policy>
      <PolicyName></PolicyName>
      <URL></URL>
      <IntervalDay></IntervalDay>
      <IntervalHour></IntervalHour>
      <IntervalMinute></IntervalMinute>
      <Username></Username>
      <Password></Password>
      <Method></Method>
      <SSLClientPolicy></SSLClientPolicy>
    </Policy>
  </DDNSPolicy>
</DDNS>
```

### Table description

Item	Description
Feature name	DDNS
Table name	DDNSPolicy
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	DDNS policy name	Index	String, case insensitive. Length: 1 to 32 characters.	N/A
URL	URL address for DDNS update	N/A	String, case sensitive. Length: 1 to	The URL addresses configured for update requests depend on the DDNS servers. Common DDNS server URL address format are shown in following table.

Column name	Column description	Column type	Data type and restrictions	Remarks	
	requests		240 characters.	DDNS server	URL addresses for DDNS update requests
				www.3322.org	http://members.3322.org/dyndns/update?system=dyndns&hostname=<h>&myip=<a>
				DYNDNS	http://members.dyndns.org/nic/update?system=dyndns&hostname=<h>&myip=<a>
				DYNS	http://www.dyns.cx/postscript.php?host=<h>&ip=<a>
				ZONE EDIT	http://dynamic.zoneedit.com/auth/dynamic.html?host=<h>&dnsto=<a>
				TZO	http://cgi.tzo.com/webclient/signedon.html?TZOName=<h>IPAddress=<a>
				EASY DNS	http://members.easydns.com/dyn/ez-ipupdate.php?action=edit&myip=<a>&host_id=<h>
				HEIP V6TB	http://dyn.dns.he.net/nic/update?hostname=<h>&myip=<a>
				CHANGE-IP	http://nic.changeip.com/nic/update?hostname=<h>&offline=1
				NO-IP	http://dynupdate.no-ip.com/nic/update?hostname=<h>&myip=<a>
				DHS	http://members.dhs.org/nic/hosts?domain=dyn.dhs.org&hostname=<h>&hostscmd=edit&hostscmdstage=2&type=1&ip=<a>
				HP	https://server-name/nic/update?group=group-name&myip=<a>
				ODS	ods://update.ods.org
				GNU DIP	gnudip://server-name
				PeanutHull	oray://phservice2.oray.net
<p>No username or password is included in the URL address. To configure the username and password, use the username command and the password command.</p> <p>HP and GNUDIP are common DDNS update protocols. The <i>server-name</i> parameter is the domain name or IP address of the service provider's server using one of the update protocols.</p> <p>The URL address for an update request can start with:</p> <p>http://—The HTTP-based DDNS server.</p> <p>https://—The HTTPS-based DDNS server.</p> <p>ods://—The TCP-based ODS server.</p> <p>gnudip://—The TCP-based GNUDIP server.</p> <p>oray://—The TCP-based DDNS server.</p> <p>members.3322.org and phservice2.oray.net are the domain names of DDNS servers. The domain names of PeanutHull DDNS servers can be phservice2.oray.net, phddns60.oray.net, client.oray.net, ph031.oray.net, and so on. Determine the domain name in the URL according to the</p>					

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>actual situation.</p> <p>The port number in the URL address is optional. If no port number is specified, the default port number is used. HTTP uses port 80, HTTPS uses port 443, and the PeanutHull server uses port 6060.</p> <p>The system automatically performs the following operations:</p> <p>Fills &lt;h&gt; with the FQDN that is specified when the DDNS policy is applied to the interface.</p> <p>Fills &lt;a&gt; with the primary IP address of the interface to which the DDNS policy is applied.</p> <p>You might also manually specify an FQDN and an IP address in &lt;h&gt; and &lt;a&gt;, respectively. After that, the FQDN that is specified when the DDNS policy is applied becomes ineffective. However, manual configuration of &lt;h&gt; and &lt;a&gt; is not recommended.</p> <p>You cannot specify an FQDN and IP address in the URL address for contacting the PeanutHull server. Alternatively, you can specify an FQDN when applying the DDNS policy to an interface. The system automatically uses the primary IP address of the interface to which the DDNS policy is applied as the IP address for DDNS update.</p> <p>To avoid misinterpretation, do not include colons (:), at signs (@), and question marks (?) in your login ID or password, even if you can do so.</p> <p>If you use the url command multiple times with different URL addresses, the most recent configuration takes effect.</p>
IntervalDay	Interval for sending DDNS update requests after DDNS update is enabled (Day)	N/A	Unsigned integer. Value range: 0 to 365 days.	<p>It must be configured together with the IntervalHour column and IntervalMinute column.</p> <p>If you set the interval to 0, the device does not periodically initiate DDNS update request. However, it initiates a DDNS update request in either of the following situations:</p> <ul style="list-style-type: none"> <li>When the primary IP address of the interface changes.</li> <li>When the link state of the interface changes from down to up.</li> </ul>
IntervalHour	Interval for sending DDNS update requests after DDNS update is enabled (Hour)	N/A	Unsigned integer. Value range: 0 to 23 hours.	It must be configured together with the IntervalDay column and IntervalMinute column.
IntervalMinute	Interval for sending DDNS update requests after DDNS update is enabled (minute)	N/A	Unsigned integer. Value range: 0 to 59 minutes.	It must be configured together with the IntervalDay column and IntervalHour column.

Column name	Column description	Column type	Data type and restrictions	Remarks
Username	Username to be included in the URL address for DDNS update requests	N/A	String, case sensitive. Length: 1 to 32 characters.	N/A
Password	Password to be included in the URL address for DDNS update requests	N/A	String, case sensitive. Length: 1 to 32 characters.	N/A
Method	Transmission method for sending DDNS update requests to HTTP/HTTPS-based DDNS servers	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Http-get</li> <li>1—Http-post.</li> </ul>	N/A
SSLClient Policy	Associate a specific SSL client policy with a DDNS policy	N/A	String, case insensitive. Length: 1 to 31 characters.	The SSL client policy is effective only for HTTPS-based DDNS update requests.

## DDNS/DDNSIfApply

This table contains DDNS policy applying configuration information.

### XML structure

```

<DDNS>
  <DDNSIfApply>
    <IfApply>
      <IfIndex></IfIndex>
      <PolicyName></PolicyName>
      <FQDN></FQDN>
    </IfApply>
  </DDNSIfApply>
</DDNS>

```

### Table description

Item	Description
Feature name	DDNS

Table name	DDNSIfApply
Table type	Multi-instance table
Row name	IfApply
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
PolicyName	DDNS policy name	Index	String, case insensitive. Length: 1 to 32 characters.	N/A
FQDN	Type of the DNS server IP address	N/A	String, case insensitive. Length: 1 to 253 characters.	Specifies the FQDN to replace <h> in the URL for DDNS update. It can include letters, digits, hyphens (-), underscores (_), and dots (.).

# Contents

DDNS .....1

    DDNS/DDNSPolicy .....1

    DDNS/DDNSIfApply .....1

# DDNS

## DDNS/DDNSPolicy

Message	Explanation
The URL can't include the username or password. Enter the username and password in the corresponding fields. 服务器地址中不能包含登录用户名和登录密码，请在登录用户名和登录密码中填写。	The URL can't include the username or password. Enter the username and password in the corresponding fields , please modify configuration under guidance. 服务器地址中不能包含登录用户名和登录密码，请在登录用户名和登录密码中填写，请按照配置说明修改
Maximum number of DDNS policies already reached. 动态DNS策略个数超过上限。	Maximum number of DDNS policies already reached. Please check configuration or specifications 动态DNS策略个数超过上限。请检查配置或者设备规格
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please modify configuration under guidance. 当前配置不符合配置要求，请按照配置说明修改

## DDNS/DDNSIfApply

Message	Explanation
Maximum number of DDNS policies applied on the interface already reached. 在该接口上应用的动态DNS策略个数超过上限。	Maximum number of DDNS policies applied on the interface already reached .Please check configuration or specifications 在该接口上应用的动态DNS策略个数超过上限。 请检查配置或者设备规格
Failed to apply the DDNS policy. 应用动态DNS策略失败。	Failed to apply the DDNS policy, please modify configuration under guidance. 应用动态DNS策略失败，请按照配置说明修改

---

# Contents

DDR .....	1
DDR/DiaGroupRule .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DDR/Bundle .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
DDR/IfDiaGroup .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
DDR/DDRAutodial .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
DDR/DDRIdle .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
DDR/DDRCircularEnable .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
DDR/DDRDialNumber .....	8
XML structure .....	8
Table description .....	8
Columns .....	9



# DDR

## DDR/DiaGroupRule

This table contains dialer-group rule information.

### XML structure

```
<DDR>
  <DiaGroupRule>
    <GroupRule>
      <GroupNumber></GroupNumber>
      <IpProtocol></IpProtocol>
      <IpPermit></IpPermit>
      <AclNum></AclNum>
      <AclName></AclName>
    </GroupRule>
  </DiaGroupRule>
</DDR>
```

### Table description

Item	Description
Feature name	DDR
Table name	DiaGroupRule
Table type	Multi-instance table
Row name	GroupRule
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	Dialer-group rule <i>group-number</i>	Index	Unsigned integer. Value range: 1 to 255	N/A
IpProtocol	Dialer-group rule ip protocol	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—IPv4 protocol</li><li>• <b>1</b>—IPv6 protocol</li></ul>	N/A
IpPermit	Denies or permits packets of the	N/A	Boolean:	IpPermit AclNum AclName are mutually

Column name	Column description	Column type	Data type and restrictions	Remarks
	specified protocol		<ul style="list-style-type: none"> <li>• <b>false</b></li> <li>• true</li> </ul>	<p>exclusive relationship.</p> <p>When executing the create, merge, replace operation must and only be use one of IpPermit, AclNum, AclName.</p> <p>Whe performing the delete, remove operation, one of IpPermit, AclNum, AclName don't need.</p>
AclNum	Specifies an ACL by its number	N/A	Unsigned integer. Value range: 2000 to 3999	N/A
AclName	Specifies an ACL by its name	N/A	String, case insensitive. Length: 1 to 63 characters.	The ACL name must start with letter a to z or A to Z. The ACL name cannot be <b>all</b> in any combination of upper- and lower-case letters.

## DDR/Bundle

This table contains the dialer bundle enable of DDR information.

## XML structure

```

<DDR>
  <Bundle>
    <DiaBundle>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </DiaBundle>
  </Bundle>
</DDR>

```

## Table description

Item	Description
Feature name	DDR
Table name	Bundle
Table type	Multi-instance table
Row name	DiaBundle

Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Enable	Before using bundle DDR, use it to enable bundle DDR on a dialer interface.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false (default)</b></li> </ul>	N/A

## DDR/IfDiaGroup

This table contains the dialer group of DDR information.

## XML structure

```

<DDR>
  <IfDiaGroup>
    <DiaGroup>
      <IfIndex></IfIndex>
      <Num></Num>
    </DiaGroup>
  </IfDiaGroup>
</DDR>

```

## Table description

Item	Description
Feature name	DDR
Table name	IfDiaGroup

Table type	Multi-instance table
Row name	DiaGroup
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Num	Specifies a dialer group by its number in the range of 1 to 255. Before the assignment, you must create the dialer group.	N/A	Unsigned integer. Value range: 1 to 255.	N/A

## DDR/DDRAutodial

This table contains the information about using **dialer timer autodial** to set the auto-dial timer.

## XML structure

```

<DDR>
  <DDRAutodial>
    <Autodial>
      <IfIndex></IfIndex>
      <Time></Time>
    </Autodial>
  </DDRAutodial>
</DDR>

```

## Table description

Item	Description
Feature name	DDR
Table name	DDRAutodial
Table type	Multi-instance table
Row name	Autodial
Restrictions	This table supports interface types: am interface bri interface/subinterface asy interface aux interface serial interface dialer interface ethchannel interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Time	Time of auto-dial	N/A	Unsigned integer. Value range: 1 to 604800. Default: 300.	Specifies the interval between auto-dial attempts.

## DDR/DDRIidle

This table contains the information about using **dialer timer idle** to set the link idle-timeout timer.

## XML structure

<DDR>

```

<DDRIdle>
  <Idle>
    <IfIndex></IfIndex>
    <Time></Time>
    <Direct></Direct>
  </Idle>
</DDRIdle>
</DDR>

```

## Table description

Item	Description
Feature name	DDR
Table name	DDRIdle
Table type	Multi-instance table
Row name	Idle
Restrictions	<p>This table supports interface types:</p> <ul style="list-style-type: none"> <li>am interface</li> <li>bri interface/subinterface</li> <li>asy interface</li> <li>aux interface</li> <li>serial interface</li> <li>dialer interface</li> <li>ethchannel interface</li> </ul>
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Time	link idle-timeout timer	N/A	Unsigned integer. Value range: 0 to 65535. Default: 120.	

Column name	Column description	Column type	Data type and restrictions	Remarks
Direct	Direct of interesting packets timer	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>• 1—OUT.</li> <li>• 2—IN.</li> <li>• 3—INOUT.</li> </ul>	Specifies the Direct of interesting packets timer.

## DDR/DDRCircularEnable

This table contains the information about using **dialer circular enable** to enable traditional DDR on a dialup interface.

### XML structure

```

<DDR>
  <DDRCircularEnable>
    <CircularEnable>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </CircularEnable>
  </DDRCircularEnable>
</DDR>

```

### Table description

Item	Description
Feature name	DDR
Table name	DDRCircularEnable
Table type	Multi-instance table
Row name	CircularEnable
Restrictions	This table supports interface types: Dialup interface
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of

Column name	Column description	Column type	Data type and restrictions	Remarks
				your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Enable	Before using traditional DDR, use it to enable traditional DDR on the dialup interface.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false (default)</b></li> </ul>	N/A

## DDR/DDRdialNumber

This table contains the information about using **dialer number** to configure a dial string for placing calls to a single remote site.

### XML structure

```

<DDR>
  <DDRdialNumber>
    <DialNumber>
      <IfIndex></IfIndex>
      <Num></Num>
      <AutoDial></AutoDial>
    </DialNumber>
  </DDRdialNumber>
</DDR>

```

### Table description

Item	Description
Feature name	DDR
Table name	DDRdialNumber
Table type	Multi-instance table
Row name	DialNumber
Restrictions	This table supports interface types: Dialup interface
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Num	A dial string for calling a remote site	N/A	String, case-insensitive. Length: 1 to 30 characters.	Specifies a dial string for calling a remote site, a case-insensitive string of 1 to 30 characters.
AutoDial	Automatically dial the remote site	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>• 0—NOTAUTO(<b>default</b>).</li> <li>• 1—AUTO</li> </ul>	Enables the interface to automatically dial the remote site by using the specified dial string at specified intervals. The interval is set in the dialer timer autodial command and defaults to 300 seconds.

---

# Contents

DDR .....	1
DDR/DiaGroupRule .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DDR/Bundle .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
DDR/IfDiaGroup .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
DDR/DDRAutodial .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
DDR/DDRIdle .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
DDR/DDRCircularEnable .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
DDR/DDRDialNumber .....	7
XML structure .....	7
Table description .....	8
Columns .....	8

# DDR

## DDR/DiaGroupRule

This table contains dialer-group rule information.

### XML structure

```
<DDR>
  <DiaGroupRule>
    <GroupRule>
      <GroupNumber></GroupNumber>
      <IpProtocol></IpProtocol>
      <IpPermit></IpPermit>
      <AclNum></AclNum>
      <AclName></AclName>
    </GroupRule>
  </DiaGroupRule>
</DDR>
```

### Table description

Item	Description
Feature name	DDR
Table name	DiaGroupRule
Table type	Multi-instance table
Row name	GroupRule
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupNumber	Dialer-group rule group-number	Index	Unsigned integer. Value range: 1 to 255
IpProtocol	Dialer-group rule ip protocol	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—IPv4 protocol</li><li>• <b>1</b>—IPv6 protocol</li></ul>
IpPermit	Denies or permits packets of the specified protocol	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>false</b></li><li>• <b>true</b></li></ul>

Column name	Column description	Column type	Data type and restrictions
AclNum	Specifies an ACL by its number	N/A	Unsigned integer. Value range: 2000 to 3999
AclName	Specifies an ACL by its name	N/A	String, case insensitive. Length: 1 to 63 characters.

## DDR/Bundle

This table contains the dialer bundle enable of DDR information.

### XML structure

```

<DDR>
  <Bundle>
    <DiaBundle>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </DiaBundle>
  </Bundle>
</DDR>

```

### Table description

Item	Description
Feature name	DDR
Table name	Bundle
Table type	Multi-instance table
Row name	DiaBundle
Restrictions	This table supports only Layer 3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about

Column name	Column description	Column type	Data type and restrictions	Remarks
				IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Enable	Before using bundle DDR, use it to enable bundle DDR on a dialer interface.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

## DDR/IfDiaGroup

This table contains the dialer group of DDR information.

## XML structure

```

<DDR>
  <IfDiaGroup>
    <DiaGroup>
      <IfIndex></IfIndex>
      <Num></Num>
    </DiaGroup>
  </IfDiaGroup>
</DDR>

```

## Table description

Item	Description
Feature name	DDR
Table name	IfDiaGroup
Table type	Multi-instance table
Row name	DiaGroup
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Num	Specifies a dialer group by its number in the range of 1 to 255. Before the assignment, you must create the dialer group.	N/A	Unsigned integer. Value range: 1 to 255.	N/A

## DDR/DDRAutodial

This table contains the information about using **dialer timer autodial** to set the auto-dial timer.

### XML structure

```

<DDR>
  <DDRAutodial>
    <Autodial>
      <IfIndex></IfIndex>
      <Time></Time>
    </Autodial>
  </DDRAutodial>
</DDR>

```

### Table description

Item	Description
Feature name	DDR
Table name	DDRAutodial
Table type	Multi-instance table
Row name	Autodial
Restrictions	This table supports interface types: am interface bri interface/subinterface asy interface

aux interface
serial interface
dialer interface
ethchannel interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Time	Time of uto-dial.	N/A	Unsigned integer. Value range: 1 to 604800.	N/A

## DDR/DDRIdle

This table contains the information about using **dialer timer idle** to set the link idle-timeout timer.

## XML structure

```

<DDR>
  <DDRIdle>
    <Idle>
      <IfIndex></IfIndex>
      <Time></Time>
      <Direct></Direct>
    </Idle>
  </DDRIdle>
</DDR>

```

## Table description

Item	Description
Feature name	DDR
Table name	DDRIdle

Table type	Multi-instance table
Row name	Idle
Restrictions	<p>This table supports interface types:</p> <p>am interface</p> <p>bri interface/subinterface</p> <p>asy interface</p> <p>aux interface</p> <p>serial interface</p> <p>dialer interface</p> <p>ethchannel interface</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Time	link idle-timeout timer	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Direct	Direct of interesting packets timer	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>1—OUT.</li> <li>2—IN.</li> <li>3—INOUT.</li> </ul>	N/A

## DDR/DDRCircularEnable

This table contains the information about using dialer circular enable to enable traditional DDR on a dialup interface.

## XML structure

```

<DDR>
  <DDRCircularEnable>
    <CircularEnable>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </CircularEnable>
  </DDRCircularEnable>
</DDR>

```



```

    </CircularEnable>
  </DDRCircularEnable>
</DDR>

```

## Table description

Item	Description
Feature name	DDR
Table name	DDRCircularEnable
Table type	Multi-instance table
Row name	CircularEnable
Restrictions	This table supports interface types: Dialup interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Enable	Before using traditional DDR, use it to enable traditional DDR on the dialup interface.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

## DDR/DDRDialNumber

This table contains the information about using **dialer number** to configure a dial string for placing calls to a single remote site.

## XML structure

```

<DDR>
  <DDRDialNumber>
    <DialNumber>

```

```

    <IfIndex></IfIndex>
    <Num></Num>
    <AutoDial></AutoDial>
  </DialNumber>
</DDRdialNumber>
</DDR>

```

## Table description

Item	Description
Feature name	DDR
Table name	DDRdialNumber
Table type	Multi-instance table
Row name	DialNumber
Restrictions	This table supports interface types: Dialup interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Num	A dial string for calling a remote site	N/A	String, case-insensitive. Length: 1 to 30 characters.	N/A
AutoDial	Automatically dial the remote site	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—NOTAUTO</li> <li>1—AUTO.</li> </ul>	N/A

# Contents

Comware 7 DDR NETCONF XML API Error Message Reference.....1

    DDR/DDRdialNumber.....1

    DDR/DiaGroupRule.....1

    DDR/DDRAutodial .....1

    DDR/DDRIdle .....1

    DDR/IfDiaGroup .....1

# Comware 7 DDR NETCONF XML API Error Message Reference

## DDR/DDR DialNumber

Message	Explanation
The configuration doesn't meet the requirements. 不符合配置要求。	The configuration parameter is incomplete. 配置参数不全。
Enable DDR first. DDR未使能。	This message means DDR not be configured. 没有DDR特性。

## DDR/DiaGroupRule

Message	Explanation
The configuration doesn't meet the requirements. 不符合配置要求。	The configuration parameter is incomplete. 配置参数不全。
Invalid Acl Name. 非法的ACL名称。	Invalid Acl Name. 非法的ACL名称。

## DDR/DDR Autodial

Message	Explanation
Enable DDR first. DDR未使能。	This message means DDR not be configured. 没有DDR特性。

## DDR/DDR Idle

Message	Explanation
Enable DDR first. DDR未使能。	This message means DDR not be configured. 没有DDR特性。

## DDR/IfDiaGroup

Message	Explanation
Enable DDR first. DDR未使能。	This message means DDR not be configured. 没有DDR特性。

# Contents

- Device .....1
  - Device/Base .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - Device/Transceivers .....1
    - XML structure .....1
    - Table description .....2
    - Columns .....2

# Device

## Device/Base

This table contains device information.

### XML structure

```
<Device>
  <Base>
    <LocalTime></LocalTime>
    <RestoreFactoryDefault/>
  </Base>
</Device>
```

### Table description

Item	Description
Feature name	Device
Table name	Base
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Data type and restrictions
LocalTime	System time on the device.	DateTime. Format: YYYY-MM-DDTHH:MM:SS.
RestoreFactoryDefault	Restore the factory-default configuration for the device.	This column must be empty.

## Device/Transceivers

This table contains information about ITU channels supported on the transceiver that is connected to this interface.

### XML structure

```
<Device>
  <Transceivers>
    <Interface>
```

```

    <IfIndex></IfIndex>
    <ActiveITUChannel></ActiveITUChannel>
  </Interface>
</Transceivers>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	TransceiversITUChannels
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
ActiveITUChannel	The index of the specified ITU channel	N/A	Unsigned integer. Value range:1 to 4294967295.	The value depends on the device model.

# Contents

Device .....	1
Device/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Device/SummerTime .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
Device/FailoverGroups .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
Device/TemperatureSensors .....	7
XML structure .....	7
Table description .....	8
Columns .....	8



# Device

## Device/Base

This table contains device information.

## XML structure

```
<Device>
  <Base>
    <HostName></HostName>
    <ClockProtocol>
      <Protocol></Protocol>
      <MDCID></MDCID>
    </ClockProtocol>
    <TimeZone>
      <Zone></Zone>
      <ZoneName></ZoneName>
    </TimeZone>
  </Base>
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	Base
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HostName	Device name	N/A	String. Length: 1 to 64 characters.	N/A
ClockProtocol	System time source	Data structure	Members include: <ul style="list-style-type: none"><li>Protocol.</li><li>MDCID.</li></ul>	This data structure is supported only on the default MDC.
Protocol	Time protocol	N/A	Enumeration:	Required.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—None.</li> <li>3—NTP.</li> <li>4—PTP.</li> </ul>	Support for NTP and PTP depends on the device model.
MDCID	ID of the MDC used as the time source	N/A	Unsigned integer. Value range: 1 to 65535.	Supported and required on an MDC-supported device that uses NTP or PTP.
TimeZone	Time zone and its name	Data structure	Members include: <ul style="list-style-type: none"> <li>Zone.</li> <li>ZoneName.</li> </ul>	N/A
Zone	Time zone	N/A	String. Use one of the following formats: <ul style="list-style-type: none"> <li><b>Z</b> for the UTC.</li> <li><b>+HH:MM:SS</b> for east time zone.</li> <li><b>-HH:MM:SS</b> for west time zone.</li> </ul> Value ranges: <ul style="list-style-type: none"> <li><b>HH</b>—0 to 23.</li> <li><b>MM</b>—0 to 59.</li> <li><b>SS</b>—0 to 59.</li> </ul>	MM and SS are optional.
ZoneName	Time zone name	N/A	String. Length: 1 to 32 characters.	N/A

## Device/SummerTime

This table contains summer-time information.

### XML structure

```

<Device>
  <SummerTime>
    <Name></Name>
    <AddTime></AddTime>
    <DateBased>
      <BeginMonth></BeginMonth>
      <BeginDay></BeginDay>
      <BeginHour></BeginHour>
      <BeginMinute></BeginMinute>
      <BeginSecond></BeginSecond>
      <EndMonth></EndMonth>
      <EndDay></EndDay>
      <EndHour></EndHour>
      <EndMinute></EndMinute>
      <EndSecond></EndSecond>
    
```

```

</DateBased>
<WeekBased>
  <BeginMonth></BeginMonth>
  <BeginWeek></BeginWeek>
  <BeginWeekDay></BeginWeekDay>
  <BeginHour></BeginHour>
  <BeginMinute></BeginMinute>
  <BeginSecond></BeginSecond>
  <EndMonth></EndMonth>
  <EndWeek></EndWeek>
  <EndWeekDay></EndWeekDay>
  <EndHour></EndHour>
  <EndMinute></EndMinute>
  <EndSecond></EndSecond>
</WeekBased>
</SummerTime>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	SummerTime
Table type	Single-instance table
Row name	N/A
Restrictions	<p>Group DateBased and WeekBased are two configuration ways.</p> <p>Only one way can take effect at the same time.</p> <p>All the members of one group should be included when tack configuration action.</p> <p>New configuration will replace the existing one.</p>
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name for the daylight saving time.	N/A	String. Length: 1 to 32 characters.	N/A
AddTime	The time to be added to the standard time.	N/A	String. Format: • HH:MM:SS	Value ranges: • <b>HH</b> —0 to 23. • <b>MM</b> —0 to 59. • <b>SS</b> —0 to 59.
DateBased	Daylight saving time	Data Structure	Members include: • BeginMonth	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	configuration based on date.		<ul style="list-style-type: none"> <li>BeginDay</li> <li>BeginHour</li> <li>BeginMinute</li> <li>BeginSecond</li> <li>EndMonth</li> <li>EndDay</li> <li>EndHour</li> <li>EndMinute</li> <li>EndSecond</li> </ul>	
BeginMonth	Begin month.	N/A	Unsigned integer. Value range: 1 to 12.	N/A
BeginDay	Begin day.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 1 to 31.</li> </ul>	N/A
BeginHour	Begin hour.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 0 to 23.</li> </ul>	N/A
BeginMinute	Begin minute.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
BeginSecond	Begin second.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
EndMonth	End month.	N/A	Unsigned integer. Value range: 1 to 12.	N/A
EndDay	End day.	N/A	Unsigned integer. Value range: 1 to 31.	N/A
EndHour	End hour.	N/A	Unsigned integer. Value range: 0 to 23.	N/A
EndMinute	End minute.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
EndSecond	End second.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
WeekBased	Daylight saving time configuration based on week.	Data Structure	Members include: <ul style="list-style-type: none"> <li>BeginMonth</li> <li>BeginWeek</li> <li>BeginWeekDay</li> <li>BeginHour</li> <li>BeginMinute</li> <li>BeginSecond</li> <li>EndMonth</li> <li>EndWeek</li> <li>EndWeekDay</li> <li>EndHour</li> <li>EndMinute</li> <li>EndSecond</li> </ul>	N/A
BeginMonth	Begin month.	N/A	Unsigned integer. Value range: 1 to 12.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
BeginWeek	Begin week of the month.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—The first week</li> <li>2—The second week</li> <li>3—The third week</li> <li>4—The fourth week</li> <li>5—The fifth week</li> <li>6—The last week</li> </ul>	Non-existent weeks of the month are treated as the last week.
BeginWeekDay	Begin day of week.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Sunday</li> <li>1—Monday</li> <li>2—Tuesday</li> <li>3—Wednesday</li> <li>4—Thursday</li> <li>5—Friday</li> <li>6—Saturday</li> </ul>	N/A
BeginHour	Begin hour .	N/A	Unsigned integer. Value range: 0 to 23.	N/A
BeginMinute	Begin minute.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
BeginSecond	Begin second.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
EndMonth	End month.	N/A	Unsigned integer. Value range: 1 to 12.	N/A
EndWeek	End week of the month.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—The first week</li> <li>2—The second week</li> <li>3—The third week</li> <li>4—The fourth week</li> <li>5—The fifth week</li> <li>6—The last week</li> </ul>	Non-existent weeks of the month are treated as the last week.
EndWeekDay	End day of week.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Sunday</li> <li>1—Monday</li> <li>2—Tuesday</li> <li>3—Wednesday</li> <li>4—Thursday</li> <li>5—Friday</li> <li>6—Saturday</li> </ul>	N/A
EndHour	End hour .	N/A	Unsigned integer. Value range: 0 to 23.	N/A
EndMinute	End minute.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
EndSecond	End second.	N/A	Unsigned integer. Value range: 0 to 59.	N/A

# Device/FailoverGroups

This table contains failover group information.

## XML structure

```
<Device>
  <FailoverGroups>
    <FailoverGroup>
      <ID></ID>
      <Name></Name>
      <PrimaryNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </PrimaryNode>
      <SecondaryNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </SecondaryNode>
    </FailoverGroup>
  </FailoverGroups>
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	FailoverGroups
Table type	Multi-instance table
Row name	FailoverGroup
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Failover group id	index	Unsigned integer. Value range: 0 to 31.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Failover group name	N/A	String. Length: 1 to 63 characters.	N/A
PrimaryNode	Primary node of the failover group.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>	N/A
Chassis	Chassis ID of the failover group primary node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the failover group primary node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of the failover group primary node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SecondaryNode	Secondary node of the failover group.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>	N/A
Chassis	Chassis ID of the failover group secondary node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the failover group secondary node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of the failover group secondary node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## Device/TemperatureSensors

This table contains temperature sensor alarm settings.

### XML structure

```

<Device>
  <TemperatureSensors>
    <Sensor>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <SensorType></SensorType>
      <SensorIndex></SensorIndex>
      <LowerLimit></LowerLimit>
      <WarningLimit></WarningLimit>
      <AlarmLimit></AlarmLimit>
    </Sensor>
  
```

```

    </TemperatureSensors>
  </Device>

```

## Table description

Item	Description
Feature name	Device
Table name	TemperatureSensors
Table type	Multi-instance table
Row name	Sensor
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Member ID of the member device where the entity resides	Index	Unsigned short. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
SensorType	Type of the temperature sensor	Index	Enumeration: <ul style="list-style-type: none"> <li>0-Inflow</li> <li>1-Outflow</li> <li>2- Hotspot</li> </ul>	N/A
SensorIndex	Resource ID of the temperature sensor.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
LowerLimit	Low-temperature threshold in Celsius degrees	N/A	Short	The specific range is different according to the equipment, and the beyond range can not be set



Column name	Column description	Column type	Data type and restrictions	Remarks
WarningLimit	High-temperature warning threshold in Celsius degrees	N/A	Short	The specific range is different according to the equipment, and the beyond range can not be set
AlarmLimit	High-temperature alarming threshold in Celsius degrees	N/A	Short	The specific range is different according to the equipment, and the beyond range can not be set

# Contents

Contents .....	i
<b>Device .....</b>	<b>1</b>
Device/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
Device/PhysicalEntities .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
Device/ExtPhysicalEntities .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
Device/Transceivers .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
Device/TransceiversChannels .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
Device/TransceiversITUChannels .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
Device/CPU's .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
Device/SummerTime .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
Device/Boards .....	23
XML structure .....	23
Table description .....	23
Columns .....	23
Device/Blades .....	24
XML structure .....	24
Table description .....	24
Columns .....	25
Device/PEXes .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
Device/BladeCapabilities .....	26
XML structure .....	26
Table description .....	26
Columns .....	27
Device/PEXCapabilities .....	27
XML structure .....	27
Table description .....	27
Columns .....	27
Device/FailoverGroupCapabilities .....	27
XML structure .....	28
Table description .....	28

Columns .....	28
Device/FailoverGroups .....	28
XML structure .....	28
Table description .....	29
Columns .....	29
Device/Subcards .....	30
XML structure .....	30
Table description .....	30
Columns .....	30
Device/TemperatureSensors .....	31
XML structure .....	31
Table description .....	31
Columns .....	32
Device/SystemStableStatus .....	33
XML structure .....	33
Table description .....	33
Columns .....	33
Device/BoardStableStatus .....	33
XML structure .....	33
Table description .....	34
Columns .....	34
Device/NetworkClockChassisStatus .....	35
XML structure .....	35
Table description .....	35
Columns .....	35
Device/NetworkClockSrcStatus .....	36
XML structure .....	36
Table description .....	37
Columns .....	37
Device/NetworkClockLPUPortStatus .....	38
XML structure .....	38
Table description .....	38
Columns .....	38

# Device

## Device/Base

This table contains device information.

## XML structure

```
<Device>
  <Base>
    <Uptime></Uptime>
    <HostName></HostName>
    <HostDescription></HostDescription>
    <HostOid></HostOid>
    <MinChassisNum></MinChassisNum>
    <MaxChassisNum></MaxChassisNum>
    <MinSlotNum></MinSlotNum>
    <MaxSlotNum></MaxSlotNum>
    <MinCPUIDNum></MinCPUIDNum>
    <MaxCPUIDNum></MaxCPUIDNum>
    <LocalTime></LocalTime>
    <ClockProtocol>
      <Protocol></Protocol>
      <MDCID></MDCID>
    </ClockProtocol>
    <TimeZone>
      <Zone></Zone>
      <ZoneName></ZoneName>
    </TimeZone>
    <BridgeMAC></BridgeMAC>
    <LocalBridgeMAC></LocalBridgeMAC>
    <VendorName></VendorName>
  </Base>
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	Base
Table type	Single-instance table
Row name	N/A
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Uptime	Time that elapsed after the device started up, in seconds	N/A	Unsigned integer.	N/A
HostName	Device name	N/A	String. Length: 1 to 64 characters.	N/A
HostDescription	Device description	N/A	String. Length: 0 to 255 characters.	N/A
HostOid	System object ID (OID) of the Device	N/A	String, dotted decimal notation.	N/A
MinChassisNum	Minimum number of the chassis	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
MaxChassisNum	Maximum number of the chassis	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
MinSlotNum	Minimum number of the slot	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
MaxSlotNum	Maximum number of the slot	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
MinCPUIDNum	Minimum ID of the CPU	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
MaxCPUIDNum	Maximum ID of the CPU	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ClockProtocol	System time source	Data structure	Members include: <ul style="list-style-type: none"> <li>Protocol.</li> <li>MDCID.</li> </ul>	This data structure is supported only on the default MDC.
Protocol	Time protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>2-None.</li> <li>3-NTP.</li> <li>4-PTP.</li> </ul>	Required. Support for NTP and PTP depends on the device model.
MDCID	ID of the MDC used as the time source	N/A	Unsigned integer. Value range: 1 to 65535.	Supported and required on an MDC-supported device that uses NTP or PTP.
LocalTime	System time on the device	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
TimeZone	Time zone and its name	Data structure	Members include: <ul style="list-style-type: none"> <li>Zone.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>ZoneName.</li> </ul>	
Zone	Time zone.	N/A	String. Use one of the following formats: <ul style="list-style-type: none"> <li><b>Z</b> for the UTC.</li> <li><b>+HH:MM:SS</b> for east time zone.</li> <li><b>-HH:MM:SS</b> for west time zone.</li> </ul> Value ranges: <ul style="list-style-type: none"> <li><b>HH</b>-0 to 23.</li> <li><b>MM</b>-0 to 59.</li> <li><b>SS</b>-0 to 59.</li> </ul>	MM and SS are optional.
ZoneName	Time zone name	N/A	String. Length: 1 to 32 characters.	N/A
BridgeMAC	Bridge MAC Address	N/A	MacAddress	N/A
LocalBridgeMAC	Local Bridge MAC Address	N/A	MacAddress	N/A
VendorName	Vendor name	N/A	String. Length: 1 to 256 characters.	N/A

## Device/PhysicalEntities

This table contains basic information about an entity.

### XML structure

```

<Device>
  <PhysicalEntities>
    <Entity>
      <PhysicalIndex></PhysicalIndex>
      <Chassis></Chassis>
      <Slot></Slot>
      <SubSlot></SubSlot>
      <Description></Description>
      <VendorType></VendorType>
      <ContainedIn></ContainedIn>
      <Class></Class>
      <ParentRelPos></ParentRelPos>
      <Name></Name>
      <HardwareRev></HardwareRev>
      <FirmwareRev></FirmwareRev>
      <SoftwareRev></SoftwareRev>
      <SerialNumber></SerialNumber>
    
```

```

    <MfgName></MfgName>
    <Model></Model>
    <Alias></Alias>
    <AssetID></AssetID>
    <FRU></FRU>
    <MfgDate></MfgDate>
    <Uris></Uris>
  </Entity>
</PhysicalEntities>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	PhysicalEntities
Table type	Multi-instance table
Row name	Entity
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PhysicalIndex	Entity index	Index	Unsigned integer.	
Chassis	ID of the member where the entity resides	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no chassis number, return 0.
Slot	Slot number of the entity	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no slot number, return 65535.
SubSlot	Subslot number of the entity	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no slot number, return 65535.
Description	Entity description	N/A	String. Length: 0 to 255 characters.	N/A
VendorType	Vendor type (OID) of the entity	N/A	String, dotted decimal notation.	N/A
ContainedIn	Position of the entity	N/A	Unsigned integer.	N/A
Class	Entity type	N/A	Enumeration. <ul style="list-style-type: none"> <li>1-Others.</li> <li>2-Unknown.</li> <li>3-Frame.</li> <li>4-Backplane.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• <b>5</b>-Slot or subslot.</li> <li>• <b>6</b>-Power supply.</li> <li>• <b>7</b>-Fan.</li> <li>• <b>8</b>-Sensor.</li> <li>• <b>9</b>-Module. It might indicates a card, a subcard, or, for example, a flash memory.</li> <li>• <b>10</b>-Port.</li> <li>• <b>11</b>-IRF fabric.</li> <li>• <b>12</b>-CPU.</li> </ul>	
ParentRelPos	Position of the entity's parent node	N/A	Signed integer. Minimum: -1.	N/A
Name	Entity name	N/A	String. Length: 0 to 255 characters.	N/A
HardwareRev	Hardware version of the entity	N/A	String. Length: 0 to 255 characters.	N/A
FirmwareRev	Firmware version of the entity	N/A	String. Length: 0 to 255 characters.	N/A
SoftwareRev	Software version of the entity	N/A	String. Length: 0 to 255 characters.	N/A
SerialNumber	Serial number of the entity	N/A	String. Length: 0 to 32 characters.	N/A
MfgName	Manufacturer name of the entity	N/A	String. Length: 0 to 32 characters.	N/A
Model	Entity model	N/A	String. Length: 0 to 255 characters.	N/A
Alias	Alias of the entity	N/A	String. Length: 0 to 32 characters.	N/A
AssetID	Asset ID of the entity	N/A	String. Length: 0 to 32 characters.	N/A
FRU	Whether the entity is a field replaceable unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>True</b>-Supports.</li> <li>• <b>False</b>-Does not support.</li> </ul>	N/A
MfgDate	Manufacture time of the entity	N/A	Format: YYYY-MM-DDTHH:MM:SS.	N/A
Uris	CLEI code	N/A	String. Length: 0 to 32 characters.	N/A



# Device/ExtPhysicalEntities

This table contains extended information about an entity.

## XML structure

```
<Device>
  <ExtPhysicalEntities>
    <Entity>
      <PhysicalIndex></PhysicalIndex>
      <AdminState></AdminState>
      <OperState></OperState>
      <StandbyState></StandbyState>
      <AlarmLight></AlarmLight>
      <CpuUsage ></CpuUsage>
      <CpuUsageThreshold></CpuUsageThreshold>
      <MemUsage></MemUsage>
      <MemUsageThreshold></MemUsageThreshold>
      <MemSize></MemSize>
      <Uptime></Uptime>
      <Temperature></Temperature>
      <TemperatureThreshold></TemperatureThreshold>
      <Voltage></Voltage>
      <VoltageLowThreshold></VoltageLowThreshold>
      <VoltageHighThreshold></VoltageHighThreshold>
      <TemperatureCriticalThreshold></TemperatureCriticalThreshold>
      <MAC></MAC>
      <ErrorStatus></ErrorStatus>
      <CpuMaxUsage></CpuMaxUsage>
      <TemperatureLowThreshold></TemperatureLowThreshold>
      <TemperatureShutdownThreshold></TemperatureShutdownThreshold>
      <PhyMemSize></PhyMemSize>
      <CpuFrequency></CpuFrequency>
      <FristUsedDate></FristUsedDate>
      <CpuAvgUsage></CpuAvgUsage>
      <MemAvgUsage></MemAvgUsage>
      <MemType></MemType>
    </Entity>
  </ExtPhysicalEntities >
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	ExtPhysicalEntities

Table type	Multi-instance table
Row name	Entity
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PhysicalIndex	Entity index	Index	Unsigned integer.
AdminState	Management status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1-Unsupported.</li> <li>2-Disabled.</li> <li>3-Shut down.</li> <li>4-Enabled.</li> </ul>
OperState	Operation status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1-Unsupported.</li> <li>2-Unusable.</li> <li>3-Usable.</li> <li>4-Dangerous, cannot be used.</li> </ul>
StandbyState	Standby status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1-Unsupported.</li> <li>2-Hot standby.</li> <li>3-Cold standby.</li> <li>4-In service.</li> </ul>
AlarmLight	Alarm LED status	N/A	Unsigned integer.
CpuUsage	CPU usage (%)	N/A	Unsigned integer. Value range: 0 to 100
CpuUsageThreshold	CPU usage threshold (%)	N/A	Unsigned integer. Value range: 0 to 100
MemUsage	Memory usage (%)	N/A	Unsigned integer. Value range: 0 to 100
MemUsageThreshold	Memory usage threshold (%)	N/A	Unsigned integer. Value range: 0 to 100
MemSize	Memory size (bytes)	N/A	Unsigned integer.
Uptime	Time that elapsed after the entity started up (seconds)	N/A	Unsigned integer.
Temperature	Temperature of the entity (°C)	N/A	Signed integer.
TemperatureThreshold	High-temperature threshold (°C)	N/A	Signed integer.
Voltage	Voltage of the	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	entity (V)		
VoltageLowThreshold	Low-voltage threshold (V)	N/A	Unsigned integer.
VoltageHighThreshold	High-voltage threshold (V)	N/A	Unsigned integer.
TemperatureCriticalThreshold	Critical high-voltage threshold (°C)	N/A	Signed integer.
MAC	MAC address of the entity	N/A	String. Format: HH-HH-HH-HH-HH-HH
ErrorStatus	Error status of the entity	N/A	Unsigned integer, greater than 0. Commonly used states: <ul style="list-style-type: none"> <li>• 1-Not supported.</li> <li>• 2-Normal.</li> <li>• 3-Power-on self test failure.</li> <li>• 4-The entity is absent.</li> <li>• 11-POE error.</li> <li>• 21-Stack error.</li> <li>• 22-IRF port is blocked.</li> <li>• 23-IRF port failed.</li> <li>• 31-SFP receiving error.</li> <li>• 32-SFP sending error.</li> <li>• 33-SFP error in both direction.</li> <li>• 41-Fan error.</li> <li>• 51-PSU error.</li> <li>• 61-RPS error.</li> <li>• 71-Module is faulty.</li> <li>• 81-Sensor error.</li> <li>• 91-Hardware is faulty.</li> </ul>
CpuMaxUsage	Maximum CPU usage (%)	N/A	Unsigned integer. Value range: 0 to 100
TemperatureLowThreshold	Low temperature threshold (°C)	N/A	Signed integer.
TemperatureShutdownThreshold	Shutdown temperature threshold (°C)	N/A	Signed integer.
PhyMemSize	Physical memory size (bytes)	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$
CpuFrequency	CPU frequency (Hz)	N/A	Unsigned integer.
FristUsedDate	Time when the entity was used for the first time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.
CpuAvgUsage	Average CPU usage (%)	N/A	Unsigned integer. Value range: 0 to 100

Column name	Column description	Column type	Data type and restrictions
MemAvgUsage	Average memory usage (%)	N/A	Unsigned integer. Value range: 0 to 100
MemType	Memory type	N/A	String. Length: 0 to 32 characters.

## Device/Transceivers

This table contains power information about a transceiver module.

### XML structure

```

<Device>
  <Transceivers>
    <Interface>
      <IfIndex></IfIndex>
      <Name></Name>
      <HardwareType></HardwareType>
      <TransceiverType></TransceiverType>
      <WaveLength></WaveLength>
      <VendorName></VendorName>
      <SerialNumber></SerialNumber>
      <FiberDiameterType></FiberDiameterType>
      <TransferDistance></TransferDistance>
      <Diagnostic></Diagnostic>
      <CurRxPower></CurRxPower>
      <MaxRxPower></MaxRxPower>
      <MinRxPower></MinRxPower>
      <CurTxPower></CurTxPower>
      <MaxTxPower></MaxTxPower>
      <MinTxPower></MinTxPower>
      <Temperature></Temperature>
      <Voltage></Voltage>
      <BiasCurrent></BiasCurrent>
      <TemperatureHiAlarm></TemperatureHiAlarm>
      <TemperatureLoAlarm></TemperatureLoAlarm>
      <TemperatureHiWarn></TemperatureHiWarn>
      <TemperatureLoWarn></TemperatureLoWarn>
      <VccHiAlarm></VccHiAlarm>
      <VccLoAlarm></VccLoAlarm>
      <VccHiWarn></VccHiWarn>
      <VccLoWarn></VccLoWarn>
      <BiasHiAlarm></BiasHiAlarm>
      <BiasLoAlarm></BiasLoAlarm>
      <BiasHiWarn></BiasHiWarn>

```

```

<BiasLoWarn></BiasLoWarn>
<PwrOutHiAlarm></PwrOutHiAlarm>
<PwrOutLoAlarm></PwrOutLoAlarm>
<PwrOutHiWarn></PwrOutHiWarn>
<PwrOutLoWarn></PwrOutLoWarn>
<RcvPwrHiAlarm></RcvPwrHiAlarm>
<RcvPwrLoAlarm></RcvPwrLoAlarm>
<RcvPwrHiWarn></RcvPwrHiWarn>
<RcvPwrLoWarn></RcvPwrLoWarn>
<TransceiverErrors></TransceiverErrors>
<VendorOUI></VendorOUI>
<RevisionNumber></RevisionNumber>
<Frequency></Frequency>
<ActiveITUChannel></ActiveITUChannel>
<CurWaveErr></CurWaveErr>
<WaveErrHiAlarm></WaveErrHiAlarm>
<WaveErrLoAlarm></WaveErrLoAlarm>
<CurFreqErr></CurFreqErr>
<FreqErrHiAlarm></FreqErrHiAlarm>
<FreqErrLoAlarm></FreqErrLoAlarm>
</Interface>
</Transceivers>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	Transceiver
Table type	Multi-instance table
Row name	Interface
Restrictions	Available only for interfaces that support a transceiver

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
lflIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about lflIndex, see <i>lflmgr NETCONF XML API Configuration Reference</i> .

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Interface name	N/A	String. Length: 2 to 47 characters.	N/A
HardwareType	Hardware type	N/A	String. Length: 0 to 63 characters.	For example, SM indicates single mode.
TransceiverType	Transceiver type	N/A	String. Length: 0 to 63 characters.	For example, SFP, XFP, and GBIC.
WaveLength	Wave length (nm)	N/A	Integer.	N/A
VendorName	Vendor name	N/A	String. Length: 0 to 63 characters.	N/A
SerialNumber	Serial number	N/A	String. Length: 0 to 63 characters.	N/A
FiberDiameterType	Fiber diameter type	N/A	Unsigned integer. Commonly used values: <ul style="list-style-type: none"> <li>1-Fiber, 9 µm.</li> <li>2-Fiber, 50 µm.</li> <li>3-Fiber, 62.5 µm.</li> <li>4-Copper.</li> <li>65535-Unknown.</li> </ul>	N/A
TransferDistance	Maximum transmission distance (meters)	N/A	Integer.	N/A
Diagnostic	Diagnostic function	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>1-Enabled.</li> <li>2-Disabled.</li> </ul>	N/A
CurRxPower	Current received optical power (hundredths of dBm)	N/A	Integer.	2147483647 means the device doesn't support this feature.
MaxRxPower	Maximum received optical power (hundredths of dBm)	N/A	Integer.	2147483647 means the device doesn't support this feature.
MinRxPower	Minimum received optical power (hundredths of dBm)	N/A	Integer.	2147483647 means the device doesn't support this feature.
CurTxPower	Current transmitted optical power (hundredths of dBm)	N/A	Integer.	2147483647 means the device doesn't support this feature.
MaxTxPower	Maximum transmitted	N/A	Integer.	2147483647 means the device

Column name	Column description	Column type	Data type and restrictions	Remarks
	optical power (hundredths of dBm)			doesn't support this feature.
MinTxPower	Minimum transmitted optical power (hundredths of dBm)	N/A	Integer.	2147483647 means the device doesn't support this feature.
Temperature	Temperature (°C)	N/A	Integer.	N/A
Voltage	Voltage (one hundredth of a volt)	N/A	Integer.	N/A
BiasCurrent	Current (one hundredth of an mA)	N/A	Integer.	N/A
TemperatureHiAlarm	Transceiver temperature high alarm threshold (thousandths of degrees Celsius)	N/A	Integer.	N/A
TemperatureLoAlarm	Transceiver temperature low alarm threshold (thousandths of degrees Celsius)	N/A	Integer.	N/A
TemperatureHiWarn	Transceiver temperature high warning threshold (thousandths of degrees Celsius)	N/A	Integer.	N/A
TemperatureLoWarn	Transceiver temperature low warning threshold (thousandths of degrees Celsius)	N/A	Integer.	N/A
VccHiAlarm	Transceiver VCC high alarm threshold (hundreds of microvolts)	N/A	Integer.	N/A
VccLoAlarm	Transceiver VCC low alarm threshold (hundreds of	N/A	Integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	microvolts)			
VccHiWarn	Transceiver VCC high warning threshold (hundreds of microvolts)	N/A	Integer.	N/A
VccLoWarn	Transceiver VCC low warning threshold (hundreds of microvolts)	N/A	Integer.	N/A
BiasHiAlarm	Transceiver bias high alarm threshold (microamps)	N/A	Integer.	N/A
BiasLoAlarm	Transceiver bias low alarm threshold (microamps)	N/A	Integer.	N/A
BiasHiWarn	Transceiver bias high warning threshold (microamps)	N/A	Integer.	N/A
BiasLoWarn	Transceiver bias low warning threshold (microamps)	N/A	Integer.	N/A
PwrOutHiAlarm	Transceiver transmit power high alarm threshold (tenths of microwatts)	N/A	Integer.	N/A
PwrOutLoAlarm	Transceiver transmit power low alarm threshold (tenths of microwatts)	N/A	Integer.	N/A
PwrOutHiWarn	Transceiver transmit power high warning threshold (tenths of microwatts)	N/A	Integer.	N/A
PwrOutLoWarn	Transceiver transmit	N/A	Integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	power low warning thresholdt (tenths of microwatts)			
RcvPwrHiAlarm	Transceiver receive power high alarm threshold (tenths of microwatts)	N/A	Integer.	N/A
RcvPwrLoAlarm	Transceiver receive power low alarm threshold (tenths of microwatts)	N/A	Integer.	N/A
RcvPwrHiWarn	Transceiver receive power high warning threshold (tenths of microwatts)	N/A	Integer.	N/A
RcvPwrLoWarn	Transceiver receive power low warning threshold (tenths of microwattss)	N/A	Integer.	N/A
TransceiverErrors	Bitmask indicating transceiver errors	N/A	1: xcvrIOError(0) 2: xcvrChecksum(1) 3: xcvrTypeAndPortConfigMismatch(2) 4: xcvrTypeNotSupported(3) 5: wisLocalFault(4) 6: rcvOpticalPowerFault(5) 7: pmapmdReceiverLocalFault(6) 8: pcsReceiveLocalFault(7) 9: phyXSReceiveLocalFault(8) 10: laserBiasCurrentFault(9) 11: laserTemperatureFault(10) 12: laserOutputPowerFault(11) 13: txFault(12) 14: pmapmdTransmitterLocalFault(13) 15: pcsTransmitLocalFault(14) 16: phyXSTransmitLocalFault(15) 17: rxLossOfSignal(16)	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			18:tecError(17) 19:wavelengthUnlocked (18) 20:txIsNotReadyDueToTuning (19)	
VendorOUI	Vendor OUI of the interface	N/A	String. Length: 0 to 255 characters.	N/A
RevisionNumber	Revision number of the interface	N/A	String. Length: 0 to 255 characters.	N/A
Frequency	Frequency(hundredths of THz)	N/A	Integer.	N/A
ActiveITUChannel	Index of the current ITU channel	N/A	Unsigned integer. Value range:1 to 4294967295.	N/A
CurWaveErr	Current wave length error(thousandths of nm)	N/A	Integer.	N/A
WaveErrHiAlarm	High wave length error alarm threshold (thousandths of nm)	N/A	Integer.	N/A
WaveErrLoAlarm	Low wave length error alarm threshold (thousandths of nm)	N/A	Integer.	N/A
CurFreqErr	Current frequency error(tenths of GHz)	N/A	Integer.	N/A
FreqErrHiAlarm	High frequency error alarm threshold (tenths of GHz)	N/A	Integer.	N/A
FreqErrLoAlarm	Low frequency error alarm threshold (tenths of GHz)	N/A	Integer.	N/A

# Device/TransceiversChannels

This table provides statistics for transceiver modules with multiple channels.

## XML structure

```
<Device>
  <TransceiversChannels>
    <Interface>
      <IfIndex></IfIndex>
      <ChannelIndex></ChannelIndex>
      <ChannelCurTXPower></ChannelCurTXPower>
      <ChannelCurRXPower></ChannelCurRXPower>
      <ChannelTemperature></ChannelTemperature>
      <ChannelBiasCurrent></ChannelBiasCurrent>
    </Interface>
  </TransceiversChannels>
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	TransceiversChannels
Table type	Multi-instance table
Row name	Interface
Restrictions	Available only for interfaces that support a transceiver module

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column is available in some versions. For more information, see the XSD document for your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
ChannelIndex	Optical channel index	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
ChannelCurT	Current	N/A	Integer.	2147483647

Column name	Column description	Column type	Data type and restrictions	Remarks
XPower	transmitted optical power of the channel (hundredths of dBm)			means the device doesn't support this feature.
ChannelCurRXPower	Current received optical power of the channel (hundredths of dBm)	N/A	Integer.	2147483647 means the device doesn't support this feature.
ChannelTemperature	Temperature of the channel (°C)	N/A	Integer.	Some versions support current temperature. For relevant information, see the XSD document of your product. 2147483647 means the device doesn't support this feature.
ChannelBiasCurrent	Current of the channel (one hundredth of an mA)	N/A	Integer.	2147483647 means the device doesn't support this feature.

## Device/TransceiversITUChannels

This table contains information about ITU channels supported on the transceiver that is connected to this interface.

### XML structure

```

<Device>
  <TransceiversITUChannels>
    <Interface>
      <IfIndex></IfIndex>
      <ITUChannelIndex></ITUChannelIndex>
      <ITUChannelFrequency></ITUChannelFrequency>
      <ITUChannelWaveLength></ITUChannelWaveLength>
    </Interface>
  </TransceiversITUChannels>
</Device>

```

### Table description

Item	Description
Feature name	Device
Table name	TransceiversITUChannels

Table type	Multi-instance table
Row name	Interface
Restrictions	Available only for ITU channels supported on the transceiver that is connected to this interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
ITUChannelIndex	The index of the specified ITU channel	Index	Unsigned integer. Value range:1 to 4294967295.	N/A
ITUChannelFrequency	The frequency of the specified ITU channel (hundredths of THz)	N/A	Integer.	N/A
ITUChannelWaveLength	The wave length of the specified ITU channel (thousandths of nm)	N/A	Integer.	N/A

## Device/CPU

This table contains usage information about the logical CPUs.

### XML structure

```

<Device>
  <CPUs>
    <CPU>
      <PhysicalIndex></PhysicalIndex>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <CPUUsage></CPUUsage>
    </CPU>
  </CPUs>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	CPUs
Table type	Multi-instance table
Row name	CPU
Restrictions	Available only for logical CPUs

## Columns

Column name	Column description	Column type	Data type and restrictions
PhysicalIndex	Entity index	Index	Unsigned integer.
Chassis	ID of the member where the entity resides	N/A	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the entity	N/A	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	N/A	Unsigned integer. Value range: 0 to 7.
CPUUsage	CPU usage (%)	N/A	Unsigned integer. Value range: 0 to 100.

## Device/SummerTime

This table contains summer-time information.

## XML structure

```
<Device>
  <SummerTime>
    <Name></Name>
    <AddTime></AddTime>
    <DateBased>
      <BeginMonth></BeginMonth>
      <BeginDay></BeginDay>
      <BeginHour></BeginHour>
      <BeginMinute></BeginMinute>
      <BeginSecond></BeginSecond>
      <EndMonth></EndMonth>
      <EndDay></EndDay>
      <EndHour></EndHour>
```

```

    <EndMinute></EndMinute>
    <EndSecond></EndSecond>
  </DateBased>
  <WeekBased>
    <BeginMonth></BeginMonth>
    <BeginWeek></BeginWeek>
    <BeginWeekDay></BeginWeekDay>
    <BeginHour></BeginHour>
    <BeginMinute></BeginMinute>
    <BeginSecond></BeginSecond>
    <EndMonth></EndMonth>
    <EndWeek></EndWeek>
    <EndWeekDay></EndWeekDay>
    <EndHour></EndHour>
    <EndMinute></EndMinute>
    <EndSecond></EndSecond>
  </WeekBased>
</SummerTime>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	SummerTime
Table type	Single-instance table
Row name	N/A
Restrictions	Group DateBased and WeekBased are two configuration ways. Only one way can take effect at the same time.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name for the daylight saving time.	N/A	String. Length: 1 to 32 characters.	N/A
AddTime	The time to be added to the standard time.	N/A	String. Formats: <ul style="list-style-type: none"> <li>HH:MM:SS</li> </ul>	Value ranges: <ul style="list-style-type: none"> <li><b>HH</b>-0 to 23.</li> <li><b>MM</b>-0 to 59.</li> <li><b>SS</b>-0 to 59.</li> </ul>
DateBased	Daylight saving time configuration	Data Structure	Members include: <ul style="list-style-type: none"> <li>BeginMonth</li> <li>BeginDay</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	based on date.		<ul style="list-style-type: none"> <li>BeginHour</li> <li>BeginMinute</li> <li>BeginSecond</li> <li>EndMonth</li> <li>EndDay</li> <li>EndHour</li> <li>EndMinute</li> <li>EndSecond</li> </ul>	
BeginMonth	Begin month.	N/A	Unsigned integer. Value range: 1 to 12.	N/A
BeginDay	Begin day.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 1 to 31.</li> </ul>	N/A
BeginHour	Begin hour.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 0 to 23.</li> </ul>	N/A
BeginMinute	Begin minute.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
BeginSecond	Begin second.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
EndMonth	End month.	N/A	Unsigned integer. Value range: 1 to 12.	N/A
EndDay	End day.	N/A	Unsigned integer. Value range: 1 to 31.	N/A
EndHour	End hour.	N/A	Unsigned integer. Value range: 0 to 23.	N/A
EndMinute	End minute.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
EndSecond	End second.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
WeekBased	Daylight saving time configuration based on week.	Data Structure	Members include: <ul style="list-style-type: none"> <li>BeginMonth</li> <li>BeginWeek</li> <li>BeginWeekDay</li> <li>BeginHour</li> <li>BeginMinute</li> <li>BeginSecond</li> <li>EndMonth</li> <li>EndWeek</li> <li>EndWeekDay</li> <li>EndHour</li> <li>EndMinute</li> <li>EndSecond</li> </ul>	N/A
BeginMonth	Begin month.	N/A	Unsigned integer. Value range: 1 to 12.	N/A
BeginWeek	Begin week of	N/A	Enumeration:	Non-existent weeks of



Column name	Column description	Column type	Data type and restrictions	Remarks
	the month.		<ul style="list-style-type: none"> <li>1-The first week</li> <li>2-The second week</li> <li>3-The third week</li> <li>4-The fourth week</li> <li>5-The fifth week</li> <li>6-The last week</li> </ul>	the month are treated as the last week.
BeginWeekDay	Begin day of week.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0-Sunday</li> <li>1-Monday</li> <li>2-Tuesday</li> <li>3-Wednesday</li> <li>4-Thursday</li> <li>5-Friday</li> <li>6-Saturday</li> </ul>	N/A
BeginHour	Begin hour.	N/A	Unsigned integer. Value range: 0 to 23.	N/A
BeginMinute	Begin minute.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
BeginSecond	Begin second.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
EndMonth	End month.	N/A	Unsigned integer. Value range: 1 to 12.	N/A
EndWeek	End week of the month.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1-The first week</li> <li>2-The second week</li> <li>3-The third week</li> <li>4-The fourth week</li> <li>5-The fifth week</li> <li>6-The last week</li> </ul>	Non-existent weeks of the month are treated as the last week.
EndWeekDay	End day of week.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0-Sunday</li> <li>1-Monday</li> <li>2-Tuesday</li> <li>3-Wednesday</li> <li>4-Thursday</li> <li>5-Friday</li> <li>6-Saturday</li> </ul>	N/A
EndHour	End hour .	N/A	Unsigned integer. Value range: 0 to 23.	N/A
EndMinute	End minute.	N/A	Unsigned integer. Value range: 0 to 59.	N/A
EndSecond	End second.	N/A	Unsigned integer. Value range: 0 to 59.	N/A

# Device/Boards

This table contains board information.

## XML structure

```
<Device>
  <Boards>
    <Board>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <PhysicalIndex></PhysicalIndex>
      <Status></Status>
      <Role></Role>
      <BelongtoCurMDC></BelongtoCurMDC>
    </Board>
  </Boards>
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	Boards
Table type	Multi-instance table
Row name	Board
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Position information of the device Node.	Data structure	Members include: <ul style="list-style-type: none"><li>Chassis</li><li>Slot</li><li>CPUID</li></ul>	N/A
Chassis	ID of the member where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the device node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	0 represent main CPU of current board.
Physical index	Entity index.	N/A	Unsigned integer.	The index is 0 when board is absent.
Status	Status of the device node.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1-Absent</li> <li>2-Normal</li> <li>3-Fault</li> </ul>	N/A
Role	Role of the device node.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1-Unknown</li> <li>2-ActiveMPU</li> <li>3-StandbyMPU</li> <li>4-LPU</li> </ul>	Role is Unknown when status is Absent or Fault.
Belong to Current MDC	Whether the device node belongs to the current MDC	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	An MPU belongs to all MDCs.  If you reclaim an LPU from the default MDC, the LPU does not belong to the default MDC.

## Device/Blades

This table contains blade information.

### XML structure

```

<Device>
  <Blades>
    <Blade>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <Model></Model>
    </Blade>
  </Blades>
</Device>

```

### Table description

Item	Description
Feature name	Device
Table name	Blades
Table type	Multi-instance table

Row name	blade
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
DeviceNode	Position of the device Node.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>
Chassis	ID of the member where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the device node.	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.
Model	Device model of blade board.	N/A	String. Length: 1 to 63 characters.

## Device/PEXes

This table contains PEX board information.

## XML structure

```

<Device>
  <PEXes>
    <PEX>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <Model></Model>
    </PEX>
  </PEXes>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	PEXes

Table type	Multi-instance table
Row name	PEX
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
DeviceNode	Position of the device Node.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>
Chassis	ID of the member where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the device node.	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.
Model	Device model of PEX board.	N/A	String. Length: 1 to 63 characters.

## Device/BladeCapabilities

This table contains capabilities of blade board.

## XML structure

```

<Device>
  <BladeCapabilities>
    <Blade>
      <Model></Model>
    </Blade>
  </BladeCapabilities>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	BladeCapabilities
Table type	Multi-instance table
Row name	Blade
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
Model	Device model of blade board.	Index	String. Length: 1 to 63 characters.

## Device/PEXCapabilities

This table contains capabilities of PEX board.

## XML structure

```
<Device>
  <PEXCapabilities>
    <PEX>
      <Model></Model>
    </PEX>
  </PEXCapabilities>
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	PEXCapabilities
Table type	Multi-instance table
Row name	PEX
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
Model	Device model of PEX board.	Index	String. Length: 1 to 63 characters.

## Device/FailoverGroupCapabilities

This table contains capabilities of failover group.

## XML structure

```
<Device>
  <FailoverGroupCapabilities>
    <FailoverGroupSupport></FailoverGroupSupport>
  </FailoverGroupCapabilities>
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	FailoverGroupCapabilities
Table type	Single -instance table
Row name	N/A
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
FailoverGroupSupport	Is support failover group.	N/A	Boolean: <ul style="list-style-type: none"><li>• true</li><li>• false</li></ul>

## Device/FailoverGroups

This table contains failover group information.

## XML structure

```
<Device>
  <FailoverGroups>
    <FailoverGroup>
      <ID></ID>
      <Name></Name>
      <PrimaryNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </PrimaryNode>
      <SecondaryNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </SecondaryNode>
    </FailoverGroup>
  </FailoverGroups>
</Device>
```

```

    </SecondaryNode>
    <State></State>
  </FailoverGroup>
</FailoverGroups>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	FailoverGroups
Table type	Multi-instance table
Row name	FailoverGroup
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Failover group id	index	Unsigned integer. Value range: 0 to 31.
Name	Failover group name	N/A	String. Length: 1 to 63 characters.
PrimaryNode	Primary node of the failover group.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>
Chassis	Chassis ID of the failover group primary node.	N/A	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the failover group primary node.	N/A	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID of the failover group primary node.	N/A	Unsigned integer. Value range: 0 to 65535.
SecondaryNode	Secondary node of the failover group.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>
Chassis	Chassis ID of the failover group secondary node.	N/A	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the failover group secondary node.	N/A	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID of the failover	N/A	Unsigned integer.



Column name	Column description	Column type	Data type and restrictions
	group secondary node.		Value range: 0 to 65535.
State	State of the failover group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1-Initial</li> <li><b>2-Primary</b></li> <li><b>3-Secondary</b></li> </ul>

## Device/Subcards

This table contains subcard information.

### XML structure

```

<Device>
  <Subcards>
    <Subcard>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <SubSlot></SubSlot>
      <PhysicalIndex></PhysicalIndex>
      <Status></Status>
    </Subcard>
  </Subcards>
</Device>

```

### Table description

Item	Description
Feature name	Device
Table name	Subcards
Table type	Multi-instance table
Row name	Subcard
Restrictions	N/A

### Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the device node.	Index	Unsigned integer. Value range: 0 to 65535.

Column name	Column description	Column type	Data type and restrictions
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.
SubSlot	Subslot number of the entity	Index	Unsigned integer. Value range: 0 to 65535.
PhysicalIndex	Physical index of the subslot	N/A	Unsigned integer. Value range: 0 to 65535.
Status	Status of the subcard	N/A	Enumeration: <ul style="list-style-type: none"> <li>SubcardRemoved-The subcard has been removed.</li> <li>SubcardNormal-The subcard is operating correctly.</li> <li>SubcardFault-The subcard is fault.</li> </ul>

## Device/TemperatureSensors

This table contains the temperature sensor information.

### XML structure

```

<Device>
  <TemperatureSensors>
    <Sensor>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <SensorType></SensorType>
      <SensorIndex></SensorIndex>
      <SensorStatus></SensorStatus>
      <CurrentTemperature></CurrentTemperature>
      <LowerLimit></LowerLimit >
      <WarningLimit></WarningLimit >
      <AlarmLimit></AlarmLimit>
      <ShutdownLimit></ShutdownLimit>
    </Sensor>
  </TemperatureSensors>
</Device>

```

### Table description

Item	Description
Feature name	Device

Table name	TemperatureSensors
Table type	Multi-instance table
Row name	Sensor
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the device node.	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.
SensorType	Type of the temperature sensor.	Index	Enumeration: <ul style="list-style-type: none"> <li>0-inflow</li> <li>1-outflow</li> <li>2-Hotspot</li> </ul>
SensorIndex	Resource ID of the temperature sensor.	Index	Unsigned integer. Value range: 0 to 65535.
SensorStatus	Status of the temperature sensor	N/A	Enumeration: <ul style="list-style-type: none"> <li>TemperatureNormal-The temperature is normal.</li> <li>TemperatureLower-The temperature dropped to or below the low-temperature threshold.</li> <li>TemperatureWarning-The temperature increased to or above the high-temperature warning threshold.</li> <li>TemperatureAlarm-The temperature increased to or above the high-temperature alarming threshold.</li> <li>TemperatureShutdown-The temperature increased to or above the high-temperature shutdown threshold.</li> </ul>
CurrentTemperature	Current temperature (°C)	N/A	Short
LowerLimit	Lower limit temperature (°C)	N/A	Short
WarningLimit	Warning limit temperature (°C)	N/A	Short
AlarmLimit	Alarm limit temperature (°C)	N/A	Short
ShutdownLimit	Shutdown limit temperature (°C)	N/A	Short

# Device/SystemStableStatus

This table contains system stability and status information.

## XML structure

```
<Device>
  <SystemStableStatus>
    <SystemStatus></SystemStatus>
    <Redundancy></Redundancy>
  </SystemStableStatus>
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	SystemStableStatus
Table type	Single-instance table
Row name	N/A
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
SystemStatus	System status	N/A	Enumeration: <ul style="list-style-type: none"><li>Stable</li><li>Not ready</li></ul>
Redundancy	System redundancy status	N/A	Enumeration: <ul style="list-style-type: none"><li>Stable</li><li>No redundancy</li><li>Not ready</li></ul>

# Device/BoardStableStatus

This table contains stability and status information for cards or member devices

## XML structure

```
<Device>
  <BoardStableStatus>
    <StableState>
      <Chassis></Chassis>
      <Slot></Slot>
    </StableState>
  </BoardStableStatus>
</Device>
```

```

    <CPU></CPU>
    <Role></Role>
    <Status></Status>
  </StableState>
</BoardStableStatus>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	BoardStableStatus
Table type	Multi-instance table
Row name	StableState
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.
CPU	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
Role	Role of the card or member device	N/A	Enumeration: <ul style="list-style-type: none"> <li>• Active</li> <li>• Standby</li> <li>• Other</li> </ul>
Status	Status of the card or member device	N/A	Enumeration: <ul style="list-style-type: none"> <li>• Stable</li> <li>• Board inserted</li> <li>• Kernel initiating</li> <li>• Service starting</li> <li>• Service stopping</li> <li>• HA Batch backup</li> <li>• Interface data batch backup</li> <li>• MDC starting</li> <li>• MDC stopping</li> <li>• Context starting</li> <li>• Context stopping</li> </ul>

# Device/NetworkClockChassisStatus

This table contains network clock monitoring module status information.

## XML structure

```
<Device>
  <NetworkClockChassisStatus>
    <ChassisStatus>
      <Chassis></Chassis>
      <Mode></Mode>
      <LockMode></LockMode>
      <SSMOutputLevel></SSMOutputLevel>
      <ControlEnable></ControlEnable>
      <ReferenceType></ReferenceType>
      <ReferenceIndex></ReferenceIndex>
    </ChassisStatus>
  </NetworkClockChassisStatus>
</Device>
```

## Table description

Item	Description
Feature name	Device
Table name	NetworkClockChassisStatus
Table type	Multi-instance table
Row name	ChassisStatus
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Mode	Work mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• Auto</li><li>• Manual</li></ul>	N/A
LockMode	Phase lock status	N/A	Enumeration: <ul style="list-style-type: none"><li>• Freerun</li><li>• Locked</li><li>• Holdover</li><li>• Pre-Locked</li><li>• Pre-Locked2</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Lost</li> <li>Unknown</li> </ul>	
SSMOutputLevel	Signal quality level of the clock source in the SSM	N/A	Enumeration: <ul style="list-style-type: none"> <li>PRC</li> <li>SSU-A</li> <li>SSU-B</li> <li>SEC</li> <li>DNU</li> <li>Unknown</li> </ul>	N/A
ControlEnable	SSM control enabling status	N/A	Enumeration: <ul style="list-style-type: none"> <li>On</li> <li>Off</li> </ul>	N/A
ReferenceType	Reference type	N/A	Enumeration: <ul style="list-style-type: none"> <li>SrcClkmIndex</li> <li>InterfaceIndex</li> </ul>	Used with ReferenceIndex When there is no selected clock source, this column is empty.
ReferenceIndex	Reference index	N/A	Unsigned integer. Value range: 0 to 65535.	When ReferenceType is SrcClkmIndex, this field represents an enumeration, which might be: <ul style="list-style-type: none"> <li>BITS0</li> <li>BITS1</li> <li>PTP</li> </ul> Otherwise it represents an interface index. When there is no selected clock source, this column is empty.

## Device/NetworkClockSrcStatus

This table contains clock source status information.

### XML structure

```

<Device>
  <NetworkClockSrcStatus>
    <SrcStatus>
      <Chassis></Chassis>
      <ClockSource></ClockSource>
      <State></State>
      <Priority></Priority>
      <SSMLLevel></SSMLLevel>
      <ForceSSM></ForceSSM>
      <SABit></SABit>
      <Frequency></Frequency>
    </SrcStatus>
  </NetworkClockSrcStatus>
</Device>

```

```

    </SrcStatus>
  </NetworkClockSrcStatus>
</Device>

```

## Table description

Item	Description
Feature name	Device
Table name	NetworkClockSrcStatus
Table type	Multi-instance table
Row name	SrcStatus
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
ClockSource	Clock source	Index	Enumeration: <ul style="list-style-type: none"> <li>• BITS0</li> <li>• BITS1</li> <li>• PTP</li> </ul>
State	Clock state	N/A	Enumeration: <ul style="list-style-type: none"> <li>• N/A</li> <li>• Normal</li> <li>• Lost</li> </ul>
Priority	Clock priority	N/A	Unsigned integer. Value range: 0 to 255.
SSMLLevel	Clock source quality level in the SSM	N/A	Enumeration: <ul style="list-style-type: none"> <li>• PRC</li> <li>• SSU-A</li> <li>• SSU-B</li> <li>• SEC</li> <li>• DNU</li> <li>• Unknown</li> </ul>
ForceSSM	Whether or not get the SSM level	N/A	Enumeration: <ul style="list-style-type: none"> <li>• On</li> <li>• Off</li> </ul>
SABit	Sa bit used by BITS to transmit the SSM	N/A	Enumeration: <ul style="list-style-type: none"> <li>• N/A</li> <li>• sa4</li> <li>• sa5</li> <li>• sa6</li> <li>• sa7</li> <li>• sa8</li> </ul>



Column name	Column description	Column type	Data type and restrictions
Frequency	Frequency of the BITS clock	N/A	Enumeration: <ul style="list-style-type: none"> <li>N/A</li> <li>2Mbps</li> <li>2MHz</li> </ul>

## Device/NetworkClockLPUPortStatus

This table contains line clock input port status information.

### XML structure

```

<Device>
  <NetworkClockLPUPortStatus>
    <LPUPortStatus>
      <Port></Port>
      <Chassis></Chassis>
      <State></State>
      <Priority></Priority>
      <SSMLLevel></SSMLLevel>
      <ForceSSM></ForceSSM>
      <LPUPort></LPUPort>
    </LPUPortStatus>
  </NetworkClockLPUPortStatus>
</Device>

```

### Table description

Item	Description
Feature name	Device
Table name	NetworkClockLPUPortStatus
Table type	Multi-instance table
Row name	LPUPortStatus
Restrictions	N/A

### Columns

Column name	Column description	Column type	Data type and restrictions
Port	Interface index	Index	Unsigned integer. Value range: 0 to 65535.
Chassis	ID of the member where the entity resides	N/A	Unsigned integer. Value range: 0 to 65535.

Column name	Column description	Column type	Data type and restrictions
State	Clock state	N/A	Enumeration: <ul style="list-style-type: none"> <li>• N/A</li> <li>• Normal</li> <li>• Lost</li> </ul>
Priority	Clock priority	N/A	Unsigned integer. Value range: 0 to 255.
SSMLLevel	Signal quality level of the line clock input port in the SSM	N/A	Enumeration: <ul style="list-style-type: none"> <li>• PRC</li> <li>• SSU-A</li> <li>• SSU-B</li> <li>• SEC</li> <li>• DNU</li> <li>• Unknown</li> </ul>
ForceSSM	Whether or not get the SSM level	N/A	Enumeration: <ul style="list-style-type: none"> <li>• On</li> <li>• Off</li> </ul>
LPUPort	Whether or not the line clock input port is up	N/A	Enumeration: <ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> <li>• N/A</li> </ul>

# Contents

- Device .....2
  - Device/summer time .....2
  - Device/ failovergroup .....2
  - Device/ transceiver.....3

# Device

## Device/summer time

Message	Explanation
Unsupported parameter. 不支持此参数。	When modify the time protocol by netconf, check the parameters are not supported. 通过 netconf 配置时间协议时，检查到参数不支持。
Incomplete parameter. 参数输入不完整。	When modify the time protocol by netconf, check the parameters are incomplete. 通过netconf配置时间协议时，检查到参数不完整。
Please set clock protocol manual mode first. 请先将时间协议配置为手工模式。	If it's not allowed to set system time, please set clock protocol manual mode first. 如果不被允许设置系统时间，需要先将时间协议配置为手工模式。
End time must be later than start time, and the time range determined can't be shorter than one day or longer than one year. 结束时间必须晚于起始时间，并且时间范围不得短于一天或长于一年。	The prompt when failed to set summer time. 设置夏令时失败时的提示。
Please choose either datebased or weekbased to configure the summertime. 请选择基于日期或者基于周的配置方式。	When setting summer time, date and week can only choose one, if both of them are not 0, this prompt will be printed. 设置夏令时时，日期和周只能配置一个，如果日期和周的参数都不为0，则打印此提示。
The device does not support PTP. 当前设备不支持PTP协议。	When setting time source with PTP protocol, but the device doesn't support PTP, this prompt will be printed. 设置设备通过PTP协议获取时间，但设备不支持PTP协议时，会打印此提示。
Invalid date 无效的日期	Setting summer time with begin time and end time, if check out that the begin time or the end time are not allowed, this prompt will be printed. 设置夏令时的起始和终止时间时，检查起始和终止时间不合法时，打印此提示。

## Device/ failovergroup

Message	Explanation
Failed to create the failover group. 创建备份组失败。	The prompt when failed to create the failover group. 创建备份组失败时的提示。
Number of failover groups exceeded the limit. 备份组个数达到最大值。	The prompt when the number of failover groups exceeded the limit. 创建备份组时，备份组个数达到最大值。
This member has been configured as the primary member for another failover group. Please specify another member. 这个节点已经指定为另一个备份组的主节点，请绑	When operate a member, if this member has been configured as the primary member for another failover group, this prompt will be printed. 对某一个节点进行操作时，如果这个节点已经被指定为另一个备份

定其他节点。	组的主节点，则打印此提示。
<p>This member has been added with a different attribute to the group. To change the attribute, remove the member and add the member with the new attribute.</p> <p>这个节点已配置为该备份组的另一属性。需要改变节点属性，请先移除该节点再以新的属性绑定。</p>	<p>When configuring attribute to a member, if this member has been added with a different attribute to the group, this prompt will be printed.</p> <p>对某一节点配置属性时，如果已经配置为该备份组的另一属性，则打印此提示。</p>
<p>The attribute has been configured for another member in this failover group.</p> <p>备份组的这个属性已经配置了另一节点。</p>	<p>When configuring attribute to a member, if this attribute has been added to a different member of the group, this prompt will be printed.</p> <p>对某一节点配置属性时，如果该属性已经配置给了该备份组的另一节点，则打印此提示。</p>
<p>Main and Standby conflict.</p> <p>主备节点冲突。</p>	暂未使用
<p>Operation failed.</p> <p>操作失败。</p>	<p>When operate the failover group failed, and the reason is not clear, this prompt will be printed by default.</p> <p>对备份组操作失败时，但又没有返回问题原因，则默认打印此提示。</p>
<p>The failovergroup name and ID must identify the same failovergroup.</p> <p>输入的备份组名称有误，请输入与ID对应的名称。</p>	<p>When the name and ID is not matched to the failovergroup, this prompt will be printed.</p> <p>如果获取的备份组名称和ID与备份组不匹配，则打印此提示。</p>
<p>Invalid failovergroup ID or Name.</p> <p>输入的备份组ID或Name无效。</p>	<p>When the name and ID is invalid, this prompt will be printed.</p> <p>创建备份组时，输入的备份组ID或Name无效，则打印此提示。</p>

## Device/ transceiver

<p>The transceiver is absent.</p> <p>可插拔光模块不在位。</p>	<p>When failed to set ITU channel num to the driver, the reason is the transceiver is absent.</p> <p>设置ITU channel 通道号到驱动失败时，驱动返回失败原因为可插拔光模块不在位。</p>
<p>The transceiver does not support this function.</p> <p>可插拔光模块不支持该功能。</p>	<p>When failed to set ITU channel num to the driver, the reason is the transceiver does not support this function.</p> <p>设置ITU channel 通道号到驱动失败时，驱动返回失败原因为可插拔光模块不支持该功能。</p>
<p>The port has no transceiver information.</p> <p>获取可插拔光模块信息失败。</p>	<p>When failed to set ITU channel num to the driver, the reason is the port has no transceiver information.</p> <p>设置ITU channel 通道号到驱动失败时，驱动返回失败原因为获取可插拔光模块信息失败。</p>
<p>Operation failed.</p> <p>操作失败。</p>	<p>When failed to set ITU channel num to the driver, and the reason does not given, this prompt will be printed by default.</p> <p>设置ITU channel 通道号到驱动失败时，驱动没有返回失败原因，则默认打印此提示。</p>

# Contents

Device event stream .....	1
BoardEvent event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	2
SubcardEvent event .....	3
XML structure for event subscription .....	3
XML structure for event report .....	4
TemperatureEvent event .....	5
XML structure for event subscription .....	5
XML structure for event report .....	6
SystemStableStatusEvent event .....	8
XML structure for event subscription .....	8
XML structure for event report .....	8
BoardStableStatusEvent event .....	9
XML structure for event subscription .....	9
XML structure for event report .....	10

# Device event stream

## BoardEvent event

This event is used to report card or member device alarm information.

## XML structure for event subscription

```
<BoardEvent>
  <Board>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
  </Board>
</BoardEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Device</stream>
    <filter type="subtree">
      <BoardEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">
        <Board>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
        </Board>
      </BoardEvent >
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	Device
Event name	BoardEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Device:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Chassis	Member ID of the member device where the entity	Unsigned integer. Value range: 0 to	No

Column name	Column description	Data type and restrictions	Support for extended queries
	resides	65535.	
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.	No
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	No

## XML structure for event report

```

<BoardEvent>
  <Board>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <PhysicalIndex></PhysicalIndex>
    <BoardStatus></BoardStatus>
  </Board>
</BoardEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <BoardEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">
    <Board>
      <Chassis>0</Chassis>
      <Slot>0</Slot>
      <CPUID>0</CPUID>
      <PhysicalIndex>100</PhysicalIndex>
      <BoardStatus>BoardNormal</BoardStatus>
    </Board>
  </BoardEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU	Unsigned integer. Value range: 0 to 65535.
PhysicalIndex	Entity index.	Unsigned integer.



Column name	Column description	Data type and restrictions
		Value range: 0 to 65535.
BoardStatus	Status of the card	Enumeration: <ul style="list-style-type: none"> <li>BoardRemoved-The card has been removed.</li> <li>BoardNormal-The card is operating correctly.</li> <li>BoardFault-The card is faulty.</li> </ul>

## SubcardEvent event

This event is used to report subcard alarm information.

## XML structure for event subscription

```
<SubcardEvent>
  <Subcard>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <SubSlot></SubSlot>
  </Subcard>
</SubcardEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Device</stream>
    <filter type="subtree">
      <SubcardEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">
        <Subcard>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
          <SubSlot>1</SubSlot>
        </Subcard>
      </SubcardEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	Device
Event name	SubcardEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Device:1.0

Item	Description
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.	No
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.	No
SubSlot	Subslot number of the entity	Unsigned integer. Value range: 0 to 65535.	No
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	No

## XML structure for event report

```

<SubcardEvent>
  <Subcard>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <SubSlot></SubSlot>
    <PhysicalIndex></PhysicalIndex>
    <SubcardStatus></SubcardStatus>
  </Subcard>
</SubcardEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <SubcardEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">
    <Subcard>
      <Chassis>0</Chassis>
      <Slot>0</Slot>
      <CPUID>0</CPUID>
      <SubSlot>1</SubSlot>
      <PhysicalIndex>100</PhysicalIndex>
      <SubcardStatus>SubcardRemoved</SubcardStatus>
    </Subcard>
  </SubcardEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU	Unsigned integer. Value range: 0 to 65535.
SubSlot	Subslot number of the entity	Unsigned integer. Value range: 0 to 65535.
PhysicalIndex	Entity index.	Unsigned integer. Value range: 0 to 65535.
SubcardStatus	Status of the subcard	Enumeration: <ul style="list-style-type: none"><li>SubcardRemoved-The subcard has been removed.</li><li>SubcardNormal-The subcard is operating correctly.</li><li>SubcardFault-The subcard is fault.</li></ul>

## TemperatureEvent event

This event is used to report temperature alarm information.

## XML structure for event subscription

```
<TemperatureEvent>
  <Temperature>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
  </Temperature>
</TemperatureEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Device</stream>
    <filter type="subtree">
      <TemperatureEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">
        <Temperature>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
```

```

        </Temperature>
    </TemperatureEvent>
</filter>
</create-subscription>
</rpc>

```

## Table description

Item	Description
Event stream name	Device
Event name	TemperatureEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Device:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.	No
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.	No
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	No

## XML structure for event report

```

<TemperatureEvent>
  <Temperature>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <PhysicalIndex></PhysicalIndex>
    <SensorType></SensorType>
    <Status></Status>
    <CurrentTemperature></CurrentTemperature>
    <LowerLimitTemperature></LowerLimitTemperature>
    <WarningLimitTemperature></WarningLimitTemperature>
    <AlarmLimitTemperature></AlarmLimitTemperature>
    <ShutdownLimitTemperature></ShutdownLimitTemperature>
  </Temperature>
</TemperatureEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <TemperatureEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">

```

```

<Temperature>
  <Chassis>0</Chassis>
  <Slot>0</Slot>
  <CPUID>0</CPUID>
  <PhysicalIndex>100</PhysicalIndex>
  <SensorType>Hotspot</SensorType>
  <Status>TemperatureWarning</Status>
  <CurrentTemperature>73</CurrentTemperature>
  <LowerLimitTemperature>0</LowerLimitTemperature>
  <WarningLimitTemperature>65</WarningLimitTemperature>
  <AlarmLimitTemperature>75</AlarmLimitTemperature>
  <ShutdownLimitTemperature>90</ShutdownLimitTemperature>
</Temperature>
</TemperatureEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU	Unsigned integer. Value range: 0 to 65535.
PhysicalIndex	Physical index of the temperature sensor	Unsigned integer. Value range: 0 to 65535.
SensorType	Type of the temperature sensor	Enumeration: <ul style="list-style-type: none"> <li>inflow</li> <li>outflow</li> <li>Hotspot</li> </ul>
Status	Status of the temperature sensor	Enumeration: <ul style="list-style-type: none"> <li>TemperatureNormal-The temperature is normal.</li> <li>TemperatureLower-The temperature dropped to or below the low-temperature threshold.</li> <li>TemperatureWarning-The temperature increased to or above the high-temperature warning threshold.</li> <li>TemperatureAlarm-The temperature increased to or above the high-temperature alarming threshold.</li> <li>TemperatureShutdown-The temperature increased to or above the high-temperature shutdown threshold</li> </ul>
CurrentTemperature	Current Temperature(°C)	Short
LowerLimitTemperature	Lower Limit Temperature(°C)	Short
WarningLimitTemperature	Warning Limit	Short

Column name	Column description	Data type and restrictions
	Temperature(°C)	
AlarmLimitTemperature	Alarm Temperature(°C) Limit	Short
ShutdownLimitTemperature	Shutdown Temperature(°C) Limit	Short

## SystemStableStatusEvent event

This event is used to report system stability and status information.

### XML structure for event subscription

```
<SystemStableStatusEvent>
</SystemStableStatusEvent>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Device</stream>
    <filter type="subtree">
      <SystemStableStatusEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">
        </SystemStableStatusEvent>
      </filter>
    </create-subscription>
  </rpc>
```

### Table description

Item	Description
Event stream name	Device
Event name	SystemStableStatusEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Device:1.0
Support for extended query	No

### Columns

None

### XML structure for event report

```
<SystemStableStatusEvent>
  <SystemStatus></SystemStatus>
  <Redundancy></Redundancy>
</SystemStableStatusEvent>
```

Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
```

```

<eventTime>2016-07-21T09:10:51</eventTime>
<SystemStableStatusEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">
  <SystemStatus>Stable</SystemStatus>
  <Redundancy>Stable</Redundancy>
</SystemStableStatusEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions
SystemStatus	System stable status	Enumeration: <ul style="list-style-type: none"> <li>Stable</li> <li>Not ready</li> </ul>
Redundancy	Status of active/standby	Enumeration: <ul style="list-style-type: none"> <li>Stable</li> <li>No redundancy</li> <li>Not ready</li> </ul>

# BoardStableStatusEvent event

This event is used to report card stability and status information.

## XML structure for event subscription

```

<BoardStableStatusEvent>
  <BoardStableStatus>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
  </BoardStableStatus>
</BoardStableStatusEvent>

```

### Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Device</stream>
    <filter type="subtree">
      <BoardStableStatusEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">
        <BoardStableStatus>
          <Chassis></Chassis>
          <Slot></Slot>
          <CPUID></CPUID>
        </BoardStableStatus>
      </BoardStableStatusEvent>
    </filter>
  </create-subscription>
</rpc>

```

## Table description

Item	Description
Event stream name	Device
Event name	BoardStableStatusEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Device:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.	No
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.	No
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	No

## XML structure for event report

```
<BoardStableStatusEvent>
  <BoardStableStatus>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <Role></Role>
    <Status></Status>
  </BoardStableStatus>
</BoardStableStatusEvent>
```

### Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <BoardStableStatusEvent xmlns="http://www.h3c.com/netconf/event:1.0/Device:1.0">
    <BoardStableStatus>
      <Chassis>1</Chassis>
      <Slot>1</Slot>
      <CPUID>0</CPUID>
      <Role>Standby</Role>
      <Status>Stable</Status>
    </BoardStableStatus>
  </BoardStableStatusEvent>
</notification>
```



## Columns

Column name	Column description	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU	Unsigned integer. Value range: 0 to 65535.
Role	Role of the board	Enumeration: <ul style="list-style-type: none"> <li>• Active</li> <li>• Standby</li> <li>• Other</li> </ul>
Status	Status of the board	Enumeration: <ul style="list-style-type: none"> <li>• Stable</li> <li>• Board inserted</li> <li>• Kernel initiating</li> <li>• Service starting</li> <li>• Service stopping</li> <li>• HA Batch backup</li> <li>• Interface data batch backup</li> <li>• MDC starting</li> <li>• MDC stopping</li> <li>• Context starting</li> <li>• Context stopping</li> <li>• Removed(Stable)</li> </ul>

# Contents

address-pool event stream .....	1
ama-register-to-controller event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	1
ama-report-heart-beat-to-controller event .....	2
XML structure for event subscription .....	2
XML structure for event report .....	2
address-pool-status event .....	3
XML structure for event subscription .....	3
XML structure for event report .....	3
ama-report-address-got-to-controller-ipv4 event .....	5
XML structure for event subscription .....	5
XML structure for event report .....	6
ama-report-address-got-to-controller-ipv6 event .....	7
XML structure for event subscription .....	7
XML structure for event report .....	7
ama-report-address-recycled-to-controller-ipv4 event .....	8
XML structure for event subscription .....	8
XML structure for event report .....	9
ama-report-address-recycled-to-controller-ipv6 event .....	10
XML structure for event subscription .....	10
XML structure for event report .....	10
ama-report-lack-of-address-block event .....	11
XML structure for event subscription .....	11
XML structure for event report .....	12

# address-pool event stream

## ama-register-to-controller event

This event is used to notify controller that AMA registered successfully.

### XML structure for event subscription

```
<ama-register-to-controller>
</ama-register-to-controller>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>address_pool</stream>
  </create-subscription>
</rpc>
```

#### Table description

Item	Description
Event stream name	address-pool
Event name	ama-register-to-controller
Event namespace	urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras
Support for extended query	no

### XML structure for event report

```
<ama-register-to-controller>
  <device-id></device-id>
</ama-register-to-controller>
```

Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <ama-register-to-controller
xmlns="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
    <device-id>5</device-id>
  </ama-register-to-controller>
</notification>
```

#### Table description

Column name	Column description	Data type and restrictions	Remarks
device-id	AMA device id assigned	Unsigned Integer 32	

Column name	Column description	Data type and restrictions	Remarks
	by app	Value range: 0 to 4294967295.	

## ama-report-heart-beat-to-controller event

This event is used to report heart beat to controller for AMA

Controller uses this to detect the inactive of AMA.

The period of heart beat is according to the configuration: flexbng-device-info /controller-send-configuration-to-ama/ device-keep-alive-interval.

.

## XML structure for event subscription

```
<ama-report-heart-beat-to-controller>
</ama-report-heart-beat-to-controller>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>address_pool</stream>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	address-pool
Event name	ama-report-heart-beat-to-controller
Event namespace	urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras
Support for extended query	no

## XML structure for event report

```
<ama-report-heart-beat-to-controller>
  <ama-id>5</ama-id>
</ama-report-heart-beat-to-controller>
```

Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <ama-report-heart-beat-to-controller
xmlns="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
    <ama-id>5</ama-id>
  </ama-report-heart-beat-to-controller>
</notification>
```

## Table description

Column name	Column description	Data type and restrictions	Remarks
ama-id	AMA device id assigned by app	Unsigned Integer 32. Value range: 0 to 4294967295.	

# address-pool-status event

This event is used to report address pool status.

## XML structure for event subscription

```
<ama-register-to-controller >
```

```
</ama-register-to-controller>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
```

```
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
```

```
    <stream>address_pool</stream>
```

```
  </create-subscription>
```

```
</rpc>
```

## Table description

Item	Description
Event stream name	address-pool
Event name	address-pool-status
Event namespace	urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras
Support for extended query	no

## XML structure for event report

```
<address-pool-status>
```

```
  <device-id></device-id>
```

```
  <time></time>
```

```
  <address-pool>
```

```
    <address-pool-name></address-pool-name>
```

```
    <address-pool-id></address-pool-id>
```

```
    <domain-name></domain-name>
```

```
    <address-pool-entries>
```

```
      <ipv4-address-block>
```

```
        <ipv4-address-block-name></ipv4-address-block-name>
```

```
        <ipv4-address-block-id></ipv4-address-block-id>
```

```
        <average-address-usage-ratio></average-address-usage-ratio>
```

```
      </ipv4-address-block>
```

```
      <ipv6-address-block>
```

```

        <ipv6-address-block-name></ipv6-address-block-name>
        <ipv6-address-block-id></ipv6-address-block-id>
        <average-address-usage-ratio></average-address-usage-ratio>
    </ipv6-address-block>
</address-pool-entries>
</address-pool>
</address-pool-status>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <eventTime>2016-07-21T09:10:51</eventTime>
    <address-pool-status
xmlns="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
        <device-id>3</device-id>
        <time>1478260941</time>
        <address-pool>
            <address-pool-name>pool1</address-pool-name>
            <address-pool-id>1</address-pool-id>
            <domain-name>pppoe</domain-name>
            <address-pool-entries>
                <ipv4-address-block>
                    <ipv4-address-block-name>network1</ipv4-address-block-name>
                    <ipv4-address-block-id>1</ipv4-address-block-id>
                    <average-address-usage-ratio>1</average-address-usage-ratio>
                </ipv4-address-block>
            </address-pool-entries>
        </address-pool>
        <address-pool>
            <address-pool-name>pool2</address-pool-name>
            <address-pool-id>2</address-pool-id>
            <domain-name>pppoe</domain-name>
            <address-pool-entries>
                <ipv6-address-block>
                    <ipv6-address-block-name>network1</ipv6-address-block-name>
                    <ipv6-address-block-id>1</ipv6-address-block-id>
                    <average-address-usage-ratio>1</average-address-usage-ratio>
                </ipv6-address-block>
            </address-pool-entries>
        </address-pool>
    </address-pool-status>
</notification>

```

### Table description

Column name	Column description	Data type and restrictions	Remarks
device-id	AMA device id assigned by app	Unsigned Integer 32. Value range: 0 to 4294967295.	

Column name	Column description	Data type and restrictions	Remarks
time	Timestamp of the notification	Unsigned Integer 32. Value range: 0 to 4294967295.	
address-pool-name	Name of the address pool	String String Length:1 to 63	
address-pool-id	Pool ID	Unsigned Integer 32. Value range: 0 to 4294967295.	
domain-name	Domain name	String String Length:1 to 63	
ipv4-address-block-name	Block name	String String Length:1 to 63	
ipv4-address-block-id	Block ID	Unsigned Integer 32. Value range: 0 to 4294967295.	
average-address-usage-ratio	Usage ratio of address pool	Unsigned Integer 32. Value range: 0 to 4294967295.	
Ipv6-address-block-name	IPv6 address block name	String String Length:1 to 63	
Ipv6-address-block-id	IPv6 address block ID	Unsigned Integer 32. Value range: 0 to 4294967295.	

## ama-report-address-got-to-controller-ipv4 event

This event is used to notify controller the distribution result of ipv4 address pools.

### XML structure for event subscription

```
<ama-report-address-got-to-controller-ipv4>
</ama-report-address-got-to-controller-ipv4>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>address_pool</stream>
  </create-subscription>
</rpc>

</rpc>
```

### Table description

Item	Description
Event stream name	address-pool
Event name	ama-report-address-got-to-controller-ipv4
Event namespace	urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras

Item	Description
Support for extended query	no

## XML structure for event report

```

<ama-report-address-got-to-controller-ipv4>
  <device-id></device-id>
  <domain-name></domain-name>
  <address-pool-id></address-pool-id>
  <address-pool-name></address-pool-name>
  <address-block-id></address-block-id>
  <address-block-name></address-block-name>
  <result></result>
</ama-report-address-got-to-controller-ipv4>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <ama-report-address-got-to-controller-ipv4
xmlns="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
    <device-id>5</device-id>
    <domain-name>ppoe</domain-name>
    <address-pool-id>2</address-pool-id>
    <address-pool-name>pool2</address-pool-name>
    <address-block-id>2</address-block-id>
    <address-block-name>network2</address-block-name>
    <result>sucess</result>
  </ama-report-address-got-to-controller-ipv4>
</notification>

```

### Table description

Column name	Column description	Data type and restrictions	Remarks
device-id	Device ID	Unsigned Integer 32 Value range: 0 to 4294967295.	
domain-name	Domain name	OctectString String Length:1 to 63	
address-pool-id	Address pool ID	Unsigned Integer 32. Value range: 0 to 4294967295.	
address-pool-name	Address pool name	OctectString String Length:1 to 63	
address-block-id	Block ID	Value range: 0 to 4294967295.	
address-block-name	Block name	OctectString String Length:1 to 63	



Column name	Column description	Data type and restrictions	Remarks
result	Distribution result of ipv4 address pools	Enumeration: <ul style="list-style-type: none"> <li>success</li> <li>fail</li> </ul>	

## ama-report-address-got-to-controller-ipv6 event

This event is used to notify controller the distribution result of ipv6 address pools.

### XML structure for event subscription

```
<ama-report-address-got-to-controller-ipv6>
</ama-report-address-got-to-controller-ipv6>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>address_pool</stream>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	address-pool
Event name	ama-report-address-got-to-controller-ipv6
Event namespace	urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras
Support for extended query	no

### XML structure for event report

```
<ama-report-address-got-to-controller-ipv6>
  <device-id></device-id>
  <domain-name></domain-name>
  <address-pool-id></address-pool-id>
  <address-pool-name></address-pool-name>
  <address-block-id></address-block-id>
  <address-block-name></address-block-name>
  <result></result>
</ama-report-address-got-to-controller-ipv6>
```

Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
```

```

<ama-report-address-got-to-controller-ipv6
xmlns="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
  <device-id>5</device-id>
  <domain-name>ppoe</domain-name>
  <address-pool-id>2</address-pool-id>
  <address-pool-name>pool2</address-pool-name>
  <address-block-id>2</address-block-id>
  <address-block-name>network2</address-block-name>
  <result>sucess</result>
</ama-report-address-got-to-controller-ipv6>
</notification>

```

### Table description

Column name	Column description	Data type and restrictions	Remarks
device-id	Device ID	Unsigned Integer 32 Value range: 0 to 4294967295.	
domain-name	Domain name	OctectString String Length:1 to 63	
address-pool-id	Address pool ID	Unsigned Integer 32. Value range: 0 to 4294967295.	
address-pool-name	Address pool name	OctectString String Length:1 to 63	
address-block-id	Block ID	Value range: 0 to 4294967295.	
address-block-name	Block name	OctectString String Length:1 to 63	
result	Distribution result of ipv6 address pools	Enumeration: <ul style="list-style-type: none"> <li>• success</li> <li>• fail</li> </ul>	

## ama-report-address-recycled-to-controller-ipv4 event

This event is used to notify controller the recycled result of ipv4 address pools.

### XML structure for event subscription

```

<ama-report-address-recycled-to-controller-ipv4>
</ama-report-address-recycled-to-controller-ipv4>

```

#### Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>address_pool</stream>
  </create-subscription>
</rpc>

```

```

    </create-subscription>
</rpc>

```

## Table description

Item	Description
Event stream name	address-pool
Event name	ama-report-address-recycled-to-controller-ipv4
Event namespace	urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras
Support for extended query	no

## XML structure for event report

```

<ama-report-address-recycled-to-controller-ipv4>
  <device-id></device-id>
  <domain-name></domain-name>
  <address-pool-id></address-pool-id>
  <address-pool-name></address-pool-name>
  <address-block-id></address-block-id>
  <address-block-name></address-block-name>
  <result></result>
</ama-report-address-recycled-to-controller-ipv4>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <ama-report-address-recycled-to-controller-ipv4
xmlns="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
    <device-id>5</device-id>
    <domain-name>ppoe</domain-name>
    <address-pool-id>2</address-pool-id>
    <address-pool-name>pool2</address-pool-name>
    <address-block-id>2</address-block-id>
    <address-block-name>network2</address-block-name>
    <result>sucess</result>
  </ama-report-address-recycled-to-controller-ipv4>
</notification>

```

## Table description

Column name	Column description	Data type and restrictions	Remarks
device-id	Device ID	Unsigned Integer 32	
domain-name	Domain name	OctectString	
address-pool-id	Pool ID	Unsigned Integer 32 Value range: 0 to 4294967295.	
address-pool-	Pool name	OctectString	

Column name	Column description	Data type and restrictions	Remarks
name		String Length:1 to 63	
address-block-id	Block ID	Unsigned Integer 32 Value range: 0 to 4294967295.	
address-block-name	Block name	OctectString String Length:1 to 63	
result	Recycled result of ipv4 address pools	Enumeration: <ul style="list-style-type: none"> <li>• success</li> <li>• fail</li> </ul>	

## ama-report-address-recycled-to-controller-ipv6 event

This event is used to notify controller the recycled result of ipv6 address pools.

### XML structure for event subscription

```
<ama-report-address-recycled-to-controller-ipv6>
</ama-report-address-recycled-to-controller-ipv6>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>address_pool</stream>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	address-pool
Event name	ama-report-address-recycled-to-controller-ipv6
Event namespace	urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras
Support for extended query	no

### XML structure for event report

```
<ama-report-address-recycled-to-controller-ipv6>
  <device-id></device-id>
  <domain-name></domain-name>
  <address-pool-id></address-pool-id>
  <address-pool-name></address-pool-name>
  <address-block-id></address-block-id>
```

```

    <address-block-name></address-block-name>
    <result></result>
</ama-report-address-recycled-to-controller-ipv6>

```

#### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <ama-report-address-recycled-to-controller-ipv6
xmlns="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
    <device-id>5</device-id>
    <domain-name>ppoe</domain-name>
    <address-pool-id>2</address-pool-id>
    <address-pool-name>pool2</address-pool-name>
    <address-block-id>2</address-block-id>
    <address-block-name>network2</address-block-name>
    <result>sucess</result>
  </ama-report-address-recycled-to-controller-ipv6>
</notification>

```

#### Table description

Column name	Column description	Data type and restrictions	Remarks
device-id	Device id	Unsigned Integer 32	
domain-name	Domain name	OctectString	
address-pool-id	Pool id	Unsigned Integer 32 Value range: 0 to 4294967295.	
address-pool-name	Pool name	OctectString String Length:1 to 63	
address-block-id	Block id	Unsigned Integer 32 Value range: 0 to 4294967295.	
address-block-name	Block name	OctectString String Length:1 to 63	
result	Recycled result of ipv6 address pools	Enumeration: <ul style="list-style-type: none"> <li>• success</li> <li>• fail</li> </ul>	

## ama-report-lack-of-address-block event

This event is used to notify controller lack of IP address. When controller receives this notification, it distributes new address pools to device.

### XML structure for event subscription

```

<ama-report-lack-of-address-block>
</ama-report-lack-of-address-block>

```

#### Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>address_pool</stream>
  </create-subscription>
</rpc>

```

## Table description

Item	Description
Event stream name	address-pool
Event name	ama-report-lack-of-address-block
Event namespace	urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras
Support for extended query	no

## XML structure for event report

```

<ama-report-lack-of-address-block>
  <device-id></device-id>
  <domain-name></domain-name>
  <protocol-type></protocol-type>
</ama-report-lack-of-address-block>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <ama-report-lack-of-address-block
xmlns="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
    <device-id>5</device-id>
    <domain-name>ppoe</domain-name>
    <protocol-type>ipv4</protocol-type>
  </ama-report-lack-of-address-block>
</notification>

```

## Table description

Column name	Column description	Data type and restrictions	Remarks
device-id	Device ID	Unsigned Integer 32. Value range: 0 to 4294967295.	
domain-name	Domain name	OctectString String Length:1 to 63	
Protocol-type	Protocl type,ipv4/ipv6	Enumeration: <ul style="list-style-type: none"> <li>1—ipv4.</li> <li>0—ipv6.</li> </ul>	

# Contents

flexbng-device-info .....	1
flexbng-device-info/controller-netconf-registration .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Example .....	1
flexbng-device-info/controller-send-configuration-to-ama .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
Example .....	3

# flexbng-device-info

The namespace of flexbng-device-info is "urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras".

## flexbng-device-info/controller-netconf-registration

This table contains flexbng device registration information.

### XML structure

```
<flexbng-device-info>
  <controller-netconf-registration>
    <device-id></device-id>
  </controller-netconf-registration>
</flexbng-device-info>
```

### Table description

Item	Description
Feature name	flexbng-device-info
Table name	controller-netconf-registration
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
device-id	AMA device id assigned by app	N/A	Unsigned Integer 32. Value range: 0 to 4294967295.

### Example

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target>
      <running/>
    </target>
    <config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0">
      <v:controller-netconf-registration
xmlns:v="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
```



```

        <v:device-id>5</v:device-id>
    </v:controller-netconf-registration>
</config>
</edit-config>
</rpc>

```

## flexbng-device-info/controller-send-configuration-to-ama

This table is used to send configuration to ama for controller.

### XML structure

```

<flexbng-device-info >
  <controller-send-configuration-to-ama>
    <device-keep-alive-interval></device-keep-alive-interval>
    <ipv4-address-pool-usage-threshold></ipv4-address-pool-usage-threshold>
    <ipv6-address-pool-usage-threshold></ipv6-address-pool-usage-threshold>
    <state-update-interval></state-update-interval>
    <device-sampling-interval></device-sampling-interval>
  </controller-send-configuration-to-ama>
</flexbng-device-info>

```

### Table description

Item	Description
Feature name	flexbng-device-info
Table name	controller-send-configuration-to-ama
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
device-keep-alive-interval	Heartbeat interval of confd service	N/A	Unsigned Integer 32. Value range: 0 to 4294967295.
ipv4-address-pool-usage-threshold	IPv4 threshold of pool block usage ratio	N/A	DOUBLE. Value range: 0 to 100.
ipv6-address-pool-usage-threshold	IPv6 threshold of pool block usage ratio	N/A	DOUBLE. Value range: 0 to 100.
state-update-interv	Report interval for pool	N/A	Unsigned Integer 32.

al	block status		Value range: 0 to 4294967295.
device-sampling-interval	Sampling interval for pool block usage ratio	N/A	Unsigned Integer 32. Value range: 0 to 4294967295.

## Example

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target>
      <running/>
    </target>
    <config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0">
      <v:controller-send-configuration-to-ama
xmlns:v="urn:ietf:params:xml:ns:yang:ietf-address-pool:flexbng:vbras">
        <v:device-keep-alive-interval>3</v:device-keep-alive-interval>
<v:ipv4-address-pool-usage-threshold>0.8</v:ipv4-address-pool-usage-threshold>
<v:ipv6-address-pool-usage-threshold>0.8</v:ipv6-address-pool-usage-threshold>
        <v:state-update-interval>5</v:state-update-interval>
        <v:device-sampling-interval>0</v:device-sampling-interval>
      </v:controller-send-configuration-to-ama>
    </config>
  </edit-config>
</rpc>
```

# Contents

ietf-address-pool .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
ietf-address-pool/address-pools/address-pool .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
ietf-address-pool/address-pools/address-pool/ipv4-address-block .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
ietf-address-pool/address-pools/address-pool/ipv6-address-block .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
Example .....	5

# ietf-address-pool

The namespace of flexbng-device-info is "urn:ietf:params:xml:ns:yang:ietf-address-pool".

The Example on the end of this module sets an instance that the module can't be under top node. ietf-address-pool/address-pools.

This table contains address pool configuration information.

## XML structure

```
<ietf-address-pool>
  <address-pools>
    <device-id></device-id>
    <address-pool>
      <address-pool-name></address-pool-name>
      <address-pool-id></address-pool-id>
      <domain-name></domain-name>
      <ipv4-usergateway></ipv4-usergateway>
      <ipv6-usergateway></ipv6-usergateway>
      <gwnetmask></gwnetmask>
      <leasing-time></leasing-time>
      <primarydns></primarydns>
      <secondarydns></secondarydns>
      <address-pool-entries>
        <ipv4-address-block>
          <pool-name></pool-name>
          <ipv4-address-block-name></ipv4-address-block-name>
          <ipv4-address-block-id></ipv4-address-block-id>
          <ipv4-prefix></ipv4-prefix>
          <ipv4-prefix-length></ipv4-prefix-length>
          <time></time>
        </ipv4-address-block>
        <ipv6-address-block>
          <pool-name></pool-name>
          <ipv6-address-block-name></ipv6-address-block-name>
          <ipv6-address-block-id></ipv6-address-block-id>
          <ipv6-prefix></ipv6-prefix>
          <ipv6-prefix-length></ipv6-prefix-length>
          <time></time>
        </ipv6-address-block>
      </address-pool-entries>
    </address-pool>
  </address-pools>
</ietf-address-pool>
```

## Table description

Item	Description
Feature name	ietf-address-pool
Table name	address-pools
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
device-id	AMA device id assigned by app	N/A	Unsigned Integer 32. Value range:0 to 4294967295.
address-pool	Information of the address pool	Sublist	The details of the sublist refer to address-pool table.

## ietf-address-pool/address-pools/address-pool

This table contains address pool configuration information.

## XML structure

Please refer to the XML Structure of ietf-address-pool/address-pools.

## Table description

Item	Description
Feature name	ietf-address-pool
Table name	address-pool
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
address-pool-name	Name of address pool	index	String Length: 1 to 63 characters
address-pool-id	Address pool ID	N/A	Unsigned Integer 32. Value range: 0 to 4294967295.
domain-name	Domain name	N/A	String Length:1 to 63 characters
ipv4-usergateway	Used for IPv4 user addressing	N/A	IPv4 address
ipv6-usergateway	Used for IPv6 user addressing	N/A	IPv6 address
gwnetmask	Netmask for user gateway	N/A	Unsigned Integer 32. Value range: 1 to 128
leasing-time	Leasing time with default 3 days	N/A	Unsigned Integer 32. Value range: 0 to 4294967295. The column can't be changed.Its returned value is always 3 ,no matter which number it is configured for.
primarydns	Primary DNS information	N/A	IP address
secondarydns	Secondary DNS information	N/A	IP address
ipv4-address-block	Information of the ipv4 address block	Sublist	The details of the sublist refer to ipv4-address-block table.
ipv6-address-block	Information of the ipv6 address block	Sublist	The details of the sublist refer to ipv6-address-block table.

## ietf-address-pool/address-pools/address-pool/ipv4-address-block

This table contains address pool configuration information.

## XML structure

Please refer to the XML Structure of ietf-address-pool/address-pools.

## Table description

Item	Description
Feature name	ietf-address-pool
Table name	ipv4-address-block
Table type	Multi-instance table

Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
address-pool-name	Name of address pool	index	String Length:1 to 63 characters	Index of present table
ipv4-address-block-name	Name of IPv4 address block	index	String Length:1 to 63 characters	N/A
ipv4-address-block-id	ID of IPv4 address block	N/A	Unsigned Integer 32. Value range: 0 to 4294967295.	N/A
ipv4-prefix	IPv4 address prefix	N/A	Ipv4Address	N/A
ipv4-prefix-length	IPv4 address prefix length	N/A	Unsigned Integer 32. Value range: 1 to 30.	N/A
time	Address block allocation time	N/A	Unsigned Integer 32. Value range: 0 to 4294967295	For table: ipv4-address-block

## ietf-address-pool/address-pools/address-pool/ipv6-address-block

This table contains address-pool configuration information.

## XML structure

Please refer to the XML Structure of ietf-address-pool/address-pools.

## Table description

Item	Description
Feature name	ietf-address-pool
Table name	Ipv6-address-block
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
address-pool-name	Name of address pool	index	String Length: 1 to 63 characters	Index of present table
ipv6-address-block-name	Name of IPv6 address block	index	String Length: 1 to 63 characters	N/A
ipv6-address-block-id	ID of IPv6 address block	N/A	Unsigned Integer 32. Value range: 0 to 4294967295.	N/A
ipv6-prefix	IPv6 address prefix	N/A	Ipv6Address	N/A
ipv6-prefix-length	IPv6 address prefix length	N/A	Unsigned Integer 32. Value range: 1 to 128.	N/A
time	Address block allocation time	N/A	Unsigned Integer 32. Value range: 0 to 4294967295	For table: ipv6-address-block

## Example

配置一个 IPv4 地址池 pool4

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target>
      <running/>
    </target>
    <config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0">
      <v:address-pools xc:operation="merge"
xmlns:v="urn:ietf:params:xml:ns:yang:ietf-address-pool">
        <v:device-id>3</v:device-id>
        <v:address-pool>
          <v:address-pool-name>pool4</v:address-pool-name>
          <v:address-pool-id>104</v:address-pool-id>
          <v:domain-name>pppoe</v:domain-name>
          <v:ipv4-usergateway>10.2.1.1</v:ipv4-usergateway>
          <v:gwnetmask>24</v:gwnetmask>
          <v:address-pool-entries>
            <v:ipv4-address-block>
              <v:ipv4-address-block-name>network-4</v:ipv4-address-block-name>
              <v:ipv4-address-block-id>40</v:ipv4-address-block-id>
              <v:ipv4-prefix>10.2.1.1</v:ipv4-prefix>
              <v:ipv4-prefix-length>24</v:ipv4-prefix-length>
              <v:time>3</v:time>
            </v:ipv4-address-block>
          </v:address-pool-entries>
        </v:address-pool>
      </v:address-pools>
    </config>
  </edit-config>
</rpc>
```



```

        </v:address-pool>
    </v:address-pools>
</config>
</edit-config>
</rpc>

```

配置一个 IPv6 地址池 pool1

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
    <edit-config>
        <target>
            <running/>
        </target>
        <config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0">
            <v:address-pools xc:operation="merge"
xmlns:v="urn:ietf:params:xml:ns:yang:ietf-address-pool">
                <v:device-id>3</v:device-id>
                <v:address-pool>
                    <v:address-pool-name>pool1</v:address-pool-name>
                    <v:address-pool-id>101</v:address-pool-id>
                    <v:domain-name>pppoe</v:domain-name>
                    <v:ipv6-usergateway>10::3</v:ipv6-usergateway>
                    <v:gwnetmask>64</v:gwnetmask>
                    <v:primarydns>1::1</v:primarydns>
                    <v:secondarydns>1::2</v:secondarydns>
                    <v:address-pool-entries>
                        <v:ipv6-address-block>
                            <v:ipv6-address-block-name>network-0</v:ipv6-address-block-name>
                            <v:ipv6-address-block-id>10</v:ipv6-address-block-id>
                            <v:ipv6-prefix>10::1</v:ipv6-prefix>
                            <v:ipv6-prefix-length>64</v:ipv6-prefix-length>
                            <v:time>3</v:time>
                        </v:ipv6-address-block>
                    </v:address-pool-entries>
                </v:address-pool>
            </v:address-pools>
        </config>
    </edit-config>
</rpc>

```

获取地址池信息

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
    <get>
        <filter type="subtree">
            <v:address-pools
xmlns:v="urn:ietf:params:xml:ns:yang:ietf-address-pool"></v:address-pools>
        </filter>
    </get>
</rpc>

```



# Contents

DHCP .....	1
DHCP/DHCPRelayClearUserInfoByIfIndex .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCP/DHCPServerClearIpInUseByPool .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
DHCP/DHCPServerClearIpInUse .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
DHCP/DHCPRelayClearUserInfo .....	3
XML structure .....	3
Table description .....	3
Columns .....	3

# DHCP

## DHCP/DHCPRelayClearUserInfoByIfIndex

This table is used to clear DHCP relay entries according to interface index.

### XML structure

```
<DHCP>
  <DHCPRelayClearUserInfoByIfIndex>
    <RelayClearUserInfo>
      <IfIndex></IfIndex>
    </RelayClearUserInfo>
  </DHCPRelayClearUserInfoByIfIndex>
</DHCP>
```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelayClearUserInfoByIfIndex
Table type	Multi-instance table
Row name	RelayClearUserInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	If the length of the column is set to 0, all entries will be cleared.

## DHCP/DHCPServerClearIpInUseByPool

This table is used to clear binding information about assigned IP addresses according to pool name.

### XML structure

```
<DHCP>
  <DHCPServerClearIpInUseByPool>
    <ServerClearIpInUse>
      <PoolName></PoolName>
    </ServerClearIpInUse>
  </DHCPServerClearIpInUseByPool>
</DHCP>
```

```

        </ServerClearIpInUse>
    </DHCPServerClearIpInUseByPool>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerClearIpInUseByPool
Table type	Multi-instance table
Row name	ServerClearIpInUse
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PoolName	DHCP address pool name	Index	String, case insensitive. Length: 1 to 63 characters.

# DHCP/DHCPServerClearIpInUse

This table is used to clear binding information about assigned IP addresses.

## XML structure

```

<DHCP>
  <DHCPServerClearIpInUse>
    <ServerClearIpInUse>
      <PoolIndex></PoolIndex>
      <Ipv4Address></Ipv4Address>
    </ServerClearIpInUse>
  </DHCPServerClearIpInUse>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerClearIpInUse
Table type	Multi-instance table
Row name	ServerClearIpInUse
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	DHCP address pool index	Index	Unsigned integer. Value range: 1 to 4096.	N/A
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.	N/A

## DHCP/DHCPRelayClearUserInfo

This table is used to clear DHCP relay entries.

## XML structure

```
<DHCP>
  <DHCPRelayClearUserInfo>
    <RelayClearUserInfo>
      <VrfIndex></VrfIndex>
      <Ipv4Address></Ipv4Address>
    </RelayClearUserInfo>
  </DHCPRelayClearUserInfo>
</DHCP>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelayClearUserInfo
Table type	Multi-instance table
Row name	RelayClearUserInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Index of the VRF	Index	Unsigned integer.	0 means public network
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.	N/A

# Contents

DHCP .....	1
DHCP/DHCPServerIpPool .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
DHCP/DHCPServerPoolStatic .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
DHCP/DHCPConfig .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
DHCP/DHCPIfMode .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
DHCP/DHCPRelaySrvIPv4Address .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
DHCP/DHCPServerPoolOption .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
DHCP/DHCPRelaySourceAddress .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
DHCP/DHCPRelayInfoEnable .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
DHCP/DHCPServerForbiddenIp .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
DHCP/DHCPRelayDiscReqFromTnlEnable .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
DHCP/DHCPRelayMacFowardEnable .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
DHCP/DHCPRelayInfo .....	21
XML structure .....	21
Table description .....	21
Columns .....	22

# DHCP

## DHCP/DHCPServerIpPool

This table contains DHCP server IP pool information.

### XML structure

```
<DHCP>
  <DHCPServerIpPool>
    <IpPool>
      <PoolIndex></PoolIndex>
      <PoolName></PoolName>
      <NetworkIpv4Address></NetworkIpv4Address>
      <NetworkIpv4Mask></NetworkIpv4Mask>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
      <LeaseDay></LeaseDay>
      <LeaseHour></LeaseHour>
      <LeaseMinute></LeaseMinute>
      <LeaseSecond></LeaseSecond>
      <LeaseUnlimit></LeaseUnlimit>
      <DomainName></DomainName>
      <GatewayIpv4Address></GatewayIpv4Address>
      <DNSIpv4Address></DNSIpv4Address>
      <NetbiosType></NetbiosType>
      <NbnsIpv4Address></NbnsIpv4Address>
      <SubnetAlloc></SubnetAlloc>
      <ForbiddenIp>
        <StartForbiddenIpv4Address></StartForbiddenIpv4Address>
        <EndForbiddenIpv4Address></EndForbiddenIpv4Address>
      </ForbiddenIp>
    </IpPool>
  </DHCPServerIpPool>
</DHCP>
```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerIpPool



Table type	Multi-instance table
Row name	IpPool
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	DHCP address pool index	Index	Unsigned integer. Value range: 0 to 4096.	For the merge, create and replace operations, 0 means to automatically assign a minimum unused index.  For the delete and remove operations, 0 cannot be set.
PoolName	DHCP address pool name	N/A	String, case insensitive. Length: 1 to 63 characters.	Required when create a new row, cannot be modified.
NetworkIpv4Address	Primary subnet for dynamic allocation	N/A	String, dotted decimal notation.	Modifying or removing the network configuration deletes the assigned addresses from the current address pool.
NetworkIpv4Mask	Primary subnet mask for dynamic allocation	N/A	String, dotted decimal notation.	If no mask is specified, the natural mask will be used.
StartIpv4Address	Start IP address of IP address range in a DHCP address pool for dynamic allocation	N/A	String, dotted decimal notation.	The address range specified must be within the subnet. The addresses out of the address range cannot be assigned.  It must be configured together with the

Column name	Column description	Column type	Data type and restrictions	Remarks
				EndIpv4Address column.
EndIpv4Address	End IP address of IP address range in a DHCP address pool for dynamic allocation	N/A	String, dotted decimal notation.	It must be configured together with the StartIpv4Address column.
LeaseDay	Days of lease duration	N/A	Unsigned integer. Value range: 0 to 365. Default: 1.	LeaseDay, LeaseHour, LeaseMinute, LeaseSecond must be configured together.  Can not be configured together with LeaseUnlimit.
LeaseHour	Hours of lease duration	N/A	Unsigned integer. Value range: 0 to 23. Default: 0.	N/A
LeaseMinute	Minutes of lease duration	N/A	Unsigned integer. Value range: 0 to 59. Default: 0.	N/A
LeaseSecond	Seconds of lease duration	N/A	Unsigned integer. Value range: 0 to 59. Default: 0.	N/A
LeaseUnlimit	Whether the function of unlimited lease duration is specified.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b>(default)</li> </ul>	Can not be configured together with LeaseDay, LeaseHour, LeaseMinute, LeaseSecond.
DomainName	Domain name	N/A	String, case sensitive. Length: 1 to 50 characters.	N/A
GatewayIpv4Address	Gateway addresses	N/A	String, case insensitive. Length: 1 to 1024 characters.	You can specify a space-separated list of up to 64 addresses. Example:

Column name	Column description	Column type	Data type and restrictions	Remarks
				1.1.1.1 2.2.2.2 3.3.3.3.
DNSIpv4Address	DNS server addresses	N/A	String, case insensitive. Length: 1 to 127 characters.	You can specify a space-separated list of up to eight addresses. Example: 1.1.1.1 2.2.2.2 3.3.3.3.
NetbiosType	NetBIOS node type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—b-node.</li> <li>• 2—p-node.</li> <li>• 3—m-node.</li> <li>• 4—h-node.</li> </ul>	<p>b-node: Specifies the broadcast node. A b-node client sends the destination name in a broadcast message to get the name-to-IP mapping from a server.</p> <p>h-node: Specifies the hybrid node. An h-node client unicasts the destination name to a WINS server. If it does not receive a response, the h-node client broadcasts the destination name to get the mapping from a server.</p> <p>m-node: Specifies the mixed node. An m-node client broadcasts the destination name. If it does not receive a response, the m-node client unicasts the destination name to the WINS server to get the mapping.</p> <p>p-node: Specifies the peer-to-peer node. A p-node client sends the destination name in a unicast message to get</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				the mapping from the WINS server.
NbnsIpv4Address	WINS server addresses	N/A	String, case insensitive. Length: 1 to 127 characters.	You can specify a space-separated list of up to eight addresses. Example: 1.1.1.1 2.2.2.2 3.3.3.3.
SubnetAlloc	The flag of dynamic pool	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—normal pool (default).</li> <li>• 1—dynamic pool.</li> </ul>	Address pool type does not support change again. Configuration StartIpv4Address and EndIpv4Address is not supported when the pool type is dynamic.
ForbiddenIp	IPv4 address excluded from dynamic allocation in the current IP pool.	Data structure	Members include: <ul style="list-style-type: none"> <li>• StartForbiddenIpv4Address</li> <li>• EndForbiddenIpv4Address</li> </ul>	You can specify an IPv4 address range excluded from dynamic allocation.
StartForbiddenIpv4Address	Start IP address of an IP address range that is excluded from dynamic allocation in the current IP pool	N/A	String, dotted decimal notation.	N/A
EndForbiddenIpv4Address	End IP address of an IP address range that is excluded from dynamic allocation in the current IP pool	N/A	String, dotted decimal notation.	EndForbiddenIpv4Address cannot be lower than the StartForbiddenIpv4Address.

# DHCP/DHCPServerPoolStatic

This table contains static binding information of DHCP server IP pool.

## XML structure

```
<DHCP>
  <DHCPServerPoolStatic>
    <IpPoolStatic>
      <PoolIndex></PoolIndex>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
      <CID></CID>
      <HAddress></HAddress>
      <HType></HType>
      <Description></Description>
    </IpPoolStatic>
  </DHCPServerPoolStatic>
</DHCP>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerPoolStatic
Table type	Multi-instance table
Row name	IpPoolStatic
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	DHCP address pool index	Index	Unsigned integer. Value range: 0 to 4096.	The specified PoolIndex must already exist.
Ipv4Address	IP address of the static binding	Index	String, dotted decimal notation.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4Mask	IP address mask of the static binding	N/A	String, dotted decimal notation.	If no mask is specified, the natural mask will be used.
CID	Client ID of the static binding	N/A	String, case insensitive. Length: 4 to 254 characters.	<p>The string can contain only hexadecimal numbers and hyphen (-), in the format of H-H-H.... The last H can be a two-digit or four-digit hexadecimal number while the other Hs must be all four-digit hexadecimal numbers. For example, aabb-cccc-dd is correct, and aabb-c-dddd and aabb-cc-dddd are not correct.</p> <p>Can not be configured together with HAddress, HType column, but one of the CID and HAddress is required.</p> <p>Can not modify bindings. To change the binding for a DHCP client, you must delete the existing binding first and create a new binding.</p>
HAddress	Client hardware address of the static binding	N/A	String, case insensitive. Length: 4 to 79 characters.	<p>The string can contain only hexadecimal numbers and hyphen (-), in the format of H-H-H.... The last H can be a two-digit or four-digit hexadecimal number while the other Hs must be all four-digit</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				hexadecimal numbers. For example, aabb-cccc-dd is correct, and aabb-c-dddd and aabb-cc-dddd are not correct.
HType	Client hardware address type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Ethernet (default).</li> <li>• <b>2</b>—TokenRing.</li> </ul>	It must be configured together with the HAddress column.
Description	Description of the static binding	N/A	String, case insensitive. Length: 1 to 255 characters.	N/A

## DHCP/DHCPConfig

This table contains DHCP server and DHCP relay configuration information.

## XML structure

```

<DHCP>
  <DHCPConfig>
    <DHCPEnable></DHCPEnable>
    <ServerConfig>
      <AlwaysBroadcast></AlwaysBroadcast>
      <IgnoreBOOTP></IgnoreBOOTP>
      <BOOTPReplyRFC1048></BOOTPReplyRFC1048>
      <Opt82Enabled></Opt82Enabled>
      <PingNumber></PingNumber>
      <PingTimeout></PingTimeout>
    </ServerConfig>
    <RelayConfig>
      <UserInfoRecord></UserInfoRecord>
      <UserInfoRefresh></UserInfoRefresh>
      <UserInfoFlushTime></UserInfoFlushTime>
    </RelayConfig>
  </DHCPConfig>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPConfig
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DHCPEnable	Whether the function of DHCP is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b>(default)</li> </ul>	N/A
ServerConfig	The configuration of DHCP server	Data structure	Members include: <ul style="list-style-type: none"> <li>AlwaysBroadcastAlert</li> <li>IgnoreBOOTP</li> <li>BOOTPReplyRFC1048</li> <li>Opt82Enabled</li> <li>PingNumber</li> <li>PingTimeout</li> </ul>	N/A
AlwaysBroadcast	Whether enable the DHCP server to broadcast all responses or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b>(default)</li> </ul>	N/A
IgnoreBOOTP	Whether ignore BOOTP requests or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
BOOTPReplyRFC1048	Whether enable the DHCP server	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	to send BOOTP responses in RFC 1048 format when it receives RFC 1048-incompliant BOOTP requests for statically bound addresses or not.		<ul style="list-style-type: none"> <li><b>false</b>(default)</li> </ul>	
Opt82Enabled	Whether enable the DHCP server to handle Option 82 or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b> (default)</li> <li><b>false</b></li> </ul>	N/A
PingNumber	Maximum number of ping packets	N/A	Unsigned integer. Value range: 0 to 10. Default: 1.	To disable the address conflict detection, set the value to 0.
PingTimeout	Ping response timeout time on the DHCP server	N/A	Unsigned integer. Value range: 0 to 10000 milliseconds. Default: 500 milliseconds.	To disable the ping operation for address conflict detection, set the value to 0 milliseconds.
RelayConfig	The configuration of DHCP relay	Data structure	Members include: <ul style="list-style-type: none"> <li>UserInfoRecord</li> <li>UserInfoRefresh</li> <li>UserInfoFlushTime</li> </ul>	N/A
UserInfoRecord	Whether the function of recording client information in relay entries is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b>(default)</li> </ul>	N/A
UserInfoRefresh	Whether enable the relay agent to periodically refresh dynamic relay entries or	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>(default)</li> <li><b>false</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	not.			
UserInfoFlushTime	Interval at which the DHCP relay agent periodically refreshes relay entries	N/A	Unsigned integer. Value range: 0 to 120 seconds. Default: 0 seconds.	To automatically calculate the refresh interval, set the value to 0 seconds.

## DHCP/DHCPIfMode

This table contains DHCP interface mode information.

## XML structure

```

<DHCP>
  <DHCPIfMode>
    <IfMode>
      <IfIndex></IfIndex>
      <Mode></Mode>
      <ClientDetect></ClientDetect>
    </IfMode>
  </DHCPIfMode>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPIfMode
Table type	Multi-instance table
Row name	IfMode
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Mode	DHCP mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>1</b>—Server (default).</li> <li>• <b>2</b>—Relay.</li> <li>• <b>3</b>—RelayProxy.</li> </ul>	N/A
ClientDetect	Whether to enable client offline detection	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	N/A

## DHCP/DHCPRelaySrvIPv4Address

This table contains DHCP servers on the DHCP relay agent information.

## XML structure

```

<DHCP>
  <DHCPRelaySrvIPv4Address>
    <RelaySrvIPv4>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
    </RelaySrvIPv4>
  </DHCPRelaySrvIPv4Address>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelaySrvIPv4Address
Table type	Multi-instance table
Row name	RelaySrvIPv4
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Ipv4Address	DHCP servers IP address on the DHCP relay agent	Index	String, dotted decimal notation.	N/A

## DHCP/DHCPServerPoolOption

This table contains DHCP server IP pool options information.

## XML structure

```
<DHCP>
  <DHCPServerPoolOption>
    <IpPoolOption>
```

```

    <PoolIndex></PoolIndex>
    <OptionCode></OptionCode>
    <OptionValueHex></OptionValueHex>
    <OptionValueAscii></OptionValueAscii>
    <OptionValueIpAddresses></OptionValueIpAddresses>
  </IpPoolOption>
</DHCPServerPoolOption>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerPoolOption
Table type	Multi-instance table
Row name	IpPoolOption
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	DHCP address pool index	Index	Unsigned integer. Value range: 0 to 4096.	The specified PoolIndex must already exist.
OptionCode	Number of the customized option	Index	Unsigned integer. Value range: 2 to 254.	Excluding 50 through 54, 56, 58, 59, 61, and 82.
OptionValueHex	Hex string as the option content	N/A	String, case insensitive. Length: 2 to 256 characters.	Only one of OptionValueHex, OptionValueAscii and OptionValueIpAddresses can be set. Hex string of even numbers from 2 to 256 as the option content.
OptionValueAscii	ASCII string as	N/A	String, case sensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the option content		Length: 1 to 255 characters.	
OptionValueIpAddresses	IP addresses as the option content	N/A	String, case insensitive. Length: 1 to 127 characters.	If there are multiple addresses, separated them by space. Example: 1.1.1.1 2.2.2.2 3.3.3.3.

## DHCP/DHCPRelaySourceAddress

This table contains information about source IP addresses of the packets sent by the DHCP relay agent.

### XML structure

```

<DHCP>
  <DHCPRelaySourceAddress>
    <RelaySrcAddr>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
      <SourceIfIndex></SourceIfIndex>
    </RelaySrcAddr>
  </DHCPRelaySourceAddress>
</DHCP>

```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelaySourceAddress
Table type	Multi-instance table
Row name	RelaySrcAddr
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Ipv4Address	Source IP addresses of the packets sent by the DHCP relay agent	N/A	String, dotted decimal notation.	Ipv4Address and SourceIfIndex can not be set at the same time.
SourceIfIndex	Index of the interface from which the DHCP relay agent sends packets.	N/A	Unsigned integer.	Ipv4Address and SourceIfIndex cannot be set at the same time.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

## DHCP/DHCPRelayInfoEnable

This table contains information about whether the DHCP relay agent support Option 82.

## XML structure

<DHCP>

```

<DHCPRelayInfoEnable>
  <RelayInfoEnable>
    <IfIndex></IfIndex>
    <InfoEnable></InfoEnable>
  </RelayInfoEnable>
</DHCPRelayInfoEnable>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelayInfoEnable
Table type	Multi-instance table
Row name	RelayInfoEnable
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
InfoEnable	Whether the DHCP relay agent support Option 82.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A



# DHCP/DHCPServerForbiddenIp

This table contains information about IP addresses excluded from dynamic allocation globally.

## XML structure

```
<DHCP>
  <DHCPServerForbiddenIp>
    <ForbiddenIp>
      <VRF></VRF>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
    </ForbiddenIp>
  </DHCPServerForbiddenIp>
</DHCP>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerForbiddenIp
Table type	Multi-instance table
Row name	ForbiddenIp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	If the lease is on the public network, the length of characters is 0.
StartIpv4Address	Start IP address of an IP address range that is excluded from	Index	String, dotted decimal notation.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	dynamic allocation globally			
EndIpv4Address	End IP address of an IP address range that is excluded from dynamic allocation globally	Index	String, dotted decimal notation.	EndIpv4Address cannot be lower than the StartIpv4Address.

## DHCP/DHCPRelayDiscReqFromTnlEnable

This table contains information about whether the DHCP relay discard request from tunnel.

### XML structure

```

<DHCP>
  <DHCPRelayDiscReqFromTnlEnable>
    <RelayDiscardReqFromTnlEnable>
      <IfIndex></IfIndex>
      <DiscardReqFromTnlEnable></DiscardReqFromTnlEnable>
    </RelayDiscardReqFromTnlEnable>
  </DHCPRelayDiscReqFromTnlEnable>
</DHCP>

```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelayDiscReqFromTnlEnable
Table type	Multi-instance table
Row name	RelayDiscardReqFromTnlEnable
Restrictions	This table supports only interface of VSI type
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
DiscardReqFrom TnlEnable	Whether the DHCP relay agent support discard request packet from tunnel .	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A

## DHCP/DHCPRelayMacFowardEnable

This table contains information about whether the DHCP Relay support forward ACK or OFFER packet by Mac Address

## XML structure

```

<DHCP>
  <DHCPRelayMacFowardEnable>
    <RelayMacForwardEnable>
      <MacEnable></MacEnable>
      <MacBroadCast></MacBroadCast>
    </RelayMacForwardEnable>
  </DHCPRelayMacFowardEnable>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP

Table name	DHCPRelayMacForwardEnable
Table type	Multi-instance table
Row name	RelayMacForwardEnable
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacEnable	Whether enable mac forward	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	If mac forward is enable, DHCP server OFFER or ACK packet will forward via unicast.
MacBroadCast	Whether enable mac broadcast		Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	It must configured with MacEnable and Mac Enable must be true.

## DHCP/DHCPRelayInfo

This table contains information about the DHCP relay agent option (Option 82).

## XML structure

```

<DHCP>
  <DHCPRelayInfo>
    <RelayInfo>
      <IfIndex></IfIndex>
      <CircuitIdMode></CircuitIdMode>
    </RelayInfo>
  </DHCPRelayInfo>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP

Item	Description
Table name	DHCPRelayInfo
Table type	Multi-instance table
Row name	RelayInfo
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
CircuitIdMode	Mode of the Circuit ID sub-option in Option 82	N/A	String, case-insensitive. Values include: <ul style="list-style-type: none"> <li><b>NormalHex</b> (default)</li> <li><b>NormalAscii</b></li> <li><b>VxlanPort</b></li> </ul>	N/A

# Contents

DHCP .....	1
DHCP/DHCPServerIpPool .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
DHCP/DHCPServerPoolStatic .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
DHCP/DHCPServerIpInUse .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
DHCP/DHCPConfig .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
DHCP/DHCPIfMode .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
DHCP/DHCPRelaySrvIPv4Address .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
DHCP/DHCPRelayUserInfo .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
DHCP/DHCPServerPoolOption .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
DHCP/DHCPServerPoolStatistics .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
DHCP/DHCPRelaySourceAddress .....	18
XML structure .....	19
Table description .....	19
Columns .....	19
DHCP/DHCPRelayInfoEnable .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
DHCP/DHCPServerLeaseInfo .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
DHCP/DHCPServerForbiddenIp .....	22
XML structure .....	22
Table description .....	23
Columns .....	23
DHCP/DHCPServerSubnetInUse .....	24
XML structure .....	24
Table description .....	24
Columns .....	24

DHCP/DHCPRelayDiscReqFromTnlEnable .....	25
XML structure .....	26
Table description .....	26
Columns .....	26
DHCP/DHCPRelayMacFowardEnable .....	27
XML structure .....	27
Table description .....	27
Columns .....	27
DHCP/DHCPRelayInfo .....	28
XML structure .....	28
Table description .....	28
Columns .....	28

# DHCP

## DHCP/DHCPServerIpPool

This table contains DHCP server IP pool information.

### XML structure

```
<DHCP>
  <DHCPServerIpPool>
    <IpPool>
      <PoolIndex></PoolIndex>
      <PoolName></PoolName>
      <NetworkIpv4Address></NetworkIpv4Address>
      <NetworkIpv4Mask></NetworkIpv4Mask>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
      <LeaseDay></LeaseDay>
      <LeaseHour></LeaseHour>
      <LeaseMinute></LeaseMinute>
      <LeaseSecond></LeaseSecond>
      <LeaseUnlimit></LeaseUnlimit>
      <DomainName></DomainName>
      <GatewayIpv4Address></GatewayIpv4Address>
      <DNSIpv4Address></DNSIpv4Address>
      <NetbiosType></NetbiosType>
      <NbnsIpv4Address></NbnsIpv4Address>
      <ForbiddenIp>
        <StartForbiddenIpv4Address></StartForbiddenIpv4Address>
        <EndForbiddenIpv4Address></EndForbiddenIpv4Address>
      </ForbiddenIp>
    </IpPool>
  </DHCPServerIpPool>
</DHCP>
```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerIpPool
Table type	Multi-instance table



Row name	IpPool
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	DHCP address pool index	Index	Unsigned integer. Value range: 0 to 4096.	N/A
PoolName	DHCP address pool name	N/A	String, case insensitive. Length: 1 to 63 characters.	N/A
NetworkIpv4Address	Primary subnet for dynamic allocation	N/A	String, dotted decimal notation.	N/A
NetworkIpv4Mask	Primary subnet mask for dynamic allocation	N/A	String, dotted decimal notation.	If no mask is specified, the natural mask will be used.
StartIpv4Address	Start IP address of IP address range in a DHCP address pool for dynamic allocation	N/A	String, dotted decimal notation.	N/A
EndIpv4Address	End IP address of IP address range in a DHCP address pool for dynamic allocation	N/A	String, dotted decimal notation.	N/A
LeaseDay	Days of lease duration	N/A	Unsigned integer. Value range: 0 to 365.	N/A
LeaseHour	Hours of lease duration	N/A	Unsigned integer. Value range: 0 to 23.	N/A
LeaseMinute	Minutes of lease duration	N/A	Unsigned integer. Value range: 0 to 59.	N/A
LeaseSecond	Seconds of lease duration	N/A	Unsigned integer. Value range: 0 to 59.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LeaseUnlimit	Whether the function of unlimited lease duration is specified.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
DomainName	Domain name	N/A	String, case sensitive. Length: 1 to 50 characters.	N/A
GatewayIpv4Address	Gateway addresses	N/A	String, case insensitive. Length: 1 to 1024 characters.	You can specify a space-separated list of up to 64 addresses. Example: 1.1.1.1 2.2.2.2 3.3.3.3.
DNSIpv4Address	DNS server addresses	N/A	String, case insensitive. Length: 1 to 127 characters.	You can specify a space-separated list of up to eight addresses. Example: 1.1.1.1 2.2.2.2 3.3.3.3.
NetbiosType	NetBIOS node type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—b-node.</li> <li><b>2</b>—p-node.</li> <li><b>3</b>—m-node.</li> <li><b>4</b>—h-node.</li> </ul>	b-node: Specifies the broadcast node. A b-node client sends the destination name in a broadcast message to get the name-to-IP mapping from a server.  h-node: Specifies the hybrid node. An h-node client unicasts the destination name to a WINS server. If it does not receive a response, the h-node client broadcasts the destination name to get the mapping from a server.  m-node: Specifies the

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>mixed node. An m-node client broadcasts the destination name. If it does not receive a response, the m-node client unicasts the destination name to the WINS server to get the mapping.</p> <p>p-node: Specifies the peer-to-peer node. A p-node client sends the destination name in a unicast message to get the mapping from the WINS server.</p>
NbnsIpv4Address	WINS server addresses	N/A	String, case insensitive. Length: 1 to 127 characters.	<p>You can specify a space-separated list of up to eight addresses.</p> <p>Example: 1.1.1.1 2.2.2.2 3.3.3.3.</p>
ForbiddenIp	IPv4 address excluded from dynamic allocation in the current IP pool.	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>StartForbiddenIpv4Address</li> <li>EndForbiddenIpv4Address</li> </ul>	You can specify an IPv4 address range excluded from dynamic allocation.
StartForbiddenIpv4Address	Start IP address of an IP address range that is excluded from dynamic allocation in the current IP pool	N/A	String, dotted decimal notation.	N/A
EndForbiddenIpv4Address	End IP address of an IP address range that is excluded from dynamic allocation	N/A	String, dotted decimal notation.	EndForbiddenIpv4Address cannot be lower than the StartForbiddenIpv4Address.

Column name	Column description	Column type	Data type and restrictions	Remarks
	in the current IP pool			

## DHCP/DHCPServerPoolStatic

This table contains static binding information of DHCP server IP pool.

### XML structure

```

<DHCP>
  <DHCPServerPoolStatic>
    <IpPoolStatic>
      <PoolIndex></PoolIndex>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
      <CID></CID>
      <HAddress></HAddress>
      <HType></HType>
      <Description></Description>
    </IpPoolStatic>
  </DHCPServerPoolStatic>
</DHCP>

```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerPoolStatic
Table type	Multi-instance table
Row name	IpPoolStatic
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	DHCP address	Index	Unsigned integer.	The specified PoolIndex

Column name	Column description	Column type	Data type and restrictions	Remarks
	pool index		Value range: 0 to 4096.	must already exist.
Ipv4Address	IP address of the static binding	Index	String, dotted decimal notation.	N/A
Ipv4Mask	IP address mask of the static binding	N/A	String, dotted decimal notation.	If no mask is specified, the natural mask will be used.
CID	Client ID of the static binding	N/A	String, case insensitive. Length: 4 to 254 characters.	The string can contain only hexadecimal numbers and hyphen (-), in the format of H-H-H.... The last H can be a two-digit or four-digit hexadecimal number while the other Hs must be all four-digit hexadecimal numbers. For example, aabb-cccc-dd is correct, and aabb-c-dddd and aabb-cc-dddd are not correct.
HAddress	Client hardware address of the static binding	N/A	String, case insensitive. Length: 4 to 79 characters.	The string can contain only hexadecimal numbers and hyphen (-), in the format of H-H-H.... The last H can be a two-digit or four-digit hexadecimal number while the other Hs must be all four-digit hexadecimal numbers. For example, aabb-cccc-dd is correct, and aabb-c-dddd and aabb-cc-dddd are not correct.
HType	Client hardware address type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ethernet.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—TokenRing.</li> </ul>	
Description	Description of the static binding	N/A	String, case insensitive. Length: 1 to 255 characters.	N/A

## DHCP/DHCPServerIpInUse

This table contains binding information about assigned IP addresses.

### XML structure

```

<DHCP>
  <DHCPServerIpInUse>
    <IpInUse>
      <PoolIndex></PoolIndex>
      <Ipv4Address></Ipv4Address>
      <CID></CID>
      <HAddress></HAddress>
      <HType></HType>
      <VLANID></VLANID>
      <EndLease></EndLease>
      <Type></Type>
      <IfIndex></IfIndex>
    </IpInUse>
  </DHCPServerIpInUse>
</DHCP>

```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerIpInUse
Table type	Multi-instance table
Row name	IpInUse
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	DHCP address pool index	Index	Unsigned integer. Value range: 0 to 4096.	N/A
Ipv4Address	IP address allocated to client	N/A	String, dotted decimal notation.	N/A
CID	Client ID of the static binding	N/A	String, case-insensitive. Length: 4 to 254 characters.	The string can contain only hexadecimal numbers and hyphen (-), in the format of H-H-H.... The last H can be a two-digit or four-digit hexadecimal number while the other Hs must be all four-digit hexadecimal numbers. For example, aabb-cccc-dd is correct, and aabb-c-dddd and aabb-cc-dddd are not correct.
HAddress	Client hardware address of the static binding	N/A	String, case-insensitive. Length: 4 to 79 characters.	The string can contain only hexadecimal numbers and hyphen (-), in the format of H-H-H.... The last H can be a two-digit or four-digit hexadecimal number while the other Hs must be all four-digit hexadecimal numbers. For example, aabb-cccc-dd is correct, and

Column name	Column description	Column type	Data type and restrictions	Remarks
				aabb-c-dddd and aabb-cc-dddd are not correct.
HType	Client hardware address of the static binding	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—ethernet.</li> <li>2—tokenRing.</li> </ul>	ethernet: the client hardware address type is Ethernet. tokenRing: the client hardware address type as token ring.
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
EndLease		N/A	String, case-insensitive. Length: 1 to 19 characters.	Format: month/day/year hour:minute:second (MM/DD/YYYY hh:mm:ss)
Type		N/A	Enumeration: <ul style="list-style-type: none"> <li>1—staticUnallocated.</li> <li>2—staticOffered.</li> <li>3—staticCommitted.</li> <li>4—autoOffered.</li> <li>5—autoCommitted.</li> </ul>	staticUnallocated: A free static binding whose IP address has not been assigned.  staticOffered: An offered static binding whose IP address has been selected and sent by the DHCP server in a DHCP-OFFER packet to the client.  staticCommitted: A committed static binding whose IP address has been assigned to the DHCP client.  autoOffered: An offered temporary dynamic binding whose IP address has



Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>been dynamically selected by the DHCP server and sent in a DHCP-OFFER packet to the DHCP client.</p> <p>autoCommitted: A committed dynamic binding whose IP address has been dynamically assigned to the DHCP client.</p>
lflIndex	Interface index		Unsigned integer.	N/A

## DHCP/DHCPConfig

This table contains DHCP server and DHCP relay configuration information.

## XML structure

```

<DHCP>
  <DHCPConfig>
    <DHCPEnable></DHCPEnable>
    <ServerConfig>
      <AlwaysBroadcast></AlwaysBroadcast>
      <IgnoreBOOTP></IgnoreBOOTP>
      <BOOTPReplyRFC1048></BOOTPReplyRFC1048>
      <Opt82Enabled></Opt82Enabled>
      <PingNumber></PingNumber>
      <PingTimeout></PingTimeout>
    </ServerConfig>
    <RelayConfig>
      <UserInfoRecord></UserInfoRecord>
      <UserInfoRefresh></UserInfoRefresh>
      <UserInfoFlushTime></UserInfoFlushTime>
    </RelayConfig>
  </DHCPConfig>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPConfig
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DHCPEnable	Whether the function of DHCP is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
ServerConfig	The configuration of DHCP server	Data structure	Members include: <ul style="list-style-type: none"><li>• AlwaysBroadcastAlert</li><li>• IgnoreBOOTP</li><li>• BOOTPReplyRFC1048</li><li>• Opt82Enabled</li><li>• PingNumber</li><li>• PingTimeout</li></ul>	N/A
AlwaysBroadcast	Whether Enable the DHCP server to broadcast all responses or not.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
IgnoreBOOTP	Whether Ignore BOOTP requests or not.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
BOOTPReplyRFC1048	Whether enable the DHCP server to send BOOTP	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	responses in RFC 1048 format when it receives RFC 1048-incompliant BOOTP requests for statically bound addresses or not.			
Opt82Enabled	Whether enable the DHCP server to handle Option 82 or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
PingNumber	Maximum number of ping packets	N/A	Unsigned integer. Value range: 0 to 10.	To disable the address conflict detection, set the value to 0.
PingTimeout	Ping response timeout time on the DHCP server	N/A	Unsigned integer. Value range: 0 to 10000 milliseconds.	To disable the ping operation for address conflict detection, set the value to 0 milliseconds.
RelayConfig	The configuration of DHCP relay	Data structure	Members include: <ul style="list-style-type: none"> <li>UserInfoRecord</li> <li>UserInfoRefresh</li> <li>UserInfoFlushTime</li> </ul>	N/A
UserInfoRecord	Whether the function of recording client information in relay entries is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
UserInfoRefresh	Whether enable the relay agent to periodically refresh dynamic relay entries or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
UserInfoFlushTime	Interval at which the DHCP relay agent periodically refreshes relay entries	N/A	Unsigned integer. Value range: 0 to 120 seconds.	To automatically calculate the refresh interval, set the value to 0 seconds.

## DHCP/DHCPIfMode

This table contains DHCP interface mode information.

### XML structure

```

<DHCP>
  <DHCPIfMode>
    <IfMode>
      <IfIndex></IfIndex>
      <Mode></Mode>
      <ClientDetect></ClientDetect>
    </IfMode>
  </DHCPIfMode>
</DHCP>

```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPIfMode
Table type	Multi-instance table
Row name	IfMode
Restrictions	This table supports only Layer 3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	DHCP mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>1</b>—Server.</li> <li>• <b>2</b>—Relay.</li> <li>• <b>3</b>—RelayProxy.</li> </ul>	N/A
ClientDetect	Whether to enable client offline detection	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	

## DHCP/DHCPRelaySrvIPv4Address

This table contains DHCP servers on the DHCP relay agent information.

### XML structure

```

<DHCP>
  <DHCPRelaySrvIPv4Address>
    <RelaySrvIPv4>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
    </RelaySrvIPv4>
  </DHCPRelaySrvIPv4Address>
</DHCP>

```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelaySrvIPv4Address
Table type	Multi-instance table
Row name	RelaySrvIPv4
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	N/A
Ipv4Address	DHCP servers IP address on the DHCP relay agent	Index	String, dotted decimal notation.	N/A

## DHCP/DHCPRelayUserInfo

This table contains DHCP relay entries information.

## XML structure

```
<DHCP>
  <DHCPRelayUserInfo>
    <RelayUserInfo>
      <VrfIndex></VrfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
      <IfIndex></IfIndex>
    </RelayUserInfo>
  </DHCPRelayUserInfo>
</DHCP>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelayUserInfo
Table type	Multi-instance table
Row name	RelayUserInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Index of the VRF	Index	Unsigned integer.	0 means public network.
Ipv4Address	DHCP servers IP address on the DHCP relay agent	Index	String, dotted decimal notation.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
IfIndex	Interface Index	N/A	Unsigned integer.	0 means no interface information.

## DHCP/DHCPServerPoolOption

This table contains DHCP server IP pool options information.

## XML structure

```
<DHCP>
  <DHCPServerPoolOption>
    <IpPoolOption>
      <PoolIndex></PoolIndex>
      <OptionCode></OptionCode>
      <OptionValueHex></OptionValueHex>
      <OptionValueAscii></OptionValueAscii>
      <OptionValueIpAddresses></OptionValueIpAddresses>
    </IpPoolOption>
  </DHCPServerPoolOption>
</DHCP>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerPoolOption
Table type	Multi-instance table

Row name	IpPoolOption
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	DHCP address pool index	Index	Unsigned integer. Value range: 0 to 4096.	The specified PoolIndex must already exist.
OptionCode	Number of the customized option	Index	Unsigned integer. Value range: 2 to 254.	Excluding 50 through 54, 56, 58, 59, 61, and 82.
OptionValueHex	Hex string as the option content	N/A	String, case insensitive. Length: 2 to 256 characters.	Hex string of even numbers from 2 to 256 as the option content.
OptionValueAscii	ASCII string as the option content	N/A	String, case sensitive. Length: 1 to 255 characters.	N/A
OptionValueIpAddresses	IP addresses as the option content	N/A	String, case insensitive. Length: 1 to 127 characters.	Separated by space if there are multiple addresses. Example: 1.1.1.1 2.2.2.2 3.3.3.3.

## DHCP/DHCPServerPoolStatistics

This table contains DHCP server pool statistics information.

## XML structure

```

<DHCP>
  <DHCPServerPoolStatistics>
    <IpPoolStatistics>
      <PoolName></PoolName>
      <UsedIpNumber></UsedIpNumber>
      <ExpiredIpNumber></ExpiredIpNumber>
      <TotalIpNumber></TotalIpNumber>
    </IpPoolStatistics>
  </DHCPServerPoolStatistics>
</DHCP>

```



```

    </IpPoolStatistics>
  </DHCPServerPoolStatistics>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerPoolStatistics
Table type	Multi-instance table
Row name	IpPoolStatistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolName	DHCP pool name	Index	String.	N/A
UsedIpNumber	Number of used IP addresses in the address pool	N/A	Unsigned integer.	N/A
ExpiredIpNumber	Number of expired IP address leases in the address pool	N/A	Unsigned integer.	N/A
TotallpNumber	Total number of IP addresses in the address pool	N/A	Unsigned integer.	N/A

## DHCP/DHCPRelaySourceAddress

This table contains information about source IP addresses of the packets sent by the DHCP relay agent.

## XML structure

```
<DHCP>
  <DHCPRelaySourceAddress>
    <RelaySrcAddr>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
      <SourceIfIndex></SourceIfIndex>
    </RelaySrcAddr>
  </DHCPRelaySourceAddress>
</DHCP>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelaySourceAddress
Table type	Multi-instance table
Row name	RelaySrcAddr
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Ipv4Address	Source IP addresses of the packets sent by the DHCP relay	N/A	String, dotted decimal notation.	Ipv4Address and SourceIfIndex cannot be set at the same time.

Column name	Column description	Column type	Data type and restrictions	Remarks
	agent			
SourcelIndex	Index of the interface from which the DHCP relay agent sends packets.	N/A	Unsigned integer.	Ipv4Address and SourcelIndex cannot be set at the same time.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

## DHCP/DHCPRelayInfoEnable

This table contains information about whether the DHCP relay agent support Option 82.

### XML structure

```

<DHCP>
  <DHCPRelayInfoEnable>
    <RelayInfoEnable>
      <IfIndex></IfIndex>
      <InfoEnable></InfoEnable>
    </RelayInfoEnable>
  </DHCPRelayInfoEnable>
</DHCP>

```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelayInfoEnable
Table type	Multi-instance table
Row name	RelayInfoEnable

Restrictions	This table supports only Layer 3 interfaces.
--------------	--

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
InfoEnable	Whether the DHCP relay agent support Option 82.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## DHCP/DHCPServerLeaseInfo

This table contains DHCP server lease information.

## XML structure

```

<DHCP>
  <DHCPServerLeaseInfo>
    <LeaseInfo>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
      <HostName></HostName>
      <Option55></Option55>
    </LeaseInfo>
  </DHCPServerLeaseInfo>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerLeaseInfo
Table type	Multi-instance table
Row name	LeaseInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	If the lease is on the public network, the length of characters is 0.
Ipv4Address	IP address allocated to client	Index	String, dotted decimal notation.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
HostName	Host name of the client	N/A	String, case insensitive. Length: 1 to 253 characters.	The length of characters is 0 when a specific client is used.
Option55	Parameter request list	N/A	String, case insensitive. Length: 2 to 510 characters.	The length of characters is 0 when a specific client is used.

## DHCP/DHCPServerForbiddenIp

This table contains information about IP addresses excluded from dynamic allocation globally.

## XML structure

<DHCP>

```

<DHCPServerForbiddenIp>
  <ForbiddenIp>
    <VRF></VRF>
    <StartIpv4Address></StartIpv4Address>
    <EndIpv4Address></EndIpv4Address>
  </ForbiddenIp>
</DHCPServerForbiddenIp>
</DHCP>

```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerForbiddenIp
Table type	Multi-instance table
Row name	ForbiddenIp
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	If the lease is on the public network, the length of characters is 0.
StartIpv4Address	Start IP address of an IP address range that is excluded from dynamic allocation globally	Index	String, dotted decimal notation.	N/A
EndIpv4Address	End IP address of an IP address range that is excluded from dynamic allocation globally	Index	String, dotted decimal notation.	EndIpv4Address cannot be lower than the StartIpv4Address.

# DHCP/DHCPServerSubnetInUse

This table contains information about subnet allocation IP addresses.

## XML structure

```
<DHCP>
  <DHCPServerSubnetInUse>
    <SubnetInUse>
      <VRF></VRF>
      <NetworkAddress></NetworkAddress>
      <NetworkMask></NetworkMask>
      <SubAllocMode></SubAllocMode>
      <VXLANID></VXLANID>
      <DPAAddress></DPAAddress>
      <UsedIpNumber></UsedIpNumber>
      <ExpiredIpNumber></ExpiredIpNumber>
      <TotalIpNumber></TotalIpNumber>
      <PoolName></PoolName>
    </SubnetInUse>
  </DHCPServerSubnetInUse>
</DHCP>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPServerSubnetInUse
Table type	Multi-instance table
Row name	SubnetInUse
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case-sensitive. Length: 0 to 31 characters.	If the lease is on the public network, the length of characters is 0.

Column name	Column description	Column type	Data type and restrictions	Remarks
Network Address	Subnet Address	Index	String, dotted decimal notation.	N/A
NetworkMask	Subnet Mask	Index	Unsigned integer. Value range: 1 to 30.	N/A
SubAllocMode	Subnet Alloc Mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—vxlanId.</li> <li>1—dp-address.</li> </ul>	If the subnet alloc by the vxlanId mode, the DP address cannot be displayed.  If the subnet alloc by the dp-address mode, the vxlanId cannot be displayed.
VXLAN ID	VXLAN ID	N/A	Unsigned integer. Value range: 1 to 16777215.	N/A
DPAddress	DP Address	N/A	String, dotted decimal notation.	N/A
UsedIpNumber	Number of used IP addresses in subnet.	N/A	Unsigned integer.	N/A
ExpiredIpNumber	Number of expired IP addresses in subnet.	N/A	Unsigned integer.	N/A
TotallpNumber	Total Number of allocated IP addresses in subnet	N/A	Unsigned integer.	N/A
PoolName	Subnet-alloc Pool Name	N/A	String.	N/A

## DHCP/DHCPRelayDiscReqFromTnlEnable

This table contains information about whether the DHCP relay discard request from tunnel.



## XML structure

```
<DHCP>
  <DHCPRelayDiscReqFromTnlEnable>
    <RelayDiscardReqFromTnlEnable>
      <IfIndex></IfIndex>
      <DiscardReqFromTnlEnable></DiscardReqFromTnlEnable>
    </RelayDiscardReqFromTnlEnable>
  </DHCPRelayDiscReqFromTnlEnable>
</DHCP>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelayDiscReqFromTnlEnable
Table type	Multi-instance table
Row name	RelayDiscardReqFromTnlEnable
Restrictions	This table supports only interface of VSI type

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
DiscardReqFromTnlEnable	Whether the DHCP relay agent support discard request packet	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	from tunnel .			

## DHCP/DHCPRelayMacFowardEnable

This table contains information about whether the DHCP Relay support forward ACK or OFFER packet by Mac Address.

### XML structure

```
<DHCP>
  <DHCPRelayMacFowardEnable>
    <RelayMacForwardEnable>
      <MacEnable></MacEnable>
      <MacBroadCast></MacBroadCast>
    </RelayMacForwardEnable>
  </DHCPRelayMacFowardEnable>
</DHCP>
```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelayMacFowardEnable
Table type	Multi-instance table
Row name	RelayMacForwardEnable
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacEnable	Whether enable mac forward	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	If mac forward is enable, DHCP server OFFER or ACK packet will forward

Column name	Column description	Column type	Data type and restrictions	Remarks
				via unicast.
MacBroadCast	Whether enable mac broadcast		Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	It must configured with MacEnable and Mac Enable must be true.

## DHCP/DHCPRelayInfo

This table contains information about the DHCP relay agent option (Option 82).

### XML structure

```

<DHCP>
  <DHCPRelayInfo>
    <RelayInfo>
      <IfIndex></IfIndex>
      <CircuitIdMode></CircuitIdMode>
    </RelayInfo>
  </DHCPRelayInfo>
</DHCP>

```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPRelayInfo
Table type	Multi-instance table
Row name	RelayInfo
Restrictions	This table supports only Layer 3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				related information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
CircuitIdMode	Mode of the Circuit ID sub-option in Option 82	N/A	String, case-insensitive. Values include: <ul style="list-style-type: none"> <li>• <b>NormalHex</b></li> <li>• <b>NormalAscii</b></li> <li>• <b>VxlanPort</b></li> </ul>	N/A

# Contents

DHCP .....1

    DHCP/dhcp.....1

# DHCP

## DHCP/dhcp

Message	Explanation
Maximum number of DHCP address pools already reached. DHCP地址池个数超过上限。	Maximum number of DHCP address pools already reached, when created more than 8192 pools before.
Invalid network address. 无效的网段地址。	Invalid network address, please check your network address.
Mask length must be in the range of 1 to 30. 掩码长度范围必须为1到30。	The mask length is Invalid.
Invalid start IP address. 无效的起始IP地址。	Invalid start IP address, please check your IP address.
Invalid end IP address. 无效的结束IP地址。	Invalid end IP address, please check your IP address.
The start IP address can't be greater than the end IP address. 起始IP地址必须小于或等于结束IP地址。	Please make certain that the start IP address is not be greater than the end IP address.
Lease duration can't be zero. IP地址租约有效期限不能为零。	Invalid Lease duration, please check your Lease duration.
Failed to set the response timeout time for ping requests. 为IP地址冲突检测指定等待回显响应超时时间失效。	The setting about the response timeout time for ping requests is failed.
Failed to enable DHCP. 开启DHCP功能失败。	DHCP process is not activated.
Invalid IP address. 无效的IP地址。	Invalid IP address, please check your IP address.
Invalid mask. 无效的掩码。	Invalid mask, please check your IP address.
Maximum number of statically bound IP address already reached. 静态绑定地址个数超过上限。	Maximum number of statically bound IP address already reached, when the number of statically bound IP address is greater than 8192.
The IP address is bound to another DHCP client. 该IP地址已经被绑定在一台DHCP客户端上。	The IP address is bound to another DHCP client, please try another IP address.
Failed to set the mode. 指定处理模式失败。	The setting about the mode is failed.
Failed to set the address pool name. 指定地址池名称失败。	The setting about the address pool name is failed.
Another address pool is using the name.	The name of address pool is already used.

地址池名称已经存在。	
The configuration doesn't meet the requirements. 不符合配置要求。	The configuration doesn't meet the requirements, please check your configuration.
Maximum number of server IP address already reached. 中继服务器IP地址个数超过上限。	Maximum number of server IP address already reached, when the number of server IP address is greater than 8.
The option is not configurable. 该DHCP选项的配置是被禁止的。	The option is not configurable, please check your option.
Invalid client ID. 无效的客户端ID。	Invalid client ID, please check your client ID.
The address pool doesn't exist. 该DHCP地址池不存在。	The address pool doesn't exist, when getting or deleting it
The subnet has already been configured. 该网段的IP地址已经在其他网段配置。	The subnet has already been configured, please try another subnet.
Invalid client hardware address. 无效的客户端硬件地址。	Invalid client hardware address, please check your client hardware address.
The statically bound IP address should be a unicast address. 该静态绑定IP地址需要是一个单播地址。	Please make certain that the statically bound IP address is a unicast address.
Not used. 未使用。	The lease is not used.
Failed to configure the Option 82. 配置Option82功能失败。	The configure the Option 82 is failed.
Ipv4Address and SourcelIndex cannot be set at the same time. 指定DHCP中继向DHCP服务器转发报文的源地址和源接口不能在一次操作中同时配置	Ipv4Address and SourcelIndex are set at the same time. 用户指定DHCP中继向DHCP服务器转发报文的源地址时，同时下发了源地址和源接口信息

# Contents

DHCP event stream .....	1
DHCP instance status event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	1



# DHCP event stream

DHCP event stream description.

## DHCP instance status event

This event is used to report status of the DHCP instance.

## XML structure for event subscription

```
<InstanceStatus>
</InstanceStatus>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>DHCP</stream>
    <filter type="subtree">
      <InstanceStatus xmlns="http://www.h3c.com/netconf/event:1.0/dhcp:1.0">
        </InstanceStatus>
      </filter>
    </create-subscription>
  </rpc>
```

### Table description

Item	Description
Event stream name	DHCP
Event name	InstanceStatus
Event namespace	http://www.h3c.com/netconf/event:1.0/dhcp:1.0
Support for extended query	No

## XML structure for event report

```
<InstanceStatus>
  <ProtocolType></ProtocolType>
  <Status></Status>
</InstanceStatus>
```

Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2019-01-21T10:12:15</eventTime>
  <InstanceStatus xmlns="http://www.h3c.com/netconf/event:1.0/dhcp:1.0">
```

```
<ProtocolType>1</ProtocolType>
<Status>Master</Status>
</InstanceStatus>
</notification>
```

### Table description

Column name	Column description	Data type and restrictions	Remarks
ProtocolType	Protocol type	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4.</li><li>• 2—IPv6.</li></ul>	N/A
Status	Instance status	String: <ul style="list-style-type: none"><li>• Master</li><li>• Backup</li><li>• Down</li></ul>	N/A

# Contents

DHCP6 .....	1
DHCP6/DHCP6ServerUpdateDatabase .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCP6/DHCP6ServerClearIpInUse .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
DHCP6/DHCP6ServerClearIpInUseByPool .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
DHCP6/DHCP6ServerClearPDInUseByPrefix .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
DHCP6/DHCP6ServerClearPDInUseByPool .....	4
XML structure .....	4
Table description .....	4
Columns .....	4

# DHCP6

## DHCP6/DHCP6ServerUpdateDatabase

This table is used to save current IPv6 DHCP server entries to the file and stop downloading these entries from the file.

### XML structure

```
<DHCP6>
  <DHCP6ServerUpdateDatabase>
    <UpdateMode></UpdateMode>
  </DHCP6ServerUpdateDatabase>
</DHCP6>
```

### Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerUpdateDatabase
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
UpdateMode	Update IPv6 DHCP server database immediately. Stop downloading entries from IPv6 DHCP server database.	N/A	Unsigned integer: <ul style="list-style-type: none"><li>• <b>0</b>—Now.</li><li>• <b>1</b>—Stop.</li></ul>

## DHCP6/DHCP6ServerClearIpInUse

This table is used to clear binding information about assigned IPv6 addresses according to VRF and IP6 address.

### XML structure

```
<DHCP6>
  <DHCP6ServerClearIpInUse>
    <ClearIpInUse>
      <VRF></VRF>
    </ClearIpInUse>
  </DHCP6ServerClearIpInUse>
</DHCP6>
```

```

        <Ipv6Address></Ipv6Address>
    </ClearIpInUse>
</DHCP6ServerClearIpInUse>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerClearIpInUse
Table type	Multi-instance table
Row name	ClearIpInUse
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	If the Ipv6 pool is on the public network, the length of characters is 0.
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	N/A

# DHCP6/DHCP6ServerClearIpInUseByPool

This table is used to clear binding information about assigned IPv6 addresses according to pool name.

## XML structure

```

<DHCP6>
  <DHCP6ServerClearIpInUseByPool>
    <ClearIpInUse>
      <PoolName></PoolName>
    </ClearIpInUse>
  </DHCP6ServerClearIpInUseByPool>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerClearIpInUseByPool

Table type	Multi-instance table
Row name	ClearIpInUse
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PoolName	IPv6 DHCP address pool name	Index	String, case-insensitive. Length: 1 to 63 characters.

## DHCP6/DHCP6ServerClearPDInUseByPrefix

This table is used to clear prefix binding information about assigned IPv6 addresses according to VRF, IPv6 address and Ipv6 prefix length.

## XML structure

```

<DHCP6>
  <DHCP6ServerClearPDInUseByPrefix>
    <ClearPDInUseByPrefix>
      <VRF></VRF>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
    </ClearPDInUseByPrefix>
  </DHCP6ServerClearPDInUseByPrefix>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerClearPDInUseByPrefix
Table type	Multi-instance table
Row name	ClearPDInUseByPrefix
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	If the Ipv6 pool is on the public network, the length of characters is 0.
Ipv6Prefix	Ipv6Prefix	Data structure	Members include: <ul style="list-style-type: none"><li>Ipv6Address</li><li>Ipv6PrefixLength</li></ul>	N/A
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	N/A
Ipv6PrefixLength	Length of the IPv6 prefix	Index	Unsigned integer. Value range: 1 to 128.	N/A

## DHCP6/DHCP6ServerClearPDInUseByPool

This table is used to clear prefix binding information about assigned IPv6 addresses according to pool name.

## XML structure

```
<DHCP6>
  <DHCP6ServerClearPDInUseByPool>
    <ClearPDInUseByPool>
      <PoolName></PoolName>
    </ClearPDInUseByPool>
  </DHCP6ServerClearPDInUseByPool>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerClearPDInUseByPool
Table type	Multi-instance table
Row name	ClearPDInUseByPool
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PoolName	IPv6 DHCP address pool name	Index	String, case-insensitive. Length: 1 to 63 characters.

# Contents

DHCP6 .....	1
DHCP6/DHCP6ServerDatabase .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCP6/DHCP6ServerIpPool .....	2
XML structure .....	3
Table description .....	3
Columns .....	4
DHCP6/ DHCP6OptionGroup .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
DHCP6/ DHCP6OptionGroupOption .....	10
XML structure .....	11
Table description .....	11
Columns .....	11
DHCP6/DHCP6RelayPoolRemoteServer .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
DHCP6/DHCP6Config .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
DHCP6/DHCP6ServerPoolStaticAddress .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
DHCP6/DHCP6ServerPoolStaticPrefix .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
DHCP6/DHCP6RelaySrvAddress .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
DHCP6/ DHCP6PrefixPool .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
DHCP6/DHCP6If .....	21
XML structure .....	21
Table description .....	21
Columns .....	21
DHCP6/ DHCP6ServerPoolOption .....	23
XML structure .....	23
Table description .....	24
Columns .....	24



# DHCP6

## DHCP6/DHCP6ServerDatabase

This table contains IPv6 DHCP server database configuration information.

### XML structure

```
<DHCP6>
  <DHCP6ServerDatabase>
    <FileName></FileName>
    <URL></URL>
    <Username></Username>
    <Password></Password>
    <UpdateInterval></UpdateInterval>
  </DHCP6ServerDatabase>
</DHCP6>
```

### Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerDatabase
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Database file name	N/A	String, case-insensitive. Length: 1 to 255 characters.	For the merge, create and replace operations, FileName and URL can not be configured simultaneously.

Column name	Column description	Column type	Data type and restrictions	Remarks
URL	Object URL string	N/A	String. case-sensitive. Length: 1 to 255 characters.	Specifies the URL of a remote file. Do not include a username or password in the URL. Case sensitivity and the supported format type of the path depend on the server.  If URL is configured for the delete and remove operations, Username and Password will be removed automatically.
Username	FTP username	N/A	String. case-sensitive. Length: 1 to 32 characters.	Can not be configured for the delete and remove operations.
Password	FTP password	N/A	String. case-sensitive. Length: 1 to 32 characters.	Only plaintext password is supported.  For the merge, create and replace operations, Password must be configured with Username.  Can not be configured for the delete and remove operations.
UpdateInterval	Auto update interval	N/A	Unsigned integer. Value range: 60 to 864000 seconds. Default: 300 seconds.	N/A

## DHCP6/DHCP6ServerIpPool

This table contains IPv6 DHCP server pool information.

## XML structure

```
<DHCP6>
  <DHCP6ServerIpPool>
    <Pool>
      <PoolIndex></PoolIndex>
      <PoolName></PoolName>
      <VRF></VRF>
      <Network>
        <NetworkIpv6Address></NetworkIpv6Address>
        <NetworkIpv6PrefixLength></NetworkIpv6PrefixLength>
        <NetworkPreferLifetime></NetworkPreferLifetime>
        <NetworkValidLifetime></NetworkValidLifetime>
        <NetworkExportRoute></NetworkExportRoute>
      </Network>
      <Range>
        <StartIpv6Address></StartIpv6Address>
        <EndIpv6Address></EndIpv6Address>
        <RangePreferLifetime></RangePreferLifetime>
        <RangeValidLifetime></RangeValidLifetime>
      </Range>
      <TempRange>
        <TempStartIpv6Address></TempStartIpv6Address>
        <TempEndIpv6Address></TempEndIpv6Address>
        <TempRangePreferLifetime></TempRangePreferLifetime>
        <TempRangeValidLifetime></TempRangeValidLifetime>
      </TempRange>
      <PrefixPool>
        <PrefixPoolNumber></PrefixPoolNumber>
        <PrefixPoolPreferLifetime></PrefixPoolPreferLifetime>
        <PrefixPoolValidLifetime></PrefixPoolValidLifetime>
      </PrefixPool>
      <DomainName></DomainName>
      <GatewayIpv6Address></GatewayIpv6Address>
      <DNSIpv6Address></DNSIpv6Address>
      <SIPIpv6Address></SIPIpv6Address>
      <SIPDomainName></SIPDomainName>
    </Pool>
  </DHCP6ServerIpPool>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6

Table name	DHCP6ServerIpPool
Table type	Multi-instance table
Row name	Pool
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 0 to 1024.	For the merge, create and replace operations, 0 means to automatically assign a minimum unused index.  For the delete and remove operations, 0 can not be set.
PoolName	IPv6 DHCP address pool name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Required when create a new row, can not be modified.
VRF	VRF instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	If the Ipv6 pool is on the public network, the length of characters is 0.
Network	The configuration of the IPv6 subnet	Data structure	Members include: <ul style="list-style-type: none"> <li>NetworkIpv6Address</li> <li>NetworkIpv6Prefix Length</li> <li>NetworkPreferLifetime</li> <li>NetworkValidLifetime</li> </ul>	N/A
NetworkIpv6Address	IPv6 address prefix	N/A	Hexadecimal string, colon-separated.	Modifying or removing the network configuration deletes the

Column name	Column description	Column type	Data type and restrictions	Remarks
				assigned addresses from the current address pool.
NetworkIpv6PrefixLength	Length of the IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128.	Must be specified with NetworkIpv6Address.
NetworkPreferredLifetime	The preferred lifetime of the IPv6 subnet	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 604800.	It must be configured together with NetworkIpv6Address when the configuration of the IPv6 subnet is not exist.
NetworkValidLifetime	The valid lifetime of the IPv6 subnet	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 2592000.	It must be configured together with NetworkIpv6Address when the configuration of the IPv6 subnet is not exist.  The preferred lifetime can't be longer than the valid lifetime.
NetworkExportRoute	Whether advertise the subnet assigned to IPv6 DHCP clients or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false (default)</b></li> </ul>	It must be configured together with NetworkIpv6Address when the configuration of the IPv6 subnet is not exist.
Range	The configuration of the non-temporary IPv6 address range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartIpv6Address</li> <li>EndIpv6Address</li> <li>RangePreferredLifetime</li> <li>RangeValidLifetime</li> </ul>	N/A
StartIpv6Address	The start IPv6 address	N/A	Hexadecimal string, colon-separated.	N/A
EndIpv6Address	The end IPv6 address	N/A	Hexadecimal string, colon-separated.	Must be specified with StartIpv6Address.

Column name	Column description	Column type	Data type and restrictions	Remarks
RangePreferLifetime	The preferred lifetime of the non-temporary IPv6 address range	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 604800.	It must be configured together with StartIpv6Address when the configuration of the non-temporary IPv6 address range is not exist.  The preferred lifetime can't be longer than the valid lifetime.
RangeValidLifetime	The valid lifetime of the non-temporary IPv6 address range	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 2592000.	It must be configured together with StartIpv6Address when the configuration of the non-temporary IPv6 address range is not exist.
TempRange	The configuration of the temporary IPv6 address range	Data structure	Members include: <ul style="list-style-type: none"> <li>TempStartIpv6Address</li> <li>TempEndIpv6Address</li> <li>TempRangePreferLifetime</li> <li>TempRangeValidLifetime</li> </ul>	N/A
TempStartIpv6Address	The start IPv6 address	N/A	Hexadecimal string, colon-separated.	N/A
TempEndIpv6Address	The end IPv6 address	N/A	Hexadecimal string, colon-separated.	Must be specified with TempStartIpv6Address.
TempRangePreferLifetime	The preferred lifetime of the temporary IPv6 address range	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 604800.	It must be configured together with TempStartIpv6Address when the configuration of the temporary IPv6 address range is not exist.

Column name	Column description	Column type	Data type and restrictions	Remarks
				The preferred lifetime can't be longer than the valid lifetime.
TempRangeValidLifetime	The valid lifetime of the temporary IPv6 address range	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 2592000.	It must be configured together with TempStartIpv6Address when the configuration of the temporary IPv6 address range is not exist.
PrefixPool	The configuration of the prefix pool applied in the IPv6 DHCP address pool	Data structure	Members include: <ul style="list-style-type: none"> <li>PrefixPoolNumber</li> <li>PrefixPoolPreferLifetime</li> <li>PrefixPoolValidLifetime</li> </ul>	N/A
PrefixPoolNumber	Prefix pool number	N/A	Unsigned integer. Value range: 1 to 128	N/A
PrefixPoolPreferLifetime	The preferred lifetime of the prefix pool	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 604800.	It must be configured together with PrefixPoolNumber when the configuration of the prefix pool is not exist.  The preferred lifetime can't be longer than the valid lifetime.
PrefixPoolValidLifetime	The valid lifetime of the prefix pool	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 2592000.	It must be configured together with PrefixPoolNumber when the configuration of the prefix pool is not exist.
DomainName	Domain name suffix	N/A	String, case-sensitive. Length: 1 to 50 characters	N/A
GatewayIpv6Addr	Gateway	N/A	String, case-insensitive.	Separated by space if

Column name	Column description	Column type	Data type and restrictions	Remarks
ess	addresses		Length: 1 to 367 characters.	there are multiple addresses.  Specifies a space-separated list of up to eight addresses  Example: 1::1 2::2.
DNSIPv6Address	DNS server addresses	N/A	String, case-insensitive.  Length: 1 to 367 characters.	Separated by space if there are multiple addresses.  Specifies a space-separated list of up to eight addresses  Example: 1::1 2::2.
SIPIPv6Address	SIP server addresses	N/A	String, case-insensitive.  Length: 1 to 367 characters.	Separated by space if there are multiple addresses.  Specifies a space-separated list of up to eight addresses  Example: 1::1 2::2.
SIPDomainName	DNS server domain name	N/A	String, case-insensitive.  Length: 1 to 407 characters.	Separated by space if there are multiple SIP domain name.  The max length of a SIP domain name is 50.  Specifies a space-separated list of up to eight SIP domain names  Example: aa.com bb.com.



# DHCP6/ DHCP6OptionGroup

This table contains IPv6 DHCP option group and self-defined IPv6 DHCP option configuration information.

## XML structure

```
<DHCP6>
  <DHCP6OptionGroup>
    <OptionGroup>
      <GroupNumber></GroupNumber>
      <DNSIPv6Address></DNSIPv6Address>
      <DomainName></DomainName>
      <SIPIpv6Address></SIPIpv6Address>
      <SIPDomainName></SIPDomainName>
    </OptionGroup>
  </DHCP6OptionGroup>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6OptionGroup
Table type	Multi-instance table
Row name	OptionGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	Group index	Index	Unsigned integer. Value range: 1 to 100	N/A
DNSIPv6Address	DNS server	N/A	String, case-insensitive.	Separated by space if

Column name	Column description	Column type	Data type and restrictions	Remarks
	addresses		Length: 1 to 367 characters.	there are multiple addresses.  Specifies a space-separated list of up to eight addresses  Example: 1::1 2::2.
DomainName	Domain name suffix	N/A	String, case-sensitive.  Length: 1 to 50 characters	N/A
SIPIpv6Address	SIP server addresses	N/A	String, case-insensitive.  Length: 1 to 367 characters.	Separated by space if there are multiple addresses.  Specifies a space-separated list of up to eight addresses  Example: 1::1 2::2.
SIPDomainName	DNS server domain name	N/A	String, case-insensitive.  Length: 1 to 407 characters.	Separated by space if there are multiple SIP domain name.  The max length of a SIP domain name is 50.  Specifies a space-separated list of up to eight SIP domain names  Example: aa.com bb.com.

## DHCP6/ DHCP6OptionGroupOption

This table contains self-defined IPv6 DHCP option configuration information.

## XML structure

```
<DHCP6>
  <DHCP6OptionGroupOption>
    <GroupOption>
      <GroupNumber></GroupNumber>
      <OptionCode></OptionCode>
      <OptionValueHex></OptionValueHex>
    </GroupOption>
  </DHCP6OptionGroupOption>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6OptionGroupOption
Table type	Multi-instance table
Row name	GroupOption
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	Group index	Index	Unsigned integer. Value range: 1 to 100	The specified GroupNumber must already exist.
OptionCode	Number of the option	Index	Unsigned integer. Value range: 21 to 65535	Following values of OptionCode are forbidden: 25,26,37 to 40 and 43 to 48
OptionValueHex	Option content	N/A	String. case-insensitive. Length: 2 to 256	Length of OptionValueHex must be an even number.

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	

## DHCP6/DHCP6RelayPoolRemoteServer

This table contains IPv6 DHCP relay pool remote server configuration information.

### XML structure

```

<DHCP6>
  <DHCP6RelayPoolRemoteServer>
    <RemoteServer>
      <PoolIndex></PoolIndex>
      <RemoteServerIpv6Address></RemoteServerIpv6Address>
      <OutIfIndex></OutIfIndex>
    </RemoteServer>
  </DHCP6RelayPoolRemoteServer>
</DHCP6>

```

### Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6RelayPoolRemoteServer
Table type	Multi-instance table
Row name	RemoteServer
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.	The specified PoolIndex must already exist.

Column name	Column description	Column type	Data type and restrictions	Remarks
RemoteServerIpv6Address	IPv6 DHCP server address.	Index	Hexadecimal string, colon-separated.	For the merge, create and replace operations, 0::0,0::1 and local multi-cast address are invalid addresses.
OutIfIndex	The outgoing interface for the IPv6 DHCP relay agent to forward packets to the IPv6 DHCP server	Index	Unsigned integer.	If a IPv6 DHCP server address is a link-local address, you must specify an outgoing interface  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.

## DHCP6/DHCP6Config

This table contains IPv6 DHCP DSCP configuration information.

## XML structure

```

<DHCP6>
  <DHCP6Config>
    <DSCP></DSCP>
  </DHCP6Config>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6Config

Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
DSCP	The DSCP value for IPv6 DHCP packets	N/A	Unsigned integer. Value range: 0 to 63. Default: 56.

## DHCP6/DHCP6ServerPoolStaticAddress

This table contains IPv6 DHCP server pool static address information.

## XML structure

```

<DHCP6>
  <DHCP6ServerPoolStaticAddress>
    <PoolStaticAddress>
      <PoolIndex></PoolIndex>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <DUID></DUID>
      <IAID></IAID>
      <PreferLifetime></PreferLifetime>
      <ValidLifetime></ValidLifetime>
      <Description></Description>
    </PoolStaticAddress>
  </DHCP6ServerPoolStaticAddress>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerPoolStaticAddress

Table type	Multi-instance table
Row name	PoolStaticAddress
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.	The specified PoolIndex must already exist.
Ipv6Address	IPv6 address prefix	Index	Hexadecimal string, colon-separated.	N/A
Ipv6PrefixLength	Length of the IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128.	Required when create a new row, can not be deleted.
DUID	The value is an even hexadecimal number in the range of 2 to 256.	N/A	String, case-insensitive. Length: 2 to 256 characters.	Required when create a new row, can not be deleted.
IAID	The value is a hexadecimal number in the range of 0 to FFFFFFFF	N/A	String, case-insensitive. Length: 8 characters.	If you do not specify an IAID, the server does not match the client IAID for prefix assignment.
PreferLifetime	The preferred lifetime of the IPv6 subnet	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 604800	The preferred lifetime can't be longer than the valid lifetime.
ValidLifetime	The valid lifetime of the IPv6 subnet	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 2592000.	N/A
Description	Description of the	N/A	String, case insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	static binding		Length: 1 to 255 characters.	

## DHCP6/DHCP6ServerPoolStaticPrefix

This table contains IPv6 DHCP server pool static prefix information.

### XML structure

```

<DHCP6>
  <DHCP6ServerPoolStaticPrefix>
    <PoolStaticPrefix>
      <PoolIndex></PoolIndex>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
      <DUID></DUID>
      <IAID></IAID>
      <PreferLifetime></PreferLifetime>
      <ValidLifetime></ValidLifetime>
      <Description></Description>
    </PoolStaticPrefix>
  </DHCP6ServerPoolStaticPrefix>
</DHCP6>

```

### Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerPoolStaticPrefix
Table type	Multi-instance table
Row name	PoolStaticPrefix
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.	The specified PoolIndex must already exist.
Ipv6Prefix	Ipv6Prefix	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A
Ipv6Address	IPv6 address prefix	Index	Hexadecimal string, colon-separated.	N/A
Ipv6PrefixLength	Length of the IPv6 prefix	Index	Unsigned integer. Value range: 1 to 128.	N/A
DUID	The value is an even hexadecimal number in the range of 2 to 256.	N/A	String, case-insensitive. Length: 2 to 256 characters.	Required when create a new row, can not be deleted.
IAID	The value is a hexadecimal number in the range of 0 to FFFFFFFF	N/A	String, case-insensitive. Length: 8 characters.	If you do not specify an IAID, the server does not match the client IAID for prefix assignment.
PreferLifetime	The preferred lifetime of the IPv6 static prefix	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 604800	The preferred lifetime can't be longer than the valid lifetime.
ValidLifetime	The valid lifetime of the IPv6 static prefix	N/A	Unsigned integer. Value range: 60 to 4294967295. Default: 2592000.	N/A
Description	Description of the static binding	N/A	String, case insensitive. Length: 1 to 255 characters.	N/A

# DHCP6/DHCP6RelaySrvAddress

This table contains IPv6 DHCP relay server configuration information.

## XML structure

```
<DHCP6>
  <DHCP6RelaySrvAddress>
    <RelaySrvIPv6>
      <IfIndex></IfIndex>
      <Ipv6Address></Ipv6Address>
      <OutIfIndex></OutIfIndex>
    </RelaySrvIPv6>
  </DHCP6RelaySrvAddress>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6RelaySrvAddress
Table type	Multi-instance table
Row name	RelaySrvIPv6
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr

Column name	Column description	Column type	Data type and restrictions	Remarks
				NETCONF XML API Configuration Reference.
Ipv6Address	IPv6 DHCP DHCP servers IPv6 address on the IPv6 DHCP relay agent.	Index	Hexadecimal string, colon-separated.	For the merge, create and replace operations, 0::0,0::1.and local multi-cast address are invalid addresses.
OutIflIndex	The outgoing interface for the IPv6 DHCP relay agent to forward packets to the IPv6 DHCP server	Index	Unsigned integer.	If a IPv6 DHCP server address is a link-local address, you must specify an outgoing interface

## DHCP6/ DHCP6PrefixPool

This table contains IPv6 DHCP prefix pool configuration information.

### XML structure

```

<DHCP6>
  <DHCP6PrefixPool>
    <PrefixPool>
      <VRF></VRF>
      <PrefixPoolNumber></PrefixPoolNumber>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
      <AssignIpv6PrefixLength></AssignIpv6PrefixLength>
    </PrefixPool>
  </DHCP6PrefixPool>
</DHCP6>

```

### Table description

Item	Description
Feature name	DHCP6

Table name	DHCP6PrefixPool
Table type	Multi-instance table
Row name	PrefixPool
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	If the prefix pool is on the public network, the length of characters is 0.
PrefixPoolNumber	Prefix pool number	Index	Unsigned integer. Value range: 1 to 128.	N/A
Ipv6Prefix	Ipv6Prefix	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A
Ipv6Address	IPv6 address	N/A	Hexadecimal string, colon-separated.	Required when create a new row, can not be deleted.
Ipv6PrefixLength	Length of the IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128.	Required when create a new row, can not be deleted.
AssignIpv6PrefixLength	Length of the assigned IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128.	Required when create a new row, can not be deleted.  The value can't be shorter than Ipv6PrefixLength. The difference between AssignIpv6PrefixLength and Ipv6PrefixLength can't be greater than 16.

# DHCP6/DHCP6If

This table contains IPv6 DHCP config information on interface.

## XML structure

```
<DHCP6>
  <DHCP6If>
    <IfConfigure>
      <IfIndex></IfIndex>
      <Mode></Mode>
      <ServerAllowHint></ServerAllowHint>
      <ServerRapidCommit></ServerRapidCommit>
      <ServerPreference></ServerPreference>
      <ApplyPoolName></ApplyPoolName>
      <ApplyPoolAllowHint></ApplyPoolAllowHint>
      <ApplyPoolRapidCommit></ApplyPoolRapidCommit>
      <ApplyPoolPreference></ApplyPoolPreference>
      <RelayInterfaceIDMode></RelayInterfaceIDMode>
      <RelayGatewayAddress></RelayGatewayAddress>
    </IfConfigure>
  </DHCP6If>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6If
Table type	Multi-instance table
Row name	IfConfigure
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support

Column name	Column description	Column type	Data type and restrictions	Remarks
				interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Mode	DHCPv6 mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None(default).</li> <li>• <b>1</b>—Server.</li> <li>• <b>2</b>—Relay.</li> </ul>	None means the interface discards IPv6 DHCP packets from IPv6 DHCP clients.
ServerAllowHint	Allow client suggested IPv6 addresses and prefixes.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b>(default).</li> </ul>	N/A
ServerRapidCommit	Enable the rapid commit function.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b>(default).</li> </ul>	N/A
ServerPreference	Specify the server preference.	N/A	Unsigned integer. Value range: 0 to 255, 4294967295. Default: 4294967295	N/A
ApplyPoolName	IPv6 DHCP address pool name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ApplyPoolAllowHint	Allow client suggested IPv6 addresses and prefixes.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b>(default)</li> </ul>	It must be configured together with ApplyPoolName when apply a IPv6 DHCP address pool to an interface.

Column name	Column description	Column type	Data type and restrictions	Remarks
ApplyPoolRapidCommit	Enable the rapid commit function.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b>(default)</li> </ul>	It must be configured together with ApplyPoolName when apply a IPv6 DHCP address pool to an interface.
ApplyPoolPreference	Specify the server preference.	N/A	Unsigned integer. Value range: 0 to 255, 4294967295. Default: 4294967295	It must be configured together with ApplyPoolName when apply a IPv6 DHCP address pool to an interface.
RelayInterfaceID Mode	IPv6 Interface-Id Option	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—None(default).</li> <li><b>1</b>—Bas.</li> <li><b>2</b>—Interface.</li> </ul>	None means the IPv6 DHCP relay agent fills the Interface-ID option with the interface index of the interface.
RelayGatewayAddress	Gateway for DHCPv6 clients	N/A	Hexadecimal string, colon-separated.	N/A

## DHCP6/ DHCP6ServerPoolOption

This table contains IPv6 DHCP server pool option information.

### XML structure

```

<DHCP6>
  <DHCP6ServerPoolOption>
    <PoolOption>
      <PoolIndex></PoolIndex>
      <OptionCode></OptionCode>
      <OptionValueHex></OptionValueHex>
    </PoolOption>
  </DHCP6ServerPoolOption>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerPoolOption
Table type	Multi-instance table
Row name	PoolOption
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.	The specified PoolIndex must already exist.
OptionCode	Number of the option	Index	Unsigned integer. Value range: 21 to 65535	Following values of OptionCode are forbidden: 25,26,37 to 40 and 43 to 48
OptionValueHex	Option content	N/A	String. case-insensitive. Length: 2 to 256 characters.	Required when create a new row, can not be deleted. Lenth of OptionValueHex must be an even number.



# Contents

DHCP6 .....	1
DHCP6/DHCP6ServerDatabase .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCP6/DHCP6ServerIpPool .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
DHCP6/DHCP6OptionGroup .....	6
XML structure .....	7
Table description .....	7
Columns .....	7
DHCP6/DHCP6OptionGroupOption .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
DHCP6/DHCP6RelayPoolRemoteServer .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
DHCP6/DHCP6Config .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
DHCP6/DHCP6ServerPoolStaticAddress .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
DHCP6/DHCP6ServerPoolStaticPrefix .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
DHCP6/DHCP6RelaySrvAddress .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
DHCP6/ DHCP6PrefixPool .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
DHCP6/DHCP6If .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
DHCP6/DHCP6ServerIpInUse .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
DHCP6/DHCP6ServerPDInUse .....	20
XML structure .....	21
Table description .....	21
Columns .....	21
DHCP6/ DHCP6ServerPoolOption .....	22
XML structure .....	22
Table description .....	23
Columns .....	23



# DHCP6

## DHCP6/DHCP6ServerDatabase

This table contains IPv6 DHCP server database information.

### XML structure

```
<DHCP6>
  <DHCP6ServerDatabase>
    <FileName></FileName>
    <URL></URL>
    <Username></Username>
    <Password></Password>
    <UpdateInterval></UpdateInterval>
  </DHCP6ServerDatabase>
</DHCP6>
```

### Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerDatabase
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
FileName	Object file name	N/A	String, case-insensitive. Length: 1 to 255 characters.
URL	Object URL string	N/A	String, case-sensitive. Length: 1 to 255 characters.
Username	FTP username	N/A	String, case-sensitive.

Column name	Column description	Column type	Data type and restrictions
			Length: 1 to 32 characters.
Password	FTP password	N/A	String. case-sensitive. Length: 1 to 32 characters.
UpdateInterval	Auto update interval	N/A	Unsigned integer. Value range: 60 to 864000 seconds.

## DHCP6/DHCP6ServerIpPool

This table contains IPv6 DHCP server pool information.

### XML structure

```

<DHCP6>
  <DHCP6ServerIpPool>
    <Pool>
      <PoolIndex></PoolIndex>
      <PoolName></PoolName>
      <VRF></VRF>
      <Network>
        <NetworkIpv6Address></NetworkIpv6Address>
        <NetworkIpv6PrefixLength></NetworkIpv6PrefixLength>
        <NetworkPreferLifetime></NetworkPreferLifetime>
        <NetworkValidLifetime></NetworkValidLifetime>
        <NetworkExportRoute></NetworkExportRoute>
      </Network>
      <Range>
        <StartIpv6Address></StartIpv6Address>
        <EndIpv6Address></EndIpv6Address>
        <RangePreferLifetime></RangePreferLifetime>
        <RangeValidLifetime></RangeValidLifetime>
      </Range>
      <TempRange>
        <TempStartIpv6Address></TempStartIpv6Address>
        <TempEndIpv6Address></TempEndIpv6Address>
        <TempRangePreferLifetime></TempRangePreferLifetime>
        <TempRangeValidLifetime></TempRangeValidLifetime>
      </TempRange>
      <PrefixPool>
        <PrefixPoolNumber></PrefixPoolNumber>
        <PrefixPoolPreferLifetime></PrefixPoolPreferLifetime>
        <PrefixPoolValidLifetime></PrefixPoolValidLifetime>
      </PrefixPool>
    </Pool>
  </DHCP6ServerIpPool>
</DHCP6>

```

```

    <DomainName></DomainName>
    <GatewayIpv6Address></GatewayIpv6Address>
    <DNSIpv6Address></DNSIpv6Address>
    <SIPIpv6Address></SIPIpv6Address>
    <SIPDomainName></SIPDomainName>
  </Pool>
</DHCP6ServerIpPool>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerIpPool
Table type	Multi-instance table
Row name	Pool
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.	N/A
PoolName	IPv6 DHCP address pool name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
VRF	VRF instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	If the Ipv6 pool is on the public network, the length of characters is 0.
Network	The configuration of the IPv6 subnet	Data structure	Members include: <ul style="list-style-type: none"> <li>NetworkIpv6Address</li> <li>NetworkIpv6PrefixLength</li> <li>NetworkPreferLifet</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			ime <ul style="list-style-type: none"> <li>NetworkValidLifetime</li> </ul>	
NetworkIpv6Address	IPv6 address prefix	N/A	Hexadecimal string, colon-separated.	N/A
NetworkIpv6PrefixLength	Length of the IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128.	N/A
NetworkPreferredLifetime	The preferred lifetime of the IPv6 subnet	N/A	Unsigned integer. Value range: 60 to 4294967295.	N/A
NetworkValidLifetime	The valid lifetime of the IPv6 subnet	N/A	Unsigned integer. Value range: 60 to 4294967295.	N/A
NetworkExportRoute	Whether advertise the subnet assigned to DHCPv6 clients or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
Range	The configuration of the non-temporary IPv6 address range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartIpv6Address</li> <li>EndIpv6Address</li> <li>RangePreferredLifetime</li> <li>RangeValidLifetime</li> </ul>	N/A
StartIpv6Address	The start IPv6 address	N/A	Hexadecimal string, colon-separated.	N/A
EndIpv6Address	The end IPv6 address	N/A	Hexadecimal string, colon-separated.	N/A
RangePreferredLifetime	The preferred lifetime of the non-temporary IPv6 address range	N/A	Unsigned integer. Value range: 60 to 4294967295.	N/A .
RangeValidLifetime	The valid lifetime	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
me	of the non-temporary IPv6 address range		Value range: 60 to 4294967295.	
TempRange	The configuration of the temporary IPv6 address range	Data structure	Members include: <ul style="list-style-type: none"> <li>TempStartIpv6Address</li> <li>TempEndIpv6Address</li> <li>TempRangePreferredLifetime</li> <li>TempRangeValidLifetime</li> </ul>	N/A
TempStartIpv6Address	The start IPv6 address	N/A	Hexadecimal string, colon-separated.	N/A
TempEndIpv6Address	The end IPv6 address	N/A	Hexadecimal string, colon-separated.	N/A
TempRangePreferredLifetime	The preferred lifetime of the temporary IPv6 address range	N/A	Unsigned integer. Value range: 60 to 4294967295.	N/A
TempRangeValidLifetime	The valid lifetime of the temporary IPv6 address range	N/A	Unsigned integer. Value range: 60 to 4294967295.	N/A
PrefixPool	The configuration of the prefix pool applied in the IPv6 DHCP address pool	Data structure	Members include: <ul style="list-style-type: none"> <li>PrefixPoolNumber</li> <li>PrefixPoolPreferredLifetime</li> <li>PrefixPoolValidLifetime</li> </ul>	N/A
PrefixPoolNumber	Prefix pool number	N/A	Unsigned integer. Value range: 1 to 128	N/A
PrefixPoolPreferredLifetime	The preferred lifetime of the	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	prefix pool		Value range: 60 to 4294967295.	
PrefixPoolValidLifetime	The valid lifetime of the prefix pool	N/A	Unsigned integer. Value range: 60 to 4294967295.	N/A
DomainName	Domain name suffix	N/A	String, case-sensitive. Length: 1 to 50 characters	N/A
GatewayIpv6Address	Gateway addresses	N/A	String, case-insensitive. Length: 1 to 367 characters.	Seperated by space if there are multiple addresses. Example: 1::1 2::2.
DNSIpv6Address	DNS server addresses	N/A	String, case-insensitive. Length: 1 to 367 characters.	Seperated by space if there are multiple addresses. Example: 1::1 2::2.
SIPIpv6Address	SIP server addresses	N/A	String, case-insensitive. Length: 1 to 367 characters.	Seperated by space if there are multiple addresses. Example: 1::1 2::2.
SIPDomainName	DNS server domain name	N/A	String, case-sensitive. Length: 1 to 407 characters.	Seperated by space if there are multiple SIP domain name. The max length of a SIP domain name is 50. Example: aa.com bb.com.

## DHCP6/DHCP6OptionGroup

This table contains IPv6 DHCP option group and self-defined IPv6 DHCP option configuration information.



## XML structure

```
<DHCP6>
  <DHCP6OptionGroup>
    <OptionGroup>
      <GroupNumber></GroupNumber>
      <DNSIPv6Address></DNSIPv6Address>
      <DomainName></DomainName>
      <SIPIpv6Address></SIPIpv6Address>
      <SIPDomainName></SIPDomainName>
    </OptionGroup>
  </DHCP6OptionGroup>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6OptionGroup
Table type	Multi -instance table
Row name	OptionGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	Group index	Index	Unsigned integer. Value range: 1 to 100	N/A
DNSIPv6Address	DNS server addresses	N/A	String, case-insensitive. Length: 1 to 367 characters.	Separated by space if there are multiple addresses. Specifies a space-separated list of up to eight addresses

Column name	Column description	Column type	Data type and restrictions	Remarks
				Example: 1::1 2::2.
DomainName	Domain name suffix	N/A	String, case-sensitive. Length: 1 to 50 characters	N/A
SIPIpv6Address	SIP server addresses	N/A	String, case-insensitive. Length: 1 to 367 characters.	Separated by space if there are multiple addresses. Specifies a space-separated list of up to eight addresses Example: 1::1 2::2.
SIPDomainName	DNS server domain name	N/A	String, case-insensitive. Length: 1 to 407 characters.	Separated by space if there are multiple SIP domain name. The max length of a SIP domain name is 50. Specifies a space-separated list of up to eight SIP domain names Example: aa.com bb.com.

## DHCP6/DHCP6OptionGroupOption

This table contains self-defined IPv6 DHCP option configuration information.

### XML structure

```

<DHCP6>
  <DHCP6OptionGroupOption>
    <GroupOption>
      <GroupNumber></GroupNumber>
      <OptionCode></OptionCode>
    </GroupOption>
  </DHCP6OptionGroupOption>
</DHCP6>

```

```

        <OptionValueHex></OptionValueHex>
    </GroupOption>
</DHCP6OptionGroupOption>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6OptionGroupOption
Table type	Multi -instance table
Row name	GroupOption
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupNumber	Group index	Index	Unsigned integer. Value range: 1 to 100
OptionCode	Number of the option	Index	Unsigned integer. Value range: 21 to 65535
OptionValueHex	Option content	N/A	String. case-insensitive. Length: 2 to 256 characters.

## DHCP6/DHCP6RelayPoolRemoteServer

This table contains IPv6 DHCP relay pool remote server configuration information.

## XML structure

```

<DHCP6>
  <DHCP6RelayPoolRemoteServer>
    <RemoteServer>
      <PoolIndex></PoolIndex>
      <RemoteServerIpv6Address></RemoteServerIpv6Address>
    </RemoteServer>
  </DHCP6RelayPoolRemoteServer>
</DHCP6>

```

```

        <OutIfIndex></OutIfIndex>
    </RemoteServer>
</DHCP6RelayPoolRemoteServer>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6RelayPoolRemoteServer
Table type	Multi -instance table
Row name	RemoteServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.
RemoteServerIpv6Address	IPv6 DHCP server address.	Index	Hexadecimal string, colon-separated.
OutIfIndex	The outgoing interface for the IPv6 DHCP relay agent to forward packets to the DHCPv6 server	Index	Unsigned integer.

## DHCP6/DHCP6Config

This table contains IPv6 DHCP DSCP configuration information.

## XML structure

```
<DHCP6>
```

```

<DHCP6Config>
  <DSCP></DSCP>
</DHCP6Config>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6Config
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
DSCP	The DSCP value for IPv6 DHCP packets	N/A	Unsigned integer. Value range: 0 to 63.

# DHCP6/DHCP6ServerPoolStaticAddress

This table contains IPv6 DHCP server pool static address information.

## XML structure

```

<DHCP6>
  <DHCP6ServerPoolStaticAddress>
    <PoolStaticAddress>
      <PoolIndex></PoolIndex>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <DUID></DUID>
      <IAID></IAID>
      <PreferLifetime></PreferLifetime>
      <ValidLifetime></ValidLifetime>
      <Description></Description>
    </PoolStaticAddress>
  </DHCP6ServerPoolStaticAddress>

```

</DHCP6>

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerPoolStaticAddress
Table type	Multi-instance table
Row name	PoolStaticAddress
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.
Ipv6Address	IPv6 address prefix	Index	Hexadecimal string, colon-separated.
Ipv6PrefixLength	Length of the IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128.
DUID	The value is an even hexadecimal number in the range of 2 to 256.	N/A	String, case-insensitive. Length: 2 to 256 characters.
IAID	The value is a hexadecimal number in the range of 0 to FFFFFFFF	N/A	String, case-insensitive. Length: 8 characters.
PreferLifetime	The preferred lifetime of the IPv6 subnet	N/A	Unsigned integer. Value range: 60 to 4294967295.
ValidLifetime	The valid lifetime of the IPv6 subnet	N/A	Unsigned integer. Value range: 60 to 4294967295.
Description	Description of the static binding	N/A	String, case insensitive. Length: 1 to 255 characters.

# DHCP6/DHCP6ServerPoolStaticPrefix

This table contains IPv6 DHCP server pool static prefix information.

## XML structure

```
<DHCP6>
  <DHCP6ServerPoolStaticPrefix>
    <PoolStaticPrefix>
      <PoolIndex></PoolIndex>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
      <DUID></DUID>
      <IAID></IAID>
      <PreferLifetime></PreferLifetime>
      <ValidLifetime></ValidLifetime>
      <Description></Description>
    </PoolStaticPrefix>
  </DHCP6ServerPoolStaticPrefix>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerPoolStaticPrefix
Table type	Multi-instance table
Row name	PoolStaticPrefix
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.

Column name	Column description	Column type	Data type and restrictions
Ipv6Prefix	Ipv6Prefix	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>
Ipv6Address	IPv6 address prefix	Index	Hexadecimal string, colon-separated.
Ipv6PrefixLength	Length of the IPv6 prefix	Index	Unsigned integer. Value range: 1 to 128.
DUID	The value is an even hexadecimal number in the range of 2 to 256.	N/A	String, case-insensitive. Length: 2 to 256 characters.
IAID	The value is a hexadecimal number in the range of 0 to FFFFFFFF	N/A	String, case-insensitive. Length: 8 characters.
PreferLifetime	The preferred lifetime of the IPv6 static prefix	N/A	Unsigned integer. Value range: 60 to 4294967295.
ValidLifetime	The valid lifetime of the IPv6 static prefix	N/A	Unsigned integer. Value range: 60 to 4294967295.
Description	Description of the static binding	N/A	String, case insensitive. Length: 1 to 255 characters.

## DHCP6/DHCP6RelaySrvAddress

This table contains IPv6 DHCP relay server configuration information.

### XML structure

```

<DHCP6>
  <DHCP6RelaySrvAddress>
    <RelaySrvIPv6>
      <IfIndex></IfIndex>
      <Ipv6Address></Ipv6Address>
      <OutIfIndex></OutIfIndex>
    </RelaySrvIPv6>
  </DHCP6RelaySrvAddress>
</DHCP6>

```



## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6RelaySrvAddress
Table type	Multi-instance table
Row name	RelaySrvIPv6
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.
Ipv6Address	IPv6 DHCP servers IPv6 address on the IPv6 DHCP relay agent.	Index	Hexadecimal string, colon-separated.
OutIfIndex	The outgoing interface for the IPv6 DHCP relay agent to forward packets to the IPv6 DHCP server	Index	Unsigned integer.

## DHCP6/ DHCP6PrefixPool

This table contains IPv6 DHCP prefix pool configuration information.

## XML structure

```
<DHCP6>
  <DHCP6PrefixPool>
    <PrefixPool>
      <VRF></VRF>
      <PrefixPoolNumber></PrefixPoolNumber>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
    </PrefixPool>
  </DHCP6PrefixPool>
</DHCP6>
```

```

    <AssignIpv6PrefixLength></AssignIpv6PrefixLength>
  </PrefixPool>
</DHCP6PrefixPool>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6PrefixPool
Table type	Multi-instance table
Row name	PrefixPool
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	If the prefix pool is on the public network, the length of characters is 0.
PrefixPoolNumber	Prefix pool number	Index	Unsigned integer. Value range: 1 to 128.	N/A
Ipv6Prefix	Ipv6Prefix	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A
Ipv6Address	IPv6 address	N/A	Hexadecimal string, colon-separated.	N/A
Ipv6PrefixLength	Length of the IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128.	N/A
AssignIpv6PrefixLength	Length of the assigned IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128.	N/A

# DHCP6/DHCP6If

This table contains IPv6 DHCP config information on interface.

## XML structure

```
<DHCP6>
  <DHCP6If>
    <IfConfigure>
      <IfIndex></IfIndex>
      <Mode></Mode>
      <ServerAllowHint></ServerAllowHint>
      <ServerRapidCommit></ServerRapidCommit>
      <ServerPreference></ServerPreference>
      <ApplyPoolName></ApplyPoolName>
      <ApplyPoolAllowHint></ApplyPoolAllowHint>
      <ApplyPoolRapidCommit></ApplyPoolRapidCommit>
      <ApplyPoolPreference></ApplyPoolPreference>
      <RelayInterfaceIDMode></RelayInterfaceIDMode>
      <RelayGatewayAddress></RelayGatewayAddress>
    </IfConfigure>
  </DHCP6If>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6If
Table type	Multi-instance table
Row name	IfConfigure
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	DHCPv6 mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>1</b>—Server.</li> <li>• <b>2</b>—Relay.</li> </ul>	None means the interface discards IPv6 DHCP packets from IPv6 DHCP clients.
ServerAllowHint	Allow client suggested IPv6 addresses and prefixes.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
ServerRapidCommit	Enable the rapid commit function.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
ServerPreference	Specify the server preference.	N/A	Unsigned integer. Value range: 0 to 255, 4294967295.	N/A
ApplyPoolName	IPv6 DHCP address pool name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ApplyPoolAllowHint	Allow client suggested IPv6 addresses and prefixes.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	It must be configured together with ApplyPoolName when apply a IPv6 DHCP address pool to an interface.
ApplyPoolRapidCommit	Enable the rapid commit function.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	It must be configured together with ApplyPoolName when apply a IPv6 DHCP address pool to an interface.
ApplyPoolPreference	Specify the server preference.	N/A	Unsigned integer. Value range: 0 to 255, 4294967295.	It must be configured together with ApplyPoolName when apply a IPv6 DHCP address pool to an interface.

Column name	Column description	Column type	Data type and restrictions	Remarks
RelayInterfaceID Mode	IPv6 Interface-Id Option	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>1</b>—Bas.</li> <li>• <b>2</b>—Interface.</li> </ul>	None means the IPv6 DHCP relay agent fills the Interface-ID option with the interface index of the interface.
RelayGatewayAddress	Gateway for DHCPv6 clients	N/A	Hexadecimal string, colon-separated.	N/A

## DHCP6/DHCP6ServerIpInUse

This table contains binding information about assigned IPv6 addresses.

### XML structure

```

<DHCP6>
  <DHCP6ServerIpInUse>
    <IpInUse>
      <PoolIndex></PoolIndex>
      <Ipv6Address></Ipv6Address>
      <Type></Type>
      <EndLease></EndLease>
      <ClientIPv6Address></ClientIPv6Address>
      <DUID></DUID>
      <IAID></IAID>
      <PreferLifetime></PreferLifetime>
      <ValidLifetime></ValidLifetime>
    </IpInUse>
  </DHCP6ServerIpInUse>
</DHCP6>

```

### Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerIpInUse
Table type	Multi-instance table
Row name	IpInUse
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.
Ipv6Address	IPv6 address prefix	Index	Hexadecimal string, colon-separated.
Type	IPv6 address binding types	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Static(F).</li> <li>• <b>1</b>—Static(O).</li> <li>• <b>2</b>—Static(C)..</li> <li>• <b>3</b>—Auto(E)</li> <li>• <b>4</b>—Auto(O)</li> <li>• <b>5</b>—Auto(C)</li> </ul>
EndLease	Time when the lease of the IPv6 address will expire.	N/A	String, case-sensitive. Length: 1 to 19 characters.
ClientIPv6Addresses	Client IPv6 address	N/A	Hexadecimal string, colon-separated.
DUID	The value is an even hexadecimal number in the range of 2 to 256.	N/A	String, case-insensitive. Length: 2 to 256 characters.
IAID	The value is a hexadecimal number in the range of 0 to FFFFFFFF	N/A	String, case-insensitive. Length: 8 characters.
PreferLifetime	Preferred lifetime in seconds of the IPv6 address	N/A	Unsigned integer. Value range: 60 to 4294967295.
ValidLifetime	Valid lifetime in seconds of the IPv6 address	N/A	Unsigned integer. Value range: 60 to 4294967295.

## DHCP6/DHCP6ServerPDInUse

This table contains prefix binding information about assigned IPv6 addresses.

## XML structure

```
<DHCP6>
  <DHCP6ServerPDInUse>
    <PDInUse>
      <PoolIndex></PoolIndex>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
      <Type></Type>
      <EndLease></EndLease>
      <ClientIPv6Address></ClientIPv6Address>
      <DUID></DUID>
      <IAID></IAID>
      <PreferLifetime></PreferLifetime>
      <ValidLifetime></ValidLifetime>
    </PDInUse>
  </DHCP6ServerPDInUse>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerPDInUse
Table type	Multi-instance table
Row name	PDInUse
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.
Ipv6Prefix	Ipv6Prefix	Data structure	Members include: <ul style="list-style-type: none"><li>Ipv6Address</li><li>Ipv6PrefixLength</li></ul>

Column name	Column description	Column type	Data type and restrictions
Ipv6Address	IPv6 address prefix	Index	Hexadecimal string, colon-separated.
Ipv6PrefixLength	Length of the IPv6 prefix	Index	Unsigned integer. Value range: 1 to 128.
Type	IPv6 address binding types	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Static(F).</li> <li>• <b>1</b>—Static(O).</li> <li>• <b>2</b>—Static(C)..</li> <li>• <b>3</b>—Auto(E)</li> <li>• <b>4</b>—Auto(O)</li> <li>• <b>5</b>—Auto(C)</li> </ul>
EndLease	Time when the lease of the IPv6 address will expire.	N/A	String, case-sensitive. Length: 1 to 19 characters.
ClientIPv6Addresses	Client IPv6 address	N/A	Hexadecimal string, colon-separated.
DUID	The value is an even hexadecimal number in the range of 2 to 256.	N/A	String, case-insensitive. Length: 2 to 256 characters.
IAID	The value is a hexadecimal number in the range of 0 to FFFFFFFF	N/A	String, case-insensitive. Length: 8 characters.
PreferLifetime	Preferred lifetime in seconds of the IPv6 prefix	N/A	Unsigned integer. Value range: 60 to 4294967295.
ValidLifetime	Valid lifetime in seconds of the IPv6 prefix	N/A	Unsigned integer. Value range: 60 to 4294967295.

## DHCP6/ DHCP6ServerPoolOption

This table contains IPv6 DHCP server pool option information.

### XML structure

```

<DHCP6>
  <DHCP6ServerPoolOption>
    <PoolOption>

```



```

    <PoolIndex></PoolIndex>
    <OptionCode></OptionCode>
    <OptionValueHex></OptionValueHex>
  </PoolOption>
</DHCP6ServerPoolOption>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6ServerPoolOption
Table type	Multi-instance table
Row name	PoolOption
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
PoolIndex	IPv6 DHCP address pool index	Index	Unsigned integer. Value range: 1 to 1024.
OptionCode	Number of the option	Index	Unsigned integer. Value range: 21 to 65535
OptionValueHex	Option content	N/A	String. case-insensitive. Length: 2 to 256 characters.

# Contents

DHCP6/dhcp6 ..... 1

# DHCP6/dhcp6

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please check your configuration.
The URL for a file on the TFTP server can't include the username or password. 不要为一个TFTP文件的URL指定用户名和密码。	Please make certain that the URL for a file on the TFTP server is not include the username or password.
Invalid filename or URL. 无效的本地文件名或URL。	Invalid filename or URL, please check it.
The URL can't include the username or password. 不要在URL中携带用户名和密码信息。	Please make certain that the URL is include the username or password.
The system is saving DHCPv6 server entries to the backup file. Please wait.... 系统正在将DHCPv6服务器表项写入备份表项的文件中。请等待。	The system is saving DHCPv6 server entries to the backup file.
The system is downloading DHCPv6 server entries from the backup file. Please wait.... 系统正在从备份表项的文件中恢复DHCPv6服务器表项。请等待。	The system is downloading DHCPv6 server entries from the backup file.
The static binding already exists in another DHCPv6 address pool. 静态绑定表项已经在配置在其他DHCPv6地址池中。	The static binding already exists in another DHCPv6 address pool, please try another one.
For a non-temporary IPv6 address range, the preferred lifetime can't be longer than the valid lifetime. 配置非临时IPv6地址范围时，首选生命期要小于等于有效生命期。	Please make certain that for a non-temporary IPv6 address range, the preferred lifetime isn't longer than the valid lifetime.
For a temporary IPv6 address range, the preferred lifetime can't be longer than the valid lifetime. 配置临时IPv6地址范围时，首选生命期要小于等于有效生命期。	Please make certain that for a temporary IPv6 address range, the preferred lifetime isn't longer than the valid lifetime.
For an IPv6 subnet, the preferred lifetime can't be longer than the valid lifetime. 配置IPv6网段地址池时，首选生命期要小于等于有效生命期。	Please make certain that for an IPv6 subnet, the preferred lifetime isn't longer than the valid lifetime.
For a prefix pool, the preferred lifetime can't be longer than the valid lifetime. 配置引用前缀池时，首选生命期要小于等于有效生命期。	Please make certain that for a prefix pool, the preferred lifetime isn't longer than the valid lifetime.
In a non-temporary IPv6 address range, the start IPv6 address can't be higher than the end IPv6 address. 配置非临时IPv6地址范围时，起始IPv6地址不能大于结束IPv6地址。	Please make certain that In a non-temporary IPv6 address range, the start IPv6 address isn't higher than the end IPv6 address.
In a temporary IPv6 address range, the start IPv6	Please make certain that In a temporary IPv6 address range, the

address can't be higher than the end IPv6 address. 配置临时IPv6地址范围时，起始IPv6地址不能大于结束IPv6地址。	start IPv6 address isn't higher than the end IPv6 address.
DHCPv6 address pool name can't be changed. 指定IPv6地址池名称失败。	DHCPv6 address pool name can't be changed.
Another DHCPv6 address pool is using the name. 其他IPv6地址池正在使用该名字。	Another DHCPv6 address pool is using the name, please try another name.
Invalid IPv6 subnet address. 非法的IPv6网段地址。	Invalid IPv6 subnet address, please check your IPv6 subnet address.
Invalid start IPv6 address. 非法的起始IPv6地址。	Invalid start IPv6 address, please check it.
Invalid end IPv6 address. 非法的结束IPv6地址。	Invalid end IPv6 address, please check it.
Invalid IPv6 address. 非法的IPv6地址。	Invalid IPv6 address, please check it.
Non-temporary IPv6 address range and temporary IPv6 address range can't overlap. 非临时IPv6地址范围和临时IPv6地址范围不能互相重叠。	Please make certain that non-temporary IPv6 address range and temporary IPv6 address range is not overlap.
Number of DHCPv6 address pools exceeded the limit. DHCPv6地址池个数超过上限。	Number of DHCPv6 address pools exceeded the limit, when the number of DHCPv6 address pools is greater than 1024.
The IPv6 subnet already exists in another DHCPv6 address pool. 该IPv6网段的地址已经在配置在其他IPv6地址池中。	The IPv6 subnet already exists in another DHCPv6 address pool, please try another subnet.
The DHCPv6 address pool doesn't exist. 该DHCPv6地址池不存在。	The DHCPv6 address pool doesn't exist, when getting or deleting it.
Invalid length for the SIP server domain name. SIP服务器的域名长度不符合配置要求。	Invalid length for the SIP server domain name, please check it.
The option is not configurable. 该DHCPv6选项的配置是被禁止的。	The option is not configurable, please check your option.
The DHCPv6 option group doesn't exist. 该DHCPv6选项组不存在。	The DHCPv6 option group doesn't exist, when getting or deleting it.
Number of servers in the DHCPv6 address pool exceeded the limit. 该地址池可配DHCPv6服务器个数已达上限。	Number of servers in the DHCPv6 address pool exceeded the limit, when the number of servers in the DHCPv6 address pool is greater than 8.
An output interface is required when the DHCPv6 server address is a multicast address or link-local address. 当DHCPv6服务器地址为组播地址或者链路本地地址必须指定出口口。	Please make certain that an output interface is required when the DHCPv6 server address is a multicast address or link-local address.
The valid lifetime can't be shorter than the preferred lifetime.	Please make certain that the valid lifetime isn't shorter than the preferred lifetime.

有效生命期不应小于首选生命期。	
Invalid DUID. 非法的DUID字符串。	Invalid DUID, please check it.
Number of statically bound address exceeded the limit. 该地址池静态绑定的IPv6地址个数已达上限。	Number of statically bound address exceeded the limit, when the number of statically bound address is greater than 8192.
Number of statically bound prefixes exceeded the limit. 该地址池静态绑定IPv6地址前缀个数已达上限。	Number of statically bound prefixes exceeded the limit, when the number of statically bound prefixes is greater than 4096.
The assigned prefix length can't be shorter than the specified prefix length. 分配的前缀长度不能小于前缀长度。	Please make certain that the assigned prefix length isn't shorter than the specified prefix length.
Difference between the specified prefix length and the assigned prefix length can't be greater than 16. 分配的前缀长度和前缀长度大小差异应该不小于16。	Please make certain that the difference between the specified prefix length and the assigned prefix length isn't greater than 16.
Prefix pools can't overlap. 前缀池不应该重叠。	Please make certain that prefix pools isn't overlap.
Number of DHCPv6 servers on the interface exceeded the limit. 该接口上指定的DHCPv6服务器个数已达上限。	Number of DHCPv6 servers on the interface exceeded the limit, when the number of DHCPv6 servers on the interface is greater than 8.
Number of VRF exceeded the limit. VRF个数已达到上限。	Number of VRF exceeded the limit.
Not available. 未使用。	The Lease is not used.

# Contents

DHCPC	1
DHCPC/DHCPConfig	1
XML structure	1
Table description	1
Columns	1
DHCPC/DHCPAlloc	1
XML structure	2
Table description	2
Columns	2
DHCPC/DHCPClientID	2
XML structure	3
Table description	3
Columns	3
DHCPC/BootpAlloc	4
XML structure	4
Table description	4
Columns	4
DHCPC/DHCPClientConfig	5
XML structure	5
Table description	5
Columns	6

# DHCPC

## DHCPC/DHCPConfig

This table contains DHCP client configuration information.

### XML structure

```
<DHCPC>
  <DHCPConfig>
    <DadEnable></DadEnable>
    <DSCP></DSCP>
  </DHCPConfig>
</DHCPC>
```

### Table description

Item	Description
Feature name	DHCPC
Table name	DHCPConfig
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DadEnable	Whether the function of duplicated address detection is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b> (default)</li><li>• <b>false</b></li></ul>	N/A
DSCP	Set the DSCP value for DHCP packets sent by the DHCP client	N/A	Unsigned integer. Value range: 0 to 63. Default: 56.	A bigger DSCP value represents a higher priority.

## DHCPC/DHCPAlloc

This table contains the information about using DHCP for IP address acquisition.

## XML structure

```
<DHCPC>
  <DHCPAlloc>
    <Alloc>
      <IfIndex></IfIndex>
      <AllocEnable></AllocEnable>
    </Alloc>
  </DHCPAlloc>
</DHCPC>
```

## Table description

Item	Description
Feature name	DHCPC
Table name	DHCPAlloc
Table type	Multi-instance table
Row name	Alloc
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
AllocEnable	Whether the function of the interface to use DHCP for IP address acquisition is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b> (default)</li></ul>	N/A

## DHCPClientID

This table contains DHCP client ID configuration information.



## XML structure

```
<DHCPC>
  <DHCPClientID>
    <ClientID>
      <IfIndex></IfIndex>
      <ASCII></ASCII>
      <Hex></Hex>
      <ClientIfIndex></ClientIfIndex>
    </ClientID>
  </DHCPClientID>
</DHCPC>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPClientID
Table type	Multi-instance table
Row name	ClientID
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
ASCII	DHCP Client ID in ASCII code type	N/A	String, case-insensitive. Length: 1 to 63 characters. The string must be ASCII string.	This column cannot be configured with Hex column or ClientIfIndex column together.

Column name	Column description	Column type	Data type and restrictions	Remarks
Hex	DHCP Client ID in hex code type	N/A	Hexadecimal string. Length: 4 to 64 characters.	This column cannot be configured with ASCII column or ClientIfIndex column together.
ClientIfIndex	Uses the MAC address of interface as a DHCP client ID	N/A	Unsigned integer.	Only Layer 3 interfaces are supported. This column cannot be configured with ASCII column or Hex column together.

## DHCPC/BootpAlloc

This table contains the information about using BOOTP for IP address acquisition.

### XML structure

```

<DHCPC>
  <BootpAlloc>
    <Alloc>
      <IfIndex></IfIndex>
      <AllocEnable></AllocEnable>
    </Alloc>
  </BootpAlloc>
</DHCPC>

```

### Table description

Item	Description
Feature name	DHCPC
Table name	BootpAlloc
Table type	Multi-instance table
Row name	Alloc
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
AllocEnable	Whether the function of the interface to use BOOTP for IP address acquisition is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A

## DHCPC/DHCPCIfConfig

This table contains DHCP client configuration information on interface.

### XML structure

```

<DHCPC>
  <DHCPCIfConfig>
    <IfConfigure>
      <IfIndex></IfIndex>
      <TrackID></TrackID>
      <Priority></Priority>
    </IfConfigure>
  </DHCPCIfConfig>
</DHCPC>

```

### Table description

Item	Description
Feature name	DHCPC
Table name	DHCPCIfConfig
Table type	Multi -instance table
Row name	IfConfigure
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
TrackID	Track number	N/A	Unsigned integer. Value range: 1 to 1024.	No track number is set by default.
Priority	Priority of the gateway	N/A	Unsigned integer. Value range: 1 to 255. Default: 70.	The greater the value, the higher the priority.

# Contents

DHCPC	1
DHCPC/DHCPConfig	1
XML structure	1
Table description	1
Columns	1
DHCPC/DHCPAlloc	1
XML structure	2
Table description	2
Columns	2
DHCPC/DHCPClientID	3
XML structure	3
Table description	4
Columns	4
DHCPC/BootpAlloc	4
XML structure	4
Table description	5
Columns	5
DHCPC/DHCPClientConfig	6
XML structure	6
Table description	6
Columns	6

# DHCPC

## DHCPC/DHCPConfig

This table contains DHCP client configuration information.

### XML structure

```
<DHCPC>
  <DHCPConfig>
    <DadEnable></DadEnable>
    <DSCP></DSCP>
  </DHCPConfig>
</DHCPC>
```

### Table description

Item	Description
Feature name	DHCPC
Table name	DHCPConfig
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DadEnable	Whether the function of duplicated address detection is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A
DSCP	Set the DSCP value for DHCP packets sent by the DHCP client	N/A	Unsigned integer. Value range: 0 to 63	A bigger DSCP value represents a higher priority.

## DHCPC/DHCPAlloc

This table contains the information about using DHCP for IP address acquisition.

# XML structure

```
<DHCPC>
  <DHCPAlloc>
    <Alloc>
      <IfIndex></IfIndex>
      <AllocEnable></AllocEnable>
      <CurrentState></CurrentState>
      <AllocatedIpv4Address></AllocatedIpv4Address>
      <AllocatedIpv4Mask></AllocatedIpv4Mask>
      <DHCPServerIpv4Address></DHCPServerIpv4Address>
      <Allocatedlease></Allocatedlease>
      <T1></T1>
      <T2></T2>
    </Alloc>
  </DHCPAlloc>
</DHCPC>
```

## Table description

Item	Description
Feature name	DHCP
Table name	DHCPAlloc
Table type	Multi-instance table
Row name	Alloc
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
AllocEnable	Whether the function of the interface to use DHCP for IP address acquisition is	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	enabled			
CurrentState	Current state of the DHCP client	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—HALT.</li> <li>• 2—INIT.</li> <li>• 3—SELECTING.</li> <li>• 4—REQUESTING</li> <li>• 5—BOUND.</li> <li>• 6—RENEWING.</li> <li>• 7—REBOUNDING</li> </ul>	N/A
AllocatedIpv4Address	IPv4 address allocated by the DHCP server	N/A	String, dotted decimal notation.	N/A
AllocatedIpv4Mask	IPv4 address mask allocated by the DHCP server	N/A	String, dotted decimal notation.	N/A
DHCPServerIpv4Address	IPv4 address of the DHCP server that assigned IP addresses	N/A	String, dotted decimal notation.	N/A
Allocatedlease	Lease time (in seconds) for the allocated address	N/A	Unsigned integer.	N/A
T1	1/2 lease time (in seconds) for the allocated address	N/A	Unsigned integer.	N/A
T2	7/8 lease time (in seconds) for the allocated address	N/A	Unsigned integer.	N/A

## DHCPC/DHCPClientID

This table contains DHCP client ID configuration information.

### XML structure

```

<DHCPC>
  <DHCPClientID>
    <ClientID>
      <IfIndex></IfIndex>
      <ASCII></ASCII>
      <Hex></Hex>
      <ClientIfIndex></ClientIfIndex>
    </ClientID>
  </DHCPClientID>
</DHCPC>

```



## Table description

Item	Description
Feature name	DHCPC
Table name	DHCPClientID
Table type	Multi-instance table
Row name	ClientID
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
ASCII	DHCP Client ID in ASCII code type	N/A	String, case-insensitive. Length: 1 to 63 characters. The string must be ASCII string.	This column cannot be configured with Hex column or ClientIfIndex column together.
Hex	DHCP Client ID in hex code type	N/A	Hexadecimal string. Length: 4 to 64 characters.	This column cannot be configured with ASCII column or ClientIfIndex column together.
ClientIfIndex	Uses the MAC address of interface as a DHCP client ID	N/A	Unsigned integer.	Only Layer 3 interfaces are supported. This column cannot be configured with ASCII column or Hex column together.

## DHCPC/BootpAlloc

This table contains the information about using BOOTP for IP address acquisition.

## XML structure

```
<DHCPC>  
  <BootpAlloc>
```

```

<Alloc>
  <IfIndex></IfIndex>
  <AllocEnable></AllocEnable>
  <AllocatedIpv4Address></AllocatedIpv4Address>
  <AllocatedIpv4Mask></AllocatedIpv4Mask>
  <MacAddress></MacAddress>
</Alloc>
</BootpAlloc>
</DHCPD>

```

## Table description

Item	Description
Feature name	DHCPD
Table name	BootpAlloc
Table type	Multi-instance table
Row name	Alloc
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
AllocEnable	Whether the function of the interface to use BOOTP for IP address acquisition is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
AllocatedIpv4Address	IPv4 address allocated by the BOOTP server	N/A	String, dotted decimal notation.	N/A
AllocatedIpv4Mask	IPv4 address mask allocated by the BOOTP server	N/A	String, dotted decimal notation.	N/A
MacAddress	MAC address of	N/A	Six groups of two hexadecimal digits,	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	a BOOTP client		hyphen-separated.	

## DHCP/DHCPClientConfig

This table contains DHCP client configuration information on interfaces.

### XML structure

```

<DHCP>
  <DHCPClientConfig>
    <IfConfigure>
      <IfIndex></IfIndex>
      <TrackID></TrackID>
      <Priority></Priority>
      <NextHop></NextHop>
    </IfConfigure>
  </DHCPClientConfig>
</DHCP>

```

### Table description

Item	Description
Feature name	DHCP
Table name	DHCPClientConfig
Table type	Multi -instance table
Row name	IfConfigure
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For related information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
TrackID	Track number	N/A	Unsigned integer.	No track number is set by default.

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 1 to 1024.	
Priority	Priority of the gateway	N/A	Unsigned integer. Value range: 1 to 255. Default: 70.	The greater the value, the higher the priority.
NextHop	IP address of the next hop	N/A	String, dotted decimal notation.	N/A

# Contents

DHCP/dhccpc..... 1

# DHCP/dhccpc

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please check your configuration.
Invalid client ID. 非法的客户端ID。	Invalid client ID, please check your client ID.

# Contents

DHCPC6 .....	1
DHCPC6/DHCPC6Config .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCPC6/DHCPC6Alloc .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
DHCPC6/DHCPC6PrefixDelegation .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
DHCPC6/DHCPC6Stateless .....	4
XML structure .....	4
Table description .....	4
Columns .....	5

# DHCPC6

## DHCPC6/DHCPC6Config

This table contains DHCPv6 client configuration information.

### XML structure

```
<DHCPC6>
  <DHCPC6Config>
    <DSCP></DSCP>
  </DHCPC6Config>
</DHCPC6>
```

### Table description

Item	Description
Feature name	DHCPC6
Table name	DHCPC6Config
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DSCP	Set DSCP value for DHCPv6 packets sent by the DHCPv6 client	N/A	Unsigned integer. Value range: 0 to 63. Default: 56.	A bigger DSCP value represents a higher priority.

## DHCPC6/DHCP6Alloc

This table contains the information about using DHCPv6 for IPv6 address acquisition.

### XML structure

```
<DHCPC6>
  <DHCP6Alloc>
    <Alloc>
      <IfIndex></IfIndex>
    </Alloc>
  </DHCP6Alloc>
</DHCPC6>
```



```

    <AllocEnable></AllocEnable>
    <OptionGroup></OptionGroup>
    <RapidCommit></RapidCommit>
  </Alloc>
</DHCP6Alloc>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6Alloc
Table type	Multi-instance table
Row name	Alloc
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface view Layer 3 aggregate interface/subinterface view VLAN interface view
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
AllocEnable	Whether the function of the interface to use DHCPv6 for IPv6 address acquisition is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
OptionGroup	Enables the DHCPv6 client to create a dynamic DHCPv6 option group for saving the configuration parameters, and assigns an ID to the option group	N/A	Unsigned integer. Value range: 1 to 100.	DHCPv6 client does not create any dynamic DHCPv6 option groups as default.  This column is available when the AllocEnable column is <b>true</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
RapidCommit	Whether rapid address or prefix assignment is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	This column is available when the AllocEnable column is <b>true</b> .

## DHCP6/DHCP6PrefixDelegation

This table contains the information about using DHCPv6 for IPv6 prefix acquisition.

### XML structure

```

<DHCP6>
  <DHCP6PrefixDelegation>
    <PrefixDelegation>
      <IfIndex></IfIndex>
      <PrefixNumber></PrefixNumber>
      <OptionGroup></OptionGroup>
      <RapidCommit></RapidCommit>
    </PrefixDelegation>
  </DHCP6PrefixDelegation>
</DHCP6>

```

### Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6PrefixDelegation
Table type	Multi-instance table
Row name	PrefixDelegation
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface view Layer 3 aggregate interface/subinterface view VLAN interface view
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
PrefixNumber	IPv6 prefix ID	N/A	Unsigned integer. Value range: 1 to 1024.	No prefix ID as default. After obtaining an IPv6 prefix, the client assigns the ID to the IPv6 prefix.
OptionGroup	Enables the DHCPv6 client to create a dynamic DHCPv6 option group for saving the configuration parameters, and assigns an ID to the option group	N/A	Unsigned integer. Value range: 1 to 100.	DHCPv6 client does not create any dynamic DHCPv6 option groups as default. This column is available when the PrefixNumber column is <b>set</b> .
RapidCommit	Whether rapid address or prefix assignment is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	This column is available when the PrefixNumber column is <b>set</b> .

## DHCPC6/DHCP6Stateless

This table contains stateless DHCPv6 configuration information.

### XML structure

```

<DHCPC6>
  <DHCP6Stateless>
    <Stateless>
      <IfIndex></IfIndex>
      <StatelessEnable></StatelessEnable>
    </Stateless>
  </DHCP6Stateless>
</DHCPC6>

```

### Table description

Item	Description
Feature name	DHCPC6
Table name	DHCP6Stateless
Table type	Multi-instance table
Row name	Stateless
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface view

	Layer 3 aggregate interface/subinterface view VLAN interface view
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
StatelessEnable	Whether the function of stateless DHCPv6 is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A

# Contents

DHCPC6 .....	1
DHCPC6/DHCPC6Config .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCPC6/DHCPC6Alloc .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
DHCPC6/DHCPC6PrefixDelegation .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
DHCPC6/DHCPC6Stateless .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
DHCPC6/DHCPC6ClientInfo .....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# DHCPC6

## DHCPC6/DHCPC6Config

This table contains DHCPv6 client configuration information.

### XML structure

```
<DHCPC6>
  <DHCPC6Config>
    <DSCP></DSCP>
  </DHCPC6Config>
</DHCPC6>
```

### Table description

Item	Description
Feature name	DHCPC6
Table name	DHCPC6Config
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DSCP	Set DSCP value for DHCPv6 packets sent by the DHCPv6 client	N/A	Unsigned integer. Value range: 0 to 63.	A bigger DSCP value represents a higher priority.

## DHCPC6/DHCP6Alloc

This table contains the information about using DHCPv6 for IPv6 address acquisition.

### XML structure

```
<DHCPC6>
  <DHCP6Alloc>
    <Alloc>
      <IfIndex></IfIndex>
      <AllocEnable></AllocEnable>
    </Alloc>
  </DHCP6Alloc>
</DHCPC6>
```

```

    <OptionGroup></OptionGroup>
    <RapidCommit></RapidCommit>
  </Alloc>
</DHCP6Alloc>
</DHCP6>

```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6Alloc
Table type	Multi-instance table
Row name	Alloc
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface view Layer 3 aggregate interface/subinterface view VLAN interface view

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	N/A
AllocEnable	Whether the function of the interface to use DHCPv6 for IPv6 address acquisition is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
OptionGroup	Enables the DHCPv6 client to create a dynamic DHCPv6 option group for saving the configuration parameters, and assigns an ID to the option group	N/A	Unsigned integer. Value range: 1 to 100.	This column is available when the AllocEnable column is <b>true</b> .
RapidCommit	Whether rapid address or prefix assignment is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	This column is available when the AllocEnable column is <b>true</b> .

## DHCP6/DHCP6PrefixDelegation

This table contains the information about using DHCPv6 for IPv6 prefix acquisition.

## XML structure

```
<DHCP6>
  <DHCP6PrefixDelegation>
    <PrefixDelegation>
      <IfIndex></IfIndex>
      <PrefixNumber></PrefixNumber>
      <OptionGroup></OptionGroup>
      <RapidCommit></RapidCommit>
    </PrefixDelegation>
  </DHCP6PrefixDelegation>
</DHCP6>
```

## Table description

Item	Description
Feature name	DHCP6
Table name	DHCP6PrefixDelegation
Table type	Multi-instance table
Row name	PrefixDelegation
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface view Layer 3 aggregate interface/subinterface view VLAN interface view

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	N/A
PrefixNumber	IPv6 prefix ID	N/A	Unsigned integer. Value range: 1 to 1024.	After obtaining an IPv6 prefix, the client assigns the ID to the IPv6 prefix.



Column name	Column description	Column type	Data type and restrictions	Remarks
OptionGroup	Enables the DHCPv6 client to create a dynamic DHCPv6 option group for saving the configuration parameters, and assigns an ID to the option group	N/A	Unsigned integer. Value range: 1 to 100.	This column is available when the PrefixNumber column is <b>set</b> .
RapidCommit	Whether rapid address or prefix assignment is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	This column is available when the PrefixNumber column is <b>set</b> .

## DHCPC6/DHCP6Stateless

This table contains stateless DHCPv6 configuration information.

### XML structure

```

<DHCPC6>
  <DHCP6Stateless>
    <Stateless>
      <IfIndex></IfIndex>
      <StatelessEnable></StatelessEnable>
    </Stateless>
  </DHCP6Stateless>
</DHCPC6>

```

### Table description

Item	Description
Feature name	DHCPC6
Table name	DHCP6Stateless
Table type	Multi-instance table
Row name	Stateless
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface view Layer 3 aggregate interface/subinterface view VLAN interface view

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	N/A
StatelessEnable	Whether the function of stateless DHCPv6 is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A

## DHCPC6/DHCP6ClientInfo

This table contains DHCPv6 client information.

## XML structure

```
<DHCPC6>
  <DHCP6ClientInfo>
    <ClientInfo>
      <IfIndex></IfIndex>
      <Type></Type>
      <State></State>
      <IAID></IAID>
      <ClientDUID></ClientDUID>
      <ReachableViaIpv6Address></ReachableViaIpv6Address>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <DNSServer></DNSServer>
      <DomainName></DomainName>
      <PreferredLifetime></PreferredLifetime>
      <ValidLifetime></ValidLifetime>
      <T1></T1>
      <T2></T2>
    </ClientInfo>
  </DHCP6ClientInfo>
</DHCPC6>
```

## Table description

Item	Description
Feature name	DHCPC6
Table name	DHCP6ClientInfo
Table type	Multi-instance table
Row name	ClientInfo
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface view

	Layer 3 aggregate interface/subinterface view VLAN interface view
--	--

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	N/A
Type	Types of DHCPv6 client	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Stateless client.</li> <li>• <b>1</b>—Stateful client requesting prefix.</li> <li>• <b>2</b>—Stateful client requesting address.</li> </ul>	N/A
State	Current states of the DHCPv6 client	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—IDLE.</li> <li>• <b>1</b>—SOLICIT.</li> <li>• <b>2</b>—REQUEST.</li> <li>• <b>3</b>—OPEN.</li> <li>• <b>4</b>—RENEW.</li> <li>• <b>5</b>—REBIND.</li> <li>• <b>6</b>—RELEASE.</li> <li>• <b>7</b>—DECLINE.</li> <li>• <b>8</b>—INFO-REQUESTING.</li> </ul>	N/A
IAID	IA identifier	N/A	Hexadecimal string. Length: 1 to 10 characters.	N/A
ClientDUID	DUID of the DHCPv6 client	N/A	Hexadecimal string. Length: 4 to 64 characters.	N/A
ReachableVialpv6Address	Reachable address for the DHCPv6 client. It is the link local address of the DHCPv6 server or DHCPv6 relay agent	N/A	Hexadecimal string, colon-separated.	N/A
Ipv6Address	IPv6 address obtained.	N/A	Hexadecimal string, colon-separated.	This column is not available when the DHCPv6 client type is Stateless client.
Ipv6PrefixLength	IPv6 prefix length obtained.	N/A	Unsigned integer. Value range: 1 to 128.	This column is not available when the DHCPv6 client type is Stateless client.
DNSServer	IPv6 address of the DNS server	N/A	String, case insensitive.	Separated by space if there are multiple

Column name	Column description	Column type	Data type and restrictions	Remarks
				addresses. Example: 1::1 2::2 3::3.
DomainName	Domain name suffix	N/A	String, case insensitive. Length: 1 to 50 characters.	N/A
PreferredLifetime	Preferred lifetime in seconds	N/A	Unsigned integer.	N/A
ValidLifetime	Valid lifetime in seconds	N/A	Unsigned integer.	N/A
T1	T1 time value in seconds	N/A	Unsigned integer.	N/A
T2	T2 time value in seconds	N/A	Unsigned integer.	N/A

# Contents

DHCP/dhccpc6 ..... 1

# DHCP/dhccpc6

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please check it.
Another interface is using the IPv6 prefix ID. 其它接口已经使用这个IPv6前缀号。	Another interface is using the IPv6 prefix ID, please try another one.

# Contents

DHCPSP .....	1
DHCPSP/DHCPSPUpdateBindingDatabase .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCPSP/DHCPSPClearBinding .....	1
XML structure .....	1
Table description .....	2
Columns .....	2

# DHCPSP

## DHCPSP/DHCPSPUpdateBindingDatabase

This table is used to save current DHCP snooping entries to the file.

### XML structure

```
<DHCPSP>
  <DHCPSPUpdateBindingDatabase>
    <Update></Update>
  </DHCPSPUpdateBindingDatabase>
</DHCPSP>
```

### Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPUpdateBindingDatabase
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Update	Update DHCP snooping database immediately	N/A	String.	This column must be empty.

## DHCPSP/DHCPSPClearBinding

This table is used to clear DHCP snooping entries.

### XML structure

```
<DHCPSP>
  <DHCPSPClearBinding>
    <ClearBinding>
      <Ipv4Address></Ipv4Address>
      <VLANID></VLANID>
    </ClearBinding>
  </DHCPSPClearBinding>
</DHCPSP>
```



```

        </ClearBinding>
    </DHCPSPClearBinding>
</DHCPSP>

```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPUpdateBindingDatabase
Table type	Multi-instance table
Row name	ClearBinding
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.	If Ipv4Address is empty, clears all DHCP snooping entries.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	If VLANID is empty, clears the DHCP snooping entry for the specified IP address in all Vlan.

# Contents

DHCPSP .....	1
DHCPSP/DHCPSPBindingDatabase .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCPSP/DHCPSPInterface .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
DHCPSP/DHCPSPOpt82CircuitIDVLAN .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
DHCPSP/DHCPSPOpt82RemoteIDVLAN .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
DHCPSP/DHCPSPOpt82 .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
DHCPSP/DHCPSPConfig .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
DHCPSP/DHCPSPEthernetServiceInstance .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
DHCPSP/DHCPSPVsi .....	15
XML structure .....	15
Table description .....	15
Columns .....	15

# DHCPSP

## DHCPSP/DHCPSPBindingDatabase

This table contains DHCP snooping binding database configuration information.

### XML structure

```
<DHCPSP>
  <DHCPSPBindingDatabase>
    <FileName></FileName>
    <URL></URL>
    <Username></Username>
    <Password></Password>
    <UpdateInterval></UpdateInterval>
  </DHCPSPBindingDatabase>
</DHCPSP>
```

### Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPBindingDatabase
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Database file name	N/A	String, case-insensitive. Length: 1 to 255 characters.	For the merge, create and replace operations, FileName and URL cannot be configured simultaneously.

Column name	Column description	Column type	Data type and restrictions	Remarks
URL	Object URL string	N/A	String. case sensitive. Length: 1 to 255 characters.	Specifies the URL of a remote file. Do not include a username or password in the URL. Case sensitivity and the supported format type of the path depend on the server.  If URL is configured for the delete and remove operations, Username and Password will be removed automatically.
Username	FTP username	N/A	String. case sensitive. Length: 1 to 32 characters.	Cannot be configured for the delete and remove operations.
Password	FTP password	N/A	String. case sensitive. Length: 1 to 32 characters.	Only plaintext password is supported.  For the merge, create and replace operations, Password must be configured with Username.  Cannot be configured for the delete and remove operations.
UpdateInterval	Auto update interval	N/A	Unsigned integer. Value range: 60 to 864000 seconds. Default: 300 seconds.	N/A

## DHCPSP/DHCPSPInterface

This table contains the configuration information on interface about using DHCP snooping.

## XML structure

```
<DHCPSP>
  <DHCPSPInterface>
    <Interface>
      <IfIndex></IfIndex>
      <BindingRecord></BindingRecord>
      <CheckMacAddress></CheckMacAddress>
      <CheckRequestMessage></CheckRequestMessage>
      <Trust></Trust>
      <LearnMaxNum></LearnMaxNum>
      <RateLimitNum></RateLimitNum>
    </Interface>
  </DHCPSPInterface>
</DHCPSP>
```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPInterface
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface Layer 3 Ethernet interface/subinterface Layer 3 aggregate interface/aggregate subinterface S-channel interface/S-channel aggregate interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document

Column name	Column description	Column type	Data type and restrictions	Remarks
				of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
BindingRecord	Whether enable the interface to record DHCP snooping entry or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	Applicable to only Layer 2 interfaces of the Restrictions.
CheckMacAddresses	Whether enable the interface to check MAC address in DHCP packets or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b>(default)</li> </ul>	N/A
CheckRequestMessage	Whether enable the interface to check request message in DHCP packets or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	Applicable to only Layer 2 interfaces of the Restrictions.
Trust	Whether to configure an interface as a trusted interface.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	N/A
LearnMaxNum	The maximum number of DHCP snooping entries for an interface to learn	N/A	Unsigned integer. Value range: 0 to 4294967295.	No limit as default. 0 means No limit.
RateLimitNum	The maximum rate for an interface to receive DHCP packets, in Kbps	N/A	Unsigned integer. Value range: 0, RateLimitMinNum to RateLimitMaxNum.	Values of RateLimitMinNum and RateLimitMaxNum depend on the device model.  Applicable to only Layer 2 interfaces of the Restrictions.

Column name	Column description	Column type	Data type and restrictions	Remarks
				No limit as default. 0 means No limit.

## DHCPSP/DHCPSPOpt82CircuitIDVLAN

This table contains DHCP snooping option 82 circuit ID with VLAN configuration information.

### XML structure

```

<DHCPSP>
  <DHCPSPOpt82CircuitIDVLAN>
    <VLANCircuitID>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <CircuitID></CircuitID>
    </VLANCircuitID>
  </DHCPSPOpt82CircuitIDVLAN>
</DHCPSP>

```

### Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPOpt82CircuitIDVLAN
Table type	Multi-instance table
Row name	VLANCircuitID
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 2 interfaces are supported.

Column name	Column description	Column type	Data type and restrictions	Remarks
				Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
CircuitID	Option82 circuit ID string	N/A	String, case-insensitive. Length: 3 to 63 characters.	For the merge, create and replace operations, the CircuitID must be configured.  For the remove and delete operations, the CircuitID cannot be configured.

## DHCPSP/DHCPSPOpt82RemoteIDVLAN

This table contains DHCP snooping option 82 remote ID with VLAN configuration information.

### XML structure

```

<DHCPSP>
  <DHCPSPOpt82RemoteIDVLAN>
    <VLANRemoteID>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <RemoteID></RemoteID>
      <Sysname></Sysname>
    </VLANRemoteID>
  </DHCPSPOpt82RemoteIDVLAN>
</DHCPSP>

```



## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPOpt82RemoteIDVLAN
Table type	Multi-instance table
Row name	VLANRemoteID
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 2 interfaces are supported.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
RemoteID	Option82 remote ID string	N/A	String, case-insensitive. Length: 1 to 63 characters. The string must be ASCII string.	For the merge, create and replace operations, the RemoteID and Sysname cannot be configured simultaneously and RemoteID or Sysname must be configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
				Cannot be configured for the delete and remove operations.
Sysname	Whether the function of system name fix in option 82 remote ID is used.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	For the merge, create and replace operations, the RemoteID and Sysname cannot be configured simultaneously and RemoteID or Sysname must be configured.  Cannot be configured for the delete and remove operations.

## DHCPSP/DHCPSPOpt82

This table contains DHCP snooping option 82 configuration information.

### XML structure

```

<DHCPSP>
  <DHCPSPOpt82>
    <Option82>
      <IfIndex></IfIndex>
      <Option82Enable></Option82Enable>
      <Strategy></Strategy>
      <Circuit>
        <CircuitID></CircuitID>
        <CircuitIDMode></CircuitIDMode>
        <CircuitIDNodeIDType></CircuitIDNodeIDType>
        <CircuitIDNodeID></CircuitIDNodeID>
        <CircuitIDFormat></CircuitIDFormat>
      </Circuit>
      <Remote>
        <RemoteIDMode></RemoteIDMode>
        <RemoteID></RemoteID>
        <RemoteIDFormat></RemoteIDFormat>
      </Remote>
    </Option82>
  </DHCPSPOpt82>

```

</DHCPSP>

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPOpt82
Table type	Multi-instance table
Row name	Option82
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Option82Enable	Whether enable theDHCP snooping to support Option 82 or not.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>.</li><li>• <b>false</b> (default)</li></ul>	N/A
Strategy	Option 82 strategy type	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Drop.</li><li>• <b>1</b>—Keep.</li><li>• <b>2</b>—Replace (default).</li></ul>	N/A
Circuit	The configuration	Data	Members include:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	of Circuit ID sub-option	structure	<ul style="list-style-type: none"> <li>CircuitID</li> <li>CircuitIDMode</li> <li>CircuitIDNodeIDType</li> <li>CircuitIDNodeID</li> <li>CircuitIDFormat</li> </ul>	
CircuitID	Circuit ID user defined string	N/A	String. case insensitive. Length: 3 to 63 characters.	For the merge, create and replace operations, the CircuitID must be configured if CircuitIDMode is 2 and can't be configured if CircuitIDMode is 0 or 1.
CircuitIDMode	Circuit ID mode	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Normal (default).</li> <li><b>1</b>—Verbose.</li> <li><b>2</b>—User-defined.</li> </ul>	It must be configured together with the CircuitIDFormat.  If CircuitIDMode is configured for the remove and delete operations, CircuitID, CircuitIDNodeIDType and CircuitIDNodeID will be removed automatically.
CircuitIDNodeIDType	Circuit IP node-identifier type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Mac (default).</li> <li><b>1</b>—Sysname.</li> <li><b>2</b>—User-defined.</li> </ul>	If CircuitIDNodeIDType is configured for the remove and delete operations, CircuitIDNodeID will be removed automatically.  For the merge, create and replace operations, the CircuitIDNodeIDType can be configured only when CircuitIDMode is 1.
CircuitIDNodeID	Circuit ID	N/A	String. case insensitive.	For the merge, create

Column name	Column description	Column type	Data type and restrictions	Remarks
	node-identifier user defined string		Length: 1 to 50 characters.	and replace operations, the CircuitIDNodeID must be configured if CircuitIDNodeIDType is 2 and can't be configured if CircuitIDNodeIDType is 0 or 1.
CircuitIDFormat	Circuit ID format type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Hex.</li> <li>• 1—Ascii.</li> <li>• 2—Undefined.</li> </ul>	It must be configured together with the CircuitIDMode.  CircuitIDFormat must be 1 if CircuitIDMode is 2.  The default CircuitIDFormat is Hex when CircuitIDMode is Normal;  The default CircuitIDFormat is Undefined when CircuitIDMode is Verbose;  The default CircuitIDFormat is Ascii when CircuitIDMode is User-defined.
Remote	The configuration of Remote ID sub-option	Data structure	Members include: <ul style="list-style-type: none"> <li>• RemoteIDMode</li> <li>• RemoteID</li> <li>• RemoteIDFormat</li> </ul>	N/A
RemoteIDMode	Remote ID mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Normal (default).</li> <li>• 1—Sysname.</li> <li>• 2—User-defined.</li> </ul>	It must be configured together with the RemoteIDFormat.  If RemoteIDMode is configured for the remove and delete operations, RemoteID will be removed

Column name	Column description	Column type	Data type and restrictions	Remarks
				automatically.
RemoteID	Remote ID user defined string	N/A	String. case insensitive. Length: 1 to 63 characters.	For the merge, create and replace operations, the RemoteID must be configured if RemoteIDMode is 2 and can't be configured if RemoteIDMode is 0 or 1.
RemoteIDFormat	Remote ID format type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Hex.</li> <li>• 1—Ascii.</li> </ul>	It must be configured together with the RemoteIDMode.  RemoteIDFormat must be 1 if RemoteIDMode is 1 or 2.  The default RemoteIDFormat is Hex when RemoteIDMode is Normal;  The default RemoteIDFormat is Ascii when CircuitIDMode is Sysname or User-defined;

## DHCPSP/DHCPSPConfig

This table contains DHCP snooping configuration information.

### XML structure

```

<DHCPSP>
  <DHCPSPConfig>
    <DHCPSPEnable></DHCPSPEnable>
  </DHCPSPConfig>
</DHCPSP>

```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPConfig
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DHCPSPEnable	Whether the function of DHCP snooping is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true.</b></li><li>• <b>false</b> (default)</li></ul>	N/A

## DHCPSP/DHCPSPEthernetServiceInstance

This table contains the Ethernet service instance configuration information of DHCP snooping.

## XML structure

```
<DHCPSP>
  <DHCPSPEthernetServiceInstance>
    <EthernetServiceInstance>
      <IfIndex></IfIndex>
      <ServiceInstance></ServiceInstance>
      <Trust></Trust>
    </EthernetServiceInstance>
  </DHCPSPEthernetServiceInstance>
</DHCPSP>
```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPEthernetServiceInstance
Table type	Multi-instance table
Row name	EthernetServiceInstance
Restrictions	This table supports only Layer 2 Ethernet interfaces or Layer 2 aggregate interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
ServiceInstance	Service instance ID.	Index	Unsigned integer.	N/A
Trust	Whether to configure the interface for the Ethernet service instance as a trusted interface.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b> (default)</li></ul>	N/A



# DHCPSP/DHCPSPVsi

This table contains the VSI configuration information of DHCP snooping.

## XML structure

```
<DHCPSP>
  <DHCPSPVsi>
    <Vsi>
      <VsiName></VsiName>
      <BindingRecord></BindingRecord>
      <TrustTunnel></TrustTunnel>
    </Vsi>
  </DHCPSPVsi>
</DHCPSP>
```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPVsi
Table type	Multi-instance table
Row name	Vsi
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
VsiName	VSI name	Index	String, case-sensitive. Length: 1 to 31 characters.
BindingRecord	Whether to enable recording DHCP snooping entries in the VSI.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b> (default)</li></ul>
TrustTunnel	Whether to	N/A	Boolean:

Column name	Column description	Column type	Data type and restrictions
	configure the tunnel interface of the VSI as a trusted interface.		<ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>

# Contents

DHCPSP .....	1
DHCPSP/DHCPSPBindingDatabase .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCPSP/DHCPSPInterface .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
DHCPSP/DHCPSPOpt82CircuitIDVLAN .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
DHCPSP/DHCPSPOpt82RemoteIDVLAN .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
DHCPSP/DHCPSPOpt82 .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
DHCPSP/DHCPSPBinding .....	8
XML structure .....	9
Table description .....	9
Columns .....	9
DHCPSP/DHCPSPConfig .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
DHCPSP/DHCPSPSpecification .....	10
XML structure .....	11
Table description .....	11
Columns .....	11
DHCPSP/DHCPSPEthernetServiceInstance .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
DHCPSP/DHCPSPVsi .....	13
XML structure .....	13
Table description .....	13
Columns .....	13

# DHCPSP

## DHCPSP/DHCPSPBindingDatabase

This table contains DHCP snooping binding database information.

### XML structure

```
<DHCPSP>
  <DHCPSPBindingDatabase>
    <FileName></FileName>
    <URL></URL>
    <Username></Username>
    <Password></Password>
    <UpdateInterval></UpdateInterval>
  </DHCPSPBindingDatabase>
</DHCPSP>
```

### Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPBindingDatabase
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
FileName	Object file name	N/A	String, case-insensitive. Length: 1 to 255 characters.
URL	Object URL string	N/A	String, case-insensitive. Length: 1 to 255 characters.
Username	FTP username	N/A	String, case-insensitive.

Column name	Column description	Column type	Data type and restrictions
			Length: 1 to 32 characters.
Password	FTP password	N/A	String, case-insensitive. Length: 1 to 32 characters.
UpdateInterval	Auto update interval	N/A	Unsigned integer. Value range: 60 to 864000 seconds.

## DHCPSP/DHCPSPInterface

This table contains the configuration information on interface about using DHCP snooping.

### XML structure

```

<DHCPSP>
  <DHCPSPInterface>
    <Interface>
      <IfIndex></IfIndex>
      <BindingRecord></BindingRecord>
      <CheckMacAddress></CheckMacAddress>
      <CheckRequestMessage></CheckRequestMessage>
      <Trust></Trust>
      <LearnMaxNum></LearnMaxNum>
      <RateLimitNum></RateLimitNum>
    </Interface>
  </DHCPSPInterface>
</DHCPSP>

```

### Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPInterface
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface Layer 3 Ethernet interface/subinterface

	Layer 3 aggregate interface/aggregate subinterface S-channel interface/S-channel aggregate interface
--	---

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
BindingRecord	Whether enable the interface to record DHCP snooping entry or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Applicable to only Layer 2 interfaces of the Restrictions.
CheckMacAddress	Whether enable the interface to check MAC address in DHCP packets or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
CheckRequestMessage	Whether enable the interface to check request message in DHCP packets or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Applicable to only Layer 2 interfaces of the Restrictions.
Trust	Whether to configure an interface as a trusted interface.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
LearnMaxN	The	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
um	maximum number of DHCP snooping entries for an interface to learn		Value range: 0 to 4294967295.	
RateLimitNum	The maximum rate for an interface to receive DHCP packets, in Kbps	N/A	Unsigned integer. Value range: 0, RateLimitMinNum to RateLimitMaxNum.	Values of RateLimitMinNum and RateLimitMaxNum depend on the device model.  Applicable to only Layer 2 interfaces of the Restrictions.

## DHCPSP/DHCPSPOpt82CircuitIDVLAN

This table contains DHCP snooping option 82 circuit ID with VLAN configuration information.

### XML structure

```

<DHCPSP>
  <DHCPSPOpt82CircuitIDVLAN>
    <VLANCircuitID>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <CircuitID></CircuitID>
    </VLANCircuitID>
  </DHCPSPOpt82CircuitIDVLAN>
</DHCPSP>

```

### Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPOpt82CircuitIDVLAN
Table type	Multi-instance table

Row name	VLANCircuitID
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.
CircuitID	Option82 circuit ID string	N/A	String, case-insensitive. Length: 3 to 63 characters. The string must be ASCII string.

## DHCPSP/DHCPSPOpt82RemoteIDVLAN

This table contains DHCP snooping option 82 remote ID with VLAN configuration information.

## XML structure

```

<DHCPSP>
  <DHCPSPOpt82RemoteIDVLAN>
    <VLANRemoteID>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <RemoteID></RemoteID>
      <Sysname></Sysname>
    </VLANRemoteID>
  </DHCPSPOpt82RemoteIDVLAN>
</DHCPSP>

```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPOpt82RemoteIDVLAN
Table type	Multi-instance table



Row name	VLANRemoteID
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.
RemoteID	Option82 remote ID string	N/A	String, case-insensitive. Length: 1 to 63 characters. The string must be ASCII string.
Sysname	Whether the function of system name fix in option 82 remote ID is used.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>

## DHCPSP/DHCPSPOpt82

This table contains DHCP snooping option 82 configuration information.

## XML structure

```

<DHCPSP>
  <DHCPSPOpt82>
    <Option82>
      <IfIndex></IfIndex>
      <Option82Enable></Option82Enable>
      <Strategy></Strategy>
      <Circuit>
        <CircuitID></CircuitID>
        <CircuitIDMode></CircuitIDMode>
        <CircuitIDNodeIDType></CircuitIDNodeIDType>
        <CircuitIDNodeID></CircuitIDNodeID>
        <CircuitIDFormat></CircuitIDFormat>
      </Circuit>
      <Remote>

```

```

    <RemoteIDMode></RemoteIDMode>
    <RemoteID></RemoteID>
    <RemoteIDFormat></RemoteIDFormat>
  </Remote>
</Option82>
</DHCPSPOpt82>
</DHCPSP>

```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPOpt82
Table type	Multi-instance table
Row name	Option82
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.
Option82Enable	Whether enable the DHCP snooping to support Option 82 or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>
Strategy	Option 82 strategy type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Drop.</li> <li><b>1</b>—Keep.</li> <li><b>2</b>—Replace.</li> </ul>
Circuit	The configuration of Circuit ID sub-option	Data structure	Members include: <ul style="list-style-type: none"> <li>CircuitID</li> <li>CircuitIDMode</li> <li>CircuitIDNodeIDType</li> <li>CircuitIDNodeID</li> <li>CircuitIDFormat</li> </ul>

Column name	Column description	Column type	Data type and restrictions
CircuitID	Circuit ID user defined string	N/A	String, case-insensitive. Length: 3 to 63 characters.
CircuitIDMode	Circuit ID mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Normal.</li> <li>• <b>1</b>—Verbose.</li> <li>• <b>2</b>—User-defined.</li> </ul>
CircuitIDNodeIDType	Circuit IP node-identifier type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Mac.</li> <li>• <b>1</b>—Sysname.</li> <li>• <b>2</b>—User-defined.</li> </ul>
CircuitIDNodeID	Circuit ID node-identifier user defined string	N/A	String, case-insensitive. Length: 1 to 50 characters.
CircuitIDFormat	Circuit ID format type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Hex.</li> <li>• <b>1</b>—Ascii.</li> <li>• <b>2</b>—Undefined.</li> </ul>
Remote	The configuration of Remote ID sub-option	Data structure	Members include: <ul style="list-style-type: none"> <li>• RemoteIDMode</li> <li>• RemoteID</li> <li>• RemoteIDFormat</li> </ul>
RemoteIDMode	Remote ID mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Normal.</li> <li>• <b>1</b>—Sysname.</li> <li>• <b>2</b>—User-defined.</li> </ul>
RemoteID	Remote ID user defined string	N/A	String, case-insensitive. Length: 1 to 63 characters.
RemoteIDFormat	Remote ID format type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Hex.</li> <li>• <b>1</b>—Ascii.</li> </ul>

## DHCPSP/DHCPSPBinding

This table contains DHCP snooping entries information.

## XML structure

```
<DHCPSP>
  <DHCPSPBinding>
    <Binding>
      <Ipv4Address></Ipv4Address>
      <VLANID></VLANID>
      <SVLANID></SVLANID>
      <MacAddress></MacAddress>
      <Lease></Lease>
      <IfIndex></IfIndex>
    </Binding>
  </DHCPSPBinding>
</DHCPSP>
```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPBinding
Table type	Multi-instance table
Row name	Binding
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Ipv4Address	IPv4 address	Index	String, dotted decimal notation.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.
SVLANID	Second VLAN ID	Index	Unsigned integer. Value range: 1 to 4094 and 65535. 65535 means do not have SVLANID.
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.
Lease	Left Lease time	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	N/A	Unsigned integer.

## DHCPSP/DHCPSPConfig

This table contains DHCP snooping configuration information.

### XML structure

```
<DHCPSP>
  <DHCPSPConfig>
    <DHCPSPEnable></DHCPSPEnable>
  </DHCPSPConfig>
</DHCPSP>
```

### Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPConfig
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
DHCPSPEnable	Whether the function of DHCP snooping is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>

## DHCPSP/DHCPSPSpecification

This table contains DHCP snooping specification information.

## XML structure

```
<DHCPSP>
  <DHCPSPSpecification>
    <RateLimitMinNum></RateLimitMinNum>
    <RateLimitMaxNum></RateLimitMaxNum>
  </DHCPSPSpecification>
</DHCPSP>
```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RateLimitMinNum	The minimum rate number can be configured	N/A	Unsigned integer.	N/A
RateLimitMaxNum	The maximum rate number can be configured	N/A	Unsigned integer.	0 means that rate limit isn't supported.

## DHCPSP/DHCPSPEthernetServiceInstance

This table contains the Ethernet service instance configuration information of DHCP snooping.

## XML structure

```
<DHCPSP>
  <DHCPSPEthernetServiceInstance>
```

```

<EthernetServiceInstance>
  <IfIndex></IfIndex>
  <ServiceInstance></ServiceInstance>
  <Trust></Trust>
</EthernetServiceInstance>
</DHCPSPEthernetServiceInstance>
</DHCPSP>

```

## Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPEthernetServiceInstance
Table type	Multi-instance table
Row name	EthernetServiceInstance
Restrictions	This table supports only Layer 2 Ethernet interfaces or Layer 2 aggregate interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
ServiceInstance	Service instance ID	Index	Unsigned integer.	N/A
Trust	Whether to configure the interface for the Ethernet service instance as a	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	trusted interface			

## DHCPSP/DHCPSPVsi

This table contains the VSI configuration information of DHCP snooping.

### XML structure

```

<DHCPSP>
  <DHCPSPVsi>
    <Vsi>
      <VsiName></VsiName>
      <BindingRecord></BindingRecord>
      <TrustTunnel></TrustTunnel>
    </Vsi>
  </DHCPSPVsi>
</DHCPSP>

```

### Table description

Item	Description
Feature name	DHCPSP
Table name	DHCPSPVsi
Table type	Multi-instance table
Row name	Vsi
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
VsiName	VSI name	Index	String, case-sensitive. Length: 1 to 31 characters.
BindingRecord	Whether to enable recording DHCP	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> </ul>



Column name	Column description	Column type	Data type and restrictions
	snooping entries in the VSI.		<ul style="list-style-type: none"> <li><b>false</b></li> </ul>
TrustTunnel	Whether to configure the tunnel interface of the VSI as a trusted interface.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>

# Contents

DHCP/dhcpsp ..... 1

# DHCP/dhcppsp

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please check your configuration.
Invalid VLAN ID. 非法的VLAN ID。	Invalid VLAN ID, please check your VLAN ID.
The URL of the TFTP file can't include username or password. 不要为一个TFTP文件的URL指定用户名和密码。	Please do not set a username or password for a URL of the TFTP file.
Invalid filename or URL. 无效的本地文件名或URL。	Invalid filename or URL, please check it.
The URL can't include the username or password. 不要在URL中携带用户名和密码信息。	Please do not set username or password in the URL.
The system is saving DHCP snooping entries to backup file. Please wait. 系统正在将DHCP Snooping表项写入备份表项的文件中。请等待。	The system is saving DHCP snooping entries to backup file.
The system is downloading DHCP snooping entries from the backup file. Please wait. 系统正在从备份表项的文件中恢复DHCP Snooping表项。请等待。	The system is downloading DHCP snooping entries from the backup file.
The node identifier can't include any spaces. 节点标识的字符串中不允许出现空格。	Please make certain that the node identifier is not include any spaces.
The value is out of range. 参数值超出范围。	The value is out of range, please check your value.
The VSI instance does not exist. VSI实例不存在。	The VSI instance is not created. 配置DHCP Snooping信任通道（远端站点）时，对应的VSI实例未创建。
The Ethernet service instance does not exist. Service instance不存在。	The Ethernet service instance is not created. 配置DHCP Snooping信任通道（本地站点）时，对应的以太网服务实例未创建。

# Contents

DHCPSP6 .....	1
DHCPSP6/DHCPSP6UpdateBindingDatabase.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
DHCPSP6/DHCPSP6ClearBinding.....	1
XML structure.....	1
Table description.....	2
Columns.....	2

# DHCPSP6

## DHCPSP6/DHCPSP6UpdateBindingDatabase

This table is used to save current DHCP snooping entries to the file.

### XML structure

```
<DHCPSP6>
  <DHCPSP6UpdateBindingDatabase>
    <Update></Update>
  </DHCPSP6UpdateBindingDatabase>
</DHCPSP6>
```

### Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6UpdateBindingDatabase
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Update	Update DHCP snooping database immediately	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	This column must be empty.

## DHCPSP6/DHCPSP6ClearBinding

This table is used to clear DHCP snooping entries.

### XML structure

```
<DHCPSP6>
  <DHCPSP6ClearBinding>
    <ClearBinding>
      <Ipv6Address></Ipv6Address>
      <VLANID></VLANID>
    </ClearBinding>
  </DHCPSP6ClearBinding>
</DHCPSP6>
```

```

        </ClearBinding>
    </DHCPSP6ClearBinding>
</DHCPSP6>

```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6ClearBinding
Table type	Single-instance table
Row name	ClearBinding
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	If Ipv6Address is empty, clears all DHCP snooping entries.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	If VLANID is empty, clears the DHCP snooping entry for the specified IP address in all Vlan.

# Contents

DHCPSP6 .....	1
DHCPSP6/DHCPSP6BindingDatabase .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCPSP6/DHCPSP6Interface .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
DHCPSP6/DHCPSP6OptionInterfaceID .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
DHCPSP6/DHCPSP6OptionRemoteID .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
DHCPSP6/DHCPSP6OptionEnable .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
DHCPSP6/DHCPSP6Config .....	8
XML structure .....	9
Table description .....	9
Columns .....	9

# DHCPSP6

## DHCPSP6/DHCPSP6BindingDatabase

This table contains IPv6 DHCP snooping binding database configuration information.

### XML structure

```
<DHCPSP6>
  <DHCPSP6BindingDatabase>
    <FileName></FileName>
    <URL></URL>
    <Username></Username>
    <Password></Password>
    <UpdateInterval></UpdateInterval>
  </DHCPSP6BindingDatabase>
</DHCPSP6>
```

### Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6BindingDatabase
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Database file name	N/A	String, case-insensitive. Length: 1 to 255 characters.	For the merge, create and replace operations, FileName and URL can not be configured simultaneously.



Column name	Column description	Column type	Data type and restrictions	Remarks
URL	Object URL string	N/A	String. case sensitive. Length: 1 to 255 characters.	Specifies the URL of a remote file. Do not include a username or password in the URL. Case sensitivity and the supported format type of the path depend on the server.  If URL is configured for the delete and remove operations, Username and Password will be removed automatically.
Username	FTP username	N/A	String. case sensitive. Length: 1 to 32 characters.	Can not be configured for the delete and remove operations.
Password	FTP password	N/A	String. case sensitive. Length: 1 to 32 characters.	Only plaintext password is supported.  For the merge, create and replace operations, Password must be configured with Username.  Can not be configured for the delete and remove operations.
UpdateInterval	Auto update interval	N/A	Unsigned integer. Value range: 60 to 864000 seconds. Default: 300 seconds.	N/A

## DHCPSP6/DHCPSP6Interface

This table contains the configuration information on interface about using IPv6 DHCP snooping.

## XML structure

```
<DHCPSP6>
  <DHCPSP6Interface>
    <Interface>
      <IfIndex></IfIndex>
      <LearnMaxNum></LearnMaxNum>
      <RateLimitNum></RateLimitNum>
      <CheckRequestMessage></CheckRequestMessage>
      <BindingRecord></BindingRecord>
      <Trust></Trust>
    </Interface>
  </DHCPSP6Interface>
</DHCPSP6>
```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6Interface
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interfaceS-channel interface/S-channel aggregate interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in

Column name	Column description	Column type	Data type and restrictions	Remarks
				Ifmgr NETCONF XML API Configuration Reference.
LearnMaxNum	The maximum number of IPv6 DHCP snooping entries for an interface to learn	N/A	Unsigned integer. Value range: 0 to 4294967295.	No limit as default. 0 means No limit.
RateLimitNum	The maximum rate for an interface to receive IPv6 DHCP packets, in Kbps.	N/A	Unsigned integer. Value range: 0, RateLimitMinNum to RateLimitMaxNum.	Values of RateLimitMinNum and RateLimitMaxNum depend on the device model. No limit as default. 0 means No limit.
BindingRecord	Whether enable the interface to record IPv6 DHCP snooping entry or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false</b>(default)</li> </ul>	N/A
CheckRequestMessage	Whether enable the interface to check request message in IPv6 DHCP packets or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false</b>(default)</li> </ul>	N/A
Trust	Whether configurate an interface to be trusted or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false</b>(default)</li> </ul>	N/A

## DHCPSP6/DHCPSP6OptionInterfaceID

This table contains IPv6 DHCP snooping option 18 DUID configuration information.

## XML structure

```
<DHCPSP6>
  <DHCPSP6OptionInterfaceID>
    <InterfaceID>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <InterfaceID></InterfaceID>
    </InterfaceID>
  </DHCPSP6OptionInterfaceID>
</DHCPSP6>
```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6OptionInterfaceID
Table type	Multi-instance table
Row name	InterfaceID
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 2 interfaces are supported.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 0 to 4094.	0 means don't specify the VLAN.
InterfaceID	Option18 DUID string	N/A	String, case-insensitive. Length: 1 to 128 characters.	For the merge, create and replace operations, the InterfaceID must be configured.  For the remove and delete operations, the InterfaceID can not be configured.

## DHCPSP6/DHCPSP6OptionRemoteID

This table contains IPv6 DHCP snooping option 37 DUID configuration information.

### XML structure

```

<DHCPSP6>
  <DHCPSP6OptionRemoteID>
    <RemoteID>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <RemoteID></RemoteID>
    </RemoteID>
  </DHCPSP6OptionRemoteID>
</DHCPSP6>

```

### Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6OptionRemoteID
Table type	Multi-instance table
Row name	RemoteID
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 2 interfaces are supported.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 0 to 4094.	0 means don't specify the VLAN.
RemoteID	Option37 DUID string	N/A	String, case-insensitive. Length: 1 to 128 characters.	For the merge, create and replace operations, the RemoteID must be configured.  For the remove and delete operations, the RemoteID can not be configured.

## DHCPSP6/DHCPSP6OptionEnable

This table contains IPv6 DHCP snooping option 82 configuration information.

## XML structure

```

<DHCPSP6>
  <DHCPSP6OptionEnable>
    <OptionEnable>
      <IfIndex></IfIndex>
      <InterfaceIDEnable></InterfaceIDEnable>
      <RemoteIDEnable></RemoteIDEnable>
    </OptionEnable>
  </DHCPSP6OptionEnable>
</DHCPSP6>

```

```

    </DHCPSP6OptionEnable>
  </DHCPSP6>

```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6OptionEnable
Table type	Multi-instance table
Row name	OptionEnable
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
InterfaceIDEnable	Whether enable the IPv6 DHCP snooping to support InterfaceID or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>.</li> <li><b>false</b>(default)</li> </ul>
RemoteIDEnable	Whether enable the IPv6 DHCP snooping to support RemoteID or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>.</li> <li><b>false</b>(default)</li> </ul>

## DHCPSP6/DHCPSP6Config

This table contains IPv6 DHCP snooping configuration information.

## XML structure

```
<DHCPSP6>
  <DHCPSP6Config>
    <DHCPSP6Enable></DHCPSP6Enable>
  </DHCPSP6Config>
</DHCPSP6>
```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6Config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
DHCPSPEnable	Enable DHCP snooping	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true.</b></li><li>• <b>false</b>(default)</li></ul>



# Contents

DHCPSP6 .....	1
DHCPSP6/DHCPSP6BindingDatabase .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DHCPSP6/DHCPSP6Interface .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
DHCPSP6/DHCPSP6OptionInterfaceID .....	3
XML structure .....	4
Table description .....	4
Columns .....	4
DHCPSP6/DHCPSP6OptionRemoteID .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
DHCPSP6/DHCPSP6OptionEnable .....	5
XML structure .....	6
Table description .....	6
Columns .....	6
DHCPSP6/DHCPSP6Binding .....	6
XML structure .....	7
Table description .....	7
Columns .....	7
DHCPSP6/DHCPSP6Config .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
DHCPSP6/DHCPSP6Specification .....	8
XML structure .....	9
Table description .....	9
Columns .....	9

# DHCPSP6

## DHCPSP6/DHCPSP6BindingDatabase

This table contains IPv6 DHCP snooping binding database configuration information.

### XML structure

```
<DHCPSP6>
  <DHCPSP6BindingDatabase>
    <FileName></FileName>
    <URL></URL>
    <Username></Username>
    <Password></Password>
    <UpdateInterval></UpdateInterval>
  </DHCPSP6BindingDatabase>
</DHCPSP6>
```

### Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6BindingDatabase
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
FileName	Database file name	N/A	String, case-insensitive. Length: 1 to 255 characters.
URL	Object URL string.	N/A	String. case sensitive. Length: 1 to 255 characters.
Username	FTP username	N/A	String. case sensitive.

Column name	Column description	Column type	Data type and restrictions
			Length: 1 to 32 characters.
Password	FTP password	N/A	String. case sensitive. Length: 1 to 32 characters.
UpdateInterval	Auto update interval	N/A	Unsigned integer. Value range: 60 to 864000 seconds. Default: 300 seconds.

## DHCPSP6/DHCPSP6Interface

This table contains the configuration information on interface about using IPv6 DHCP snooping.

### XML structure

```

<DHCPSP6>
  <DHCPSP6Interface>
    <Interface>
      <IfIndex></IfIndex>
      <LearnMaxNum></LearnMaxNum>
      <RateLimitNum></RateLimitNum>
      <CheckRequestMessage></CheckRequestMessage>
      <BindingRecord></BindingRecord>
      <Trust></Trust>
    </Interface>
  </DHCPSP6Interface>
</DHCPSP6>

```

### Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6Interface
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interfaceS-channel interface/S-channel aggregate

	interface
--	-----------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
LearnMaxNum	The maximum number of DHCP snooping entries for an interface to learn	N/A	Unsigned integer. Value range: 0 to 4294967295.	No limit as default. 0 means No limit.
RateLimitNum	The maximum rate for an interface to receive DHCP packets, in Kbps	N/A	Unsigned integer.	The value range depends on the device model.
BindingRecord	Whether enable the interface to record DHCP snooping entry or not	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false</b>(default)</li> </ul>	N/A
CheckRequestMessage	Whether enable the interface to check request message in DHCP packets or not	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false</b>(default)</li> </ul>	N/A
Trust	Whether configurate an interface to be trusted or not	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false</b>(default)</li> </ul>	N/A

## DHCPSP6/DHCPSP6OptionInterfaceID

This table contains IPv6 DHCP snooping option 18 DUID configuration information.

## XML structure

```
<DHCPSP6>
  <DHCPSP6OptionInterfaceID>
    <InterfaceID>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <InterfaceID></InterfaceID>
    </InterfaceID>
  </DHCPSP6OptionInterfaceID>
</DHCPSP6>
```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6OptionInterfaceID
Table type	Multi-instance table
Row name	InterfaceID
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 2 interfaces are supported.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 0 to 4094.	0 means don't specify the VLAN.
InterfaceID	Option18 DUID string	N/A	String, case-insensitive. Length: 1 to 128 characters.	N/A

## DHCPSP6/DHCPSP6OptionRemoteID

This table contains IPv6 DHCP snooping option 37 DUID configuration information.

## XML structure

```
<DHCPSP6>
  <DHCPSP6OptionRemoteID>
    <RemoteID>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <RemoteID></RemoteID>
    </RemoteID>
  </DHCPSP6OptionRemoteID>
</DHCPSP6>
```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6OptionRemoteID
Table type	Multi-instance table
Row name	RemoteID
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 2 interfaces are supported.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 0 to 4094.	0 means don't specify the VLAN.
RemoteID	Option37 DUID string	N/A	String, case-insensitive. Length: 1 to 128 characters.	N/A

## DHCPSP6/DHCPSP6OptionEnable

This table contains IPv6 DHCP snooping option 82 configuration information.

## XML structure

```
<DHCPSP6>
  <DHCPSP6OptionEnable>
    <OptionEnable>
      <IfIndex></IfIndex>
      <InterfaceIDEnable></InterfaceIDEnable>
      <RemoteIDEnable></RemoteIDEnable>
    </OptionEnable>
  </DHCPSP6OptionEnable>
</DHCPSP6>
```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6OptionEnable
Table type	Multi-instance table
Row name	OptionEnable
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.
InterfaceIDEnable	Enable the DHCP snooping to support InterfaceID	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled (default).</li></ul>
RemoteIDEnable	Enable the DHCP snooping to support RemoteID	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled (default).</li></ul>

## DHCPSP6/DHCPSP6Binding

This table contains IPv6 DHCP snooping entries information.

## XML structure

```
<DHCPSP6>
  <DHCPSP6Binding>
    <Binding>
      <Ipv6Address></Ipv6Address>
      <VLANID></VLANID>
      <SVLANID></SVLANID>
      <MacAddress></MacAddress>
      <Lease></Lease>
      <IfIndex></IfIndex>
    </Binding>
  </DHCPSP6Binding>
</DHCPSP6>
```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6Binding
Table type	Multi-instance table
Row name	Binding
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Ipv6Address	IPv6 address	Index	String, dotted decimal notation.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.
SVLANID	Second VLAN ID	Index	Unsigned integer. Value range: 1 to 4094 and 65535. 65535 means no SVLANID.
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.



Column name	Column description	Column type	Data type and restrictions
Lease	Left Lease time	N/A	Unsigned integer.
IfIndex	Interface index	N/A	Unsigned integer.

## DHCPSP6/DHCPSP6Config

This table contains IPv6 DHCP snooping configuration information.

### XML structure

```
<DHCPSP6>
  <DHCPSP6Config>
    <DHCPSP6Enable></DHCPSP6Enable>
  </DHCPSP6Config>
</DHCPSP6>
```

### Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6Config
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
DHCPSP6Enable	Enable DHCP snooping	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false</b>(default)</li> </ul>

## DHCPSP6/DHCPSP6Specification

This table contains DHCP snooping specification information.

## XML structure

```
<DHCPSP6>
  <DHCPSP6Specification>
    <RateLimitMinNum></RateLimitMinNum>
    <RateLimitMaxNum></RateLimitMaxNum>
  </DHCPSP6Specification>
</DHCPSP6>
```

## Table description

Item	Description
Feature name	DHCPSP6
Table name	DHCPSP6Specification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RateLimitMinNum	The minimum rate number can be configured	N/A	Unsigned integer.	N/A
RateLimitMaxNum	The maximum rate number can be configured	N/A	Unsigned integer.	0 means that rate limit isn't supported.

# Contents

DHCP/dhccsp6 ..... 1

# DHCP/dhcppsp6

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please check it.
Invalid VLAN ID. 非法的VLAN ID。	Invalid VLAN ID, please check it.
The URL of the TFTP file can't include username or password. 不要为一个TFTP文件的URL指定用户名和密码。	Please make certain that the URL of the TFTP file isn't include username or password.
Invalid filename or URL. 无效的本地文件名或URL。	Invalid file name or URL, please check it.
The URL can't include the username or password. 不要在URL中携带用户名和密码信息。	Please make certain that the URL isn't include the username or password.
The system is saving DHCPv6 snooping entries to backup file. Please wait. 系统正在将DHCPv6 Snooping表项写入备份表项的文件中。请等待。	The system is saving DHCPv6 snooping entries to backup file
The system is downloading DHCPv6 snooping entries from the backup file. Please wait. 系统正在从备份表项的文件中恢复DHCPv6 Snooping表项。请等待。	The system is downloading DHCPv6 snooping entries from the backup file.
The value is out of range. 参数值超出范围。	The value is out of range, please check it.

# Contents

Diagnostic .....	1
Diagnostic/CPUHistory.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Diagnostic/CPUAlert.....	2
XML structure.....	2
Table description.....	2
Columns.....	3
Diagnostic/MemoryAlert .....	3
XML structure.....	3
Table description.....	4
Columns.....	4
Diagnostic/CoreAlert.....	5
XML structure.....	5
Table description.....	5
Columns.....	6
Diagnostic/Configuration .....	6
XML structure.....	6
Table description.....	6
Columns.....	7
Diagnostic/DiskAlert .....	7
XML structure.....	7
Table description.....	7
Columns.....	8

# Diagnostic

## Diagnostic/CPUHistory

This table contains usage information about the logical CPUs.

### XML structure

```
<Diagnostic>
  <CPUHistory>
    <CPU>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <MoniterEnable></MoniterEnable>
      <HistroyCycleInSecond></HistroyCycleInSecond>
      <CPUUsageLimit></CPUUsageLimit>
    </CPU>
  </CPUHistory>
</Diagnostic>
```

### Table description

Item	Description
Feature name	Diagnostic
Table name	CPUHistory
Table type	Multi-instance table
Row name	CPU
Restrictions	Available only for logical CPUs
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.

Column name	Column description	Column type	Data type and restrictions
CPUID	ID of the CPU	Index	Unsigned integer. Value range: 0 to 65535.
MoniterEnable	CPU monitoring usage	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Disabled.</li> <li>2—Enabled.</li> </ul>
HistoryCycleInSecond	CPU sampling interval in seconds	N/A	Enumeration: <ul style="list-style-type: none"> <li>5—5 seconds.</li> <li>60—60 seconds.</li> <li>300—300 seconds.</li> </ul>
CPUUsageLimit	CPU threshold (%)	N/A	Unsigned integer. Value range: 0 to 100.

## Diagnostic/CPUAlert

This table contains usage alarm settings for logical CPUs.

### XML structure

```

<Diagnostic>
  <CPUAlert>
    <Alert>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <MinorThreshold></MinorThreshold >
      <WarningThreshold></WarningThreshold>
      <RecoveryThreshold></RecoveryThreshold>
    </Alert>
  </CPUAlert>
</Diagnostic>

```

### Table description

Item	Description
Feature name	Diagnostic
Table name	CPUAlert
Table type	Multi-instance table
Row name	Alert
Restrictions	Available only for logical CPUs
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
MinorThreshold	CPU usage minor threshold (%)	N/A	Unsigned integer. Value range: 1 to 100.
WarningThreshold	CPU usage severe alarm threshold (%)	N/A	Unsigned integer Value range: 1 to 100
RecoveryThreshold	CPU usage recovery threshold (%)	N/A	Unsigned integer Value range: 0 to 99

## Diagnostic/MemoryAlert

This table contains free-memory alarm settings.

### XML structure

```
<Diagnostic>
  <MemoryAlert>
    <Alert>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Unit></Unit>
      <MinorThreshold></MinorThreshold>
      <SevereThreshold></SevereThreshold>
      <CriticalThreshold></CriticalThreshold>
      <NormalThreshold></NormalThreshold>
      <EarlyWarningThreshold></EarlyWarningThreshold>
      <SecureThreshold></SecureThreshold>
    </Alert>
  </MemoryAlert>
</Diagnostic>
```



## Table description

Item	Description
Feature name	Diagnostic
Table name	MemoryAlert
Table type	Multi-instance table
Row name	Alert
Restrictions	For a create or replace operation, all non-index columns are required. For a delete, remove, or replace operation, you must specify all non-index columns or leave all non-index columns unspecified.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Unit	Unit of the threshold	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>MB</b></li> <li><b>Percentage</b></li> </ul>	N/A
MinorThreshold	Minor insufficient-free-memory threshold	N/A	Unsigned integer. Value range: 0 to 100 if the unit is percentage.	Setting this threshold to 0 disables the minor alarm feature
SevereThreshold	Severe insufficient-free-memory threshold	N/A	Unsigned integer. Value range: 0 to 100 if the unit is percentage.	Setting this threshold to 0 disables the severe alarm feature.
CriticalThreshold	Critical insufficient-free-memory threshold	N/A	Unsigned integer. Value range: 0 to 100 if the unit is percentage.	Setting this threshold to 0 disables the critical alarm feature.

Column name	Column description	Column type	Data type and restrictions	Remarks
NormalThreshold	Normal free-memory state threshold	N/A	Unsigned integer. Value range: 0 to 100 if the unit is percentage.	N/A
EarlyWarningThreshold	Early-warning threshold for insufficient-free-memory condition	N/A	Unsigned integer. Value range: 0 to 100 if the unit is percentage.	Setting this threshold to 0 disables the early warning feature.
SecureThreshold	Early-warning-removed threshold for insufficient-free-memory condition	N/A	Unsigned integer. Value range: 0 to 100 if the unit is percentage.	N/A

## Diagnostic/CoreAlert

This table contains usage alarm settings for logical Cores.

### XML structure

```

<Diagnostic>
  <CoreAlert>
    <Alert>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <CoreID></CoreID>
      <CoreThreshold></CoreThreshold>
      <CoreMinorThreshold></CoreMinorThreshold>
      <CoreRecoveryThreshold></CoreRecoveryThreshold>
    </Alert>
  </CoreAlert>
</Diagnostic>

```

### Table description

Item	Description
Feature name	Diagnostic
Table name	CoreAlert
Table type	Multi-instance table
Row name	Alert
Restrictions	Available only for logical Cores
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the card	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
CoreID	ID of the Core	Index	Unsigned integer. Value range: 0 to 65535.
CoreThreshold	CPU usage threshold (%)	N/A	Unsigned integer Value range: 2 to 100
CoreMinorThreshold	CPU core usage minor threshold (%)	N/A	Unsigned integer Value range: 1 to 99
CoreRecoveryThreshold	CPU core usage recovery threshold (%)	N/A	Unsigned integer Value range: 0 to 98

## Diagnostic/Configuration

This table contains the global settings of the diagnostic module.

### XML structure

```
<Diagnostic>
  <Configuration>
    <MonitorDiskUsageInterval></MonitorDiskUsageInterval>
  </Configuration>
</Diagnostic>
```

### Table description

Item	Description
Feature name	Diagnostic
Table name	Configuration

Item	Description
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
MonitorDiskUsageInterval	Disk usage monitoring interval in seconds.	N/A	Unsigned integer. Value range: 5 to 1800. Default: 300.

## Diagnostic/DiskAlert

This table contains disk usage alarm settings.

## XML structure

```

<Diagnostic>
  <DiskAlert>
    <Alert>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <DiskName></DiskName>
      <Threshold></Threshold>
    </Alert>
  </DiskAlert>
</Diagnostic>

```

## Table description

Item	Description
Feature name	Diagnostic
Table name	DiskAlert
Table type	Multi-instance table
Row name	Alert
Restrictions	None

Item	Description
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node.	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
DiskName	Disk name.	Index	String. Length: 1 to 64 characters.
Threshold	Disk usage threshold in percentage.	N/A	Unsigned integer. Value range: 1 to 100.

# Contents

Diagnostic .....	1
Diagnostic/CPUHistory .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Diagnostic/ProcessesCPUHistory .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
Diagnostic/CPUUsage(currently not available) .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
Diagnostic/ProcessesCPU(currently not available) .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
Diagnostic/CPUAlert .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
Diagnostic/Memories .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
Diagnostic/ProcessesMemory (currently not available) .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
Diagnostic/SlubInfo (currently not available) .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
Diagnostic/MemoryAlert .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
Diagnostic/CoreAlert .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
Diagnostic/CPUGroups .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
Diagnostic/Configuration .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
Diagnostic/DiskAlert .....	19
XML structure .....	19
Table description .....	20
Columns .....	20

# Diagnostic

## Diagnostic/CPUHistory

This table contains usage information about the logical CPUs.

### XML structure

```
<Diagnostic>
  <CPUHistory>
    <CPU>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <CPUUsage></CPUUsage>
      <Last1mUsage></Last1mUsage>
      <Last5mUsage></Last5mUsage>
      <MoniterEnable></MoniterEnable>
      <HistroyCycleInSecond></HistroyCycleInSecond>
      <CPUUsageLimit></CPUUsageLimit>
      <CPUHistory></CPUHistory>
    </CPU>
  </CPUHistory>
</Diagnostic>
```

### Table description

Item	Description
Feature name	Diagnostic
Table name	CPUHistory
Table type	Multi-instance table
Row name	CPU
Restrictions	Available only for logical CPUs

### Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.

Column name	Column description	Column type	Data type and restrictions
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
CPUUsage	CPU usage (%)	N/A	Unsigned integer. Value range: 0 to 100.
Last1mUsage	Usage in the most recent 1-minute interval (%)	N/A	Unsigned integer. Value range: 0 to 100.
Last5mUsage	Usage in the most recent 5-minute interval (%)	N/A	Unsigned integer. Value range: 0 to 100.
MonitorEnabled	CPU usage monitoring	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Disabled.</li> <li>2—Enabled.</li> </ul>
HistoryCycleInSecond	CPU usage sampling interval in seconds	N/A	Enumeration: <ul style="list-style-type: none"> <li>5—5 seconds.</li> <li>60—60 seconds.</li> <li>300—300 seconds.</li> </ul>
CPUUsageLimit	CPU usage threshold (%)	N/A	Unsigned integer. Value range: 0 to 100.
CPUHistory	Historical CPU usage statistics	N/A	String of up to 60 integers. Each integer represents the CPU usage in a CPU usage sampling interval. Length: 0 to 304 characters. Format: HH,HH,HH,HH,HH,HH

## Diagnostic/ProcessesCPUHistory

This table contains historical CPU usage statistics by process ID.

### XML structure

```

<Diagnostic>
  <ProcessesCPUHistory>
    <Process>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <ProcessJobID></ProcessJobID>
      <ProcessName></ProcessName>
      <CPUHistoryProcess></CPUHistoryProcess>
    </Process>
  </ProcessesCPUHistory>
</Diagnostic>

```



## Table description

Item	Description
Feature name	Diagnostic
Table name	ProcessesCPUHistory
Table type	Multi-instance table
Row name	Process
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
ProcessJobID	Process ID	Index	Unsigned integer. Value range: 1 to 2147483647
ProcessName	Process name	N/A	String. Length: 0 to 128 characters.
CPUHistoryProcess	Historical CPU usage statistics by process ID	N/A	String of up to 60 integers. Each integer represents the CPU usage in a CPU usage sampling interval. Length: 0 to 304 characters. Format: HH,HH,HH,HH,HH,HH

## Diagnostic/CPUUsage(currently not available)

This table contains usage information about the logical CPUs.

## XML structure

```
<Diagnostic>
  <CPUUsage>
    <CPU>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
```

```

    <CPUUsage></CPUUsage>
  <Core>
    <CoreID></CoreID>
    <CPUUsage></CPUUsage>
    <Idle></Idle>
    <User></User>
    <Kernel></Kernel>
    <Interrupt></Interrupt>
  </Core>
</CPU>
</CPUUsage>
</Diagnostic>

```

## Table description

Item	Description
Feature name	Diagnostic
Table name	CPUUsage
Table type	Multi-instance table
Row name	CPU
Restrictions	Available only for logical CPUs

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Member ID of the member device where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUUsage	CPU usage (%)	N/A	Unsigned integer. Value range: 0 to 100.	N/A
Core	CPUInfo of core	Data structure	Members include: <ul style="list-style-type: none"> <li>CoreID</li> <li>CPUUsage</li> <li>Idle</li> <li>User</li> <li>Kernel</li> <li>Interrupt</li> </ul>	Contain all core of the cpu.
CoreID	ID of the core	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 65535.	
CPUUsage	Core usage (%)	N/A	Double. Value range: 0 to 100. Formats: %.2f	Accurate to the second decimal place. Example: 12.34
Idle	CPU idle time ratio (%)	N/A	Double. Value range: 0 to 100. Formats: %.2f	Accurate to the second decimal place. Example: 12.34
User	Ratio of time for processes in user mode to total CPU time (%)	N/A	Double. Value range: 0 to 100. Formats: %.2f	Accurate to the second decimal place. Example: 12.34
Kernel	Ratio of time for processes in kernel mode to total CPU time (%)	N/A	Double. Value range: 0 to 100. Formats: %.2f	Accurate to the second decimal place. Example: 12.34
Interrupt	Ratio of time for interrupts to total CPU time (%)	N/A	Double. Value range: 0 to 100. Formats: %.2f	Accurate to the second decimal place. Example: 12.34

## Diagnostic/ProcessesCPU(currently not available)

This table contains CPU usage information for processes.

### XML structure

```

<Diagnostic>
  <ProcessesCPU>
    <Process>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <JobID></JobID>
      <Name></Name>
      <CPUUsage></CPUUsage>
      <Priority></Priority>
      <State></State>
      <FDs></FDs>
      <Memory></Memory>
      <RunTime></RunTime>
    </Process>
  </ProcessesCPU>

```

</Diagnostic>

## Table description

Item	Description
Feature name	Diagnostic
Table name	ProcessesCPU
Table type	Multi-instance table
Row name	Process
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
JobID	Job ID	Index	Unsigned integer. Value range: 1 to 2147483647	N/A
Name	Process name	N/A	String. Length: 0 to 255 characters.	N/A
CPUUsage	CPU usage of the process	N/A	Double. Value range: 0 to 100. Formats: %.2f	N/A
Priority	Thread priority	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
State	Status of the process	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>R</b>—Running.</li><li>• <b>S</b>—Sleeping.</li><li>• <b>T</b>—Traced or stopped.</li><li>• <b>D</b>—Uninterruptible sleep.</li><li>• <b>Z</b>—Zombie.</li></ul>	N/A
FDs	File descriptions for the process	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Memory	Process memory space	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	(KB)		Value range: 0 to 4294967295.	
RunTime	Running time of the process	N/A	String. Formats: <ul style="list-style-type: none"> <li>HH:MM:SS Runtime &lt; 100h</li> <li>HHh Runtime &gt;= 100h</li> </ul>	N/A

## Diagnostic/CPUAlert

This table contains cpu usage alarm information about the logical CPUs.

### XML structure

```

<Diagnostic>
  <CPUAlert>
    <Alert>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <MinorThreshold></MinorThreshold>
      <WarningThreshold></WarningThreshold>
      <RecoveryThreshold></RecoveryThreshold>
      <CurrentState></CurrentState>
    </Alert>
  </CPUAlert>
</Diagnostic>

```

### Table description

Item	Description
Feature name	Diagnostic
Table name	CPUAlert
Table type	Multi-instance table
Row name	Alert
Restrictions	Available only for logical CPU

### Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the	Index	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	member device where the entity resides		Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
MinorThreshold	CPU usage minor threshold (%)	N/A	Unsigned integer. Value range: 1 to 100.
WarningThreshold	CPU usage severe threshold (%)	N/A	Unsigned integer. Value range: 1 to 100
RecoveryThreshold	CPU usage RecoveryThreshold (%)	N/A	Unsigned integer Value range: 0 to 99
CurrentState	Current alarm status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>Normal</b></li> <li>• <b>Minor</b></li> <li>• <b>Severe</b></li> </ul>

## Diagnostic/Memories

This table contains memory information.

### XML structure

```

<Diagnostic>
  <Memories>
    <Memory>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Total></Total>
      <Used></Used>
      <Free></Free>
      <FreeRatio></FreeRatio>
      <Buffers></Buffers>
      <Cached></Cached>
      <CommitLimit></CommitLimit>
      <CommittedAS></CommittedAS>
      <VmallocTotal></VmallocTotal>
      <VmallocUsed></VmallocUsed>
      <VmallocChunk></VmallocChunk>
      <SwapTotal></SwapTotal>
      <SwapFree></SwapFree>
      <LowTotal></LowTotal>
    
```

```

    <LowFree></LowFree>
    <HighTotal></HighTotal>
    <HighFree></HighFree>
  </Memory>
</Memories>
</Diagnostic>

```

## Table description

Item	Description
Feature name	Diagnostic
Table name	Memories
Table type	Multi-instance table
Row name	Memory
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU	Index	Unsigned integer. Value range: 0 to 65535.
Total	Total memory size (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
Used	Used memory space (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
Free	Free memory space (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
FreeRatio	Free memory ratio (%)	N/A	Double. Value range: 0 to 100. Formats: %.1f
Buffers	Memory space used for buffers (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
Cached	Memory space used for cache	N/A	Unsigned integer. Value range: 0 to 4294967295.

Column name	Column description	Column type	Data type and restrictions
	(KB)		
CommitLimit	Memory space currently available for allocation (KB)	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
CommittedAS	Memory space allocated by processes (KB)	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
VmallocTotal	Total allocated virtual memory space (KB)	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
VmallocUsed	Used virtual memory space (KB)	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
VmallocChunk	Free virtual memory space (KB)	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
SwapTotal	Total memory space used for swapping (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
SwapFree	Free memory space dedicated for swapping (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
LowTotal	Total low-memory size (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
LowFree	Free low-memory space (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
HighTotal	Total high-memory size (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
HighFree	Free high-memory space (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.

## Diagnostic/ProcessesMemory (currently not available)

This table contains memory information about the Processes.

### XML structure

```

<Diagnostic>
  <ProcessesMemory>
    <Process>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
    </Process>
  </ProcessesMemory>
</Diagnostic>

```



```

    <JID></JID>
    <Name></Name>
    <Text></Text>
    <Data></Data>
    <Stack></Stack>
    <Dynamic></Dynamic>
  </Process>
</ProcessesMemory>
</Diagnostic>

```

## Table description

Item	Description
Feature name	Diagnostic
Table name	ProcessesMemory
Table type	Multi-instance table
Row name	Process
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
JID	Job ID of the process	Index	Unsigned integer. Value range: 1 to 2147483647
Name	Process name	N/A	String. Length: 0 to 255 characters.
Text	Memory space for the text segment (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
Data	Memory space for the data segment (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
Stack	Memory space for the stack segment (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.
Dynamic	Memory space for dynamic allocation (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.

# Diagnostic/SlubInfo (currently not available)

This table contains memory information about the Slub.

## XML structure

```
<Diagnostic>
  <SlubInfo>
    <Slub>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Name></Name>
      <Active></Active>
      <Number></Number>
      <Size></Size>
      <Align></Align>
      <Slab></Slab>
      <PgSlab></PgSlab>
      <ASlabs></ASlabs>
      <NSlabs></NSlabs>
    </Slub>
  </SlubInfo>
</Diagnostic>
```

## Table description

Item	Description
Feature name	Diagnostic
Table name	SlubInfo
Table type	Multi-instance table
Row name	Slub
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
			Value range: 0 to 65535.
Name	Target name	Index	String. Length: 1 to 255 characters.
Active	Number of active targets	N/A	Unsigned integer. Value range: 0 to 4294967295.
Number	Total number of targets	N/A	Unsigned integer. Value range: 0 to 4294967295.
Size	Target memory space (KB)	N/A	Unsigned integer. Value range: 0 to 2147483647.
Align	Aligned memory	N/A	Unsigned integer. Value range: 0 to 2147483647.
Slab	Number of targets in one slab	N/A	Unsigned integer. Value range: 0 to 2147483647.
PgSlab	Number of memory pages for one slab	N/A	Unsigned integer. Value range: 0 to 2147483647.
ASlabs	Number of active slabs	N/A	Unsigned integer. Value range: 0 to 4294967295.
NSlabs	Total number of slabs	N/A	Unsigned integer. Value range: 0 to 4294967295.

## Diagnostic/MemoryAlert

This table contains free-memory alarm settings and status information.

### XML structure

```

<Diagnostic>
  <MemoryAlert>
    <Alert>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Unit></Unit>
      <MinorThreshold></MinorThreshold>
      <SevereThreshold></SevereThreshold>
      <CriticalThreshold></CriticalThreshold>
      <NormalThreshold></NormalThreshold>
      <EarlyWarningThreshold></EarlyWarningThreshold>
      <SecureThreshold></SecureThreshold>
      <CurrentState></CurrentState>
    </Alert>
  </MemoryAlert>
</Diagnostic>

```

## Table description

Item	Description
Feature name	Diagnostic
Table name	MemoryAlert
Table type	Multi-instance table
Row name	Alert
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Unit	Unit for memory thresholds	N/A	Enumeration: <ul style="list-style-type: none"> <li>• MB</li> <li>• Percentage</li> </ul>	N/A
MinorThreshold	Minor insufficient-free-memory threshold	N/A	Unsigned integer. When unit is percentage, value range: 0 to 100.	Setting this threshold to 0 disables the minor alarm feature.
SevereThreshold	Severe insufficient-free-memory threshold	N/A	Unsigned integer. When unit is percentage, value range: 0 to 100.	Setting this threshold to 0 disables the severe alarm feature.
CriticalThreshold	Critical insufficient-free-memory threshold	N/A	Unsigned integer. When unit is percentage, value range: 0 to 100.	Setting this threshold to 0 disables the critical alarm feature.

Column name	Column description	Column type	Data type and restrictions	Remarks
NormalThreshold	Normal free-memory state threshold	N/A	Unsigned integer. When unit is percentage, value range: 0 to 100.	N/A
EarlyWarningThreshold	Early-warning threshold for insufficient-free-memory condition	N/A	Unsigned integer. When unit is percentage, value range: 0 to 100.	Setting this threshold to 0 disables the early warning feature.
SecureThreshold	Early-warning-removed threshold for insufficient-free-memory condition	N/A	Unsigned integer. When unit is percentage, value range: 0 to 100.	N/A
CurrentState	Current memory alarm status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>Minor</b></li> <li>• <b>Severe</b></li> <li>• <b>Critical</b></li> <li>• <b>Normal</b></li> <li>• <b>EarlyWarning</b></li> <li>• <b>Secure</b></li> </ul>	N/A

## Diagnostic/CoreAlert

This table contains core alarm settings and status information.

### XML structure

```

<Diagnostic>
  <CoreAlert>
    <Alert>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <CoreID></CoreID>
      <CoreThreshold></CoreThreshold>
      <Current5SUsage></Current5SUsage>
      <Current1MUsage></Current1MUsage>
      <Current5MUsage></Current5MUsage>
      <LastState></LastState>
      <CoreMinorThreshold></CoreMinorThreshold>
      <CoreRecoveryThreshold></CoreRecoveryThreshold>
    </Alert>
  </CoreAlert>

```

</Diagnostic>

## Table description

Item	Description
Feature name	Diagnostic
Table name	CoreAlert
Table type	Multi-instance table
Row name	Alert
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the card	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
CoreID	ID of the Core	Index	Unsigned integer. Value range: 0 to 65535.
CoreThreshold	Core usage Threshold (%)	N/A	Unsigned integer. Value range: 2 to 100 Default: 4294967295
Current5SUsage	Core usage in the most recent 5-second interval (%)	N/A	Unsigned integer. Value range: 0 to 100
Current1MUsage	Core usage in the most recent 12 five-second interval (%)	N/A	Unsigned integer. Value range: 0 to 100
Current5MUsage	Core usage in the most recent 60 five-second interval (%)	N/A	Unsigned integer. Value range: 0 to 100

Column name	Column description	Column type	Data type and restrictions
LastState	Previous core alarm status	N/A	Enumeration: <ul style="list-style-type: none"> <li>Normal</li> <li>Warning</li> </ul>
CoreMinorThreshold	Core usage minor threshold (%)	N/A	Unsigned integer. Value range: 1 to 99 Default: 4294967295
CoreRecoveryThreshold	Core usage recovery threshold (%)	N/A	Unsigned integer. Value range: 0 to 98 Default: 4294967295

## Diagnostic/CPUGroups

This table contains usage information about the logical CPU groups.

### XML structure

```

<Diagnostic>
  <CPUGroups>
    <CPUGroup>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <GroupID></GroupID>
      <GroupName></GroupName>
      <CPUUsage></CPUUsage>
      <Last1mUsage></Last1mUsage>
      <Last5mUsage></Last5mUsage>
    </CPUGroup>
  </CPUGroups>
</Diagnostic>

```

### Table description

Item	Description
Feature name	Diagnostic
Table name	CPUGroups
Table type	Multi-instance table
Row name	CPUGroup
Restrictions	Available only for logical CPU groups

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
GroupID	ID of CPU group	Index	Unsigned integer. Value range: 0 to 65535. For example: 0 means control plane, 1 means data plane
GroupName	Name of CPU group	N/A	String. Length: 1 to 64 characters.
CPUUsage	Usage in the most recent 5-second interval (%) for the specified plane	N/A	Unsigned integer. Value range: 0 to 100.
Last1mUsage	Usage in the most recent 1-minute interval (%) for the specified plane	N/A	Unsigned integer. Value range: 0 to 100.
Last5mUsage	Usage in the most recent 5-minute interval (%) for the specified plane	N/A	Unsigned integer. Value range: 0 to 100.

## Diagnostic/Configuration

This table contains the global settings of the diagnostic module.

### XML structure

```
<Diagnostic>
  <Configuration>
    <MonitorDiskEnable></MonitorDiskEnable>
    <DefaultMonitorDiskUsageInterval></DefaultMonitorDiskUsageInterval>
    <MonitorDiskUsageInterval></MonitorDiskUsageInterval>
  </Configuration>
</Diagnostic>
```

### Table description

Item	Description
Feature name	Diagnostic



Item	Description
Table name	Configuration
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type
MonitorDiskEnable	Enable disk usage monitoring.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>
DefaultMonitorDiskUsageInterval	Default disk usage monitoring interval in seconds.	N/A	Unsigned integer. Value range: 5 to 1800.
MonitorDiskUsageInterval	Disk usage monitoring interval in seconds.	N/A	Unsigned integer. Value range: 5 to 1800.

## Diagnostic/DiskAlert

This table contains disk usage alarm settings.

## XML structure

```

<Diagnostic>
  <DiskAlert>
    <Alert>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <DiskName></DiskName>
      <Threshold></Threshold>
    </Alert>
  </DiskAlert>
</Diagnostic>

```

## Table description

Item	Description
Feature name	Diagnostic
Table name	DiskAlert
Table type	Multi-instance table
Row name	Alert
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Member ID of the member device where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node.	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	ID of the CPU.	Index	Unsigned integer. Value range: 0 to 65535.
DiskName	Disk name.	Index	String. Length: 1 to 64 characters.
Threshold	Disk usage threshold in percentage.	N/A	Unsigned integer. Value range: 1 to 100.

# Contents

- Diagnostic .....1
  - Diagnostic/CPUUsage(currently not available) .....1
  - Diagnostic/MemoryAlert .....1
  - Diagnostic/CoreAlert.....2

# Diagnostic

## Diagnostic/CPUUsage(currently not available)

Message	Explanation
The value of MinorThreshold should be greater than the value of RecoveryThreshold. MinorThreshold的值应该大于RecoveryThreshold的值。	The value of MinorThreshold should be greater than the value of RecoveryThreshold. MinorThreshold的值应该大于RecoveryThreshold的值。
PEX configuration not supported. 不支持设置PEX	PEX configuration not supported. 不支持设置PEX

## Diagnostic/MemoryAlert

Message	Explanation
The value of SevereThreshold should be greater than or equal to the value of CriticalThreshold. SevereThreshold的值应该大于或等于CriticalThreshold的值。	The value of SevereThreshold should be greater than or equal to the value of CriticalThreshold. SevereThreshold的值应该大于或等于CriticalThreshold的值。
The value of MinorThreshold should be greater than or equal to the value of SevereThreshold. MinorThreshold的值应该大于或等于SevereThreshold的值。	The value of MinorThreshold should be greater than or equal to the value of SevereThreshold. MinorThreshold的值应该大于或等于SevereThreshold的值。
The value of NormalThreshold should be greater than or equal to the value of MinorThreshold. NormalThreshold的值应该大于或等于MinorThreshold的值。	The value of NormalThreshold should be greater than or equal to the value of MinorThreshold. NormalThreshold的值应该大于或等于MinorThreshold的值。
The value of NormalThreshold should be less than or equal to the total memory size of Device. NormalThreshold的值应该小于或等于设备内存的大小。	The value of NormalThreshold should be less than or equal to the total memory size of Device. NormalThreshold的值应该小于或等于设备内存的大小。
The value of WarningThreshold should be greater than the value of MinorThreshold. WarningThreshold的值应该大于MinorThreshold的值。	The value of WarningThreshold should be greater than the value of MinorThreshold. WarningThreshold的值应该大于MinorThreshold的值。
To disable the free-memory alarm feature, set all free-memory thresholds to 0. 如果需要关闭内存门限告警功能，请设置所有内存门限值为0。	To disable the free-memory alarm feature, set all free-memory thresholds to 0. 如果需要关闭内存门限告警功能，请设置所有内存门限值为0。
The value of EarlyWarningThreshold should be greater than or equal to the value of NormalThreshold. EarlyWarningThreshold的值应该大于或等于NormalThreshold的值。	The value of EarlyWarningThreshold should be greater than or equal to the value of NormalThreshold. EarlyWarningThreshold的值应该大于或等于NormalThreshold的值。
The value of EarlyWarningThreshold should be	The value of EarlyWarningThreshold should be less than or equal

less than or equal to the total memory size. EarlyWarningThreshold的值应该小于或等于设备内存的大小。	to the total memory size. EarlyWarningThreshold的值应该小于或等于设备内存的大小。
The value of SecureThreshold should be greater than or equal to the value of EarlyWarningThreshold. SecureThreshold的值应该大于或等于EarlyWarningThreshold的值。	The value of SecureThreshold should be greater than or equal to the value of EarlyWarningThreshold. SecureThreshold的值应该大于或等于EarlyWarningThreshold的值。
The value of SecureThreshold should be less than or equal to the total memory size. SecureThreshold的值应该小于或等于设备内存的大小。	The value of SecureThreshold should be less than or equal to the total memory size. SecureThreshold的值应该小于或等于设备内存的大小。
To disable the EarlyWarningThreshold alarm feature, set EarlyWarningThreshold and SecureThreshold to 0. 如果需要关闭预内存门限告警功能，请同时设置EarlyWarningThreshold和SecureThreshold门限值为0。	To disable the EarlyWarningThreshold alarm feature, set EarlyWarningThreshold and SecureThreshold to 0. 如果需要关闭预内存门限告警功能，请同时设置EarlyWarningThreshold和SecureThreshold门限值为0。
The device doesn't support setting EarlyWarningThreshold or SecureThreshold. 不支持设置预告警。	The device doesn't support setting EarlyWarningThreshold or SecureThreshold. 不支持设置预告警。
Please set all free-memory thresholds to 0 to disable the free-memory alarm functions first. 请先设置所有内存门限值为0，关闭内存门限告警功能。	Please set all free-memory thresholds to 0 to disable the free-memory alarm functions first. 请先设置所有内存门限值为0，关闭内存门限告警功能。
For a create or merge operation, all non-index columns are required. 当下发create或者merge时，必须下发所有非索引列。	For a create or merge operation, all non-index columns are required. 当设置内存门限时，必须下发所有非索引列。
For a delete, remove, or replace operation, you must specify all non-index columns or leave all non-index columns unspecified. 当下发delete或者remove或者replace时，必须下发所有的非索引列或者不下发任何非索引列。	For a delete, remove, or replace operation, you must specify all non-index columns or leave all non-index columns unspecified. 当下发delete或者remove或者replace时，必须下发所有的非索引列或者不下发任何非索引列。

## Diagnostic/CoreAlert

Message	Explanation
The core doesn't support setting the thresholds. 该core不支持配置。	The core doesn't support setting the thresholds. 该core不支持配置。
The specified core doesn't exist. 设备不支持该core。	The specified core doesn't exist. 设备不支持该core。
The value of CoreThreshold must be in the range of 2 to 100. CoreThreshold的取值范围为2-100。	The value of CoreThreshold must be in the range of 2 to 100. CoreThreshold的取值范围为2-100。



# Contents

Diagnostics event stream .....	1
CPUEvent event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	2
MemoryEvent event .....	5
XML structure for event subscription .....	6
XML structure for event report .....	7
CoreEvent event .....	9
XML structure for event subscription .....	9
XML structure for event report .....	11
DiskEvent event .....	14
XML structure for event subscription .....	14
XML structure for event report .....	15

# Diagnostics event stream

## CPUEvent event

This event is used to report CPU alarm information.

## XML structure for event subscription

```
<CPUEvent>
  <CPU>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
  </CPU>
</CPUEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Diagnostic</stream>
    <filter type="subtree">
      <CPUEvent xmlns="http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0">
        <CPU>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
        </CPU>
      </CPUEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	Diagnostic
Event name	CPUEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries	Remarks
Chassis	Member ID of the	Unsigned integer.	No	N/A



Column name	Column description	Data type and restrictions	Support for extended queries	Remarks
	member device where the entity resides	Value range: 0 to 65535.		
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.	No	N/A
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	No	N/A

## XML structure for event report

```

<CPUEvent>
  <CPU>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <Description></Description>
    <CPUUsage></CPUUsage>
    <Core>
      <CoreID></CoreID>
      <CPUUsage></CPUUsage>
      <Idle></Idle>
      <User></User>
      <Kernel></Kernel>
      <Interrupt></Interrupt>
    </Core>
    <Process>
      <JobID></JobID>
      <PID></PID>
      <Name></Name>
      <CPUUsage></CPUUsage>
      <Priority></Priority>
      <State></State>
      <FDs></FDs>
      <Memory></Memory>
      <RunTime></RunTime>
    </Process>
  </CPU>
</CPUEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <CPUEvent xmlns="http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0">

```

```

<CPU>
  <Chassis>0</Chassis>
  <Slot>0</Slot>
  <CPUID>0</CPUID>
  <Description>CPU_THRESHOLD</Description>
  <CPUUsage>50</CPUUsage>
  <Core>
    <CoreID>0</CoreID>
    <CPUUsage>11.00</CPUUsage>
    <Idle>89.00</Idle>
    <User>4.00</User>
    <Kernel>5.00</Kernel>
    <Interrupt>2.00</Interrupt>
  </Core>
  .....
  <Core>
    <CoreID>7</CoreID>
    <CPUUsage>13.00</CPUUsage>
    <Idle>87.00</Idle>
    <User>5.00</User>
    <Kernel>5.00</Kernel>
    <Interrupt>3.00</Interrupt>
  </Core>
  <Process>
    <JobID>84</JobID>
    <PID>84</PID>
    <Name>diagd</Name>
    <CPUUsage>0.03</CPUUsage>
    <Priority>120</Priority>
    <State>R</State>
    <FDs>18</FDs>
    <Memory>10384</Memory>
    <RunTime>00:00:56</RunTime>
  </Process>
  .....
  <Process>
    <JobID>86</JobID>
    <PID>86</PID>
    <Name>syslogd</Name>
    <CPUUsage>0.03</CPUUsage>
    <Priority>120</Priority>
    <State>S</State>
    <FDs>30</FDs>
    <Memory>12984</Memory>
    <RunTime>00:00:36</RunTime>
  </Process>
</CPU>
</CPUEvent>

```

</notification>

## Columns

Column name	Column description	Data type and restrictions	Remarks
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	N/A
Description	CPU event description.	Enumeration: <ul style="list-style-type: none"><li>• CPU_THRESHOLD</li><li>• CPU_THRESHOLD_RECOVERY</li><li>• CPU_MINOR_THRESHOLD</li><li>• CPU_MINOR_RECOVER</li></ul>	N/A
CPUUsage	CPU usage (%)	Unsigned integer. Value range: 0 to 100.	N/A
Core	CPUInfo of core	Members include: <ul style="list-style-type: none"><li>• CoreID</li><li>• CPUUsage</li><li>• Idle</li><li>• User</li><li>• Kernel</li><li>• Interrupt</li></ul>	N/A
CoreID	Core ID	Unsigned integer. Value range: 0 to 65535.	N/A
CPUUsage	Core CPU usage (%)	Double. Value range: 0 to 100. Formats: %.2f	Accurate to the second decimal place. Example: 12.34
Idle	CPU idle time ratio(%)	Double. Value range: 0 to 100. Formats: %.2f	Accurate to the second decimal place. Example: 12.34
User	Ratio of the time of processes executing in user mode to CPU total time(%)	Double. Value range: 0 to 100. Formats: %.2f	Accurate to the second decimal place. Example: 12.34
Kernel	Ratio of the time of processes executing in kernel mode to CPU total time (%)	Double. Value range: 0 to 100. Formats: %.2f	Accurate to the second decimal place. Example: 12.34
Interrupt	Ratio of the time of interrupt to total cpu	Double. Value range: 0 to 100.	Accurate to the second decimal place.

Column name	Column description	Data type and restrictions	Remarks
	time.	Formats: %.2f	Example: 12.34
Process	CPUInfo of process	Members include: <ul style="list-style-type: none"> <li>• JobID</li> <li>• PID</li> <li>• Name</li> <li>• CPUUsage</li> <li>• Priority</li> <li>• State</li> <li>• FDs</li> <li>• Memory</li> <li>• RunTime</li> </ul>	N/A
JobID	Job ID	Unsigned integer. Value range: 1 to 2147483647.	N/A
PID	Process ID	Unsigned integer. Value range: 1 to 2147483647.	N/A
Name	Process name	String. Length: 1 to 255 characters.	Only report the top 10 cpusage processes.
CPUUsage	CPUUsage of Process	Double. Value range: 0 to 100. Formats: %.2f	N/A
Priority	Process priority	Unsigned integer. Value range: 0 to 65535.	N/A
State	Running state of process	Enumeration: <ul style="list-style-type: none"> <li>• <b>R</b>—Running.</li> <li>• <b>S</b>—Sleeping.</li> <li>• <b>T</b>—Traced or stopped.</li> <li>• <b>D</b>—Uninterruptible sleep.</li> <li>• <b>Z</b>—Zombie.</li> </ul>	N/A
FDs	File descriptions of process	Unsigned integer. Value range: 0 to 4294967295.	N/A
Memory	Size of the process memory space(KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A
RunTime	Runtime of process	String. Formats: <ul style="list-style-type: none"> <li>• HH:MM:SS Runtime &lt; 100h</li> <li>• HHh Runtime &gt;= 100h</li> </ul>	N/A

## MemoryEvent event

This event is used to report memory alarm information.

# XML structure for event subscription

```
<MemoryEvent>
  <Memory>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
  </Memory>
</MemoryEvent>
```

## Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Diagnostic</stream>
    <filter type="subtree">
      <MemoryEvent xmlns="http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0">
        <Memory>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
        </Memory>
      </MemoryEvent>
    </filter>
  </create-subscription>
</rpc>
```

## Table description

Item	Description
Event stream name	Diagnostic
Event name	MemoryEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Chassis	Member ID of the member device where the entity resides.	Unsigned integer. Value range: 0 to 65535.	No
Slot	Slot number of the device node.	Unsigned integer. Value range: 0 to 65535.	No
CPUID	CPU Identification.	Unsigned integer. Value range: 0 to 65535.	No

# XML structure for event report

```
<MemoryEvent>
  <Memory>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <Description></Description>
    <Total></Total>
    <Used></Used>
    <Free></Free>
    <FreeRatio></FreeRatio>
    <LowTotal></LowTotal>
    <LowFree></LowFree>
    <HighTotal></HighTotal>
    <HighFree></HighFree>
    <TopUsageProcess>
      <JID></JID>
      <Name></Name>
      <Used></Used>
    </TopUsageProcess>
    <TopUsageSlub>
      <Name></Name>
      <Used></Used>
    </TopUsageSlub>
  </Memory>
</MemoryEvent>
```

## Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <MemoryEvent xmlns="http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0">
    <Memory>
      <Chassis>0</Chassis>
      <Slot>0</Slot>
      <CPUID>0</CPUID>
      <Description>Normal</Description>
      <Total>1199160</Total>
      <Used>773500</Used>
      <Free>425660</Free>
      <FreeRatio>35</FreeRatio>
      <LowTotal>895096</LowTotal>
      <LowFree>425060</LowFree>
      <HighTotal>304064</HighTotal>
      <HighFree>600</HighFree>
      <TopUsageProcess>
        <JID>1</JID>
        <Name>scmd</Name>
```

```

        <Used>8868</Used>
    </TopUsageProcess>
    .....
    <TopUsageProcess>
        <JID>78</JID>
        <Name>fsd</Name>
        <Used>5668</Used>
    </TopUsageProcess>
    <TopUsageSlub>
        <Name>kmalloc-524280</Name>
        <Used>524280</Used>
    </TopUsageSlub>
    .....
    <TopUsageSlub>
        <Name>tcpcb</Name>
        <Used>856</Used>
    </TopUsageSlub>
</Memory>
</MemoryEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Remarks
Chassis	Member ID of the member device where the entity resides.	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node.	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU Identification.	Unsigned integer. Value range: 0 to 65535.	N/A
Description	Memory event description.	Enumeration: <ul style="list-style-type: none"> <li>MEM_EARLYWARNING_THR ESHOLD</li> <li>MEM_EARLYWARNING_REC OVER</li> <li>MEM_MINOR_THRESHOLD</li> <li>MEM_MINOR_RECOVER</li> <li>MEM_SEVERE_THRESHOLD</li> <li>MEM_SEVERE_RECOVER</li> <li>MEM_CRITICAL_THRESHOL D</li> <li>MEM_CRITICAL_RECOVER</li> </ul>	N/A
Total	Total memory size (KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A
Used	Size of the used memory space(KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A
Free	Size of the free	Unsigned integer.	N/A

Column name	Column description	Data type and restrictions	Remarks
	memory space (KB)	Value range: 0 to 4294967295.	
FreeRatio	Free memory Ratio(%)	Unsigned integer. Value range: 0 to 100.	N/A
LowTotal	Total LowMem size (KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A
LowFree	Size of the free LowMem space (KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A
HighTotal	Total HighMem size (KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A
HighFree	Size of the free HighMem space (KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A
TopUsageProcesses	Memory Info of top usage process	Members include: <ul style="list-style-type: none"> <li>• JID</li> <li>• Name</li> <li>• Used</li> </ul>	Only report the top 10 memory usage processes.
JID	Process Job ID	Unsigned integer. Value range: 1 to 2147483647.	N/A
Name	Process name	String. Length: 1 to 255 characters.	N/A
Used	Size of the process used memory space(KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A
TopUsageSlub	Memory Info of top usage slub	Members include: <ul style="list-style-type: none"> <li>• Name</li> <li>• Used</li> </ul>	Only report the top 10 memory usage target.
Name	Target name	String. Length: 1 to 255 characters.	N/A
Used	Size of the target used memory space(KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A

## CoreEvent event

This event is used to report core alarm information.

## XML structure for event subscription

```

<CoreEvent>
  <Cores>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
  </Cores>
</CoreEvent>

```



```

    <CoreID></CoreID>
  </Cores>
</CoreEvent>

```

### Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Diagnostic</stream>
    <filter type="subtree">
      <CoreEvent xmlns="http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0">
        <Cores>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
          <CoreID>0</CoreID>
        </Cores>
      </CoreEvent>
    </filter>
  </create-subscription>
</rpc>

```

### Table description

Item	Description
Event stream name	Diagnostic
Event name	CoreEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries	Remarks
Chassis	Member ID of the member where the device resides	Unsigned integer. Value range: 0 to 65535.	No	N/A
Slot	Slot number of the card	Unsigned integer. Value range: 0 to 65535.	No	N/A
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	No	N/A
CoreID	ID of the Core.	Unsigned integer. Value range: 0 to 65535.	No	N/A

# XML structure for event report

```
<CoreEvent>
  <Cores>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <CoreID></CoreID>
    <CoreUsage></CoreUsage>
    <CoreThreshold></CoreThreshold>
    <CpuLast5sUsage></CpuLast5sUsage>
    <CpuLast1mUsage></CpuLast1mUsage>
    <CpuLast5mUsage></CpuLast5mUsage>
    <Process>
      <Name></Name>
      <CPU></CPU>
      <JobID></JobID>
      <PID></PID>
      <PPID></PPID>
      <InLast5sUsage></InLast5sUsage>
      <InLast1mUsage></InLast1mUsage>
      <InLast5mUsage></InLast5mUsage>
      <State></State>
      <Memory></Memory>
    </Process>
    <EventType></EventType>
    <CoreMinorThreshold></CoreMinorThreshold>
    <CoreRecoveryThreshold></CoreRecoveryThreshold>
  </Cores>
</CoreEvent>
```

## Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <CoreEvent xmlns="http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0">
    <Cores>
      <Chassis>0</Chassis>
      <Slot>0</Slot>
      <CPUID>0</CPUID>
      <CoreID>0</CoreID>
      <CoreUsage>6</CoreUsage>
      <CoreThreshold>5</CoreThreshold>
      <CpuLast5sUsage>3.12</CpuLast5sUsage>
      <CpuLast1mUsage>2.56</CpuLast1mUsage>
      <CpuLast5mUsage>5.23</CpuLast5mUsage>
      <Process>
        <Name>diagd</Name>
        <CPU>0</CPU>
```

```

<JobID>84</JobID>
<PID>84</PID>
<PPID>1</PPID>
<InLast5sUsage>10.0%</InLast5sUsage>
<InLast1mUsage>6.0%</InLast1mUsage>
<InLast5mUsage>5.3%</InLast5mUsage>
<State>R</State>
<Memory>10384</Memory>
</Process>
.....
<Process>
<Name>syslogd</Name>
  <CPU>0</CPU>
  <JobID>86</JobID>
  <PID>86</PID>
  <PPID>1</PPID>
  <Name>syslogd</Name>
  <InLast5sUsage>10.0%</InLast5sUsage>
  <InLast1mUsage>6.0%</InLast1mUsage>
  <InLast5mUsage>5.3%</InLast5mUsage>
  <State>S</State>
  <Memory>12984</Memory>
</Process>
<EventType>CORE_SEVERE_THRESHOLD</EventType>
<CoreMinorThreshold>3</CoreMinorThreshold>
<CoreRecoveryThreshold>1</CoreRecoveryThreshold>
</Cores>
</CoreEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Remarks
Chassis	Member ID of the member device where the entity resides	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the card	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	ID of the CPU.	Unsigned integer. Value range: 0 to 65535.	N/A
CoreID	ID of the Core.	Unsigned integer. Value range: 0 to 65535.	N/A
CoreUsage	Core usage (%)	Unsigned integer. Value range: 0 to 100.	In last 30 minutes the core usage
CpuLast5sUsage	The core on CPU usage (%)	Double. Value range:0 to 100. Formats:	In last 5 seconds the CPU usage.

Column name	Column description	Data type and restrictions	Remarks
		%.2f	
CpuLast1m Usage	The core on CPU usage (%)	Double. Value range:0 to 100. Formats: %.2f	In last 1 minute the CPU usage.
CpuLast5m Usage	The core on CPU usage (%)	Double. Value range:0 to 100. Formats: %.2f	In last 5 minutes the CPU usage.
CoreThreshold	Core usage threshold	Unsigned integer. Value range: 2 to 100. Default: 4294967295.	N/A
Process	High-core processes usage	Members include: <ul style="list-style-type: none"> <li>• Name</li> <li>• CPU</li> <li>• JobID</li> <li>• PID</li> <li>• InLast5sUsage</li> <li>• InLast1mUsage</li> <li>• InLast5mUsage</li> <li>• State</li> <li>• Memory</li> </ul>	Only the top high-core usage processes are reported
Name	Process name	String. Length: 1 to 255 characters.	N/A
CPU	Core that held one of the top high-core usage processes when the high-core usage alarm was issued	Unsigned integer. Value range: 0 to 65535.	N/A
JobID	Job ID	Unsigned integer. Value range: 1 to 2147483647.	N/A
PID	Process ID	Unsigned integer. Value range: 1 to 2147483647.	N/A
PPID	Parent process ID	Unsigned integer. Value range: 1 to 2147483647.	N/A
InLast5sUsage	Usage in the most recent 5-second interval (%)	Double. Value range: 0 to 100. Formats: %.1f	N/A
InLast1mUsage	Usage in the most recent 1-minute interval (%)	Double. Value range: 0 to 100. Formats: %.1f	N/A
InLast5mUsage	Usage in the most recent 5-minute interval	Double.	N/A

Column name	Column description	Data type and restrictions	Remarks
	(%)	Value range: 0 to 100. Formats: %.1f	
State	Running state of process	Enumeration: <ul style="list-style-type: none"> <li>• <b>R</b>—Running.</li> <li>• <b>S</b>—Sleeping.</li> <li>• <b>T</b>—Traced or stopped.</li> <li>• <b>D</b>—Uninterruptible sleep.</li> <li>• <b>Z</b>—Zombie.</li> </ul>	N/A
Memory	Size of the process memory space(KB)	Unsigned integer. Value range: 0 to 4294967295.	N/A
EventType	Core event type.	String: <ul style="list-style-type: none"> <li>• <b>CORE_SEVERE_THRESHOLD</b>—A severe CPU core usage alarm occurred.</li> <li>• <b>CORE_SEVERE_RECOVERY</b>—A severe CPU core usage alarm was removed.</li> <li>• <b>CORE_MINOR_THRESHOLD</b>—A minor CPU core usage alarm occurred.</li> <li>• <b>CORE_MINOR_RECOVERY</b>—A minor CPU core usage alarm was removed.</li> </ul>	N/A
CoreMinorThreshold	Core usage minor threshold	Unsigned integer. Value range: 1 to 99. Default: 4294967295.	N/A
CoreRecoveryThreshold	Core usage recovery threshold	Unsigned integer. Value range: 0 to 98. Default: 4294967295.	N/A

## DiskEvent event

This event is used to report disk alarm information.

## XML structure for event subscription

```

<DiskEvent>
  <Disk>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <DiskName></DiskName>
  </Disk>
</DiskEvent>

```

Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Diagnostic</stream>
    <filter type="subtree">
      <DiskEvent xmlns="http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0">
        <Disk>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
          <DiskName>flash</DiskName>
        </Disk>
      </DiskEvent>
    </filter>
  </create-subscription>
</rpc>

```

## Table description

Item	Description
Event stream name	Diagnostic
Event name	DiskEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Chassis	Member ID of the member device where the entity resides.	Unsigned integer. Value range: 0 to 65535.	No
Slot	Slot number of the device node.	Unsigned integer. Value range: 0 to 65535.	No
CPUID	CPU Identification.	Unsigned integer. Value range: 0 to 65535.	No
DiskName	Disk name.	String. Length: 1 to 64 characters.	

## XML structure for event report

```

<DiskEvent>
  <Disk>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <DiskName></DiskName>
    <Threshold></Threshold>
  </Disk>
</DiskEvent>

```

```

    <CurrentUsage></CurrentUsage>
  </Disk>
</DiskEvent>

```

#### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <DiskEvent xmlns="http://www.h3c.com/netconf/event:1.0/Diagnostic:1.0">
    <Disk>
      <Chassis>0</Chassis>
      <Slot><0/Slot>
      <CPUID>0</CPUID>
      <DiskName>flash</DiskName>
      <Threshold>80</Threshold>
      <CurrentUsage>45.55</CurrentUsage>
    </Disk>
  </DiskEvent>
</notification>

```

#### Columns

Column name	Column description	Data type and restrictions
Chassis	Member ID of the member device where the entity resides.	Unsigned integer. Value range: 0 to 65535.
Slot	Slot number of the device node.	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU Identification.	Unsigned integer. Value range: 0 to 65535.
DiskName	Disk name.	String. Length: 1 to 64 characters.
Threshold	Disk usage threshold (%).	Unsigned integer. Value range: 1 to 100.
CurrentUsage	Current disk usage (%).	Double. Value range: 0.00 to 100.00.

# Contents

- DIM ..... 1
  - DIM/CompileInspectEngine ..... 1
  - XML structure ..... 1
  - Table description ..... 1
  - Columns ..... 1



# DIM

## DIM/CompileInspectEngine

This table triggers the inspect engine to activate all DPI settings.

### XML structure

```
<DIM>
  <CompileInspectEngine>
    <Compile></Compile>
  </CompileInspectEngine>
</DIM>
```

### Table description

Item	Description
Feature name	DIM
Table name	CompileInspectEngine
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Compile	Activate all DPI settings	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A

# Contents

DIM .....	1
DIM/BlockParameters .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DIM/CaptureParameters .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
DIM/LoggingParameters .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
DIM/RedirectParameters .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
DIM/MailParameters .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
DIM/InspectBypass .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
DIM/ProxyServerParameters .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
DIM/DimFileUncompress .....	7
XML structure .....	7
Table description .....	7
Columns .....	8

# DIM

## DIM/BlockParameters

This table contains block parameters.

### XML structure

```
<DIM>
  <BlockParameters>
    <BlockParameter>
      <ParameterName></ParameterName>
      <Denyperiod></Denyperiod>
    </BlockParameter>
  </BlockParameters>
</DIM>
```

### Table description

Item	Description
Feature name	DIM
Table name	BlockParameters
Table type	Multi-instance table
Row name	BlockParameter
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Denyperiod	Deny period	N/A	Unsigned integer. Value range: 1 to 86400s	Default is 1800s

## DIM/CaptureParameters

This table contains capture parameters.

## XML structure

```
<DIM>
  <CaptureParameters>
    <CaptureParameter>
      <ParameterName></ParameterName>
      <CaptureMax></CaptureMax>
      <CaptureExceedURL></CaptureExceedURL>
      <StartTime></StartTime>
    </CaptureParameter>
  </CaptureParameters>
</DIM>
```

## Table description

Item	Description
Feature name	DIM
Table name	CaptureParameters
Table type	Multi-instance table
Row name	CaptureParameter
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
CaptureMax	Max space for captured packets	N/A	Unsigned integer. Value range: 0 to 1024	Default is 512 Kbytes
CaptureExceedURL	The URL while the packets size exceeds the max space, they will be sent to	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
StartTime	Time when the system sends the packets	N/A	Time. Format: HH:MM:SS	Default is 01:00:00

## DIM/LoggingParameters

This table contains logging parameters.

## XML structure

```
<DIM>
  <LoggingParameters>
    <LoggingParameter>
      <ParameterName></ParameterName>
      <IsLogToHost></IsLogToHost>
      <IsLogMail></IsLogMail>
    </LoggingParameter>
  </LoggingParameters>
</DIM>
```

## Table description

Item	Description
Feature name	DIM
Table name	BlockParameters
Table type	Multi-instance table
Row name	BlockParameter
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IsLogToHost	Sending log to host or not	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A
IsLogMail	Email the logs to an email server or not	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A

## DIM/RedirectParameters

This table contains redirect parameters.

## XML structure

```
<DIM>
  <RedirectParameters>
```

```

<RedirectParameter>
  <ParameterName></ParameterName>
  <url></url>
</RedirectParameter>
</RedirectParameters>
</DIM>

```

## Table description

Item	Description
Feature name	DIM
Table name	RedirectParameters
Table type	Multi-instance table
Row name	RedirectParameter
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
url	Target URL for redirect	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## DIM/MailParameters

This table contains mail parameters.

## XML structure

```

<DIM>
  <MailParameters>
    <MailParameter>
      <ParameterName></ParameterName>
      <ServerAddr></ServerAddr>
      <SrcMailAddr></SrcMailAddr>
      <DstMailAddr></DstMailAddr>
      <LocalDomain></LocalDomain>
      <UserName></UserName>
      <Password></Password>
      <IsNeedAuthentication></IsNeedAuthentication>
    </MailParameter>
  </MailParameters>
</DIM>

```

```

    <IsNeedSPA></IsNeedSPA>
  </MailParameter>
</MailParameters>
</DIM>

```

## Table description

Item	Description
Feature name	DIM
Table name	MailParameters
Table type	Multi-instance table
Row name	MailParameter
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ServerAddr	Mail server's address	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
SrcMailAddr	Source mail address	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
DstMailAddr	Destination mail address	N/A	String, case-insensitive. Length: 1 to 511 characters.	N/A
LocalDomain	Local domain name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
UserName	Mail user name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Password	Password	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IsNeedAuthentication	Requires authentication by the mail server or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
IsNeedSPA	Requires using SPA by the mail server or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# DIM/InspectBypass

This table contains bypass parameters.

## XML structure

```
<DIM>
  <InspectBypass>
    <BypassByConfig></BypassByConfig>
  </InspectBypass>
</DIM>
```

## Table description

Item	Description
Feature name	DIM
Table name	InspectBypass
Table Type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BypassByConfig	Value of bypass.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A

# DIM/ProxyServerParameters

This table contains information about DIM proxy server parameters.

## XML structure

```
<DIM>
  <ProxyServerParameters>
    <ProxyServerParameter>
      <ProxyAddress></ProxyAddress>
      <ProxyPort></ProxyPort>
      <UserName></UserName>
      <PassWord></PassWord>
    </ProxyServerParameter>
  </ProxyServerParameters>
```



</DIM>

## Table description

Item	Description
Feature name	DIM
Table name	ProxyServerParameters
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProxyAddress	Proxy server address	N/A	String, case-insensitive Length: 3 to 63 characters.	N/A
ProxyPort	Proxy server port	N/A	Unsigned integer: Value range: 1 to 65535.	N/A
UserName	Proxy username	N/A	String, case-insensitive Length: 1 to 31 characters.	N/A
PassWord	Proxy password	N/A	String, case-sensitive Length: 1 to 31 characters.	N/A

## DIM/DimFileUncompress

This table contains the maximum length of file uncompressing.

## XML structure

```
<DIM>
  <DimFileUncompress>
    <Size></Size>
  </DimFileUncompress>
</DIM>
```

## Table description

Item	Description
Feature name	DIM
Table name	DimFileUncompress

Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Size	Maximum size that can be uncompressed	N/A	Unsigned integer. Value range: 1 to 200MB.	N/A

# Contents

DIM .....	1
DIM/BlockParameters .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DIM/CaptureParameters .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
DIM/LoggingParameters .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
DIM/RedirectParameters .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
DIM/MailParameters .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
DIM/ActivePercentage .....	5
XML structure .....	6
Table description .....	6
Columns .....	6
DIM/InspectBypass .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
DIM/ProxyServerParameters .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
DIM/DimFileUncompress .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
DIM/DeviceInfo .....	8
XML structure .....	9
Table description .....	9
Columns .....	9

# DIM

## DIM/BlockParameters

This table contains block parameters.

### XML structure

```
<DIM>
  <BlockParameters>
    <BlockParameter>
      <ParameterName></ParameterName>
      <Denyperiod></Denyperiod>
    </BlockParameter>
  </BlockParameters>
</DIM>
```

### Table description

Item	Description
Feature name	DIM
Table name	BlockParameters
Table type	Multi-instance table
Row name	BlockParameter
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Denyperiod	Deny period	N/A	Unsigned integer. Value range: 1 to 86400s.	Default is 1800s

## DIM/CaptureParameters

This table contains capture parameters.

## XML structure

```
<DIM>
  <CaptureParameters>
    <CaptureParameter>
      <ParameterName></ParameterName>
      <CaptureMax></CaptureMax>
      <CaptureExceedURL></CaptureExceedURL>
      <UploadTime></UploadTime>
    </CaptureParameter>
  </CaptureParameters>
</DIM>
```

## Table description

Item	Description
Feature name	DIM
Table name	CaptureParameters
Table type	Multi-instance table
Row name	CaptureParameter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
CaptureMax	Max space for captured packets	N/A	Unsigned integer. Value range: 0 to 1024	Default is 512 Kbytes
CaptureExceedURL	The URL while the packets size exceeds the max space, they will be sent to	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
UploadTime	Time when the system sends the packets	N/A	Time. Format: HH:MM:SS	Default is 01:00:00

## DIM/LoggingParameters

This table contains logging parameters.

## XML structure

```
<DIM>
  <LoggingParameters>
    <LoggingParameter>
      <ParameterName></ParameterName>
      <IsLogToHost></IsLogToHost>
      <IsLogMail ></IsLogMail>
    </LoggingParameter>
  </LoggingParameters>
</DIM>
```

## Table description

Item	Description
Feature name	DIM
Table name	BlockParameters
Table type	Multi-instance table
Row name	BlockParameter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IsLogToHost	Sending log to host or not	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A
IsLogMail	Email the logs to an email server or not	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A

## DIM/RedirectParameters

This table contains redirect parameters.

## XML structure

```
<DIM>
  <RedirectParameters>
    <RedirectParameter>
```

```

    <ParameterName></ParameterName>
    <url></url>
  </RedirectParameter>
</RedirectParameters>
</DIM>

```

## Table description

Item	Description
Feature name	DIM
Table name	RedirectParameters
Table type	Multi-instance table
Row name	RedirectParameter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
url	Target URL for redirect	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## DIM/MailParameters

This table contains mail parameters.

## XML structure

```

<DIM>
  <MailParameters>
    <MailParameter>
      <ParameterName></ParameterName>
      <ServerAddr></ServerAddr>
      <SrcMailAddr></SrcMailAddr>
      <DstMailAddr></DstMailAddr>
      <LocalDomain></LocalDomain>
      <UserName></UserName>
      <Password></Password>
      <IsNeedAuthentication></IsNeedAuthentication>
      <IsNeedSPA></IsNeedSPA>
    </MailParameter>
  </MailParameters>
</DIM>

```

```

    </MailParameters>
</DIM>

```

## Table description

Item	Description
Feature name	DIM
Table name	MailParameters
Table type	Multi-instance table
Row name	MailParameter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Parameter name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ServerAddr	Mail server's address	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
SrcMailAddr	Source mail address	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
DstMailAddr	Destination mail address	N/A	String, case-insensitive. Length: 1 to 511 characters.	N/A
LocalDomain	Local domain name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
UserName	Mail user name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Password	Password	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IsNeedAuthentication	Requires authentication by the mail server or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
IsNeedSPA	Requires using SPA by the mail server or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## DIM/ActivePercentage

This table contains active percentage.



## XML structure

```
<DIM>
  <ActivePercentage>
    <Percentage></Percentage>
  </ActivePercentage>
</DIM>
```

## Table description

Item	Description
Feature name	DIM
Table name	ActivePercentage
Table Type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Percentage	Percentage of active.	N/A	Unsigned integer: Value range: 0 to 100.	When the value range is 0 to 100, it means in active, Otherwise, means error

## DIM/InspectBypass

This table contains bypass information.

## XML structure

```
<DIM>
  <InspectBypass>
    <BypassByConfig></BypassByConfig>
  </InspectBypass>
</DIM>
```

## Table description

Item	Description
Feature name	DIM
Table name	InspectBypass
Table Type	Single-instance table

Item	Description
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BypassByConfig	Value of bypass.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## DIM/ProxyServerParameters

This table contains information about DIM proxy server parameters.

## XML structure

```

<DIM>
  <ProxyServerParameters>
    <ProxyServerParameter>
      <ProxyAddress></ProxyAddress>
      <ProxyPort></ProxyPort>
      <UserName></UserName>
      <PassWord></PassWord>
    </ProxyServerParameter>
  </ProxyServerParameters>
</DIM>

```

## Table description

Item	Description
Feature name	DIM
Table name	ProxyServerParameters
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProxyAddress	Proxy server	N/A	String, case-insensitive	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	address		Length: 3 to 63 characters.	
ProxyPort	Proxy server port	N/A	Unsigned integer: Value range: 1 to 65535.	N/A
UserName	Proxy username	N/A	String, case-insensitive Length: 1 to 31 characters.	N/A
PassWord	Proxy password	N/A	String, case-sensitive Length: 1 to 31 characters.	N/A

## DIM/DimFileUncompress

This table contains the maximum length of file uncompressing.

### XML structure

```
<DIM>
  <DimFileUncompress>
    <Size></Size>
  </DimFileUncompress>
</DIM>
```

### Table description

Item	Description
Feature name	DIM
Table name	DimFileUncompress
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Size	Maximum size that can be uncompressed	N/A	Unsigned integer. Value range: 1 to 200MB.	N/A

## DIM/DeviceInfo

This table contains the device node where main dpid running on.

## XML structure

```
<DIM>
  <DeviceInfo>
    <ModuleName></ModuleName>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
  </DeviceInfo>
</DIM>
```

## Table description

Item	Description
Feature name	DIM
Table name	DeviceInfo
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModuleName	The name of current module.	Index	String. Length: 1 to 63 characters..	N/A
Chassis	Chassis of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	Cpu id of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

# Contents

DIM .....1

    DIM/CompileInspectEngine .....1

# DIM

## DIM/CompileInspectEngine

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍等。	The signature file is updating, Please try later. 特征库正在升级，稍后再试。
Cannot execute this operation because of memory alert. 已达到内存门限，不能执行此操作。	The device memory is not sufficient to execute this operation. 设备内存不够，不能继续操作。
Cannot update the signature library because the required service card cannot be found. 未检测到业务板，特征库升级失败。	Cannot update the signature library because the required service card cannot be found. Please check the service card's status. 未检测到业务板，特征库升级失败。请检查业务版状态。

# Contents

directrt .....	2
directrt/directrtvlink.....	2
XML structure .....	2
Table description .....	2
Columns .....	3
directrt/ directrtvlink / drVlinkVpns .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# directrt

## directrt/directrtvlink

This table contains configure vlink routes.

### XML structure

```
<directrt xmlns="http://www.gsta.com/netconf/gsta-directrt">

  <directrtvlink>

    <drVlinkVpns>

      <drVlinkVpn>

        <vrfName> </vrfName >

        <addressFamily> </addressFamily>

        <routePolicyName> </routePolicyName>

        <routeFilterName> </routeFilterName>

      </drVlinkVpn>

    </drVlinkVpns>

  </directrtvlink>

</directrt>
```

### Table description

Item	Description
Feature name	directrt



Item	Description
Table name	directrtvlink
Table type	Multi-instance table
Row name	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
directrtvlink	Configure Vlink routes	Subtable	N/A	For more information, see the directrtvlink / drVlinkVpns table.

## directrt/ directrtvlink / drVlinkVpns

This table contains Configure Vlink routes.

## XML structure

Please refer to the XML structure of directrt/ directrtvlink.

## Table description

Item	Description
Feature name	directrtvlink
Table name	drVlinkVpns
Table type	Multi-instance table
Row name	drVlinkVpn
Restrictions	None

Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vrfName	VPN instance	index	String. Length: 1 to 31 characters.	VPN instance
addressFamily	APR or ND flag	index	Members include: <ul style="list-style-type: none"><li>ipv4unicast</li><li>ipv6unicast</li></ul>	N/A
routePolicyName	Set the name of a Vlink route-policy	N/A	String.	Not used
routeFilterName	Set the name of a Vlink route-filter	N/A	String. Length: 0 to 201 characters.	Not used



## Contents

directrt .....	2
directrt/directrtvlink.....	2
XML structure .....	2
Table description .....	2
Columns .....	3
directrt/ directrtvlink / drVlinkVpns .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# directrt

## directrt/directrtvlink

This table contains configure vlink routes.

### XML structure

```
<directrt xmlns="http://www.gsta.com/netconf/gsta-directrt">

  <directrtvlink>

    <drVlinkVpns>

      <drVlinkVpn>

        <vrfName> </vrfName>

        <addressFamily> </addressFamily>

        <routePolicyName> </routePolicyName>

        <routeFilterName> </routeFilterName>

      </drVlinkVpn>

    </drVlinkVpns>

  </directrtvlink>

</directrt>
```

### Table description

Item	Description
Feature name	directrt

Item	Description
Table name	directrtvlink
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
directrtvlink	Configure Vlink routes	Subtable	N/A	For more information, see the directrtvlink / drVlinkVpns table.

## directrt/ directrtvlink / drVlinkVpns

This table contains Configure Vlink routes.

## XML structure

Please refer to the XML structure of directrt/ directrtvlink.

## Table description

Item	Description
Feature name	directrtvlink
Table name	drVlinkVpns
Table type	Multi-instance table
Row name	drVlinkVpn
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vrfName	VPN instance	index	String. Length: 1 to 31 characters.	VPN instance
addressFamily	APR or ND flag	index	Members include: <ul style="list-style-type: none"><li>ipv4unicast</li><li>ipv6unicast</li></ul>	N/A
routePolicyName	Set the name of a Vlink route-policy	N/A	String.	Not used
routeFilterName	Set the name of a Vlink route-filter	N/A	String. Length: 0 to 201 characters.	Not used

# Contents

- DNS .....1
  - DNS/DNSClearHost .....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1



# DNS

## DNS/DNSClearHost

This table is used to clear DNS host entries.

### XML structure

```
<DNS>
  <DNSClearHost>
    <ClearHost>
      <VRF></VRF>
      <Type></Type>
      <QueryType></QueryType>
    </ClearHost>
  </DNSClearHost>
</DNS>
```

### Table description

Item	Description
Feature name	DNS
Table name	DNSClearHost
Table type	Multi-instance table
Row name	ClearHost
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case sensitive. Length: 1 to 31 characters.	If the DNS host is on the public network, the length of characters is 0.
Type	Domain name-to-IP address mapping type	Index	Enumeration: <ul style="list-style-type: none"><li>1—Static.</li><li>2—Dynamic.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
QueryType	Query type	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—A.</li> <li>• 2—AAAA.</li> </ul>	<p>A type A query resolves a domain name to the mapped IPv4 address.</p> <p>A type AAAA query resolves a domain name to the mapped IPv6 address.</p> <p>If all the query type is set, the length of the column is 0.</p>

# Contents

DNS .....	1
DNS/DNSHost .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DNS/DNSServer .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
DNS/DNSDomain .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
DNS/DNSConfig .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
DNS/DNSIfServer .....	5
XML structure .....	5
Table description .....	6
Columns .....	6

# DNS

## DNS/DNSHost

This table contains DNS host configuration information.

### XML structure

```
<DNS>
  <DNSHost>
    <Host>
      <VRF></VRF>
      <HostName></HostName>
      <Type></Type>
      <QueryType></QueryType>
      <Result></Result>
    </Host>
  </DNSHost>
</DNS>
```

### Table description

Item	Description
Feature name	DNS
Table name	DNSHost
Table type	Multi-instance table
Row name	Host
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case sensitive. Length: 1 to 31 characters.	If the DNS host is on the public network, the length of characters is 0.
HostName	Host name	Index	String, case insensitive. Length: 1 to 253 characters.	It can include letters, digits, hyphens (-), underscores (_), and dots (.).

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Domain name-to-IP address mapping type	Index	Enumeration: • 1—Static.	N/A
QueryType	Query type	Index	Enumeration: • 1—A. • 2—AAAA.	A type A query resolves a domain name to the mapped IPv4 address. A type AAAA query resolves a domain name to the mapped IPv6 address.
Result	Replied result	N/A	String, case insensitive. Length: 1 to 45 characters.	Required. An IPv4 address as QueryType is A, an IPv6 address as QueryType is AAAA.

## DNS/DNSServer

This table contains DNS server configuration information.

### XML structure

```

<DNS>
  <DNSServer>
    <Server>
      <VRF></VRF>
      <Type></Type>
      <AddressType></AddressType>
      <IpAddress></IpAddress>
      <IfIndex></IfIndex>
    </Server>
  </DNSServer>
</DNS>

```

### Table description

Item	Description
Feature name	DNS
Table name	DNSServer
Table type	Multi-instance table
Row name	Server
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case sensitive. Length: 1 to 31 characters.	If the DNS server is on the public network, the length of characters is 0.
Type	DNS server type	Index	Enumeration: • 1—Static.	N/A
AddressType	Type of the DNS server IP address	Index	Enumeration: • 1—IPv4. • 2—IPv6.	N/A
IpAddress	IP address of the DNS server	Index	String, case insensitive. Length: 1 to 45 characters.	IPv4 address string as AddressType is IPv4, IPv6 address string as AddressType is IPv6.
IfIndex	Output interface Index	Index	Unsigned integer.	Must and can only be specified when the IPv6 address of the DNS server is a link-local address.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.

## DNS/DNSDomain

This table contains domain name suffix configuration information.

## XML structure

```

<DNS>
  <DNSDomain>
    <Domain>
      <VRF></VRF>
      <Type></Type>
      <DomainName></DomainName>
    </Domain>
  </DNSDomain>
</DNS>

```

## Table description

Item	Description
Feature name	DNS
Table name	DNSDomain
Table type	Multi-instance table
Row name	Domain
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case sensitive. Length: 1 to 31 characters.	If the domain name suffix is on the public network, the length of characters is 0.
Type	Domain name suffix type	Index	Enumeration: <ul style="list-style-type: none"><li>1—Static.</li></ul>	N/A
DomainName	Domain name suffix	Index	String, case insensitive. Length: 1 to 253 characters.	It is a dot-separated, case-insensitive string that can include letters, digits, hyphens (-), underscores (_), and dots (.) (for example, aabbcc.com). The domain name suffix can include at most 253 characters, and each separated string includes no more than 63 characters.

## DNS/DNSConfig

This table contains DNS configuration information.

## XML structure

```
<DNS>
  <DNSConfig>
    <DNSProxyEnable></DNSProxyEnable>
    <DNSDSCP></DNSDSCP>
    <DNSDSCP6></DNSDSCP6>
  </DNSConfig>
</DNS>
```

## Table description

Item	Description
Feature name	DNS
Table name	DNSConfig
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSProxyEnable	Whether the function of DNS proxy is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b>(default)</li></ul>	Support for this function depends on the device model.
DNSDSCP	DSCP value for DNS packets sent by a DNS client or DNS proxy	N/A	Unsigned integer. Value range: 0 to 63. Default: 0.	N/A
DNSDSCP6	DSCP value for IPv6 DNS packets sent by an IPv6 DNS client or DNS proxy	N/A	Unsigned integer. Value range: 0 to 63. Default: 0.	N/A

## DNS/DNSIfServer

This table contains DNS server of interface information.

## XML structure

```
<DNS>
  <DNSIfServer>
    <Server>
      <IfIndex></IfIndex>
      <VRF></VRF>
      <Type></Type>
      <AddressType></AddressType>
      <IpAddress></IpAddress>
      <IfIndexOut></IfIndexOut>
    </Server>
  </DNSIfServer>
</DNS>
```



## Table description

Item	Description
Feature name	DNS
Table name	DNSIfServer
Table type	Multi-instance table
Row name	Server
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
VRF	VRF instance name	Index	String, case sensitive. Length: 1 to 31 characters.	If the DNS server is on the public network, the length of characters is 0.
Type	DNS server type	Index	Enumeration: • 1—Static.	N/A
AddressType	Type of the DNS server IP address	Index	Enumeration: • 1—IPv4.	N/A
IpAddress	IP address of the DNS server	Index	String, case insensitive. Length: 1 to 45 characters.	IPv4 address string as AddressType is IPv4, IPv6 address string as AddressType is IPv6.
IfIndexOut	Output interface Index	Index	Unsigned integer.	Must and can only be specified when the IPv6 address of the DNS server is a link-local address.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.

# Contents

DNS .....	1
DNS/DNSHost .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DNS/DNSServer .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
DNS/DNSDomain .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
DNS/DNSConfig .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
DNS/DNSSpecification .....	5
XML structure .....	6
Table description .....	6
Columns .....	6
DNS/DNSIfServer .....	6
XML structure .....	6
Table description .....	7
Columns .....	7

# DNS

## DNS/DNSHost

This table contains DNS host information.

### XML structure

```
<DNS>
  <DNSHost>
    <Host>
      <VRF></VRF>
      <HostName></HostName>
      <Type></Type>
      <QueryType></QueryType>
      <AgeTime></AgeTime>
      <Result></Result>
    </Host>
  </DNSHost>
</DNS>
```

### Table description

Item	Description
Feature name	DNS
Table name	DNSHost
Table type	Multi-instance table
Row name	Host
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case sensitive. Length: 1 to 31 characters.	If the DNS host is on the public network, the length of characters is 0.
HostName	Host name	Index	String, case insensitive. Length: 1 to 253 characters.	It can include letters, digits, hyphens (-), underscores (_), and dots (.).

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Domain name-to-IP address mapping type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Static.</li> <li>2—Dynamic.</li> </ul>	N/A
QueryType	Query type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—A.</li> <li>2—AAAA.</li> </ul>	A type A query resolves a domain name to the mapped IPv4 address. A type AAAA query resolves a domain name to the mapped IPv6 address.
AgeTime	Time in seconds that a mapping can be stored in the cache.	N/A	Unsigned integer. Value range: 1 to 65535 seconds.	No aging time for a static mapping.
Result	Replied result	N/A	String, case insensitive.	IPv4 address string as QueryType is A, IPv6 address string as QueryType is AAAA. Seperated by space if there are multiple addresses. Example: 1.1.1.1 2.2.2.2 3.3.3.3. 1::1 2::2 3::3.

## DNS/DNSServer

This table contains DNS server information.

### XML structure

```

<DNS>
  <DNSServer>
    <Server>
      <VRF></VRF>
      <Type></Type>
      <AddressType></AddressType>
      <IpAddress></IpAddress>
      <IfIndex></IfIndex>
      <Priority></Priority>
    </Server>
  </DNSServer>
</DNS>

```

## Table description

Item	Description
Feature name	DNS
Table name	DNSServer
Table type	Multi-instance table
Row name	Server
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case sensitive. Length: 1 to 31 characters.	If the DNS server is on the public network, the length of characters is 0.
Type	DNS server type	Index	Enumeration: <ul style="list-style-type: none"><li>1—Static.</li><li>2—Dynamic.</li></ul>	N/A
AddressType	Type of the DNS server IP address	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>	N/A
IpAddress	IP address of the DNS server	Index	String, case insensitive. Length: 1 to 45 characters.	IPv4 address string as AddressType is IPv4, IPv6 address string as AddressType is IPv6.
IfIndex	Output interface Index	Index	Unsigned integer.	Equal 0 if AddressType is 1 or the IpAddress is not a link-local address.
Priority	Priority of DNS server	N/A	Unsigned integer. Value range: 0 to 5.	The lower the value, the greater the priority. The priority indicates query sequence when resolving a domain name.

## DNS/DNSDomain

This table contains domain name suffix information.

## XML structure

```
<DNS>
  <DNSDomain>
    <Domain>
      <VRF></VRF>
```

```

    <Type></Type>
    <DomainName></DomainName>
    <Priority></Priority>
  </Domain>
</DNSDomain>
</DNS>

```

## Table description

Item	Description
Feature name	DNS
Table name	DNSDomain
Table type	Multi-instance table
Row name	Domain
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String, case sensitive. Length: 1 to 31 characters.	If the domain name suffix is on the public network, the length of characters is 0.
Type	Domain name suffix type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Static.</li> <li>2—Dynamic.</li> </ul>	N/A
DomainName	Domain name suffix	Index	String, case insensitive. Length: 1 to 253 characters.	It is a dot-separated, case-insensitive string that can include letters, digits, hyphens (-), underscores (_), and dots (.) (for example, aabbcc.com). The domain name suffix can include at most 253 characters, and each separated string includes no more than 63 characters.
Priority	Priority of domain name suffix	N/A	Unsigned integer. Value range: 0 to 15.	The lower the value, the greater the priority. The priority indicates query sequence when resolving a domain name.

# DNS/DNSConfig

This table contains DNS configuration information.

## XML structure

```
<DNS>
  <DNSConfig>
    <DNSProxyEnable></DNSProxyEnable>
    <DNSDSCP></DNSDSCP>
    <DNSDSCP6></DNSDSCP6>
  </DNSConfig>
</DNS>
```

## Table description

Item	Description
Feature name	DNS
Table name	DNSConfig
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSProxyEnable	Whether the function of DNS proxy is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>False</b></li></ul>	Support for this function depends on the device model.
DNSDSCP	DSCP value for DNS packets sent by a DNS client or DNS proxy	N/A	Unsigned integer. Value range: 0 to 63.	N/A
DNSDSCP6	DSCP value for IPv6 DNS packets sent by an IPv6 DNS client or DNS proxy	N/A	Unsigned integer. Value range: 0 to 63.	N/A

# DNS/DNSSpecification

This table contains DNS specification information.

## XML structure

```
<DNS>
  <DNSSpecification>
    <SupportDNSProxy></SupportDNSProxy>
  </DNSSpecification>
</DNS>
```

## Table description

Item	Description
Feature name	DNS
Table name	DNSSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportDNS Proxy	Whether the function of DNS proxy is supported.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A

## DNS/DNSIfServer

This table contains DNS server of interface information.

## XML structure

```
<DNS>
  <DNSIfServer>
    <Server>
      <IfIndex></IfIndex>
      <VRF></VRF>
      <Type></Type>
      <AddressType></AddressType>
      <IpAddress></IpAddress>
      <IfIndexOut></IfIndexOut>
      <Priority></Priority>
    </Server>
  </DNSIfServer>
</DNS>
```



## Table description

Item	Description
Feature name	DNS
Table name	DNSIfServer
Table type	Multi-instance table
Row name	Server
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
VRF	VRF instance name	Index	String, case sensitive. Length: 1 to 31 characters.	If the DNS server is on the public network, the length of characters is 0.
Type	DNS server type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Static.</li> <li>2—Dynamic.</li> </ul>	N/A
AddressType	Type of the DNS server IP address	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> </ul>	N/A
IpAddress	IP address of the DNS server	Index	String, case insensitive. Length: 1 to 45 characters.	IPv4 address string as AddressType is IPv4, IPv6 address string as AddressType is IPv6.
IfIndexOut	Output interface Index	Index	Unsigned integer.	Equal 0 if AddressType is 1 or the IpAddress is not a link-local address.
Priority	Priority of DNS server	N/A	Unsigned integer. Value range: 0 to 5.	The lower the value, the greater the priority. The priority indicates query sequence when resolving a domain name.

# Contents

- DNS .....1
  - DNS/DNSHost .....1
  - DNS/DNSServer.....1
  - DNS/DNSDomain .....2
  - DNS/DNSConfig.....3

# DNS

## DNS/DNSHost

Message	Explanation
Invalid host name. 非法的主机名。	Invalid host name configuration. 非法的主机名。
Maximum number of VRFs already reached. DNS支持的可配VRF个数超过上限。	Maximum number of VRFs already reached. ,please check configuration or specifications. DNS 支持的可配 VRF 个数超过上限，请检查配置或者设备规格。
Maximum number of IPv4 DNS entries already reached. 可配主机IP地址个数超过上限。	Maximum number of IPv4 DNS entries already reached, please check configuration or specifications 可配主机 IP 地址个数超过上限。请检查配置或者设备规格
Failed to create the IPv4 DNS entry. 创建主机名及其对应的主机IP地址失败。	Failed to create the IPv4 DNS entry, please modify configuration under guidance. 创建主机名及其对应的主机 IP 地址失败，请按照配置说明修改
Invalid IPv6 address. 非法的IPv6地址。	nvalid IPv6 address configuration. 非法的 IPv6 地址。
The configuration doesn't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改
The configuration doesn't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改
Maximum number of IPv6 DNS entries already reached. 可配主机IPv6地址个数超过上限。	Maximum number of IPv6 DNS entries already reached ,please check configuration or specifications 可配主机 IPv6 地址个数超过上限,请检查配置或者设备规格
Failed to create the IPv6 DNS entry. 创建主机名及其对应的主机IPv6地址失败。	Failed to create the IPv6 DNS entry, please modify configuration under guidance. 创建主机名及其对应的主机 IPv6 地址失败，请按照配置说明修改

## DNS/DNSServer

Message	Explanation
Maximum number of VRFs already reached. DNS支持的可配VRF个数超过上限。	Maximum number of VRFs already reached, please check configuration or specifications DNS 支持的可配 VRF 个数超过上限，请检查配置或者设备规格

Maximum number of DNS servers already reached. 可配域名服务器个数超过上限。	Maximum number of DNS servers already reached. , please check configuration or specifications 可配域名服务器个数超过上限, 请检查配置或者设备规格
Failed to specify the DNS server. 指定域名服务器失败。	Failed to specify the DNS server, please modify configuration under guidance. 指定域名服务器失败, 请按照配置说明修改
An output interface must be specified when the IPv6 address of the DNS server is a link-local address. 需要为一个链路本地地址指定一个报文出接口。	Invalid configuration, please modify configuration under guidance. 无效配置, 请按照配置说明修改。
An output interface is not configurable when the IPv6 address of the DNS server is a global unicast address. 不需要为一个全局单播地址指定一个报文出接口。	Invalid configuration, please modify configuration under guidance. 无效配置, 请按照配置说明修改。
Invalid IPv6 address. 非法的IPv6地址。	Invalid IPv6 address configuration. 非法的 IPv6 地址。
Failed to specify the IPv6 DNS server. 指定IPv6域名服务器失败。	Failed to specify the IPv6 DNS server, please modify configuration under guidance. 指定 IPv6 域名服务器失败, please modify configuration under guidance。
The configuration doesn't meet the requirements. 不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置, 请按照配置说明修改
An output interface is not configurable when you specify a DNS server by its IPv4 address. 不需要为一个IPv4地址指定一个报文出接口。	Invalid configuration, please modify configuration under guidance. 无效配置, 请按照配置说明修改

## DNS/DNSDomain

Message	Explanation
Maximum number of VRFs already reached. DNS支持的可配VRF个数超过上限。	Maximum number of VRFs already reached, please check configuration or specifications. DNS 支持的可配 VRF 个数超过上限, 请检查配置或者设备规格
Invalid domain name suffix. 无效的域名后缀。	Invalid configuration, please modify configuration under guidance. 无效配置, 请按照配置说明修改
Failed to create the domain name suffix. 创建域名后缀失败。	Invalid configuration, please modify configuration under guidance. 无效配置, 请按照配置说明修改
Maximum number of domain name suffixes already reached.	Maximum number of domain name suffixes already reached, please check configuration or specifications.

可配域名后缀个数超过上限。	可配域名后缀个数超过上限, , 请检查配置或者设备规格
---------------	-----------------------------

## DNS/DNSConfig

Message	Explanation
Failed to enable DNS proxy. 使能DNS代理功能失败。	Failed to enable DNS proxy, please modify configuration under guidance. 使能 DNS 代理功能失败, 无效配置, 请按照配置说明修改

# Contents

- Domain ..... 1
  - Domain/Domains ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1
  - Domain/ResetUserRecords ..... 1
    - XML structure ..... 1
    - Table description ..... 2
    - Columns ..... 2

# Domain

## Domain/Domains

Domain status table.

### XML structure

```
<Domain>
  <Domains>
    <Domain>
      <DomainName></DomainName>
      <State></State>
    </Domain>
  </Domains>
</Domain>
```

### Table description

Item	Description
Feature name	Domain
Table name	Domains
Table type	Multi-instance table
Row name	Domain
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 255 characters.
State	Status of the domain	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Block.</li><li>• 1—Active.</li></ul>

## Domain/ResetUserRecords

This table clears user online or offline records.

### XML structure

```
<Domain>
```

```

<ResetUserRecords>
  <RecordType></RecordType>
</ResetUserRecords>
</Domain>

```

## Table description

Item	Description
Feature name	Domain
Table name	ResetUserRecords
Table type	Single-instance table
Row name	ResetUserRecord
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
RecordType	Type of user records to be cleared	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Abnormal offline records.</li> <li>• <b>1</b>—Normal offline records.</li> <li>• <b>2</b>—Offline records.</li> <li>• <b>3</b>—Online failure records.</li> </ul>



# Contents

Domain .....	1
Domain/GlobalConfig .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Domain/SessionLimit .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
Domain/Domains .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
Domain/Schemes .....	6
XML structure .....	7
Table description .....	7
Columns .....	7
Domain/BroadcastSchemes .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
Domain/EnableAbnormalOfflineRecords .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
Domain/EnableNormalOfflineRecords .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
Domain/EnableOfflineRecords .....	12
XML structure .....	13
Table description .....	13
Columns .....	13
Domain/EnableOnlineFailRecords .....	13
XML structure .....	13
Table description .....	13
Columns .....	14

# Domain

## Domain/GlobalConfig

Global domain configuration information table.

### XML structure

```
<Domain>
  <GlobalConfig>
    <DefaultDomain></DefaultDomain>
    <IfUnknownDomain></IfUnknownDomain>
  </GlobalConfig>
</Domain>
```

### Table description

Item	Description
Feature name	Domain
Table name	GlobalConfig
Table type	Single-instance table
Row name	None
Restrictions	A maximum of 16 domains can be created.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DefaultDomain	Default domain	N/A	String, case-insensitive. Length: 1 to 255 characters.	By default, the default domain is the predefined domain named system.
IfUnknownDomain	ISP domain that accommodates users assigned to nonexistent domains	N/A	String, case-insensitive. Length: 1 to 255 characters. The domain name can't contain the following characters: \   / : * ? " < > @	N/A

## Domain/SessionLimit

The maximum number of concurrent users that can log on to the device through the specified method.

# XML structure

```
<Domain>
  <SessionLimit>
    <Ftp></Ftp>
    <Telnet></Telnet>
    <Http></Http>
    <Ssh></Ssh>
    <Https></Https>
  </SessionLimit>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	SessionLimit
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ftp	Maximum number of concurrent FTP users	N/A	Unsigned integer. Value range: 1 to 64.	Default: 32. <ul style="list-style-type: none"><li>In non-FIPS mode, the value for this column can take effect.</li><li>In FIPS mode, this column is ignored.</li></ul>
Telnet	Maximum number of concurrent Telnet users	N/A	Unsigned integer. Value range: 1 to 32.	Default: 32. <ul style="list-style-type: none"><li>In non-FIPS mode, the value for this column can take effect.</li><li>In FIPS mode, this column is ignored.</li></ul>
Http	Maximum number of concurrent HTTP users	N/A	Unsigned integer. Value range: 1 to 64.	Default: 32. <ul style="list-style-type: none"><li>In non-FIPS mode, the value for this column can take effect.</li><li>In FIPS mode, this column is ignored.</li></ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
Ssh	Maximum number of concurrent SSH users	N/A	Unsigned integer. Value range: 1 to 32.	Default: 32.
Https	Maximum number of concurrent HTTPS users	N/A	Unsigned integer. Value range: 1 to 64.	Default: 32.

## Domain/Domains

Basic domain information table.

### XML structure

```

<Domain>
  <Domains>
    <Domain>
      <DomainName></DomainName>
      <SessTimeIncldeIdle></SessTimeIncldeIdle>
      <AcctStartFailAction></AcctStartFailAction>
      <AcctUpdateFail>
        <MaxTimes></MaxTimes>
        <AcctUpdateFailAction></AcctUpdateFailAction>
      </AcctUpdateFail>
      <ServiceType></ServiceType>
      <AccessLimit></AccessLimit>
      <UserAddrType></UserAddrType>
      <AuthorAttrs>
        <IdleTime></IdleTime>
        <IdleFlow></IdleFlow>
        <ProfileName></ProfileName>
        <IpPoolName></IpPoolName>
        <Ipv6PoolName></Ipv6PoolName>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
        <PrimDnsIpaddr></PrimDnsIpaddr>
        <PrimDnsIpv6addr></PrimDnsIpv6addr>
        <SecDnsIpaddr></SecDnsIpaddr>
        <SecDnsIpv6addr></SecDnsIpv6addr>
        <PortalUrl></PortalUrl>
        <VRF></VRF>
        <IgmpMaxAccessNum></IgmpMaxAccessNum>
        <MldMaxAccessNum></MldMaxAccessNum>
        <SessTimeOut></SessTimeOut>
        <InboundUserPriority></InboundUserPriority>
        <OutboundUserPriority></OutboundUserPriority>
      </AuthorAttrs>
    </Domain>
  </Domains>
</Domain>

```

```

    </AuthorAttrs>
  </Domain>
</Domains>
</Domain>

```

## Table description

Item	Description
Feature name	Domain
Table name	Domains
Table type	Multi-instance table
Row name	Domain
Restrictions	A maximum of 16 domains can be created. The domain named system is predefined and can't be deleted.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name can't contain the following characters: \   / : * ? " < > @	A predefined domain named system exists.
SessTimeIncludIdle	Whether to include the idle cut period or user online detection period in the user online duration to be sent to the server	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The idle cut period or user online detection period is included in the user online duration to be sent to the server.</li> <li><b>false</b>—The idle cut period or user online detection period is excluded from the user online duration to be sent to the server.</li> </ul>	Default: false. Only portal users support the user online detection period.
AcctStartFailAction	Access control for users that encounter accounting-start failures	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Allows the users to stay online.</li> <li><b>1</b>—Logs off the users.</li> </ul>	Default: 0.
AcctUpdateFail	Configuration for users that encounter accounting-update failures	Data structure	Members include: <ul style="list-style-type: none"> <li>MaxTimes.</li> <li>AcctUpdateFailAction.</li> </ul>	N/A
MaxTimes	Maximum number of consecutive accounting-updat	N/A	Unsigned integer. Value range: 1 to 255.	Default: 1.

	e failures allowed for each user			
AcctUpdateFailAction	Access control for users that encounter accounting-update failures	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Allows the users to stay online.</li> <li>1—Logs off the users.</li> </ul>	Default: 0.
ServiceType	Service type of the domain	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—High-Speed Internet (HSI) service.</li> <li>1—Set Top Box (STB) service.</li> <li>2—Voice over IP (VoIP) service.</li> </ul>	Default: 0.
AccessLimit	Maximum number of concurrent access users	N/A	Unsigned integer. Value range: 1 to 2147483647.	N/A
UserAddrType	User address type of the domain	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—public-ipv4.</li> <li>1—private-ipv4.</li> <li>2—public-ds.</li> <li>3—private-ds.</li> <li>4—ds-lite.</li> <li>5—ipv6.</li> <li>6—nat64.</li> </ul>	N/A
AuthorAttrs	Authorization attributes	Data structure	Members include: <ul style="list-style-type: none"> <li>IdleTime.</li> <li>IdleFlow.</li> <li>ProfileName.</li> <li>IpPoolName.</li> <li>Ipv6PoolName.</li> <li>Ipv6Address.</li> <li>Ipv6PrefixLength.</li> <li>PrimDnsIppaddr.</li> <li>PrimDnsIpv6addr.</li> <li>SecDnsIppaddr.</li> <li>SecDnsIpv6addr.</li> <li>PortalUrl.</li> <li>VRF.</li> <li>IgmpMaxAccessNum.</li> <li>MldMaxAccessNum.</li> <li>SessTimeOut.</li> </ul>	N/A
IdleTime	Idle timeout period	N/A	Unsigned integer. Value range: 1 to 600, in minutes.	N/A
IdleFlow	The minimum traffic that must be generated in the idle timeout period	N/A	Unsigned integer. Value range: 1 to 10240000, in bytes.	Default: 10240 bytes.
ProfileName	User profile	N/A	String, case-sensitive.	Valid characters include letters, digits, and

	name		Length: 1 to 31 characters.	underscores (_). The name must start with a letter and must be unique.
IpPoolName	IPv4 address pool name	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
Ipv6PoolName	IPv6 address pool name	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
Ipv6Address	IPv6 address for specifying the prefix	N/A	Hexadecimal string, colon-separated.	For example, 2001:12::22:33.
Ipv6PrefixLength	IPv6 prefix length	N/A	Unsigned integer. Value range: 1 to 128.	N/A
PrimDnsIpaddr	IPv4 address of the primary DNS server	N/A	IPv4: String, dotted decimal notation.	IPv4 example: 10.1.1.1.
PrimDnsIpv6addr	IPv6 address of the primary DNS server	N/A	IPv6: Hexadecimal string.	IPv6 example: 2001:12::22:33.
SecDnsIpaddr	IPv4 address of the secondary DNS server	N/A	IPv4: String, dotted decimal notation.	IPv4 example: 10.1.1.1.
SecDnsIpv6addr	IPv6 address of the secondary DNS server	N/A	IPv6: Hexadecimal string.	IPv6 example: 2001:12::22:33.
PortalUrl	Portal redirect URL	N/A	String, case-sensitive. Length: 1 to 255 characters.	N/A
VRF	VPN instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
IgmpMaxAccessNum	The maximum number of IGMP groups that an IPv4 user can join concurrently	N/A	Unsigned integer. Value range: 1 to 64.	Default: 4.
MldMaxAccessNum	The maximum number of MLD groups that an IPv6 user can join concurrently	N/A	Unsigned integer. Value range: 1 to 64.	Default: 4.
SessTimeOut	Session timeout timer	N/A	Unsigned integer. Value range: 1 to 4294967295.	Users are logged off when the session timeout timer expires for the users.
InboundUserPriority	Inbound user priority	N/A	Unsigned integer. Value range: 0 to 7.	N/A
OutboundUserPriority	Outbound user priority	N/A	Unsigned integer. Value range: 0 to 7.	N/A

## Domain/Schemes

Domain scheme table.

## XML structure

```
<Domain>
  <Schemes>
    <Scheme>
      <DomainName></DomainName>
      <AaaType></AaaType>
      <AccessType></AccessType>
      <SchemeList></SchemeList>
      <SchemeNameList></SchemeNameList>
    </Scheme>
  </Schemes>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	Schemes
Table type	Multi-instance table
Row name	Scheme
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters.	N/A
AaaType	AAA type	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Authentication.</li><li>• 4—Authorization.</li><li>• 5—Accounting.</li></ul>	There are some restrictions among the column AccessType, the column AaaType, and the column SchemeList. Those restrictions will be described in the Restrictions section below the table.
AccessType	Access type	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Login.</li><li>• 1—Super.</li><li>• 2—Command.</li><li>• 3—LAN access.</li><li>• 4—PPP.</li><li>• 5—Default.</li><li>• 6—Portal.</li><li>• 7—IKE.</li><li>• 8—IPoE.</li><li>• 9—SSL VPN.</li></ul>	



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• <b>10</b>—ADVPN.</li> </ul>	
SchemeList	AAA method types	N/A	<p>String.</p> <p>Length: 1 to 9 characters, using the format of 1-2-4.</p> <p>The hyphen (-) is used to separate the digits that represent different AAA methods, including:</p> <ul style="list-style-type: none"> <li>• <b>1</b>—HWTACACS.</li> <li>• <b>2</b>—RADIUS.</li> <li>• <b>3</b>—LDAP.</li> <li>• <b>4</b>—Local.</li> <li>• <b>5</b>—None.</li> </ul> <p>The string 1-2-4 indicates that HWTACACS is specified as the primary authentication, authorization, or accounting method. If the HWTACACS method fails, the RADIUS method applies. If the RADIUS method fails, the local method applies.</p>	
SchemeNameList	Scheme name list	N/A	<p>String, case-insensitive.</p> <p>Length: 0 to 68 characters, may contain 0 to 2 scheme names.</p> <p>Every scheme name contains two parts: Scheme name length and scheme name string.</p> <p>The scheme name is in the format of xxmm.....mm.</p> <ul style="list-style-type: none"> <li>• The xx argument represents the scheme name length. Use two digits to set the scheme name length.</li> <li>• The mm.....mm argument represents the scheme name string. The string is 1 to 32 characters.</li> </ul> <p>For example:</p> <ul style="list-style-type: none"> <li>• The string 08abcdefgh represents a scheme whose name is abcdefgh and whose name length is 8 characters.</li> <li>• The string 10testtestte04test represents two schemes. One scheme is named as testtestte and the name length is 10 characters. The other scheme is named as test and the</li> </ul>	If this column is not available, no schemes are specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
			name length is 4 characters.	

#### Restrictions:

- The letter Y indicates that a specific access type supports a specific method for authentication, authorization, or accounting.
- You can specify one primary method and multiple backup methods for authentication, authorization, or accounting. An AAA method with a lower level can be the backup of another method that has a higher level. The following list arranges the methods from high level to low level:
  - RADIUS, TACACS, and LDAP.
  - Local.
  - None.

Among the highest-level methods, the RADIUS method and TACACS method can be the backup of each other.

- In FIPS mode, all access types can't use the none method for authentication, authorization, or accounting.

AAA method (level) Access type +AAA type		RADIUS (3)	TACACS (3)	LDAP (3)	Local (2)	None (1)
Default	Authentication	Y	Y	Y	Y	Y
	Authorization	Y	Y		Y	Y
	Accounting	Y	Y		Y	Y
Login	Authentication	Y	Y	Y	Y	Y
	Authorization	Y	Y		Y	Y
	Accounting	Y	Y		Y	Y
Super	Authentication	Y	Y			
Command	Authorization		Y		Y	Y
	Accounting		Y			
LAN access (MAC authentication or 802.1X)	Authentication	Y		Y	Y	Y
	Authorization	Y			Y	Y
	Accounting	Y			Y	Y
PPP	Authentication	Y	Y		Y	Y
	Authorization	Y	Y		Y	Y
	Accounting	Y	Y		Y	Y
Portal	Authentication	Y		Y	Y	Y
	Authorization	Y			Y	Y
	Accounting	Y			Y	Y
IKE	Authentication	Y			Y	Y

IPoE	Authentication	Y			Y	Y
	Authorization	Y			Y	Y
	Accounting	Y			Y	Y
SSL VPN	Authentication	Y		Y	Y	Y
	Authorization	Y		Y	Y	Y
	Accounting	Y			Y	Y
ADVPN	Authentication	Y			Y	Y
	Authorization	Y			Y	Y
	Accounting	Y			Y	Y

## Domain/BroadcastSchemes

RADIUS broadcast scheme table for a domain.

### XML structure

```

<Domain>
  <BroadcastSchemes>
    <BroadcastScheme>
      <DomainName></DomainName>
      <AccessType></AccessType>
      <SchemeName></SchemeName>
    </BroadcastScheme>
  </BroadcastSchemes>
</Domain>

```

### Table description

Item	Description
Feature name	Domain
Table name	BroadcastSchemes
Table type	Multi-instance table
Row name	BroadcastScheme
Restrictions	Configure this table only for domains that have been configured RADIUS accounting.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 255 characters. The name can't contain the following characters: \   / : * ? " < > @	N/A
AccessType	Access type	Index	Enumeration: <ul style="list-style-type: none"><li>• 3—LAN access.</li><li>• 4—PPP.</li><li>• 6—Portal.</li><li>• 8—IPoE.</li></ul>	At present, only one RADIUS broadcast scheme is supported for a domain.
SchemeName	RADIUS scheme name	Index	String. Length: 1 to 32 characters.	

## Domain/EnableAbnormalOfflineRecords

This table controls the enabling status of the user abnormal offline recording feature.

## XML structure

```
<Domain>
  <EnableAbnormalOfflineRecords>
    <Enable></Enable>
  </EnableAbnormalOfflineRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	EnableAbnormalOfflineRecords
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable the user abnormal offline recording feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable.</li><li><b>false</b>—Disable.</li></ul>	The default varies by device model.

## Domain/EnableNormalOfflineRecords

This table controls the enabling status of the user normal offline recording feature.

## XML structure

```
<Domain>
  <EnableNormalOfflineRecords>
    <Enable></Enable>
  </EnableNormalOfflineRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	EnableNormalOfflineRecords
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable the user normal offline recording feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable.</li><li><b>false</b>—Disable.</li></ul>	The default varies by device model.

## Domain/EnableOfflineRecords

This table controls the enabling status of the user offline recording feature.

## XML structure

```
<Domain>
  <EnableOfflineRecords>
    <Enable></Enable>
  </EnableOfflineRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	EnableOfflineRecords
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable the user offline recording feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable.</li><li><b>false</b>—Disable.</li></ul>	The default varies by device model.

## Domain/EnableOnlineFailRecords

This table controls the enabling status of the user online failure recording feature.

## XML structure

```
<Domain>
  <EnableOnlineFailRecords>
    <Enable></Enable>
  </EnableOnlineFailRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain

Item	Description
Table name	EnableOnlineFailRecords
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable the user online failure recording feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	The default varies by device model.

# Contents

Domain .....	1
Domain/GlobalConfig .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Domain/SessionLimit .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
Domain/Domains .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
Domain/Schemes .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
Domain/BroadcastSchemes .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
Domain/Specification .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
Domain/UserAbnormalOfflineRecords .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
Domain/UserNormalOfflineRecords .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
Domain/UserOfflineRecords .....	16
XML structure .....	17
Table description .....	17
Columns .....	17
Domain/UserOnlineFailRecords .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
Domain/EnableAbnormalOfflineRecords .....	20
XML structure .....	21
Table description .....	21
Columns .....	21
Domain/EnableNormalOfflineRecords .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
Domain/EnableOfflineRecords .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
Domain/EnableOnlineFailRecords .....	23
XML structure .....	23
Table description .....	23
Columns .....	23



# Domain

## Domain/GlobalConfig

Global domain configuration information table.

### XML structure

```
<Domain>
  <GlobalConfig>
    <DefaultDomain></DefaultDomain>
    <IfUnknownDomain></IfUnknownDomain>
  </GlobalConfig>
</Domain>
```

### Table description

Item	Description
Feature name	Domain
Table name	GlobalConfig
Table type	Single-instance table
Row name	None
Restrictions	A maximum of 16 domains can be created.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DefaultDomain	Default domain.	N/A	String, case-insensitive. Length: 1 to 255 characters.	By default, the default domain is the predefined domain named system.
IfUnknownDomain	ISP domain that accommodates users assigned to nonexistent domains.	N/A	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain the following characters: \   / : * ? " < > @	N/A

## Domain/SessionLimit

The maximum number of concurrent users that can log on to the device through the specific method.

# XML structure

```
<Domain>
  <SessionLimit>
    <Ftp></Ftp>
    <Telnet></Telnet>
    <Http></Http>
    <Ssh></Ssh>
    <Https></Https>
  </SessionLimit>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	SessionLimit
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ftp	Maximum number of concurrent FTP users	N/A	Unsigned integer. Value range: 1 to 64.	Default: 32. <ul style="list-style-type: none"><li>In non-FIPS mode, the value for this column can take effect.</li><li>In FIPS mode, this column is ignored.</li></ul>
Telnet	Maximum number of concurrent Telnet users	N/A	Unsigned integer. Value range: 1 to 32.	Default: 32. <ul style="list-style-type: none"><li>In non-FIPS mode, the value for this column can take effect.</li><li>In FIPS mode, this column is ignored.</li></ul>
Http	Maximum number of concurrent HTTP users	N/A	Unsigned integer. Value range: 1 to 64.	Default: 32. <ul style="list-style-type: none"><li>In non-FIPS mode, the value for this column can take effect.</li><li>In FIPS mode, this column is ignored.</li></ul>
Ssh	Maximum number of concurrent SSH	N/A	Unsigned integer. Value range: 1 to 32.	Default: 32.

Column name	Column description	Column type	Data type and restrictions	Remarks
	users			
Https	Maximum number of concurrent HTTPS users	N/A	Unsigned integer. Value range: 1 to 64.	Default: 32.

## Domain/Domains

Basic domain information table.

### XML structure

```

<Domain>
  <Domains>
    <Domain>
      <DomainName></DomainName>
      <SessTimeIncldeIdle></SessTimeIncldeIdle>
      <State></State>
      <AcctStartFailAction></AcctStartFailAction>
      <AcctUpdateFail>
        <MaxTimes></MaxTimes>
        <AcctUpdateFailAction></AcctUpdateFailAction>
      </AcctUpdateFail>
      <ServiceType></ServiceType>
      <AccessLimit></AccessLimit>
      <UserAddrType></UserAddrType>
      <AuthorAttrs>
        <IdleTime></IdleTime>
        <IdleFlow></IdleFlow>
        <ProfileName></ProfileName>
        <IpPoolName></IpPoolName>
        <Ipv6PoolName></Ipv6PoolName>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
        <PrimDnsIpaddr></PrimDnsIpaddr>
        <PrimDnsIpv6addr></PrimDnsIpv6addr>
        <SecDnsIpaddr></SecDnsIpaddr>
        <SecDnsIpv6addr></SecDnsIpv6addr>
        <PortalUrl></PortalUrl>
        <VRF></VRF>
        <IgmpMaxAccessNum></IgmpMaxAccessNum>
        <MldMaxAccessNum></MldMaxAccessNum>
        <SessTimeOut></SessTimeOut>
        <InboundUserPriority></InboundUserPriority>
        <OutboundUserPriority></OutboundUserPriority>
      </AuthorAttrs>
    </Domain>
  </Domains>
</Domain>

```

```

    </Domain>
  </Domains>
</Domain>

```

## Table description

Item	Description
Feature name	Domain
Table name	Domains
Table type	Multi-instance table
Row name	Domain
Restrictions	A maximum of 16 domains can be created. The domain named system is predefined and cannot be deleted.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain the following characters: \   / : * ? " < > @	A predefined domain named system exists.
SessTimeIncludle	Whether to include the idle cut period or user online detection period in the user online duration to be sent to the server	N/A	Boolean: <ul style="list-style-type: none"> <li>true—The idle cut period or user online detection period is included in the user online duration to be sent to the server.</li> <li>false—The idle cut period or user online detection period is excluded from the user online duration to be sent to the server.</li> </ul>	Default: false. Only portal users support the user online detection period.
State	Status of the domain	N/A	Boolean: <ul style="list-style-type: none"> <li><b>0</b>—Blocked.</li> <li><b>1</b>—Active.</li> </ul>	Default: 1.
AcctStartFailAction	Access control for users that encounter accounting-start failures	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Allows the users to stay online.</li> <li><b>1</b>—Logs off the users.</li> </ul>	Default: 0.
AcctUpdateFail	Configuration for users that encounter accounting-update failures	Data structure	Members include: <ul style="list-style-type: none"> <li>MaxTimes.</li> <li>AcctUpdateFailAction.</li> </ul>	N/A
MaxTimes	Maximum number of consecutive accounting-updat	N/A	Unsigned integer. Value range: 1 to 255.	Default: 1.

Column name	Column description	Column type	Data type and restrictions	Remarks
	e failures allowed for each user			
AcctUpdateFailAction	Access control for users that encounter accounting-update failures	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Allows the users to stay online.</li> <li>1—Logs off the users.</li> </ul>	Default: 0.
ServiceType	Service type of the domain	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—High-Speed Internet (HSI) service.</li> <li>1—Set Top Box (STB) service.</li> <li>2—Voice over IP (VoIP) service.</li> </ul>	Default: 0.
AccessLimit	Maximum number of concurrent access users	N/A	Unsigned integer. Value range: 1 to 2147483647.	N/A
UserAddrType	User address type of the domain	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—public-ipv4.</li> <li>1—private-ipv4.</li> <li>2—public-ds.</li> <li>3—private-ds.</li> <li>4—ds-lite.</li> <li>5—ipv6.</li> <li>6—nat64.</li> </ul>	N/A
AuthorAttrs	Authorization attributes	Data structure	Members include: <ul style="list-style-type: none"> <li>IdleTime.</li> <li>IdleFlow.</li> <li>ProfileName.</li> <li>IpPoolName.</li> <li>Ipv6PoolName.</li> <li>Ipv6Address.</li> <li>Ipv6PrefixLength.</li> <li>PrimDnsIpaddr.</li> <li>PrimDnsIpv6addr.</li> <li>SecDnsIpaddr.</li> <li>SecDnsIpv6addr.</li> <li>PortalUrl.</li> <li>VRF.</li> <li>IgmpMaxAccessNum.</li> <li>MldMaxAccessNum.</li> <li>SessTimeOut.</li> </ul>	N/A
IdleTime	Idle timeout period	N/A	Unsigned integer. Value range: 1 to 600, in minutes.	N/A
IdleFlow	The minimum traffic that must be generated in the idle timeout	N/A	Unsigned integer. Value range: 1 to 10240000, in bytes.	Default: 10240 bytes.

Column name	Column description	Column type	Data type and restrictions	Remarks
	period			
ProfileName	User profile name	N/A	String, case-sensitive. Length: 1 to 31 characters.	Valid characters include letters, digits, and underscores (_). The name must start with a letter and must be unique.
IpPoolName	IPv4 address pool name	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
Ipv6PoolName	IPv6 address pool name	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
Ipv6Address	IPv6 address for specifying the prefix	N/A	Hexadecimal string, colon-separated.	For example, 2001:12::22:33.
Ipv6PrefixLength	IPv6 prefix length	N/A	Unsigned integer. Value range: 1 to 128.	N/A
PrimDnsIpaddr	IPv4 address of the primary DNS server	N/A	IPv4: String, dotted decimal notation.	IPv4 example: 1.1.1.1.
PrimDnsIpv6addr	IPv6 address of the primary DNS server	N/A	IPv6: Hexadecimal string.	IPv6 example: 1:2:3:4:5:6:7:8.
SecDnsIpaddr	IPv4 address of the secondary DNS server	N/A	IPv4: String, dotted decimal notation.	IPv4 example: 1.1.1.1.
SecDnsIpv6addr	IPv6 address of the secondary DNS server	N/A	IPv6: Hexadecimal string.	IPv6 example: 1:2:3:4:5:6:7:8.
PortalUrl	Portal redirect URL	N/A	String, case-sensitive. Length: 1 to 255 characters.	N/A
VRF	VPN instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
IgmpMaxAccessNum	The maximum number of IGMP groups that an IPv4 user can join concurrently	N/A	Unsigned integer. Value range: 1 to 64.	Default: 4.
MldMaxAccessNum	The maximum number of MLD groups that an IPv6 user can join concurrently	N/A	Unsigned integer. Value range: 1 to 64.	Default: 4.
SessTimeOut	The users will be offline when the time is over	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
InboundUserPriority	Inbound user priority	N/A	Unsigned integer. Value range: 0 to 7.	N/A
OutboundUse	Outbound user	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
rPriority	priority		Value range: 0 to 7.	

## Domain/Schemes

Domain scheme table.

### XML structure

```

<Domain>
  <Schemes>
    <Scheme>
      <DomainName></DomainName>
      <AaaType></AaaType>
      <AccessType></AccessType>
      <SchemeList></SchemeList>
      <SchemeNameList></SchemeNameList>
    </Scheme>
  </Schemes>
</Domain>

```

### Table description

Item	Description
Feature name	Domain
Table name	Schemes
Table type	Multi-instance table
Row name	Scheme
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters.	N/A
AaaType	AAA type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Authentication.</li> <li>4—Authorization.</li> <li>5—Accounting.</li> </ul>	There are some restrictions among the columns AccessType, AaaType, and SchemeList. Those restrictions will be described in the Restrictions section below the table.
AccessType	Access type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Login.</li> <li>1—Super.</li> <li>2—Command.</li> </ul>	

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 3—LAN access.</li> <li>• 4—PPP.</li> <li>• 5—Default.</li> <li>• 6—Portal.</li> <li>• 7—IKE.</li> <li>• 8—IPoE.</li> <li>• 9—SSL VPN.</li> <li>• 10—ADVPN.</li> </ul>	
SchemeList	AAA method types.	N/A	<p>String.</p> <p>Length: 1 to 9 characters, using the format of 1-2-4.</p> <p>A hyphen (-) is used to separate the digits that represent different AAA methods, including:</p> <ul style="list-style-type: none"> <li>• 1—HWTACACS.</li> <li>• 2—RADIUS.</li> <li>• 3—LDAP.</li> <li>• 4—Local.</li> <li>• 5—None.</li> </ul> <p>The string 1-2-4 indicates that HWTACACS is specified as the primary authentication, authorization, or accounting method. If the HWTACACS method fails, the RADIUS method applies. If the RADIUS method fails, the local method applies.</p>	
SchemeNameList	Scheme name list.	N/A	<p>String, case-insensitive.</p> <p>Length: 0 to 68 characters, which can contain 0 to 2 scheme names.</p> <p>Every scheme name contains two parts: Scheme name length and scheme name string.</p> <p>The scheme name is in the format of xxmm.....mm.</p> <ul style="list-style-type: none"> <li>• The xx argument represents the scheme name length. Use two digits to set the scheme name length.</li> <li>• The mm.....mm argument represents the scheme name string. The string is 1 to 32 characters.</li> </ul> <p>For example:</p> <ul style="list-style-type: none"> <li>• The string 08abcdefgh represents a scheme whose name is abcdefgh and whose name length is</li> </ul>	If this column is not available, no schemes are specified.



Column name	Column description	Column type	Data type and restrictions	Remarks
			8 characters. <ul style="list-style-type: none"> <li>The string 10testtestte04test represents two schemes. One scheme is named as testtestte and the name length is 10 characters. The other scheme is named as test and the name length is 4 characters.</li> </ul>	

**Restrictions:**

- The letter Y indicates that a specific access type supports a specific method for authentication, authorization, or accounting.
- You can specify one primary method and multiple backup methods for authentication, authorization, or accounting. An AAA method with a lower level can be the backup of another method that has a higher level. The following list arranges the methods from high level to low level:
  - RADIUS, TACACS, or LDAP.
  - Local.
  - None.

Among the highest-level methods, the RADIUS method and the TACACS method can be the backup of each other.

- In FIPS mode, all access types cannot use the none method for authentication, authorization, or accounting.

AAA method (level)  Access type +AAA type		RADIUS (3)	TACACS (3)	LDAP (3)	Local (2)	None (1)
Default	Authentication	Y	Y	Y	Y	Y
	Authorization	Y	Y		Y	Y
	Accounting	Y	Y		Y	Y
Login	Authentication	Y	Y	Y	Y	Y
	Authorization	Y	Y		Y	Y
	Accounting	Y	Y		Y	Y
Super	Authentication	Y	Y			
Command	Authorization		Y		Y	Y
	Accounting		Y			
LAN access (MAC authenticat ion or 802.1X)	Authentication	Y		Y	Y	Y
	Authorization	Y			Y	Y
	Accounting	Y			Y	Y
PPP	Authentication	Y	Y		Y	Y
	Authorization	Y	Y		Y	Y
	Accounting	Y	Y		Y	Y

Portal	Authentication	Y		Y	Y	Y
	Authorization	Y			Y	Y
	Accounting	Y			Y	Y
IKE	Authentication	Y			Y	Y
IPoE	Authentication	Y			Y	Y
	Authorization	Y			Y	Y
	Accounting	Y			Y	Y
SSL VPN	Authentication	Y		Y	Y	Y
	Authorization	Y		Y	Y	Y
	Accounting	Y			Y	Y
ADVPN	Authentication	Y			Y	Y
	Authorization	Y			Y	Y
	Accounting	Y			Y	Y

## Domain/BroadcastSchemes

RADIUS broadcast scheme table for a domain.

### XML structure

```

<Domain>
  <BroadcastSchemes>
    <BroadcastScheme>
      <DomainName></DomainName>
      <AccessType></AccessType>
      <SchemeName></SchemeName>
    </BroadcastScheme>
  </BroadcastSchemes>
</Domain>

```

### Table description

Item	Description
Feature name	Domain
Table name	BroadcastSchemes
Table type	Multi-instance table
Row name	BroadcastScheme
Restrictions	Configure this table only for domains that have been configured RADIUS accounting.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The name can't contain the following characters: \   / : * ? " < > @	N/A
AccessType	Access type.	Index	Enumeration: <ul style="list-style-type: none"><li>3—LAN access.</li><li>4—PPP.</li><li>6—Portal.</li><li>8—IPoE.</li></ul>	At present, only one RADIUS broadcast scheme is supported for a domain.
SchemeName	RADIUS scheme name.	Index	String. Length: 1 to 32 characters.	

## Domain/Specification

The domain feature capability differs on different devices or on the same device in different states.

- Additional description for the table Domain/SessionLimit, including what service types are supported on the device in the current state. The device can limit the number of concurrent online users only for the service types that are supported in the current state.
- Additional description for the table Domain/Schemes. Whether the device supports the none method as the authentication, authorization, or accounting method.

## XML structure

```
<Domain>
  <Specification>
    <SessionLimitSpecification>
      <Ftp></Ftp>
      <Telnet></Telnet>
      <Http></Http>
    </SessionLimitSpecification>
    <SchemesSpecification>
      <None></None>
    </SchemesSpecification>
  </Specification>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	Specification

Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SessionLimit Specification	Additional description for the table Domain/Session Limit.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ftp.</li> <li>Telnet.</li> <li>Http.</li> </ul>	N/A
Ftp	Whether to support the column Ftp in the table Domain/Session Limit.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	<ul style="list-style-type: none"> <li>In FIPS mode, the default is false.</li> <li>In non-FIPS mode, the default is true.</li> </ul>
Telnet	Whether to support the column Telnet in the table Domain/Session Limit.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	
Http	Whether to support the column Http in the table Domain/Session Limit.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	
SchemesSpecification	Additional description for the table Domain/Schemes.	Data structure	The member is None.	N/A
None	Whether to support the none method for authentication, authorization, and accounting.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	In FIPS mode, the none method is not supported for authentication, authorization, or accounting of all users.

## Domain/UserAbnormalOfflineRecords

This table contains user abnormal offline records.

## XML structure

```

<Domain>
  <UserAbnormalOfflineRecords>
    <UserAbnormalOfflineRecord>

```

```

<SerialNumber></SerialNumber>
<OfflineTime></OfflineTime>
<UserName></UserName>
<AccessType></AccessType>
<DomainName></DomainName>
<Interface></Interface>
<Ip></Ip>
<Ipv6></Ipv6>
<MacAddress></MacAddress>
<OfflineReason></OfflineReason>
<OnlineRequestTime></OnlineRequestTime>
<Svlan></Svlan>
<Cvlan></Cvlan>
<Slot></Slot>
<Chassis></Chassis>
</UserAbnormalOfflineRecord>
</UserAbnormalOfflineRecords>
</Domain>

```

## Table description

Item	Description
Feature name	Domain
Table name	UserAbnormalOfflineRecords
Table type	Multi-instance table
Row name	UserAbnormalOfflineRecord
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SerialNumber	Serial number of a user abnormal offline record	Index	Unsigned integer. Value range: 1 to 2 <sup>64</sup> -1.
OfflineTime	Time when the user went offline	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS. Value range for YYYY: 2000 to 2035. Value range for MM: 1 to 12. Value range for DD depends on the specified month. Value range for HH: 0 to 23. Value range for MM: 0 to 59. Value range for SS: 0 to 59.
UserName	Username	N/A	String, case-sensitive. Length: 1 to 253 characters.

Column name	Column description	Column type	Data type and restrictions
AccessType	Access type of the user	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PPP.</li> <li>2—IPoE.</li> <li>3—Portal.</li> <li>4—Login.</li> <li>5—LAN access.</li> </ul>
DomainName	Name of the ISP domain to which the user belongs	N/A	String, case-insensitive. Length: 1 to 255 characters.
Interface	Interface through which the user accesses the network	N/A	String, case-insensitive. Length: 1 to 47 characters.
Ip	IP address of the user	N/A	String, dotted decimal notation.
Ipv6	IPv6 address of the user	N/A	Hexadecimal string, colon-separated.
MacAddress	MAC address of the user	N/A	MAC address format: ff-ff-ff-ff-ff-ff.
OfflineReason	Reason that the user went offline	N/A	String, case-sensitive.
OnlineRequestTime	Time when the user requested to come online	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS. Value range for YYYY: 2000 to 2035. Value range for MM: 1 to 12. Value range for DD depends on the specified month. Value range for HH: 0 to 23. Value range for MM: 0 to 59. Value range for SS: 0 to 59.
Svlan	ID of the service provider network VLAN to which the user belongs	N/A	Unsigned integer. Value range: 1 to 4094.
Cvlan	ID of the customer network VLAN to which the user belongs	N/A	Unsigned integer. Value range: 1 to 4094.
Slot	Slot number	N/A	Unsigned integer. Value range: 0 to $2^{16}-1$ .
Chassis	Chassis number	N/A	Unsigned integer. Value range: 0 to $2^{16}-1$ .

## Domain/UserNormalOfflineRecords

This table contains user normal offline records.

### XML structure

```
<Domain>
```

```

<UserNormalOfflineRecords>
  <UserNormalOfflineRecord>
    <SerialNumber></SerialNumber>
    <OfflineTime></OfflineTime>
    <UserName></UserName>
    <AccessType></AccessType>
    <DomainName></DomainName>
    <Interface></Interface>
    <Ip></Ip>
    <Ipv6></Ipv6>
    <MacAddress></MacAddress>
    <OfflineReason></OfflineReason>
    <OnlineRequestTime></OnlineRequestTime>
    <Svlan></Svlan>
    <Cvlan></Cvlan>
    <Slot></Slot>
    <Chassis></Chassis>
  </UserNormalOfflineRecord>
</UserNormalOfflineRecords>
</Domain>

```

## Table description

Item	Description
Feature name	Domain
Table name	UserNormalOfflineRecords
Table type	Multi-instance table
Row name	UserNormalOfflineRecord
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SerialNumber	Serial number of a user normal offline record	Index	Unsigned integer. Value range: 1 to 2 <sup>64</sup> -1.
OfflineTime	Time when the user went offline	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS. Value range for YYYY: 2000 to 2035. Value range for MM: 1 to 12. Value range for DD depends on the specified month. Value range for HH: 0 to 23. Value range for MM: 0 to 59. Value range for SS: 0 to 59.

Column name	Column description	Column type	Data type and restrictions
UserName	Username	N/A	String, case-sensitive. Length: 1 to 253 characters.
AccessType	Access type of the user.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PPP.</li> <li>2—IPoE.</li> <li>3—Portal.</li> <li>4—Login.</li> <li>5—LAN access.</li> </ul>
DomainName	Name of the ISP domain to which the user belongs	N/A	String, case-insensitive. Length: 1 to 255 characters.
Interface	Interface through which the user accesses the network	N/A	String, case-insensitive. Length: 1 to 47 characters.
Ip	IP address of the user	N/A	String, dotted decimal notation.
Ipv6	IPv6 address of the user	N/A	Hexadecimal string, colon-separated.
MacAddress	MAC address of the user	N/A	MAC address format: ff-ff-ff-ff-ff-ff.
OfflineReason	Reason that the user went offline	N/A	String, case-sensitive.
OnlineRequestTime	Time when the user requested to come online	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS. Value range for YYYY: 2000 to 2035. Value range for MM: 1 to 12. Value range for DD depends on the specified month. Value range for HH: 0 to 23. Value range for MM: 0 to 59. Value range for SS: 0 to 59.
Svlan	ID of the service provider network VLAN to which the user belongs	N/A	Unsigned integer. Value range: 1 to 4094.
Cvlan	ID of the customer network VLAN to which the user belongs	N/A	Unsigned integer. Value range: 1 to 4094.
Slot	Slot number	N/A	Unsigned integer. Value range: 0 to 2 <sup>16</sup> -1.
Chassis	Chassis number	N/A	Unsigned integer. Value range: 0 to 2 <sup>16</sup> -1.

## Domain/UserOfflineRecords

This table contains user offline records, including user abnormal offline records and user normal offline records.



# XML structure

```
<Domain>
  <UserOfflineRecords>
    <UserOfflineRecord>
      <SerialNumber></SerialNumber>
      <OfflineTime></OfflineTime>
      <UserName></UserName>
      <AccessType></AccessType>
      <DomainName></DomainName>
      <Interface></Interface>
      <Ip></Ip>
      <Ipv6></Ipv6>
      <MacAddress></MacAddress>
      <OfflineReason></OfflineReason>
      <OnlineRequestTime></OnlineRequestTime>
      <Svlan></Svlan>
      <Cvlan></Cvlan>
      <Slot></Slot>
      <Chassis></Chassis>
    </UserOfflineRecord>
  </UserOfflineRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	UserOfflineRecords
Table type	Multi-instance table
Row name	UserOfflineRecord
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SerialNumber	Serial number of a user offline record	Index	Unsigned integer. Value range: 1 to 2 <sup>64</sup> -1.
OfflineTime	Time when the user went offline	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS. Value range for YYYY: 2000 to 2035. Value range for MM: 1 to 12. Value range for DD depends on the specified month. Value range for HH: 0 to 23.

Column name	Column description	Column type	Data type and restrictions
			Value range for MM: 0 to 59. Value range for SS: 0 to 59.
UserName	Username	N/A	String, case-sensitive. Length: 1 to 253 characters.
AccessType	Access type of the user	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PPP.</li> <li>2—IPoE.</li> <li>3—Portal.</li> <li>4—Login.</li> <li>5—LAN access.</li> </ul>
DomainName	Name of the ISP domain to which the user belongs	N/A	String, case-insensitive. Length: 1 to 255 characters.
Interface	Interface through which the user accesses the network	N/A	String, case-insensitive. Length: 1 to 47 characters.
Ip	IP address of the user	N/A	String, dotted decimal notation.
Ipv6	IPv6 address of the user	N/A	Hexadecimal string, colon-separated.
MacAddress	MAC address of the user	N/A	MAC address format: ff-ff-ff-ff-ff-ff.
OfflineReason	Reason that the user went offline	N/A	String, case-sensitive.
OnlineRequestTime	Time when the user requested to come online	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS. Value range for YYYY: 2000 to 2035. Value range for MM: 1 to 12. Value range for DD depends on the specified month. Value range for HH: 0 to 23. Value range for MM: 0 to 59. Value range for SS: 0 to 59.
Svlan	ID of the service provider network VLAN to which the user belongs	N/A	Unsigned integer. Value range: 1 to 4094.
Cvlan	ID of the customer network VLAN to which the user belongs	N/A	Unsigned integer. Value range: 1 to 4094.
Slot	Slot number	N/A	Unsigned integer. Value range: 0 to $2^{16}-1$ .
Chassis	Chassis number	N/A	Unsigned integer. Value range: 0 to $2^{16}-1$ .

# Domain/UserOnlineFailRecords

This table contains user online failure records.

## XML structure

```
<Domain>
  <UserOnlineFailRecords>
    <UserOnlineFailRecord>
      <SerialNumber></SerialNumber>
      <OnlineRequestTime></OnlineRequestTime>
      <UserName></UserName>
      <AccessType></AccessType>
      <DomainName></DomainName>
      <Interface></Interface>
      <Ip></Ip>
      <Ipv6></Ipv6>
      <MacAddress></MacAddress>
      <ServerReplyMessage></ServerReplyMessage>
      <OnlineFailureReason></OnlineFailureReason>
      <Svlan></Svlan>
      <Cvlan></Cvlan>
      <Slot></Slot>
      <Chassis></Chassis>
    </UserOnlineFailRecord>
  </UserOnlineFailRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	UserOnlineFailRecords
Table type	Multi-instance table
Row name	UserOnlineFailRecord
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SerialNumber	Serial number of a user online failure record	Index	Unsigned integer. Value range: 1 to 2 <sup>64</sup> -1.
OnlineRequestTime	Time when the user requested to come online	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.

Column name	Column description	Column type	Data type and restrictions
			Value range for YYYY: 2000 to 2035. Value range for MM: 1 to 12. Value range for DD depends on the specified month. Value range for HH: 0 to 23. Value range for MM: 0 to 59. Value range for SS: 0 to 59.
UserName	Username	N/A	String, case-sensitive. Length: 1 to 253 characters.
AccessType	Access type of the user	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PPP.</li> <li>2—IPoE.</li> <li>3—Portal.</li> <li>4—Login.</li> <li>5—LAN access.</li> </ul>
DomainName	Name of the ISP domain to which the user belongs	N/A	String, case-insensitive. Length: 1 to 255 characters.
Interface	Interface through which the user accesses the network	N/A	String, case-insensitive. Length: 1 to 47 characters.
Ip	IP address of the user	N/A	String, dotted decimal notation.
Ipv6	IPv6 address of the user	N/A	Hexadecimal string, colon-separated.
MacAddress	MAC address of the user	N/A	MAC address format: ff-ff-ff-ff-ff-ff.
ServerReplyMessage	Server reply message	N/A	String, case-sensitive. Length: 1 to 252 characters.
OnlineFailureReason	Online failure reason	N/A	String, case-sensitive.
Svlan	ID of the service provider network VLAN to which the user belongs	N/A	Unsigned integer. Value range: 1 to 4094.
Cvlan	ID of the customer network VLAN to which the user belongs	N/A	Unsigned integer. Value range: 1 to 4094.
Slot	Slot number	N/A	Unsigned integer. Value range: 0 to $2^{16}-1$ .
Chassis	Chassis number	N/A	Unsigned integer. Value range: 0 to $2^{16}-1$ .

## Domain/EnableAbnormalOfflineRecords

This table contains the enabling status of the user abnormal offline recording feature.

## XML structure

```
<Domain>
  <EnableAbnormalOfflineRecords>
    <Enable></Enable>
  </EnableAbnormalOfflineRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	EnableAbnormalOfflineRecords
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

C o l u m n n a m e	C o l u m n d e s c r i p t i o n		D a t a t y p e a n d r e s t r i c t i o n s	R e m a r k s
Enable	Whether the user abnormal offline recording feature is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	The default varies by device model.

## Domain/EnableNormalOfflineRecords

This table contains the enabling status of the user normal offline recording feature.

## XML structure

```
<Domain>
  <EnableNormalOfflineRecords>
    <Enable></Enable>
  </EnableNormalOfflineRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	EnableNormalOfflineRecords
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether the user normal offline recording feature is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	The default varies by device model.

## Domain/EnableOfflineRecords

This table contains the enabling status of the user offline recording feature.

## XML structure

```
<Domain>
  <EnableOfflineRecords>
    <Enable></Enable>
  </EnableOfflineRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	EnableOfflineRecords
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether the user offline recording feature is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	The default varies by device model.

## Domain/EnableOnlineFailRecords

This table contains the enabling status of the user online failure recording feature.

## XML structure

```
<Domain>
  <EnableOnlineFailRecords>
    <Enable></Enable>
  </EnableOnlineFailRecords>
</Domain>
```

## Table description

Item	Description
Feature name	Domain
Table name	EnableOnlineFailRecords
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether the user online failure recording feature is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	The default varies by device model.

# Contents

- Domain .....1
  - Domain/GlobalConfig.....1
  - Domain/Domains .....1



# Domain

## Domain/GlobalConfig

Message	Explanation
Domain name must not include \,  , /, :, *, ?, "", <, > and @. 域名不能包含字符\、 、/、:、*、?、"、<、>和@。	Domain name must not include \,  , /, :, *, ?, "", <, > and @.
The specified domain does not exist. 指定的ISP域不存在。	When the default domain is modified, the specified ISP domain does not exist.

## Domain/Domains

Message	Explanation
Domain name must not include \,  , /, :, *, ?, "", <, > and @. 域名不能包含字符\、 、/、:、*、?、"、<、>和@。	Domain name must not include \,  , /, :, *, ?, "", <, > and @.
The number of domains has reached the limit. 系统中ISP域的数目已经达到上限。	The number of domains has reached the limit.
It's system domain, cannot be deleted! 不能删除系统中预定义的ISP域system。	Cannot delete the predefined ISP domain in the system.
It's default domain, cannot be deleted! 不能删除系统缺省的ISP域。	Cannot delete the default ISP domain in the system.
The specified domain does not exist. 指定的ISP域不存在。	The specified ISP domain does not exist.

# Contents

Dot1X .....	1
Dot1X/ClearAllStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Dot1X/ClearInterStatistics .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
Dot1X/ResetGVLANUser .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
Dot1X/ResetOneGVLANUser .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# Dot1X

## Dot1X/ClearAllStatistics

This table clear Dot1X all interfaces' statistics.

### XML structure

```
<Dot1X>
  <ClearAllStatistics>
    <Clear></Clear>
  </ClearAllStatistics>
</Dot1X>
```

### Table description

Item	Description
Feature name	Dot1X
Table name	ClearAllStatistics
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clear all interfaces' statistics.	N/A	<ul style="list-style-type: none"><li>This column must be empty</li></ul>

## Dot1X/ClearInterStatistics

This table clears Dot1X interface statistics information.

### XML structure

```
<Dot1X>
  <ClearInterStatistics>
    <Interface>
      <IfIndex></IfIndex>
    </Interface>
  </ClearInterStatistics>
</Dot1X>
```

```

        <Clear></Clear>
    </Interface>
</ClearInterStatistics>
</Dot1X>

```

## Table description

Item	Description
Feature name	Dot1X
Table name	ClearInterStatistics
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Resets the interface's statistics or guest VLAN's users.	Index	Unsigned integer.
Clear	Clears the interface's statistics.	N/A	<ul style="list-style-type: none"> <li>This column must be empty</li> </ul>

## Dot1X/ResetGVLANUser

This table resets Dot1X interface's all users in guest VLAN.

## XML structure

```

<Dot1X>
  <ResetGVLANUser>
    <Interface>
      <IfIndex></IfIndex>
      <ResetAll></ResetAll>
    </Interface>
  </ResetGVLANUser>
</Dot1X>

```

## Table description

Item	Description
Feature name	Dot1X
Table name	ResetGVLANUser
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Clears the interface's guest VLAN's users.	Index	Unsigned integer.
ResetAll	Resets the interface' users in guest VLAN.	N/A	<ul style="list-style-type: none"><li>This column must be empty</li></ul>

## Dot1X/ResetOneGVLANUser

This table resets one of Dot1X interface users of guest VLAN.

## XML structure

```
<Dot1X>
  <ResetOneGVLANUser>
    <Interface>
      <IfIndex></IfIndex>
      <UserMAC></UserMAC>
      <Reset></Reset>
    </Interface>
  </ResetOneGVLANUser>
</Dot1X>
```

## Table description

Item	Description
Feature name	Dot1X
Table name	ResetOneGVLANUser
Table type	Multi-instance table

Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Resets the interface's guest VLAN's user.	Index	Unsigned integer.
UserMAC	The designated user's MAC.	Index	MAC address
Reset	Resets the interface's designated user in guest VLAN	N/A	<ul style="list-style-type: none"> <li>This column must be empty</li> </ul>

# Contents

Dot1X .....	1
Dot1X/Protocol .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Dot1X/EAD .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
DOT1X/EADFreeIPs .....	3
XML structure .....	4
Table description .....	4
Columns .....	4
Dot1X/Smarton .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
Dot1X/Interfaces .....	5
XML structure .....	5
Table description .....	6
Columns .....	6

# Dot1X

## Dot1X/Protocol

This table contains Dot1X protocol related parameters information.

### XML structure

```
<Dot1X>
  <Protocol>
    <Enable></Enable>
    <AuthenMethod></AuthenMethod>
    <DomainDelimiterAt></DomainDelimiterAt>
    <DomainDelimiterSlash></DomainDelimiterSlash>
    <DomainDelimiterBackSlash></DomainDelimiterBackSlash>
    <DomainDelimiterDot></DomainDelimiterDot>
    <QuietEnable></QuietEnable>
    <QuietInterval></QuietInterval>
    <HandshakeInterval></HandshakeInterval>
    <ReauthenInterval></ReauthenInterval>
    <ServerInterval></ServerInterval>
    <SupplicantInterval></SupplicantInterval>
    <ReqIDInterval></ReqIDInterval>
    <RequestRetryCount></RequestRetryCount>
  </Protocol>
</Dot1X>
```

### Table description

Item	Description
Feature name	Dot1X
Table name	Protocol
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Global Dot1X feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled</li></ul>



Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li><b>false</b>—Disabled(default)</li> </ul>
AuthenMethod	Authentication Method of 802.1X	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Chap(default)</li> <li><b>2</b>—PAP</li> <li><b>3</b>—EAP</li> </ul>
DomainDelimiterAt	Delimiter "@" between username and domain name	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled(default)</li> <li><b>false</b>—Disabled</li> </ul>
DomainDelimiterSlash	Delimiter "/" between username and domain name	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled(default)</li> </ul>
DomainDelimiterBackslash	Delimiter "\" between username and domain name	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled(default)</li> </ul>
DomainDelimiterDot	Delimiter "." between username and domain	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled(default)</li> </ul>
QuietEnable	Enable 802.1X quiet function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled(default)</li> </ul>
QuietInterval	Period value of Quiet timer	N/A	Unsigned integer Value range: 10 to 120 seconds. Default value is 60 second.
HandshakeInterval	Period value of handshake timer	N/A	Unsigned integer. Value range: 5 to 1024 seconds. Default value is 15 second.
ReauthenInterval	Period value of re-authentication timer	N/A	Unsigned integer. Value range: 60 to 7200 seconds. Default value is 3600 second.
ServerInterval	Period value of server response timer	N/A	Unsigned integer. Value range: 100 to 300 seconds. Default value is 100 second.
SupplicantInterval	Period value of supplicant response timer(other than EAP-Response/ID)	N/A	Unsigned integer. Value range: 1 to 120 seconds. Default value is 30 second.
ReqIDInterval	Period value of supplicant EAP-Response /ID timer	N/A	Unsigned integer. Value range: 1 to 120 seconds. Default value is 30 second.
RequestRetryCount	Max count of retrying to send	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	out dot1X's Request packets		Value range: 1 to 10. Default value is 2.

## Dot1X/EAD

This table contains Dot1X's EAD feature.

## XML structure

```
<Dot1X>
  <EAD>
    <AssistEnable></AssistEnable>
    <AssistURL></AssistURL>
  </EAD>
</Dot1X>
```

## Table description

Item	Description
Feature name	Dot1X
Table name	EAD
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
AssistEnable	Enable EAD assistant function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled(default)</li> </ul>
AssistURL	The redirect URL used with EAD assistant function	N/A	String. Length: 1 to 64 characters.

## DOT1X/EADFreeIPs

This table contains Dot1X's EAD assistant free IP.

## XML structure

```
<Dot1X>
  <EADFreeIPs>
    <FreeIP>
      <IPv4Address></IPv4Address>
      <IPv4Mask></IPv4Mask>
    </FreeIP>
  </EADFreeIPs>
</Dot1X>
```

## Table description

Item	Description
Feature name	Dot1X
Table name	EADFreeIPs
Table type	Multi-instance table
Row name	FreeIP
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
IPv4Address	IP address used in EAD assistance feature	Index	String, dotted decimal notation.
IPv4Mask	IP address mask	Index	Ipv4Mask.

## Dot1X/Smarton

This table contains Dot1X's Smarton feature table.

## XML structure

```
<Dot1X>
  <Smarton>
    <SwitchID></SwitchID>
    <Password></Password>
    <RetryCount></RetryCount>
  </Smarton>
</Dot1X>
```

## Table description

Item	Description
Feature name	Dot1X
Table name	Smarton
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SwitchID	Dot1x smarton switchid	N/A	String. <ul style="list-style-type: none"><li>Length: 1 to 30 characters.</li></ul>
Password	Dot1x smarton password	N/A	String. Length: 1 to 16 characters. Not return.
RetryCount	Maxium attempt count to send out Request packets with smarton notification	N/A	Unsigned integer. Value range: 1 to 10. Default value is 3.

## Dot1X/Interfaces

This table contains Dot1X interface's information .

## XML structure

```
<Dot1X>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <SmartonEnable></SmartonEnable>
      <PortControl></PortControl>
      <PortMethod></PortMethod>
      <ReauthenEnable></ReauthenEnable>
      <MulticastTrigger></MulticastTrigger>
      <UnicastTrigger></UnicastTrigger>
      <HandshakeEnable></HandshakeEnable>
      <SecHandshakeEnable></SecHandshakeEnable>
      <ReauthUnreachableMode></ReauthUnreachableMode>
      <MandDomain></MandDomain>
```

```

    <MaxUser></MaxUser>
    <FailVLAN></FailVLAN>
    <CriticalVLAN></CriticalVLAN>
    <GuestVLAN></GuestVLAN>
    <FailVSI></FailVSI>
    <CriticalVSI></CriticalVSI>
    <GuestVSI></GuestVSI>
    <CriticalEapol></CriticalEapol>
  </Interface>
</Interfaces>
</Dot1X>

```

## Table description

Item	Description
Feature name	Dot1X
Table name	Interfaces
Table type	Multi-instance table
Row name	interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
Enable	Enable 802.1X	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled(default)</li> </ul>
SmartonEnable	Enable Smarton feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled(default)</li> </ul>
PortControl	Port control status of the interface	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—authorized-force</li> <li><b>2</b>—unauthorized-force</li> <li><b>3</b>—auto(default)</li> </ul>
PortMethod	Control Method of the interface	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Portbased</li> <li><b>2</b>—MACbased(default)</li> </ul>
ReauthenEnable	Enable periodic reauthentication feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled(default)</li> </ul>
FailVLAN	VLAN for users that have failed 802.1X	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	authentication		Value range: 1 to 4094. Default Value is not configured.
CriticalVLAN	VLAN for users that have failed 802.1X authentication because of unreachable servers	N/A	Unsigned integer. Value range: 1 to 4094. Default Value is not configured.
GuestVLAN	VLAN used before 802.1X authentication	N/A	Unsigned integer. Value range: 1 to 4094. Default Value is not configured.
FailVSI	VSI for users that have failed 802.1X authentication because of any reason other than unreachable servers	N/A	String. Length: 1 to 31 characters.
CriticalVSI	VSI for users that have failed 802.1X authentication because of unreachable servers	N/A	String. Length: 1 to 31 characters.
GuestVSI	VSI with restricted services for non-authenticated 802.1X users	N/A	String. Length: 1 to 31 characters.
CriticalEapol	Enable the device to send an EAP-Success packet to an 802.1X client when its client user is assigned to the critical VLAN or VSI on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>
HandshakeEnable	Enable handshake feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled(default)</li> <li><b>false</b>—Disabled</li> </ul>
SecHandshakeEnable	Enable secure handshake feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled(default)</li> </ul>
ReauthUnreachableMode	Set user online or offline when the AAA server is not available during re-authenticating	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Offline(default)</li> <li><b>1</b>—Online</li> </ul>
MandDomain	Mandatory authentication domain on this interface	N/A	String. Length: 1 to 255 characters.
MaxUser	Maximum user number on this interface	N/A	Unsigned integer. Value range: 1 to 4294967295. Default Value is 4294967295.
MulticastTrigger	Enable multicast trigger function on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled(default)</li> <li><b>false</b>—Disabled</li> </ul>
UnicastTrigger	Enable unicast trigger function on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> </ul>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li><b>false</b>—Disabled(default)</li> </ul>

# Contents

Dot1X .....	1
Dot1X/Protocol .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
Dot1X/EAD .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
DOT1X/EADFreeIPs .....	3
XML structure .....	4
Table description .....	4
Columns .....	4
Dot1X/Smarton .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
Dot1X/Interfaces .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
Dot1X/InterfaceUsers .....	9
XML structure .....	9
Table description .....	9
Columns .....	9



# Dot1X

## Dot1X/Protocol

This table contains Dot1X protocol parameters table.

### XML structure

```
<Dot1X>
  <Protocol>
    <Enable></Enable>
    <AuthenMethod></AuthenMethod>
    <DomainDelimiterAt></DomainDelimiterAt>
    <DomainDelimiterSlash></DomainDelimiterSlash>
    <DomainDelimiterBackSlash></DomainDelimiterBackSlash>
    <DomainDelimiterDot></DomainDelimiterDot>
    <QuietEnable></QuietEnable>
    <QuietInterval></QuietInterval>
    <HandshakeInterval></HandshakeInterval>
    <ReauthenInterval></ReauthenInterval>
    <ServerInterval></ServerInterval>
    <SupplicantInterval></SupplicantInterval>
    <ReqIDInterval></ReqIDInterval>
    <RequestRetryCount></RequestRetryCount>
    <OnlineUserNum></OnlineUserNum>
  </Protocol>
</Dot1X>
```

### Table description

Item	Description
Feature name	Dot1X
Table name	Protocol
Table type	Single-instance table
Row name	None
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Dot1X globally enabled status	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled</li> </ul>
AuthenMethod	Authentication Method of 802.1X	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Chap</li> <li><b>2</b>—PAP</li> <li><b>3</b>—EAP</li> </ul>
DomainDelimiterAt	Delimiter "@" between username and domain name	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled</li> </ul>
DomainDelimiterSlash	Delimiter "/" between username and domain name	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled</li> </ul>
DomainDelimiterBackslash	Delimiter "\" between username and domain name	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled</li> </ul>
DomainDelimiterDot	Delimiter "." between username and domain name	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled</li> </ul>
QuietEnable	Status Of Dot1X quiet function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled</li> </ul>
QuietInterval	Period value of Quiet timer	N/A	Unsigned integer. Value range: 10 to 120 seconds.
HandshakeInterval	Period value of handshake timer	N/A	Unsigned integer. Value range: 5 to 1024 seconds.
ReauthenInterval	Period value of re-authentication timer	N/A	Unsigned integer. Value range: 60 to 7200 seconds.
ServerInterval	Period value of server response timer	N/A	Unsigned integer. Value range: 100 to 300 seconds.
SupplicantInterval	Period value of supplicant response timer(other than EAP-Response/ID packets)	N/A	Unsigned integer. Value range: 1 to 120 seconds.
ReqIDInterval	Period value of supplicant EAP-Response/ID timer	N/A	Unsigned integer. Value range: 1 to 120 seconds.

Column name	Column description	Column type	Data type and restrictions
RequestRetryCount	Max count of retrying to send out dot1X's Request packets	N/A	Unsigned integer. Value range: 1 to 10.
OnlineUserNum	Current online user count	N/A	Unsigned integer.

## Dot1X/EAD

This table contains Dot1X's EAD(Endpoint Admission Defense) feature table.

## XML structure

```
<Dot1X>
  <EAD>
    <AssistEnable></AssistEnable>
    <AssistURL></AssistURL>
  </EAD>
</Dot1X>
```

## Table description

Item	Description
Feature name	Dot1X
Table name	EAD
Table type	Single-instance table
Row name	None
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
AssistEnable	Status of EAD assistant function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled</li> </ul>
AssistURL	The redirect URL used with EAD assistant function	N/A	String. Length: 1 to 64 characters.

## DOT1X/EADFreeIPs

This table contains Dot1X's EAD assistant free IP.

## XML structure

```
<Dot1X>
  <EADFreeIPs>
    <FreeIP>
      <IPv4Address></IPv4Address>
      <IPv4Mask></IPv4Mask>
    </FreeIP>
  </EADFreeIPs>
</Dot1X>
```

## Table description

Item	Description
Feature name	Dot1X
Table name	EADFreeIPs
Table type	Multi-instance table
Row name	FreeIP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IPv4Address	IP address used in EAD assistance feature	Index	String, dotted decimal notation.
IPv4Mask	IP address mask	Index	IPv4Mask.

## Dot1X/Smarton

This table contains Dot1X's Smarton feature table.

## XML structure

```
<Dot1X>
  <Smarton>
    <SwitchID></SwitchID>
    <Password></Password>
    <RetryCount></RetryCount>
  </Smarton>
</Dot1X>
```

## Table description

Item	Description
Feature name	Dot1X
Table name	Smarton
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SwitchID	Dot1x smarton switchid	N/A	String. Length: 1 to 30 characters.
Password	Dot1x smarton password	N/A	Null or ****Not return.
RetryCount	Maxium attempt count to send out Request packets with smarton notification	N/A	Unsigned integer. Value range: 1 to 10.

## Dot1 X/Interfaces

This table contains Dot1X interface's information.

## XML structure

```
<Dot1X>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <SmartonEnable></SmartonEnable>
      <PortControl></PortControl>
      <PortMethod></PortMethod>
      <PortRole></PortRole>
      <ReauthenEnable></ReauthenEnable>
      <MulticastTrigger></MulticastTrigger>
      <UnicastTrigger></UnicastTrigger>
      <HandshakeEnable></HandshakeEnable>
      <SecHandshakeEnable></SecHandshakeEnable>
      <ReauthUnreachableMode></ReauthUnreachableMode>
      <MandDomain></MandDomain>
```

```

<MaxUser></MaxUser>
<FailVLAN></FailVLAN>
<CriticalVLAN></CriticalVLAN>
<GuestVLAN></GuestVLAN>
<FailVSI></FailVSI>
<CriticalVSI></CriticalVSI>
<GuestVSI></GuestVSI>
<CriticalEapol></CriticalEapol>
<OnlineUserNum></OnlineUserNum>
<RcvPktNum></RcvPktNum>
<SndPktNum></SndPktNum>
<StartPktNum></StartPktNum>
<LogoffPktNum></LogoffPktNum>
<RespIDPktNum></RespIDPktNum>
<RespPktNum></RespPktNum>
<ReqIDPktNum></ReqIDPktNum>
<ReqPktNum></ReqPktNum>
<RcvErrorPktNum></RcvErrorPktNum>
</Interface>
</Interfaces>
</Dot1X>

```

## Table description

Item	Description
Feature name	Dot1X
Table name	Interfaces
Table type	Multi-instance table
Row name	interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
Enable	Enable Status of 802.1X	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled</li> </ul>
SmartonEnable	Enable Status of Smarton feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled</li> <li><b>false</b>—Disabled</li> </ul>

Column name	Column description	Column type	Data type and restrictions
PortControl	Port control status of the interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—authorized-force</li> <li>2—unauthorized-force</li> <li>3—auto</li> </ul>
PortMethod	Control Method of the interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Portbased</li> <li>2—MACbased</li> </ul>
PortRole	Role of the interface in authentication	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Authenticator</li> </ul>
ReauthenEnable	Enable status of periodic reauthentication feature	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>
FailVLAN	VLAN for users that have failed 802.1X authentication	N/A	Unsigned integer. Value range: 1 to 4094.
CriticalVLAN	VLAN for users that have failed 802.1X authentication because of unreachable servers	N/A	Unsigned integer. Value range: 1 to 4094.
GuestVLAN	VLAN used before 802.1X authentication	N/A	Unsigned integer. Value range: 1 to 4094.
FailVSI	VSI for users that have failed 802.1X authentication because of any reason other than unreachable servers	N/A	String. Length: 1 to 31 characters.
CriticalVSI	VSI for users that have failed 802.1X authentication because of unreachable servers	N/A	String. Length: 1 to 31 characters.
GuestVSI	VSI with restricted services for non-authenticated 802.1X users	N/A	String. Length: 1 to 31 characters.
CriticalEapol	Status of the feature that enables the device to send an EAP-Success packet to an 802.1X client when its client user is assigned to the critical VLAN or VSI on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
HandshakeEnable	Enable status of handshake feature on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>
SecHandshakeEnable	Enable status of secure handshake feature on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>

Column name	Column description	Column type	Data type and restrictions
ReauthUnreachableMode	Status of user online or offline when the AAA server is not available during re-authenticating	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Offline</li> <li>1—Online</li> </ul>
MandDomain	Mandatory authentication domain on this interface	N/A	String. Length: 1 to 255 characters.
MaxUser	Maximum user number on this interface	N/A	Unsigned integer. Value range: 1 to 4294967295.
MulticastTrigger	Enable status of multicast trigger function on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>
UnicastTrigger	Enable status of unicast trigger function on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>
OnlineUserNum	Number of online 802.1X users of the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .
RcvPktNum	Number of received EAPOL packets on the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .
SndPktNum	Number of sent EAPOL packets on the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .
StartPktNum	Number of received EAPOL-Start packets on the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .
LogoffPktNum	Number of received EAPOL-LogOff packets on the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .
RespIDPktNum	Number of received EAP-Response/ID packets on the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .
RespPktNum	Number of received EAP-Response(other than EAP-Response/ID) packets on the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .
ReqIDPktNum	Number of sent EAP-Request/ID packets on the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .
ReqPktNum	Number of sent EAP-Request (other than EAP-Request /ID) packets on the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .
RcvErrorPktNum	Number of received error packets on the interface	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .



# Dot1X/InterfaceUsers

This table displays Dot1X users' information.

## XML structure

```
<Dot1X>
  <InterfaceUsers>
    <Interface>
      <IfIndex></IfIndex>
      <UserMAC></UserMAC>
      <Name></Name>
      <Domain></Domain>
      <Ipv4Addr></Ipv4Addr>
      <Ipv6Addr></Ipv6Addr>
      <InitialVLAN></InitialVLAN>
      <AuthzVLAN></AuthzVLAN>
      <AuthzACLGroup></AuthzACLGroup>
      <AuthzUserProfile></AuthzUserProfile>
      <TermAction></TermAction>
      <TimeoutPeriod></TimeoutPeriod>
      <LogonTime></LogonTime>
      <OnlineDuration></OnlineDuration>
    </Interface>
  </InterfaceUsers>
</Dot1X>
```

## Table description

Item	Description
Feature name	Dot1X
Table name	InterfaceUsers
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
UserMAC	MAC address of user on the interface.	Index	MAC address

Column name	Column description	Column type	Data type and restrictions
Name	User name when logs on	N/A	String. Length: 1 to 253 characters.
Domain	User's domain when logs on	N/A	String. Length: 1 to 255 characters.
Ipv4Addr	IPv4 address of the user	N/A	String, dotted decimal notation.
Ipv6Addr	IPv6 address of the user	N/A	Hexadecimal string, colon-separated.
InitialVLAN	VLAN ID used by the user when logs on	N/A	Unsigned integer Value range: 1 to 4094.
AuthzVLAN	VLAN ID allocated for authenticated user by the AAA server	N/A	Unsigned integer Value range: 1 to 4094.
AuthzACLGroup	ACL group number allocated for authenticated user by the AAA server	N/A	Unsigned integer
AuthzUserProfile	User Profile name allocated for authenticated user by the AAA server	N/A	String.
TermAction	Action attribute assigned by the AAA server when the session timeout timer expires	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Default.</li> <li>• <b>1</b>—Radius-request.</li> </ul>
TimeoutPeriod	Period value of session timeout timer assigned by the server timer	N/A	Unsigned integer
LogonTime	Time from which the user logs on	N/A	String.Format: YYYY-MM-DD HH:MM:SS.
OnlineDuration	Online duration of the user	N/A	Unsigned integer.

# Contents

- 802.1X ..... 1
  - 802.1X/IF ..... 1
  - 802.1X /Freelp ..... 2
  - 802.1X /Protocol ..... 2
  - 802.1X /EadAssist ..... 3

# 802.1X

## 802.1X/IF

Message	Explanation
Can't set a nonexistent VLAN as a guest VLAN. 无法将一个不存在的VLAN配置为Guest VLAN。	VLAN do not exist. 指定的VLAN不存在
Can't set a nonexistent VLAN as an Auth-Fail VLAN. 无法将一个不存在的VLAN配置为Auth-Fail VLAN。	VLAN do not exist. 指定的VLAN不存在
Can't set a nonexistent VLAN as a critical VLAN. 无法将一个不存在的VLAN配置为Critical VLAN。	VLAN do not exist. 指定的VLAN不存在
Failed to enable 802.1X on the interface, because it is a link aggregation member port 端口使能802.1X失败，因为端口为聚合口成员。	Failed to enable 802.1X on the interface, because it is a link aggregation member port 聚合口成员不能配置802.1X
Can't enable 802.1X for port security mode is configured on the port. 使能802.1X失败，因为该端口已经使能端口安全。	Can't enable 802.1X for port security mode is configured on the port. 使能802.1X失败，因为该端口已经使能端口安全。
Can't enable 802.1x for port security is enabled. 使能802.1x失败，因为已经使能端口安全。	Can't enable 802.1x for port security is enabled. 使能802.1x失败，因为已经使能端口安全。
Can't configure port-control for port security is enabled. 配置端口控制失败，因为已经使能端口安全。	Can't configure port-control for port security is enabled. 配置端口控制失败，因为已经使能端口安全。
Can't configure port-control for port security mode is configured on the port. 配置端口控制失败，因为该端口已经使能端口安全。	Can't configure port-control for port security mode is configured on the port. 配置端口控制失败，因为该端口已经使能端口安全。
Can't configure port-method for port security is enabled. 配置端口控制方式失败，因为已经使能端口安全。	Can't configure port-method for port security is enabled. 配置端口控制方式失败，因为已经使能端口安全。
Can't configure port-method for port security mode is configured on the port. 配置端口控制方式失败，因为该端口已经使能端口安全。	Can't configure port-method for port security mode is configured on the port. 配置端口控制方式失败，因为该端口已经使能端口安全。
Can't configure port-method for MAC authentication is enabled on the port. 配置端口控制方式失败，因为MACA认证已经使能。	Can't configure port-method for MAC authentication is enabled on the port. 配置端口控制方式失败，因为MACA认证已经使能。

Message	Explanation
The specified number must be higher than the current number of online users. 配置的最大用户数必须大于当前在线用户数。	The specified number must be higher than the current number of online users. 配置的最大用户数必须大于当前在线用户数。
Can't set a dynamic VLAN as an guest VLAN. 无法将一个动态VLAN配置成Guest VLAN。	Can't set a dynamic VLAN as an guest VLAN. 无法将一个动态VLAN配置成Guest VLAN。
Can't set a dynamic VLAN as a Auth-Fail VLAN. 无法将一个动态VLAN配置成Auth-Fail VLAN。	Can't set a dynamic VLAN as a Auth-Fail VLAN. 无法将一个动态VLAN配置成Auth-Fail VLAN。
Can't set a dynamic VLAN as a critical VLAN. 无法将一个动态VLAN配置成Critical VLAN。	Can't set a dynamic VLAN as a critical VLAN. 无法将一个动态VLAN配置成Critical VLAN。
Port security, MAC authentication, and 802.1X authentication are not supported on Layer 2 aggregate interfaces. 端口安全, MAC地址认证和802.1X认证不支持在二层以太网聚合接口上配置。	Port security, MAC authentication, and 802.1X authentication are not supported on Layer 2 aggregate interfaces. 端口安全, MAC地址认证和802.1X认证不支持在二层以太网聚合接口上配置。
This operation conflicts with VSI configuration. 此操作和VSI配置冲突。	VLAN configuration conflicts with VSI configuration. VLAN配置和VSI配置冲突。
This operation conflicts with VLAN configuration. 此操作和VLAN配置冲突。	VLAN configuration conflicts with VSI configuration. VLAN配置和VSI配置冲突。

## 802.1X /FreeIp

Message	Explanation
The maximum number of free-IP segments has reached. Free-IP 片段的最大数目无法达到。	The maximum number of free-IP segments has reached. Free-IP 片段数超限。
Invalid IP address or subnet mask. 无效的IP地址或子网掩码。	Invalid IP address or subnet mask. 无效的IP地址或子网掩码。

## 802.1X /Protocol

Message	Explanation
Can't enable 802.1x for port security is enabled. 使能802.1x失败, 因为已经使能端口安全。	Can't enable 802.1x for port security is enabled. 使能802.1x失败, 因为已经使能端口安全。
Can't disable 802.1X for port security is enabled. 去使能802.1x失败, 因为已经使能端口安全。	Can't disable 802.1X for port security is enabled. 去使能802.1x失败, 因为已经使能端口安全。

## 802.1X /EadAssist

Message	Explanation
Can't enable the EAD assistant function when MAC authentication is enabled globally. 使能EAD快速部署失败，因为已经使能MAC认证	Can't enable the EAD assistant function when MAC authentication is enabled globally. 使能EAD快速部署失败，因为已经使能MAC认证
Can't enable the EAD assistant function when port security is enabled globally. 使能EAD快速部署失败，因为已经使能端口安全	Can't enable the EAD assistant function when port security is enabled globally.. 使能EAD快速部署失败，因为已经使能端口安全

# Contents

DRNI/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DRNI/Role .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
DRNI/Keepalive .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
DRNI/IPPTable .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
DRNI/DRPortTable .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
DRNI/PortTable .....	6
XML structure .....	6
Table description .....	6
Columns .....	6

# DRNI

## DRNI/Base

This table contains DRNI Base information.

### XML structure

```
<DRNI>
  <Base>
    <SystemMAC></SystemMAC>
    <SystemPriority></SystemPriority>
    <SystemNumber></SystemNumber>
    <RestoreDelay></RestoreDelay>
    <AutoRecoveryReloadDelay></AutoRecoveryReloadDelay>
  </Base>
</DRNI>
```

### Table description

Item	Description
Feature name	DRNI
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SystemMAC	DR system MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 0-1-0-1-0-1 Configure the same DR MAC address for the DR member devices in a DR system.
SystemPriority	DR system priority	N/A	Unsigned integer. Value range: 0 to 65535.	Configure the same DR system priority for the DR member devices in a DR system.
SystemNumber	DR system number	N/A	Unsigned integer. Value range: 1 or 2.	Assign different DR system numbers to the DR member devices in a DR system.



RestoreDelay	Data restoration interval in seconds	N/A	Unsigned integer. Value range: 1 to 3600. Default: 30.	N/A
AutoRecoveryReloadDelay	Reload delay timer in seconds for DR system auto-recovery	N/A	Unsigned integer. Value range: 240 to 3600.	N/A

## DRNI/Role

This table contains DRNI Role information.

## XML structure

```
<DRNI>
  <Role>
    <LocalRolePriority></LocalRolePriority>
  </Role>
</DRNI>
```

## Table description

Item	Description
Feature name	DRNI
Table name	Role
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalRolePriority	DR role priority of the local DR member device	N/A	Unsigned integer. Value range: 0 to 65535. Default: 32768.	The lower the value,the higher the priority.

## DRNI/Keepalive

This table contains DRNI Keepalive information.

## XML structure

```
<DRNI>
  <Keepalive>
    <IPV4Addr>
      <KeepaliveDestinationIPV4></KeepaliveDestinationIPV4>
      <KeepaliveSourceIPV4></KeepaliveSourceIPV4>
    </IPV4Addr>
    <IPV6Addr>
      <KeepaliveDestinationIPV6></KeepaliveDestinationIPV6>
      <KeepaliveSourceIPV6></KeepaliveSourceIPV6>
    </IPV6Addr>
    <KeepaliveUDPPort></KeepaliveUDPPort>
    <KeepaliveInterval></KeepaliveInterval>
    <KeepaliveTimeout></KeepaliveTimeout>
    <KeepaliveHoldTime></KeepaliveHoldTime>
    <VRF></VRF>
  </Keepalive>
</DRNI>
```

## Table description

Item	Description
Feature name	DRNI
Table name	Keepalive
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPV4Addr	Source and destination IPv4 address of the keepalive link	Data structure	Members include: <ul style="list-style-type: none"><li>KeepaliveDestinationIPV4.</li><li>KeepaliveSourceIPV4.</li></ul>	N/A
KeepaliveDestinationIPV4	Destination IPv4 address of the keepalive link	N/A	String,dotted decimal notation.	Example: 1.1.1.1
KeepaliveSourceIPV4	Source IPv4 address of the keepalive link	N/A	String,dotted decimal notation.	Example: 1.1.1.2 This column must be with the <b>KeepaliveDestinationIPV4</b> column.

IPv6Addr	Source and destination IPv6 address of the keepalive link	Data structure	Members include: <ul style="list-style-type: none"> <li>KeepaliveDestinationIPv6.</li> <li>KeepaliveSourceIPv6.</li> </ul>	N/A
KeepaliveDestinationIPv6	Destination IPv6 address of the keepalive link	N/A	Hexadecimal string,colon-separated.	Example: 1:1::1:1
KeepaliveSourceIPv6	Source IPv6 address of the keepalive link	N/A	Hexadecimal string,colon-separated.	Example: 1:1::1:2 This column must be with the <b>KeepaliveDestinationIPv6</b> column.
KeepaliveUDPPort	Keepalive destination UDP port	N/A	Unsigned integer. Value range: 1 to 65535. Default: 6400	The <b>KeepaliveUDPPort</b> must be with the IP address and <b>KeepaliveUDPPort</b> will be deleted when you delete IP address.
KeepaliveInterval	Keepalive interval in milliseconds	N/A	Unsigned integer Value range: 100 to 10000. Default: 1000.	N/A
KeepaliveTimeout	Keepalive timeout time in seconds	N/A	Unsigned integer. Value range: 3 to 20 Default: 5.	The DR keepalive timeout timer must be two times the DR keepalive interval at minimum.
KeepaliveHoldTime	Keepalive hold time in seconds	N/A	Unsigned integer. Value range: 3 to 10. Default: 3.	N/A
VRF	VRF instance name	N/A	String, case-sensitive. Length: 0 to 31 characters.	If the local device is on the public network, the length of the string is 0.

## DRNI/IPPTable

This table contains information about IPP ports.

### XML structure

```

<DRNI>
  <IPPTable>
    <IPP>
      <IPPNumb></IPPNumb>
      <IfIndex></IfIndex>
    </IPP>
  </IPPTable>
</DRNI>

```

## Table description

Item	Description
Feature name	DRNI
Table name	IPPTable
Table type	Multi-instance table
Row name	IPP
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPPNNumber	IPP ID	Index	Unsigned integer.	The IPP ID must be fixed at 1.
IfIndex	Interface index	N/A	Unsigned integer.	N/A

## DRNI/DRPortTable

This table contains information about DR ports.

## XML structure

```
<DRNI>
  <DRPortTable>
    <DRPort>
      <DRGroupId></DRGroupId>
      <IfIndex></IfIndex>
    </DRPort>
  </DRPortTable>
</DRNI>
```

## Table description

Item	Description
Feature name	DRNI
Table name	DRPortTable
Table type	Multi-instance table
Row name	DRPort
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions
DRGroupId	DR group ID	Index	Unsigned integer. Value range: 1 to 1024.
IfIndex	IfIndex value of the Layer 2 aggregate interface	N/A	Unsigned integer.

## DRNI/PortTable

This table contains information about DRNI ports.

## XML structure

```

<DRNI>
  <PortTable>
    <Port>
      <IfIndex></IfIndex>
      <DrpShortPeriodEnable></DrpShortPeriodEnable>
    </Port>
  </PortTable>
</DRNI>

```

## Table description

Item	Description
Feature name	DRNI
Table name	PortTable
Table type	Multi-instance table
Row name	Port
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.

DrcpShortPeriodEnable	Short DRCP timeout timer flag	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable the short DRCP timeout timer.</li> <li>• <b>false</b>—Disabled the short DRCP timeout timer.</li> </ul>
-----------------------	-------------------------------	-----	--

# Contents

DRNI .....	1
DRNI/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DRNI/Role .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
DRNI/Keepalive .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
DRNI/IPPTable .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
DRNI/DRPortTable .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
DRNI/PortTable .....	7
XML structure .....	7
Table description .....	7
Columns .....	7

# DRNI

## DRNI/Base

This table contains DRNI Base information.

### XML structure

```
<DRNI>
  <Base>
    <SystemMAC></SystemMAC>
    <SystemPriority></SystemPriority>
    <SystemNumber></SystemNumber>
    <RestoreDelay></RestoreDelay>
    <AutoRecoveryReloadDelay></AutoRecoveryReloadDelay>
  </Base>
</DRNI>
```

### Table description

Item	Description
Feature name	DRNI
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SystemMAC	DR system MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 0-1-0-1-0-1. Configure the same DR MAC address for the DR member devices in a DR system.
SystemPriority	DR system priority	N/A	Unsigned integer. Value range: 0 to 65535.	Configure the same DR system priority for the DR member devices in a DR system.
SystemNumber	DR system number	N/A	Unsigned integer. Value range: 1 to 2.	Assign different DR system numbers to the DR member devices in a DR system.
RestoreDelay	Data restoration	N/A	Unsigned integer.	N/A



	interval in seconds		Value range: 1 to 3600.	
AutoRecoveryReloadDelay	Reload delay timer in seconds for DR system auto-recovery	N/A	Unsigned integer. Value range: 240 to 3600.	N/A

## DRNI/Role

This table contains DRNI Role information.

## XML structure

```

<DRNI>
  <Role>
    <LocalRolePriority></LocalRolePriority>
    <PeerRolePriority></PeerRolePriority>
    <LocalBridgeMAC></LocalBridgeMAC>
    <PeerBridgeMAC></PeerBridgeMAC>
    <LocalConfiguredRole></LocalConfiguredRole>
    <PeerConfiguredRole></PeerConfiguredRole>
    <LocalEffectiveRole></LocalEffectiveRole>
    <PeerEffectiveRole></PeerEffectiveRole>
  </Role>
</DRNI>

```

## Table description

Item	Description
Feature name	DRNI
Table name	Role
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalRolePriority	DR role priority of the local DR member device	N/A	Unsigned integer. Value range: 0 to 65535.	The lower the value, the higher the priority.
PeerRolePriority	DR role priority of the peer DR member device	N/A	Unsigned integer. Value range: 0 to 65535.	The lower the value, the higher the priority.

LocalBridgeMAC	Bridge MAC address of the local DR member device	N/A	Six groups of two hexadecimal digits,hyphen-separated.	N/A
PeerBridgeMAC	Bridge MAC address of the peer DR member device	N/A	Six groups of two hexadecimal digits,hyphen-separated.	N/A
LocalConfiguredRole	DR role calculated based on the role priority and bridge MAC address of the local DR member device	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—none.</li> <li>1—primary.</li> <li>2—secondary.</li> </ul>	N/A
PeerConfiguredRole	DR role calculated based on the role priority and bridge MAC address of the peer DR member device	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—none.</li> <li>1—primary.</li> <li>2—secondary.</li> </ul>	N/A
LocalEffectiveRole	Current role of the local DR member device	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—none.</li> <li>1—primary.</li> <li>2—secondary.</li> </ul>	N/A
PeerEffectiveRole	Current role of the peer DR member device	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—none.</li> <li>1—primary.</li> <li>2—secondary.</li> </ul>	N/A

## DRNI/Keepalive

This table contains DRNI Keepalive information.

### XML structure

```

<DRNI>
  <Keepalive>
    <IPV4Addr>
      <KeepaliveDestinationIPV4></KeepaliveDestinationIPV4>
      <KeepaliveSourceIPV4></KeepaliveSourceIPV4>
    </IPV4Addr>
    <IPV6Addr>
      <KeepaliveDestinationIPV6></KeepaliveDestinationIPV6>
      <KeepaliveSourceIPV6></KeepaliveSourceIPV6>
    </IPV6Addr>
    <KeepaliveUDPPort></KeepaliveUDPPort>
    <KeepaliveInterval></KeepaliveInterval>
    <KeepaliveTimeout></KeepaliveTimeout>
  </Keepalive>
</DRNI>

```

```

    <KeepaliveHoldTime></KeepaliveHoldTime>
    <KeepaliveLinkStatus></KeepaliveLinkStatus>
    <VRF></VRF>
  </Keepalive>
</DRNI>

```

## Table description

Item	Description
Feature name	DRNI
Table name	Keepalive
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Addr	Source and destination IPv4 address of the keepalive link	Data structure	Members include: <ul style="list-style-type: none"> <li>KeepaliveDestinationIPv4.</li> <li>KeepaliveSourceIPv4.</li> </ul>	N/A
KeepaliveDestinationIPv4	Destination IPv4 address of the keepalive link	N/A	String,dotted decimal notation.	Example: 1.1.1.1
KeepaliveSourceIPv4	Source IPv4 address of the keepalive link	N/A	String,dotted decimal notation.	Example: 1.1.1.2 This column must be with the <b>KeepaliveDestinationIPv4</b> column.
IPv6Addr	Source and destination IPv6 address of the keepalive link	Data structure	Members include: <ul style="list-style-type: none"> <li>KeepaliveDestinationIPv6.</li> <li>KeepaliveSourceIPv6.</li> </ul>	N/A
KeepaliveDestinationIPv6	Destination IPv6 address of the keepalive link	N/A	Hexadecimal string,colon-separated.	Example: 1:1::1:1
KeepaliveSourceIPv6	Source IPv6 address of the keepalive link	N/A	Hexadecimal string,colon-separated.	Example: 1:1::1:2 This column must be with the <b>KeepaliveDestinationIPv6</b> column.
KeepaliveUDPPort	Keepalive destination UDP port	N/A	Unsigned integer. Value range: 1 to 65535.	The <b>KeepaliveUDPPort</b> must be with the IP address and <b>KeepaliveUDPPort</b> will be deleted when you

				delete IP address.
KeepaliveInterval	Keepalive Interval in milliseconds	N/A	Unsigned integer. Value range: 100 to 10000.	N/A
KeepaliveTimeout	Keepalive timeout time in seconds	N/A	Unsigned integer. Value range: 3 to 20.	The DR keepalive timeout timer must be two times the DR keepalive interval at minimum.
KeepaliveHoldTime	Keepalive hold time in seconds	N/A	Unsigned integer. Value range: 3 to 10.	N/A
KeepaliveLinkStatus	Keepalive link status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—unknown.</li> <li>1—up.</li> <li>2—down.</li> </ul>	N/A
VRF	VPN instance name	N/A	String, case-sensitive. Length: 0 to 31 characters.	If the local device is on the public network, the length of the string is 0.

## DRNI/IPPTable

This table contains DRNI IPP information

## XML structure

```

<DRNI>
  <IPPTable>
    <IPP>
      <IPPNNumber></IPPNNumber>
      <IfIndex></IfIndex>
    </IPP>
  </IPPTable>
</DRNI>

```

## Table description

Item	Description
Feature name	DRNI
Table name	IPPTable
Table type	Multi -instance table
Row name	IPP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPPNNumber	IPP ID	Index	Unsigned integer. Value range: 1.	The IPP ID must be fixed at 1.
IfIndex	Interface index	N/A	Unsigned integer.	N/A

## DRNI/DRPortTable

This table contains information about DR ports.

## XML structure

```
<DRNI>
  <DRPortTable>
    <DRPort>
      <DRGroupId></DRGroupId>
      <IfIndex></IfIndex>
    </DRPort>
  </DRPortTable>
</DRNI>
```

## Table description

Item	Description
Feature name	DRNI
Table name	DRPortTable
Table type	Multi-instance table
Row name	DRPort
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
DRGroupId	DR group ID	Index	Unsigned integer. Value range: 1 to 1024.
IfIndex	IfIndex value of the Layer 2 aggregate interface	N/A	Unsigned integer.

# DRNI/PortTable

This table contains information about DRNI ports.

## XML structure

```
<DRNI>
  <PortTable>
    <Port>
      <IfIndex></IfIndex>
      <DrpcShortPeriodEnable></DrpcShortPeriodEnable>
      <PortStatus></PortStatus>
      <LocalDRCPState></LocalDRCPState>
      <PeerDRCPState></PeerDRCPState>
      <LocalSelectedMemberList></LocalSelectedMemberList>
      <PeerSelectedMemberList></PeerSelectedMemberList>
    </Port>
  </PortTable>
</DRNI>
```

## Table description

Item	Description
Feature name	DRNI
Table name	PortTable
Table type	Multi-instance table
Row name	Port
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
DrpcShortPeriodEnable	Short DRCP timeout timer flag	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable the short DRCP timeout timer.</li><li><b>false</b>—Disabled the short DRCP timeout timer.</li></ul>
PortStatus	Port status	N/A	Enumeration: <ul style="list-style-type: none"><li>0—down.</li><li>1—up.</li></ul>
LocalDRCPState	DRCP state on the local port	N/A	DRCP state flags. The flag field is one byte long, represented by ABCDEFGH from the

			<p>lowest bit to the highest bit. A letter is displayed when its bit is 1 and is not displayed when its bit is 0.</p> <ul style="list-style-type: none"> <li>• <b>A</b>—Indicates whether DRCP is enabled on the local device. 1 indicates enabled. 0 indicates disabled.</li> <li>• <b>B</b>—Indicates whether DRCP is enabled on the DR peer. 1 indicates enabled. 0 indicates disabled.</li> <li>• <b>C</b>—Indicates whether DRCP is enabled on a third DR member device. 1 indicates enabled. 0 indicates disabled.</li> <li>• <b>D</b>—Indicates whether the local IPP has determined that DRCP is enabled on the DR peer. 1 indicates yes. 0 indicates no.</li> <li>• <b>E</b>—Indicates the DRCP timeout timer. 1 indicates the short timeout timer. 0 indicates the long timeout timer.</li> <li>• <b>F</b>—Indicates whether the local IPP permits the packets that contain the negotiated gateway conversation IDs. 1 indicates yes. 0 indicates no.</li> <li>• <b>G</b>—Indicates whether the local IPP permits the packets that contain the negotiated port conversation IDs. 1 indicates yes. 0 indicates no.</li> <li>• <b>H</b>—Indicates whether the local DRCPDU receive machine is in default or expired state. 1 indicates yes. 0 indicates no.</li> </ul>
PeerDRCPState	DRCP state on the peer port	N/A	This column has the same data type and restrictions as <b>LocalDRCPState</b> .
LocalSelectedMemberList	Local DR member device's selected aggregate member ports in a distributed relay group	N/A	<p>Bitmap. No length restrictions.</p> <p>Each octet within this value specifies a set of eight ports, with the first octet specifying ports 1 through 8, the second octet specifying ports 9 through 16, and so on. Within each octet, the most significant bit represents the lowest numbered port, and the least significant bit represents</p>

			the highest numbered port.Each port of the bridge is represented by a single bit within the value of this object.If a bit has a value of 1 then the port is included in the set of ports;a port is not included if its bit has a value of 0.
PeerSelected MemberList	Peer DR member device's selected aggregate member ports in a distributed relay group	N/A	This column has the same data type and restrictions as <b>LocalSelectedMemberList</b> .



# Contents

- DRNI .....2
  - DRNI/Base .....2
  - DRNI/Role .....2
  - DRNI/Keepalive.....2
  - DRNI/IPPTable.....3
  - DRNI/DRPortTable.....3
  - DRNI/PortTable .....3

# DRNI

## DRNI/Base

Message	Explanation
The MAC address cannot be an all-zero address, a multicast address, or a broadcast address. 不允许配置MAC地址为全零MAC地址、组播MAC地址或广播MAC地址。	The system MAC address cannot be an all-zero address, a multicast address, or a broadcast address.

## DRNI/Role

Message	Explanation
None. 无。	None.

## DRNI/Keepalive

Message	Explanation
Please specify the destination IP addresses of keepalive packets. 指定Keepalive报文的目的IP地址。	Specify the destination IP address of keepalive link.
The destination and source IP addresses cannot be the same. 目的IP地址和源IP地址不能相同。	The destination address must be different from the source.
You cannot specify both IPv4 and IPv6 addresses for keepalive packets. 不能同时指定IPv4地址和IPv6地址。	The destination and source address of keepalive link must be the same family.
Invalid destination or source IP address. 无效的源/目的IP地址。	The IP address is invalid,keepalive must config with a legal address.
Please delete all parameters of keepalive configuration. 请删除所有的keepalive配置参数。	You need to delete all parameters.
The source and destination IP addresses of keepalive packets must have the same internet protocol version. Keepalive报文的源IP地址和目的IP地址必须使用相同的IP地址协议。	The family of destination and source address must be the same.

## DRNI/IPPTable

Message	Explanation
The interface is already configured as a DR interface. 该接口已经是DR口。	The interface is a DR interface, you can't configure to an IPP again.
The device already has an IPP. 设备已经存在一个IPP口。	A device can only configure an IPP.
Please specify a valid interface index. 对于merge、create、replace操作，请指定有效的接口索引。	The ifindex must set to a interface exist.
The interface must be a Layer 2 aggregate interface or tunnel interface. 该接口必须是二层聚合接口或Tunnel接口。	The IPP must configure to a Layer 2 aggregate interface or tunnel interface.

## DRNI/DRPortTable

Message	Explanation
The interface is already configured as a DR interface. 该接口已经是DR口。	The interface is with another DR id.
The interface is already configured as an IPP. 该接口已经是IPP口。	The interface is already a IPP,you can not.set it to a DR interface again.
The interface must be a Layer 2 aggregate interface. 该接口必须是二层聚合接口。	The DR id must set to a Layer 2 aggregate interface.
The DR group with the specified ID is already configured on another interface. 该DR口ID已经存在。	A device can not have two group with the same DR id.
Please specify a valid interface index. 对于merge、create、replace操作，请指定有效的接口索引。	The ifindex must set to a interface exist.

## DRNI/PortTable

Message	Explanation
None. 无。	None.

# Contents

DRNI event stream .....	1
BaseInfoEvent event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	1
RoleInfoEvent event .....	2
XML structure for event subscription .....	2
XML structure for event report .....	3
PortInfoEvent event .....	3
XML structure for event subscription .....	3
XML structure for event report .....	4

# DRNI event stream

## BaseInfoEvent event

This event is used to report DRNI BaseInfo.

## XML structure for event subscription

```
<BaseInfoEvent>
</BaseInfoEvent>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>DRNI</stream>
    <filter type="subtree">
      <BaseInfoEvent xmlns="http://www.h3c.com/netconf/event:1.0/DRNI:1.0">
      </BaseInfoEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	DRNI
Event name	BaseInfoEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/DRNI:1.0
Support for extended query	No

## XML structure for event report

```
<BaseInfoEvent>
  <BaseInfo>
    <SystemMAC></SystemMAC>
    <OperationType></OperationType>
  </BaseInfo>
</BaseInfoEvent>
```

Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <BaseInfoEvent xmlns="http://www.h3c.com/netconf/event:1.0/DRNI:1.0">
    <BaseInfo>
      <SystemMAC>00-01-00-01-00-01</SystemMAC>
      <OperationType>1</OperationType>
```

```

        </BaseInfo>
    </BaseInfoEvent>
</notification>

```

### Table description

Column name	Column description	Data type and restrictions	Support for extended query	Remarks
SystemMAC	DR system MAC address	Six groups of two hexadecimal digits, hyphen-separated. Example: 00-01-00-01-00-01.	No	You must configure the same DR system MAC address for the DR member devices in a DR system.
OperationType	Operation type	Enumeration: <ul style="list-style-type: none"> <li>1—Create.</li> <li>2—Modify.</li> <li>3—Delete.</li> </ul>	No	The operation type specifies the operation that DRNI BaseInfo should perform.

## RoleInfoEvent event

This event is used to report DRNI RoleInfo.

### XML structure for event subscription

```

<RoleInfoEvent>
</RoleInfoEvent>

```

Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
    <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
        <stream>DRNI</stream>
        <filter type="subtree">
            <RoleInfoEvent xmlns="http://www.h3c.com/netconf/event:1.0/DRNI:1.0">
                </RoleInfoEvent>
            </filter>
        </create-subscription>
    </rpc>

```

### Table description

Item	Description
Event stream name	DRNI
Event name	RoleInfoEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/DRNI:1.0
Support for extended query	No

## XML structure for event report

```
<RoleInfoEvent>
  <LocalBridgeMAC></LocalBridgeMAC>
  <PeerBridgeMAC></PeerBridgeMAC>
</RoleInfoEvent>
```

### Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <RoleInfoEvent xmlns="http://www.h3c.com/netconf/event:1.0/DRNI:1.0">
    <RoleInfo>
      <LocalBridgeMAC>00-01-00-01-00-01</LocalBridgeMAC>
      <PeerBridgeMAC>00-01-00-01-00-03</PeerBridgeMAC>
    </RoleInfo>
  </RoleInfoEvent>
</notification>
```

### Table description

Column name	Column description	Data type and restrictions	Support for extended query
LocalBridgeMAC	Bridge MAC address of the local device	Six groups of two hexadecimal digits, hyphen-separated. Example: 00-01-00-01-00-01.	No
PeerBridgeMAC	Bridge MAC address of the peer device	Six groups of two hexadecimal digits, hyphen-separated. Example: 00-01-00-01-00-01.	No

## PortInfoEvent event

This event is used to report DRNI PortInfo.

## XML structure for event subscription

```
<PortInfoEvent>
</PortInfoEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>DRNI</stream>
    <filter type="subtree">
      <PortInfoEvent xmlns="http://www.h3c.com/netconf/event:1.0/DRNI:1.0">
        </PortInfoEvent>
      </filter>
    </create-subscription>
  </rpc>
```

## Table description

Item	Description
Event stream name	DRNI
Event name	PortInfoEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/DRNI:1.0
Support for extended query	No

## XML structure for event report

```
<PortInfoEvent>
  <PortInfo>
    <IfIndex></IfIndex>
    <DRGroupId></DRGroupId>
    <OperationType></OperationType>
  </PortInfo>
</PortInfoEvent>
```

### Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <PortInfoEvent xmlns="http://www.h3c.com/netconf/event:1.0/DRNI:1.0">
    <PortInfo>
      <IfIndex>66</IfIndex>
      <DRGroupId>66</DRGroupId>
      <OperationType>1</OperationType>
    </PortInfo>
  </PortInfoEvent>
</notification>
```

## Table description

Column name	Column description	Data type and restrictions	Support for extended query	Remarks
IfIndex	Aggregation interface ifIndex	Unsigned integer.	No	Interface name is not supported.
DRGroupId	DR group ID	Unsigned integer. Value range: 1 to 1024.	No	N/A
OperationType	Operation type	Enumeration: <ul style="list-style-type: none"><li>1—Create.</li><li>2—Modify.</li><li>3—Delete.</li></ul>	No	The operation type specifies the operation that DNRI PortInfo should perform.



# Contents

DropStatistics .....	1
DropStatistics/ClearAppStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DropStatistics/ExportPacket .....	2
XML structure .....	2
Table description .....	2
Columns .....	2

# DropStatistics

## DropStatistics/ClearAppStatistics

This table contains information about the cleared statistics of packet loss.

### XML structure

```
<DropStatistics>
  <ClearAppStatistics>
    <ClearAppStatistic>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <AppName></AppName>
      <Clear></Clear>
    </ClearAppStatistic>
  </ClearAppStatistics>
</DropStatistics>
```

### Table description

Item	Description
Feature name	DropStatistics
Table name	ClearAppStatistics
Table type	Multi-instance table
Row name	ClearAppStatistic
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the interface resides.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the interface.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 7.	N/A
AppName	Name of the application	N/A	String. Length: 1 to 15 characters.	N/A
Clear	Clear statistics of packet loss for	N/A	This column must be empty.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	an application			

## DropStatistics/ExportPacket

This table is used to export captured packets to a file.

### XML structure

```
<DropStatistics>
  <ExportPacket>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <AppName></AppName>
  </ExportPacket>
</DropStatistics>
```

### Table description

Item	Description
Feature name	DropStatistics
Table name	ExportPacket
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the interface resides	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the interface	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	N/A	Unsigned integer. Value range: 0 to 7.	N/A
AppName	Name of the application	N/A	String. Length: 1 to 15 characters.	This column is required.

# Contents

- DropStatistics ..... 1
  - DropStatistics/StatisticsCfg ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1

# DropStatistics

## DropStatistics/StatisticsCfg

This table contains the dropped-packet statistics settings.

### XML structure

```
<DropStatistics>
  <StatisticsCfg>
    <FilterType></FilterType>
    <SrcAddress></SrcAddress>
    <DstAddress></DstAddress>
    <UserName></UserName>
    <DomainName></DomainName>
  </StatisticsCfg>
</DropStatistics>
```

### Table description

Item	Description
Feature name	DropStatistics
Table name	StatisticsCfg
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FilterType	Filter type	N/A	Enumeration: <ul style="list-style-type: none"><li><b>0</b>—Does not filter.</li><li><b>1</b>—Filters by address.</li><li><b>2</b>—Filters by user.</li></ul>	Leaving this column empty has the same effect as setting it to <b>0</b> .
SrcAddress	Source address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
DstAddress	Destination address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string,	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.

Column name	Column description	Column type	Data type and restrictions	Remarks
			colon-separated.	
UserName	Username	N/A	String, case sensitive. Length: 1 to 55 characters.	N/A
DomainName	Domain name	N/A	String, case insensitive. Length: 1 to 255 characters.	N/A

# Contents

DropStatistics .....	1
DropStatistics/SummaryStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
DropStatistics/AppDetailStatistics .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
DropStatistics/AppSupportInfos .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
DropStatistics/AppDropAddresses .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
DropStatistics/AppDetailDropAddresses .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
DropStatistics/StatisticsCfg .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
DropStatistics/SummaryIPCounts .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
DropStatistics/DetailIPCounts .....	9
XML structure .....	9
Table description .....	9
Columns .....	10

# DropStatistics

## DropStatistics/SummaryStatistics

This table contains the summaries of packet loss.

### XML structure

```
<DropStatistics>
  <SummaryStatistics>
    <SummaryStatistic>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <SumStatisticsString></SumStatisticsString>
    </SummaryStatistic>
  </SummaryStatistics>
</DropStatistics>
```

### Table description

Item	Description
Feature name	DropStatistics
Table name	SummaryStatistics
Table type	Multi-instance table
Row name	SummaryStatistic
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the interface resides.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the interface.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 7.	N/A
SumStatistics String	Summaries of packet loss.	N/A	String.	Separate the pack loss applications with comma(.). Separate the application and value



Column name	Column description	Column type	Data type and restrictions	Remarks
				with colon(:). Can not contain spaces.

## DropStatistics/AppDetailStatistics

This table contains the details of packet loss for an application.

### XML structure

```

<DropStatistics>
  <AppDetailStatistics>
    < AppDetailStatistic>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <AppName></AppName>
      <AppDetailString></AppDetailString>
    </AppDetailStatistic>
  </AppDetailStatistics>
</DropStatistics>

```

### Table description

Item	Description
Feature name	DropStatistics
Table name	AppDetailStatistics
Table type	Multi-instance table
Row name	AppDetailStatistic
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the interface resides.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the interface.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 7.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AppName	Name of the Application	Index	String. Length: 1 to 15 characters.	N/A
AppDetailString	Details of the application's packet loss.	N/A	String.	Separate the packet loss types with comma(.). Separate the type and value with colon(:). Can not contain spaces.

## DropStatistics/AppSupportInfos

This table contains support of applications for packet capture.

### XML structure

```

<DropStatistics>
  <AppSupportInfos>
    <AppSupportInfo>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <AppName></AppName>
      <SupportPktCapture></SupportPktCapture>
    </AppSupportInfo>
  </AppSupportInfos>
</DropStatistics>

```

### Table description

Item	Description
Feature name	DropStatistics
Table name	AppSupportInfos
Table type	Multi-instance table
Row name	AppSupportInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the interface resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Slot	Slot ID of the interface	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 7.	N/A
AppName	Name of the application	Index	String. Length: 1 to 15 characters.	N/A
SupportPktCapture	Support for packet capture	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supports packet capture.</li> <li><b>false</b>—Does not support packet capture.</li> </ul>	N/A

## DropStatistics/AppDropAddresses

This table contains dropped-packet statistics for connections of features.

### XML structure

```

<DropStatistics>
  <AppDropAddresses>
    <AppDropAddress>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <AppName></AppName>
      <SrcAddress></SrcAddress>
      <DstAddress></DstAddress>
      <UserName></UserName>
      <DomainName></DomainName>
      <OriginalNum></OriginalNum>
      <ReplyNum></ReplyNum>
    </AppDropAddress>
  </AppDropAddresses>
</DropStatistics>

```

### Table description

Item	Description
Feature name	DropStatistics
Table name	AppDropAddresses
Table type	Multi-instance table
Row name	AppDropAddress
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the interface resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the interface	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
AppName	Feature name	Index	String. Length: 1 to 15 characters.	N/A
SrcAddress	Source address	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
DstAddress	Destination address	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
UserName	Username	N/A	String, case sensitive. Length: 1 to 55 characters.	N/A
DomainName	Domain name	N/A	String, case insensitive. Length: 1 to 255 characters.	N/A
OriginalNum	Number of packets dropped for original	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ReplyNum	Number of packets dropped for reply	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## DropStatistics/AppDetailDropAddresses

This table contains detailed dropped-packet statistics for connections of features.

### XML structure

```

<DropStatistics>
  <AppDetailDropAddresses>
    <AppDetailDropAddress>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <AppName></AppName>
    
```

```

    <DropReason></DropReason>
    <SrcAddress></SrcAddress>
    <DstAddress></DstAddress>
    <UserName></UserName>
    <DomainName></DomainName>
    <OriginalNum></OriginalNum>
    <ReplyNum></ReplyNum>
  </AppDetailDropAddress>
</AppDetailDropAddresses>
</DropStatistics>

```

## Table description

Item	Description
Feature name	DropStatistics
Table name	AppDetailDropAddresses
Table type	Multi-instance table
Row name	AppDetailDropAddress
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the interface resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the interface	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
AppName	Feature name	Index	String. Length: 1 to 15 characters.	N/A
DropReason	Drop reason	Index	String. Length: 1 to 63 characters.	N/A
SrcAddress	Source address	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
DstAddress	Destination address	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
UserName	Username	N/A	String, case sensitive. Length: 1 to 55 characters.	N/A

DomainName	Domain name	N/A	String, case insensitive. Length: 1 to 255 characters.	N/A
OriginalNum	Number of packets dropped for original	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ReplyNum	Number of packets dropped for reply	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## DropStatistics/StatisticsCfg

This table contains the dropped-packet statistics settings.

### XML structure

```

<DropStatistics>
  <StatisticsCfg>
    <FilterType></FilterType>
    <SrcAddress></SrcAddress>
    <DstAddress></DstAddress>
    <UserName></UserName>
    <DomainName></DomainName>
  </StatisticsCfg>
</DropStatistics>

```

### Table description

Item	Description
Feature name	DropStatistics
Table name	StatisticsCfg
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FilterType	Filter type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Does not filter.</li> <li><b>1</b>—Filter by address.</li> <li><b>2</b>—Filters by user.</li> </ul>	Leaving this column empty has the same effect as setting it to <b>0</b> .
SrcAddress	Source address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string,	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.

Column name	Column description	Column type	Data type and restrictions	Remarks
			colon separated.	
DstAddress	Destination address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
UserName	UserName	N/A	String, case sensitive. Length: 1 to 55 characters.	N/A
DomainName	DomainName	N/A	String, case insensitive. Length: 1 to 255 characters.	N/A

## DropStatistics/SummaryIPCounts

This table is used to obtain the number of connections of a feature for which dropped-packet statistics are configured.

### XML structure

```

<DropStatistics>
  <SummaryIPCounts>
    <SummaryIPCount>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <AppName></AppName>
      <Count></Count>
    </SummaryIPCount>
  </SummaryIPCounts>
</DropStatistics>

```

### Table description

Item	Description
Feature name	DropStatistics
Table name	SummaryIPCounts
Table type	Multi-instance table
Row name	SummaryIPCount
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member	Index	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	where the interface resides		Value range: 0 to 65535.
Slot	Slot ID of the interface	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
AppName	Feature name	Index	String. Length: 1 to 15 characters.
Count	Number of connections of a feature for which dropped-packet statistics are configured	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .

## DropStatistics/DetailIPCounts

This table is used to obtain the number of connections of a feature that have packets dropped due to a specific reason.

### XML structure

```

<DropStatistics>
  <DetailIPCounts>
    <DetailIPCount>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <AppName></AppName>
      <DropReason></DropReason>
      <Count></Count>
    </DetailIPCount>
  </DetailIPCounts>
</DropStatistics>

```

### Table description

Item	Description
Feature name	DropStatistics
Table name	DetailIPCounts
Table type	Multi-instance table
Row name	DetailIPCount
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	ID of the member where the interface resides	Index	Unsigned integer. Value range: 0 to 65535.
Slot	Slot ID of the interface	Index	Unsigned integer. Value range: 0 to 65535.
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.
AppName	Feature name	Index	String. Length: 1 to 15 characters.
DropReason	Drop reason	Index	String. Length: 1 to 63 characters.
Count	Number of connections of a feature that have packets dropped due to a specific reason	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .

# Contents

DropStatistics .....2

    DropStatistics/ExportPacket .....2

    DropStatistics/StatistcsCfg .....2

# DropStatistics

## DropStatistics/ExportPacket

Message	Explanation
Failed to create the file. 创建文件失败。	When saving the dropped packets to a file, the system failed to create the file due to insufficient space or other reasons. 保存报文到文件时由于空间不足或者其他原因导致失败。
No packets dropped. 没有报文被丢弃。	When saving the dropped packets to a file, there is no packet dropped. 没有需要保存到文件的报文。

## DropStatistics/StatisticsCfg

Message	Explanation
The source IP address field and destination IP address field cannot be null at the same time. 源IP和目的IP地址不能同时为空。	When configuring dropped packet counting based on IP addresses, the source IP and destination IP cannot be both null. 根据IP地址进行丢包统计时不允许源IP地址和目的IP地址都为空。
The source IP address and the destination IP address must be the same type. 源IP与目的IP地址类型必须一致。	When configuring dropped packet counting based on IP addresses, the source IP and the destination IP must belong to the same address family. 根据IP地址进行丢包统计时源IP地址和目的IP地址地址族必须一致。
Invalid source IP address or destination IP address. 源IP或者目的IP地址非法。	When configuring dropped packet counting based on IP addresses, but the source IP or the destination IP is invalid. 根据IP地址进行丢包统计时源IP地址或者目的IP地址非法。
A username is required. 用户名为空。	When configuring dropped packet counting based on users, the username cannot be null. 根据用户名进行丢包统计时用户名不允许为空。
A filter type is required. 过滤类型为空。	When configuring dropped packet counting based on filter conditions, the filter type cannot be null. 使用过滤条件进行丢包统计时过滤类型不能为空。
Not enough memory for the operation. 操作失败，当前设备内存不足。	When configuring dropped packet counting based on filter conditions, the device memory is not enough. 使用过滤条件进行丢包统计时设备内存空间不足。
Another statistics collection is in progress. Please wait... 同时只能有一个进程在配置，请稍候。	When configuring dropped packet counting based on filter conditions, another user is modifying the filter conditions. 使用过滤条件进行丢包统计时，其他用户尝试修改过滤条件。

# Contents

EAA .....	1
EAA/System .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
EAA/System/RtmSyslogBuffer .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
EAA/Environments .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
EAA/CliPolicys .....	3
XML structure .....	3
Table description .....	5
Columns .....	5
EAA/CliPolicys/CliPolicy .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
EAA/CliPolicys/CliPolicy/CliPolicyEvent .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventCli .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventHotplug .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventInterface .....	10
XML structure .....	11
Table description .....	11
Columns .....	11
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventProcess .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSnmp .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSnmpNotification .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSyslog .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventTrack .....	16
XML structure .....	16
Table description .....	17
Columns .....	17

EAA/CliPolicys/CliPolicy/CliPolicyActions .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSyslog .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionReboot .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSwitchover .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionCli .....	23
XML structure .....	23
Table description .....	23
Columns .....	23
EAA/CliPolicys/CliPolicy/CliPolicyUserRoles .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
EAA/ScriptPolicys .....	24
XML structure .....	24
Table description .....	25
Columns .....	25
Appendix .....	25

# EAA

## EAA/System

This table contains information about EAA.

### XML structure

```
<EAA>
  <System>
    <RunStatus></RunStatus>
    <RtmSyslogBuffer>
      <SyslogBufferSize></SyslogBufferSize>
    </RtmSyslogBuffer>
  </System>
</EAA>
```

### Table description

Item	Description
Feature name	EAA
Table name	System
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RunStatus	Monitor status of EAA	N/A	EnableState: <ul style="list-style-type: none"><li><b>enable</b> (default).</li><li><b>disable</b>.</li></ul>	Monitor status of EAA.
RtmSyslogBuffer	RTM syslog buffer	Subtable	N/A	For more information, see the System/RtmSyslogBuffer table.

## EAA/System/RtmSyslogBuffer

This table contains information about EAA.

## XML structure

See the XML structure of EAA/System

## Table description

Item	Description
Feature name	EAA
Table name	RtmSyslogBuffer
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SyslogBuffer Size	Syslog buffer size	N/A	Unsigned integer. Value range: 1 to 500000	N/A

## EAA/Environments

This table contains environment information about EAA.

## XML structure

```
<EAA>
  <Environments>
    <Environment>
      <EnvironmentName></EnvironmentName>
      <EnvironmentValue></EnvironmentValue>
    </Environment>
  </Environments>
</EAA>
```

## Table description

Item	Description
Feature name	EAA
Table name	Environments
Table type	Multi-instance table

Row name	Environment
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Environment Name	Environment name	Index	String. Length: 1 to 63 characters.	N/A
Environment Value	Environment value	N/A	String. Length: 1 to 512 characters.	The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.  For environmental variables definition, please see "Appendix".

## EAA/CliPolicys

This table contains CLI policy information.

## XML structure

```

<EAA>
  <CliPolicys>
    <CliPolicy>
      <CliPolicyName></CliPolicyName>
      <RunningTime></RunningTime>
      <CliPolicyEvent>
        <EventCli>
          <CliStatus></CliStatus>
          <Mode></Mode>
          <Pattern></Pattern>
        </EventCli>
        <EventHotplug>
          <HotplugStatus></HotplugStatus>
          <Chassis></Chassis>
          <Slot></Slot>
          <SubSlot></SubSlot>
        </EventHotplug>
        <EventInterface>
          <IfList></IfList>
          <MonitorObj></MonitorObj>

```



```

    <StartOp></StartOp>
    <StartVal></StartVal>
    <RestartOp></RestartOp>
    <RestartVal></RestartVal>
    <Interval></Interval>
</EventInterface>
<EventProcess>
    <ProcessType></ProcessType>
    <Name></Name>
    <Instance></Instance>
    <Chassis></Chassis>
    <Slot></Slot>
</EventProcess>
<EventSnmp>
    <Oid></Oid>
    <Monitor></Monitor>
    <StartOp></StartOp>
    <StartVal></StartVal>
    <RestartOp></RestartOp>
    <RestartVal></RestartVal>
    <Interval></Interval>
</EventSnmp>
<EventSnmpNotification>
    <Oid></Oid>
    <OidVal></OidVal>
    <Option></Option>
    <Drop></Drop>
</EventSnmpNotification>
<EventSyslog>
    <Priority></Priority>
    <Msg></Msg>
    <Occur></Occur>
    <Period></Period>
</EventSyslog>
<EventTrack>
    <TrackList></TrackList>
    <State></State>
    <SuppressTime></SuppressTime>
</EventTrack>
</CliPolicyEvent>
<CliPolicyActions>
    <CliPolicyAction>
        <ActionNum></ActionNum>
        <ActionContent>
            <ActionSyslog>
                <Priority></Priority>
                <Facility></Facility>
                <Msg></Msg>

```

```

        </ActionSyslog>
        <ActionReboot>
            <Reboot></Reboot>
            <Chassis></Chassis>
            <Slot></Slot>
            <SubSlot></SubSlot>
        </ActionReboot>
        <ActionSwitchover>
            <State></State>
        </ActionSwitchover>
        <ActionCli>
            <Command></Command>
        </ActionCli>
    </ActionContent>
</CliPolicyAction>
</CliPolicyActions>
<CliPolicyUserRoles>
    <CliPolicyUserRole>
        <UserRoleName></UserRoleName>
    </CliPolicyUserRole>
</CliPolicyUserRoles>
</CliPolicy>
</CliPolicys>
</EAA>

```

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicys
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CliPolicy	CliPolicy table	Sublist	N/A	For more information, see the EAA/CliPolicys/CliPolicy table.

# EAA/CliPolicys/CliPolicy

This table contains CLI policy information.

## XML structure

See the XML structure of EAA/CliPolicys

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicy
Table type	Multi-instance table
Row name	CliPolicy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CliPolicyName	CLI policy name	Index	String. Length: 1 to 63 characters.	N/A
RunningTime	Action execution timeout	N/A	Unsigned integer. Value range: 0 to 31536000	0 means never time out.
CliPolicyEvent	CliPolicyEvent information of the CLI policy name	Subtable	N/A	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyEvent table.
CliPolicyActions	CliPolicyActions information of the CLI policy name	Subtable	N/A	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions table.
CliPolicyUserRoles	CliPolicyUserRoles information of the CLI policy name	Subtable	N/A	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyUserRoles table.

# EAA/CliPolicys/CliPolicy/CliPolicyEvent

This table contains CLI policy information.

## XML structure

See the XML structure of EAA/CliPolicys

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicyEvent
Table type	Single-instance table
Row name	N/A
Restrictions	Event tables are mutually exclusive and can not occur at the same time.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EventCli	Cli event information of the CLI policy	Subtable	N/A	EventCli tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventCli table.
EventHotplug	Hotplug event information of the CLI policy name	Subtable	N/A	EventHotplug tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventHotplug table.
EventInterface	Interface event information of the CLI policy name	Subtable	N/A	EventInterface tables are mutually exclusive with other event tables.  For more information, see

Column name	Column description	Column type	Data type and restrictions	Remarks
				the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventInterface table.
EventProcess	Process event information of the CLI policy name	Subtable	N/A	EventProcess tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventProcess table.
EventSnmp	Snmp event information of the CLI policy name	Subtable	N/A	EventSnmp tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventSnmp table.
EventSnmpNotification	SnmpNotification event information of the CLI policy name	Subtable	N/A	EventSnmpNotification tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventSnmpNot ification table.
EventSyslog	Syslog event information of the CLI policy name	Subtable	N/A	EventSyslog tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventSyslog table.
EventTrack	Track event information of the CLI policy name	Subtable	N/A	EventTrack tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventTrack

Column name	Column description	Column type	Data type and restrictions	Remarks
				table.

# EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventCli

This table contains EAA, CLI event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys

## Table description

Item	Description
Feature name	EAA
Table name	EventCli
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CliStatus	CLI type status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—sync.</li> <li>• <b>1</b>—async.</li> <li>• <b>2</b>—async-skip.</li> </ul>	N/A
Mode	CLI monitoring mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—tab.</li> <li>• <b>1</b>—help.</li> <li>• <b>2</b>—execute.</li> </ul>	N/A
Pattern	Regular expression matching command line	N/A	String. Length: 1 to 512 characters.	The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.

# EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventHotplug

This table contains EAA, hotplug event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventHotplug
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HotplugStatus	Hotplug state	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—all.</li><li>• <b>1</b>—insert</li><li>• <b>2</b>—remove.</li></ul>	N/A
Chassis	Member ID of the member device where the entity resides	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SubSlot	SubSlot number of the slot	N/A	Unsigned integer. Value range: 0 to 65535.	65535 means not set subslot.

# EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventInterface

This table contains EAA, interface event, and monitor policy information.

# XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventInterface
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfList	List of interface items	N/A	Number string. It is a comma-separated list of interface items. An item can be an individual interface name or an interface range. Use a hyphen (-) to separate the start and end interface item of a range. The string cannot end with a comma or hyphen, or contain any spaces.	Up to 8 items can be entered. Example: null0,GigabitEthernet0/0/1-GigabitEthernet0/0/2.
MonitorObj	Monitoring object	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—input-errors.</li><li>• 1—ouput-errors.</li><li>• 2—input-drops.</li><li>• 3—ouput-drops.</li><li>• 4—rcv-broadcasts.</li><li>• 5—rcv-bps.</li><li>• 6—rcv-pps.</li><li>• 7—tx-bps.</li><li>• 8—tx-pps.</li><li>• 9—tx-kbps.</li><li>• 10—rcv-kbps.</li><li>• 11—tx-kpps.</li><li>• 12—rcv-kpps.</li></ul>	N/A
StartOp	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—gt.</li><li>• 1—ge.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—eq.</li> <li>3—ne.</li> <li>4—le.</li> <li>5—lt.</li> </ul>	
StartVal	Value of the monitored objects	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
RestartOp	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—gt.</li> <li>1—ge.</li> <li>2—eq.</li> <li>3—ne.</li> <li>4—le.</li> <li>5—lt.</li> </ul>	N/A
RestartVal	Value of the monitored objects	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Interval	Sampling period	N/A	Unsigned integer. Value range: 1 to 4294967295.	The default value is 300.

## EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventProcess

This table contains EAA, process event, and monitor policy information.

### XML structure

See the XML structure of EAA/CliPolicys.

### Table description

Item	Description
Feature name	EAA
Table name	EventProcess
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProcessType	Process type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—start.</li><li>• 1—shutdown.</li><li>• 2—restart.</li><li>• 3—exception.</li></ul>	N/A
Name	Process name	N/A	String. Length: 1 to 63 characters.	N/A
Instance	Process ID	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Chassis	Member ID of the member device where the entity resides	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSnmp

This table contains EAA, SNMP event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventSnmp
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Oid	SNMP OID	N/A	String. Length: 1 to 256 characters.	N/A
Monitor	Monitor object	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—get.</li> <li>2—get-next.</li> </ul>	N/A
StartOp	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—gt.</li> <li>1—ge.</li> <li>2—eq.</li> <li>3—ne.</li> <li>4—le.</li> <li>5—lt.</li> </ul>	N/A
StartVal	Value of the monitored objects	N/A	String. Length: 1 to 512 characters.	N/A
RestartOp	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—gt.</li> <li>1—ge.</li> <li>2—eq.</li> <li>3—ne.</li> <li>4—le.</li> <li>5—lt.</li> </ul>	N/A
RestartVal	Value of the monitored objects	N/A	String. Length: 1 to 512 characters.	N/A
Interval	Sampling period	N/A	Unsigned integer. Value range: 1 to 4294967295.	The default value is 300.

## EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSnmpNotification

This table contains EAA, SNMP notification event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventSnmpNotification
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Oid	Trap SNMP OID	N/A	String. Length: 1 to 256 characters.	N/A
OidVal	OID value	N/A	String. Length: 1 to 512 characters.	N/A
Option	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—gt.</li><li>• <b>1</b>—ge.</li><li>• <b>2</b>—eq.</li><li>• <b>3</b>—ne.</li><li>• <b>4</b>—le.</li><li>• <b>5</b>—lt.</li></ul>	N/A
Drop	Drop trap	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>false</b> (default).</li><li>• <b>true</b>.</li></ul>	N/A

## EAA/CliPolycys/CliPolicy/CliPolicyEvent/EventSyslog

This table contains EAA, Syslog event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolycys.

## Table description

Item	Description
Feature name	EAA
Table name	EventSyslog
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Priority	Log level	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—LOG_EMERG.</li><li>• 1—LOG_ALERT.</li><li>• 2—LOG_CRIT.</li><li>• 3—LOG_ERR.</li><li>• 4—LOG_WARNING.</li><li>• 5—LOG_NOTICE.</li><li>• 6—LOG_INFO.</li><li>• 7—LOG_DEBUG.</li><li>• 8—ALL.</li></ul>	N/A
Msg	Regular expression matching Syslog message	N/A	String. Length: 1 to 255 characters.	N/A
Occur	Occurrences	N/A	Unsigned integer. Value range: 1 to 32.	N/A
Period	Time range is seconds	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A

## EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventTrack

This table contains EAA, track event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventTrack
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TrackList	List of track items	N/A	Number string. It is a comma-separated list of track items. An item can be an individual track ID or a track ID range. Use a hyphen (-) to separate the start and end track item of a range. The string cannot end with a comma or hyphen, or contain any spaces.	The track list is in the range of 1 to 1024. Up to 16 items can be entered. Example: 1,2,3,5-8,10-20.
State	Monitor change status of track items	N/A	Enumeration: <ul style="list-style-type: none"><li>1—positive.</li><li>2—negative.</li></ul>	N/A
SuppressTime	Suppress time	N/A	Unsigned integer.	The default value is 0.

## EAA/CliPolicys/CliPolicy/CliPolicyActions

This table contains information about the CLI policy action.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicyActions

Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CliPolicyAction	CliPolicyAction information	Sublist	N/A	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction table

## EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction

This table contains information about the CLI policy action.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicyAction
Table type	Multi-instance table
Row name	CliPolicyAction
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ActionNum	Action number	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 231	
ActionContent	Action content	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent table.

## EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent

This table contains information about the CLI policy action.

### XML structure

See the XML structure of EAA/CliPolicys.

### Table description

Item	Description
Feature name	EAA
Table name	ActionContent
Table type	Single-instance table
Row name	N/A
Restrictions	Action operations are mutually exclusive and only one type of action exists in the current table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ActionSyslog	Syslog action	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<p>CliPolicyActionSyslog tables are mutually exclusive with other action tables.</p> <p>For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSyslog table.</p>



Column name	Column description	Column type	Data type and restrictions	Remarks
ActionReboot	Reboot action	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<p>CliPolicyActionReboot tables are mutually exclusive with other action tables.</p> <p>For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionReboot table.</p>
ActionSwitchover	Switchover action	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<p>CliPolicyActionSwitchover tables are mutually exclusive with other action tables.</p>
ActionCli	CLI action	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<p>CliPolicyActionCli tables are mutually exclusive with other action tables.</p> <p>For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionCli table.</p>

## EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSyslog

This table contains information about the CLI policy action.

### XML structure

See the XML structure of EAA/CliPolicys.

### Table description

Item	Description
Feature name	EAA
Table name	ActionSyslog
Table type	Single-instance table
Row name	N/A
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Priority	Log level	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—LOG_EMERG.</li> <li>• <b>1</b>—LOG_ALERT.</li> <li>• <b>2</b>—LOG_CRIT.</li> <li>• <b>3</b>—LOG_ERR.</li> <li>• <b>4</b>—LOG_WARNING.</li> <li>• <b>5</b>—LOG_NOTICE.</li> <li>• <b>6</b>—LOG_INFO.</li> <li>• <b>7</b>—LOG_DEBUG.</li> </ul>	N/A
Facility	Logging facility used by the log host	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>128</b>—local0.</li> <li>• <b>136</b>—local1.</li> <li>• <b>144</b>—local2.</li> <li>• <b>152</b>—local3.</li> <li>• <b>160</b>—local4.</li> <li>• <b>168</b>—local5.</li> <li>• <b>176</b>—local6.</li> <li>• <b>184</b>—local7.</li> </ul>	N/A
Msg	Output log contents	N/A	String. Length: 1 to 512 characters.	The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.

## EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionReboot

This table contains information about the CLI policy action.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	ActionReboot
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Reboot	Reboot operation	N/A	EnableState: <ul style="list-style-type: none"><li><b>enable.</b></li></ul>	N/A
Chassis	Member ID of the member device where the entity resides	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SubSlot	SubSlot number of the slot	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## EAA/CliPolycys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSwitchover

This table contains information about the switchover policy action.

## XML structure

See the XML structure of EAA/CliPolycys.

## Table description

Item	Description
Feature name	EAA

Table name	ActionSwitchover
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
State	state of switchover	N/A	EnableState: • <b>enable.</b>	N/A

## EAA/CliPolycys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionCli

This table contains information about the CLI policy action.

## XML structure

See the XML structure of EAA/CliPolycys.

## Table description

Item	Description
Feature name	EAA
Table name	ActionCli
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Command	Command line	N/A	String.  Length: 1 to 512 characters.	The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.

# EAA/CliPolycys/CliPolicy/CliPolicyUserRoles

This table contains CLI policy information.

## XML structure

See the XML structure of EAA/CliPolycys.

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicyUserRoles
Table type	Multi-instance table
Row name	CliPolicyUserRole
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserRoleName	CLI policy user role name	N/A	String. Length: 1 to 63 characters.	This column may not occur which mean no user role have set yet, or can repeat of up to 64.

# EAA/ScriptPolycys

This table contains Tcl policy information.

## XML structure

```
<EAA>
  <ScriptPolycys>
    <ScriptPolicy>
      <ScriptType></ScriptType>
      <PolicyName></PolicyName>
      <PolicyFile></PolicyFile>
    </ScriptPolicy>
  </ScriptPolycys>
</EAA>
```

## Table description

Item	Description
Feature name	EAA
Table name	ScriptPolicys
Table type	Multi-instance table
Row name	ScriptPolicy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ScriptType	script policy type	Index	Enumeration: <ul style="list-style-type: none"><li>2—RTM_POLICYTYPE.</li></ul>	The script currently supported isTCL script, later may support other scripts.
PolicyName	script policy name	Index	String. Length: 1 to 63 characters.	N/A
PolicyFile	Script policy file	N/A	String. Length: 1 to 512 characters.	<p>The script currently supported isTCL script, later may support other scripts.</p> <p>The TCL file suffix must be ".tcl".</p> <p>TCL filename is case sensitive.</p> <p>The TCL file must be a file on the device storage medium.</p> <p>The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.</p>

## Appendix

EAA environment variables decouple the configuration of action arguments from the monitor policy so you can modify a policy easily.

An EAA environment variable is defined as a <variable\_name variable\_value> pair and can be used in different policies. When you define an action, you can enter a variable name with a leading dollar sign (\$variable\_name). EAA will replace the variable name with the variable value when it performs the action.

To change the value for an action argument, modify the value specified in the variable pair instead of editing each affected monitor policy.

EAA environment variables include system-defined variables and user-defined variables.

## System-defined variables

System-defined variables are provided by default, and they cannot be created, deleted, or modified by users. System-defined variable names start with an underscore (\_) sign. The variable values are set automatically depending on the event setting in the policy that uses the variables.

System-defined variables include the following types:

- **Public variable**—Available for any events.
- **Event-specific variable**—Available only for a type of event.

Table 1 shows all system-defined variables.

**Table 1 System-defined EAA environment variables by event type**

Variable name	Description
<b>Any event:</b>	
_event_id	Event ID.
_event_type	Event type.
_event_type_string	Event type description.
_event_time	Time when the event occurs.
_event_severity	Severity level of an event.
<b>CLI:</b>	
_cmd	Commands that are matched.
<b>Syslog:</b>	
_syslog_pattern	Log message content.
<b>Hotplug:</b>	
_slot	(Centralized devices.) 0. (Distributed devices) ID of the slot where card hot-swapping occurs. (Centralized IRF devices.) ID of the member device that joins or leaves the IRF fabric.
_subslot	ID of the subslot where subcard hot-swapping occurs.
<b>Interface:</b>	
_ifname	Interface name.
<b>SNMP:</b>	
_oid	OID of the MIB variable where an SNMP operation is performed.
_oid_value	Value of the MIB variable.
<b>SNMP-Notification:</b>	
_oid	OID that is included in the SNMP notification.

Variable name Process:	Description
_process_name	Process name.

## User-defined variables

You can use user-defined variables for all types of events.

User-defined variable names can contain digits, characters, and the underscore sign (\_), except that the underscore sign cannot be the leading character.



# Contents

EAA .....	1
EAA/System .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
EAA/System/RtmSyslogBuffer .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
EAA/Environments .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
EAA/CliPolicys .....	3
XML structure .....	3
Table description .....	5
Columns .....	5
EAA/CliPolicys/CliPolicy .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
EAA/CliPolicys/CliPolicy/CliPolicyEvent .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventCli .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventHotplug .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventInterface .....	10
XML structure .....	11
Table description .....	11
Columns .....	11
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventProcess .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSnmp .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSnmpNotification .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSyslog .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventTrack .....	16
XML structure .....	16
Table description .....	17
Columns .....	17

EAA/CliPolicys/CliPolicy/CliPolicyActions .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSyslog .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionReboot .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSwitchover .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionCli .....	23
XML structure .....	23
Table description .....	23
Columns .....	23
EAA/CliPolicys/CliPolicy/CliPolicyUserRoles .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
EAA/ScriptPolicys .....	24
XML structure .....	24
Table description .....	25
Columns .....	25
EAA/ActivePolicy .....	25
XML structure .....	26
Table description .....	26
Columns .....	26
EAA/RegisteredPolicy .....	27
XML structure .....	27
Table description .....	27
Columns .....	27

# EAA

## EAA/System

This table contains system information about EAA.

### XML structure

```
<EAA>
  <System>
    <RunStatus></RunStatus>
    <RtmSyslogBuffer>
      <SyslogBufferSize></SyslogBufferSize>
    </RtmSyslogBuffer>
  </System>
</EAA>
```

### Table description

Item	Description
Feature name	EAA
Table name	System
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RunStatus	Monitor status of EAA	N/A	EnableState: <ul style="list-style-type: none"><li><b>enable</b> (default).</li><li><b>disable</b>.</li></ul>	Monitor status of EAA.
RtmSyslogBuffer	RTM syslog buffer	Subtable	N/A	For more information, see the System/RtmSyslogBuffer table.

## EAA/System/RtmSyslogBuffer

This table contains syslog buffer information about EAA.

## XML structure

See the XML structure of EAA/System

## Table description

Item	Description
Feature name	EAA
Table name	RtmSyslogBuffer
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SyslogBuffer Size	Syslog buffer size	N/A	Unsigned integer. Value range: 1 to 500000	N/A

## EAA/Environments

This table contains environment information about EAA.

## XML structure

```
<EAA>
  <Environments>
    <Environment>
      <EnvironmentName></EnvironmentName>
      <EnvironmentValue></EnvironmentValue>
    </Environment>
  </Environments>
</EAA>
```

## Table description

Item	Description
Feature name	EAA
Table name	Environments
Table type	Multi-instance table

Row name	Environment
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Environment Name	Environment name	Index	String. Length: 1 to 63 characters.	N/A
Environment Value	Environment value	N/A	String. Length: 1 to 512 characters.	The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.  For environmental variables definition, please see "Appendix".

## EAA/CliPolicys

This table contains CLI policy information.

## XML structure

```

<EAA>
  <CliPolicys>
    <CliPolicy>
      <CliPolicyName></CliPolicyName>
      <RunningTime></RunningTime>
      <CliPolicyEvent>
        <EventCli>
          <CliStatus></CliStatus>
          <Mode></Mode>
          <Pattern></Pattern>
        </EventCli>
        <EventHotplug>
          <HotplugStatus></HotplugStatus>
          <Chassis></Chassis>
          <Slot></Slot>
          <SubSlot></SubSlot>
        </EventHotplug>
        <EventInterface>
          <IfList></IfList>
          <MonitorObj></MonitorObj>

```

```

    <StartOp></StartOp>
    <StartVal></StartVal>
    <RestartOp></RestartOp>
    <RestartVal></RestartVal>
    <Interval></Interval>
</EventInterface>
<EventProcess>
    <ProcessType></ProcessType>
    <Name></Name>
    <Instance></Instance>
    <Chassis></Chassis>
    <Slot></Slot>
</EventProcess>
<EventSnmp>
    <Oid></Oid>
    <Monitor></Monitor>
    <StartOp></StartOp>
    <StartVal></StartVal>
    <RestartOp></RestartOp>
    <RestartVal></RestartVal>
    <Interval></Interval>
</EventSnmp>
<EventSnmpNotification>
    <Oid></Oid>
    <OidVal></OidVal>
    <Option></Option>
    <Drop></Drop>
</EventSnmpNotification>
<EventSyslog>
    <Priority></Priority>
    <Msg></Msg>
    <Occur></Occur>
    <Period></Period>
</EventSyslog>
<EventTrack>
    <TrackList></TrackList>
    <State></State>
    <SuppressTime></SuppressTime>
</EventTrack>
</CliPolicyEvent>
<CliPolicyActions>
    <CliPolicyAction>
        <ActionNum></ActionNum>
        <ActionContent>
            <ActionSyslog>
                <Priority></Priority>
                <Facility></Facility>
                <Msg></Msg>

```

```

        </ActionSyslog>
        <ActionReboot>
            <Reboot></Reboot>
            <Chassis></Chassis>
            <Slot></Slot>
            <SubSlot></SubSlot>
        </ActionReboot>
        <ActionSwitchover>
            <State></State>
        </ActionSwitchover>
        <ActionCli>
            <Command></Command>
        </ActionCli>
    </ActionContent>
</CliPolicyAction>
</CliPolicyActions>
<CliPolicyUserRoles>
    <CliPolicyUserRole>
        <UserRoleName></UserRoleName>
    </CliPolicyUserRole>
</CliPolicyUserRoles>
</CliPolicy>
</CliPolicys>
</EAA>

```

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicys
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CliPolicy	CliPolicy table	Sublist	N/A	For more information, see the EAA/CliPolicys/CliPolicy table.

# EAA/CliPolicys/CliPolicy

This table contains CLI policy information.

## XML structure

See the XML structure of EAA/CliPolicys

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicy
Table type	Multi-instance table
Row name	CliPolicy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CliPolicyName	CLI policy name	Index	String. Length: 1 to 63 characters.	N/A
RunningTime	Action execution timeout	N/A	Unsigned integer. Value range: 0 to 31536000	0 means never time out.
CliPolicyEvent	CliPolicyEvent information of the CLI policy name	Subtable	N/A	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyEvent table.
CliPolicyActions	CliPolicyActions information of the CLI policy name	Subtable	N/A	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions table.
CliPolicyUserRoles	CliPolicyUserRoles information of the CLI policy name	Subtable	N/A	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyUserRoles table.



# EAA/CliPolicys/CliPolicy/CliPolicyEvent

This table contains CLI policy information.

## XML structure

See the XML structure of EAA/CliPolicys

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicyEvent
Table type	Single-instance table
Row name	N/A
Restrictions	Event tables are mutually exclusive and can not occur at the same time.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EventCli	Cli event information of the CLI policy	Subtable	N/A	EventCli tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventCli table.
EventHotplug	Hotplug event information of the CLI policy name	Subtable	N/A	EventHotplug tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventHotplug table.
EventInterface	Interface event information of the CLI policy name	Subtable	N/A	EventInterface tables are mutually exclusive with other event tables.  For more information, see

Column name	Column description	Column type	Data type and restrictions	Remarks
				the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventInterface table.
EventProcess	Process event information of the CLI policy name	Subtable	N/A	EventProcess tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventProcess table.
EventSnmp	Snmp event information of the CLI policy name	Subtable	N/A	EventSnmp tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventSnmp table.
EventSnmpNotification	SnmpNotification event information of the CLI policy name	Subtable	N/A	EventSnmpNotification tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventSnmpNot ification table.
EventSyslog	Syslog event information of the CLI policy name	Subtable	N/A	EventSyslog tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventSyslog table.
EventTrack	Track event information of the CLI policy name	Subtable	N/A	EventTrack tables are mutually exclusive with other event tables.  For more information, see the EAA/CliPolycys/CliPolicy/Cli PolicyEvent/EventTrack

Column name	Column description	Column type	Data type and restrictions	Remarks
				table.

# EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventCli

This table contains EAA, CLI event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys

## Table description

Item	Description
Feature name	EAA
Table name	EventCli
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CliStatus	CLI type status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—sync.</li> <li>• <b>1</b>—async.</li> <li>• <b>2</b>—async-skip.</li> </ul>	N/A
Mode	CLI monitoring mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—tab.</li> <li>• <b>1</b>—help.</li> <li>• <b>2</b>—execute</li> </ul>	N/A
Pattern	Regular expression matching command line	N/A	String. Length: 1 to 512 characters.	The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.

# EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventHotplug

This table contains EAA, hotplug event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventHotplug
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HotplugStatus	Hotplug state	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—all.</li><li>• <b>1</b>—insert</li><li>• <b>2</b>—remove.</li></ul>	N/A
Chassis	Member ID of the member device where the entity resides	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SubSlot	SubSlot number of the slot	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

# EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventInterface

This table contains EAA, interface event, and monitor policy information.

# XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventInterface
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfList	List of interface items	N/A	Number string. It is a comma-separated list of interface items. An item can be an individual interface name or an interface range. Use a hyphen (-) to separate the start and end interface item of a range. The string cannot end with a comma or hyphen, or contain any spaces.	Up to 8 items can be entered. Example: null0,GigabitEthernet0/0/1-GigabitEthernet0/0/2.
MonitorObj	Monitoring object	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—input-errors.</li><li>• 1—output-errors.</li><li>• 2—input-drops.</li><li>• 3—output-drops.</li><li>• 4—rcv-broadcasts.</li><li>• 5—rcv-bps.</li><li>• 6—rcv-pps.</li><li>• 7—tx-bps.</li><li>• 8—tx-pps.</li><li>• 9—tx-kbps.</li><li>• 10—rcv-kbps.</li><li>• 11—tx-kpps.</li><li>• 12—rcv-kpps.</li></ul>	N/A
StartOp	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—gt.</li><li>• 1—ge.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 2—eq.</li> <li>• 3—ne.</li> <li>• 4—le.</li> <li>• 5—lt.</li> </ul>	
StartVal	Value of the monitored objects	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
RestartOp	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—gt.</li> <li>• 1—ge.</li> <li>• 2—eq.</li> <li>• 3—ne.</li> <li>• 4—le.</li> <li>• 5—lt.</li> </ul>	N/A
RestartVal	Value of the monitored objects	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Interval	Sampling period	N/A	Unsigned integer. Value range: 1 to 4294967295.	The default value is 300.

## EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventProcess

This table contains EAA, process event, and monitor policy information.

### XML structure

See the XML structure of EAA/CliPolicys.

### Table description

Item	Description
Feature name	EAA
Table name	EventProcess
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProcessType	Process type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—start.</li><li>• 1—shutdown.</li><li>• 2—restart.</li><li>• 3—exception.</li></ul>	N/A
Name	Process name	N/A	String.  Length: 1 to 63 characters.	N/A
Instance	Process ID	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Chassis	Member ID of the member device where the entity resides	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSnmp

This table contains EAA, SNMP event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventSnmp
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Oid	SNMP OID	N/A	String. Length: 1 to 256 characters.	N/A
Monitor	Monitor object	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—get.</li> <li>2—get-next.</li> </ul>	N/A
StartOp	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—gt.</li> <li>1—ge.</li> <li>2—eq.</li> <li>3—ne.</li> <li>4—le.</li> <li>5—lt.</li> </ul>	N/A
StartVal	Value of the monitored objects	N/A	String. Length: 1 to 512 characters.	N/A
RestartOp	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—gt.</li> <li>1—ge.</li> <li>2—eq.</li> <li>3—ne.</li> <li>4—le.</li> <li>5—lt.</li> </ul>	N/A
RestartVal	Value of the monitored objects	N/A	String. Length: 1 to 512 characters.	N/A
Interval	Sampling period	N/A	Unsigned integer. Value range: 1 to 4294967295.	The default value is 300.

## EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSnmpNotification

This table contains EAA, SNMP notification event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys.



## Table description

Item	Description
Feature name	EAA
Table name	EventSnmpNotification
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Oid	Trap SNMP OID	N/A	String. Length: 1 to 256 characters.	N/A
OidVal	OID value	N/A	String. Length: 1 to 512 characters.	N/A
Option	Comparison operator	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—gt.</li><li>• <b>1</b>—ge.</li><li>• <b>2</b>—eq.</li><li>• <b>3</b>—ne.</li><li>• <b>4</b>—le.</li><li>• <b>5</b>—lt.</li></ul>	N/A
Drop	Drop trap	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>false</b> (default).</li><li>• <b>true</b>.</li></ul>	This column must be empty.

## EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventSyslog

This table contains EAA, Syslog event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventSyslog
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Priority	Log level	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—LOG_EMERG.</li><li>• 1—LOG_ALERT.</li><li>• 2—LOG_CRIT.</li><li>• 3—LOG_ERR.</li><li>• 4—LOG_WARNING.</li><li>• 5—LOG_NOTICE.</li><li>• 6—LOG_INFO.</li><li>• 7—LOG_DEBUG.</li><li>• 8—ALL.</li></ul>	N/A
Msg	Regular expression matching Syslog message	N/A	String. Length: 1 to 255 characters.	N/A
Occur	Occurrences	N/A	Unsigned integer. Value range: 1 to 32.	N/A
Period	Time range is seconds	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A

## EAA/CliPolicys/CliPolicy/CliPolicyEvent/EventTrack

This table contains EAA, track event, and monitor policy information.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	EventTrack
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TrackList	List of track items	N/A	Number string. It is a comma-separated list of track items. An item can be an individual track ID or a track ID range. Use a hyphen (-) to separate the start and end track item of a range. The string cannot end with a comma or hyphen, or contain any spaces.	The track list is in the range of 1 to 1024. Up to 16 items can be entered. Example: 1,2,3,5-8,10-20.
State	Monitor change status of track items	N/A	Enumeration: <ul style="list-style-type: none"><li>1-positive.</li><li>2-negative.</li></ul>	N/A
SuppressTime	Suppress time	N/A	Unsigned integer.	The default value is 0.

## EAA/CliPolicys/CliPolicy/CliPolicyActions

This table contains information about the CLI policy action.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicyActions

Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CliPolicyAction	CliPolicyAction information	Sublist	N/A	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction table

## EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction

This table contains information about the CLI policy action.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicyAction
Table type	Multi-instance table
Row name	CliPolicyAction
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ActionNum	Action number	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 231	
ActionContent	Action content	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent table.

## EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent

This table contains information about the CLI policy action.

### XML structure

See the XML structure of EAA/CliPolicys.

### Table description

Item	Description
Feature name	EAA
Table name	ActionContent
Table type	Single-instance table
Row name	N/A
Restrictions	Action operations are mutually exclusive and only one type of action exists in the current table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ActionSyslog	Syslog action	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<p>CliPolicyActionSyslog tables are mutually exclusive with other action tables.</p> <p>For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSyslog table.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
ActionReboot	Reboot action	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<p>CliPolicyActionReboot tables are mutually exclusive with other action tables.</p> <p>For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionReboot table.</p>
ActionSwitchover	Switchover action	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<p>CliPolicyActionSwitchover tables are mutually exclusive with other action tables.</p>
ActionCli	CLI action	Subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<p>CliPolicyActionCli tables are mutually exclusive with other action tables.</p> <p>For more information, see the EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionCli table.</p>

## EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSyslog

This table contains information about the CLI policy action.

### XML structure

See the XML structure of EAA/CliPolicys.

### Table description

Item	Description
Feature name	EAA
Table name	ActionSyslog
Table type	Single-instance table
Row name	N/A
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Priority	Log level	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—LOG_EMERG.</li> <li>• 1—LOG_ALERT.</li> <li>• 2—LOG_CRIT.</li> <li>• 3—LOG_ERR.</li> <li>• 4—LOG_WARNING.</li> <li>• 5—LOG_NOTICE.</li> <li>• 6—LOG_INFO.</li> <li>• 7—LOG_DEBUG.</li> </ul>	N/A
Facility	Logging facility used by the log host	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 128—local0.</li> <li>• 136—local1.</li> <li>• 144—local2.</li> <li>• 152—local3.</li> <li>• 160—local4.</li> <li>• 168—local5.</li> <li>• 176—local6.</li> <li>• 184—local7.</li> </ul>	N/A
Msg	Output log contents	N/A	String. Length: 1 to 512 characters.	The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.

## EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionReboot

This table contains information about the CLI policy action.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	ActionReboot
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Reboot	Reboot operation	N/A	EnableState: <b>enable.</b>	N/A
Chassis	Member ID of the member device where the entity resides	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SubSlot	SubSlot number of the slot	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## EAA/CliPolicys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionSwitchover

This table contains information about the switchover policy action.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA



Table name	ActionSwitchover
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
State	state of switchover	N/A	EnableState: • <b>enable.</b>	N/A

## EAA/CliPolycys/CliPolicy/CliPolicyActions/CliPolicyAction/ActionContent/ActionCli

This table contains information about the CLI policy action.

## XML structure

See the XML structure of EAA/CliPolycys.

## Table description

Item	Description
Feature name	EAA
Table name	ActionCli
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Command	Command line	N/A	String.  Length: 1 to 512 characters.	The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.

# EAA/CliPolicys/CliPolicy/CliPolicyUserRoles

This table contains CLI policy information.

## XML structure

See the XML structure of EAA/CliPolicys.

## Table description

Item	Description
Feature name	EAA
Table name	CliPolicyUserRoles
Table type	Multi-instance table
Row name	CliPolicyUserRole
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserRoleName	CLI policy user role name	N/A	String. Length: 1 to 63 characters.	This column may not occur which mean no user role have set yet, or can repeat of up to 64.

# EAA/ScriptPolicys

This table contains Tcl policy information.

## XML structure

```
<EAA>
  <ScriptPolicys>
    <ScriptPolicy>
      <ScriptType></ScriptType>
      <PolicyName></PolicyName>
      <PolicyFile></PolicyFile>
    </ScriptPolicy>
  </ScriptPolicys>
</EAA>
```

## Table description

Item	Description
Feature name	EAA
Table name	ScriptPolicys
Table type	Multi-instance table
Row name	ScriptPolicy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ScriptType	script policy type	Index	Enumeration: <ul style="list-style-type: none"><li>2—RTM_POLICYTYPE.</li></ul>	The script currently supported isTCL script, later may support other scripts.
PolicyName	script policy name	Index	String. Length: 1 to 63 characters.	N/A
PolicyFile	Script policy file	N/A	String. Length: 1 to 512 characters.	<p>The script currently supported isTCL script, later may support other scripts.</p> <p>The TCL file suffix must be ".tcl".</p> <p>TCL filename is case sensitive.</p> <p>The TCL file must be a file on the device storage medium.</p> <p>The actual length must be compatible with command line configuration. Users are required to ensure the validity of the length.</p>

## EAA/ActivePolicy

This table contains information about the active policy.

## XML structure

```
<EAA>
  <ActivePolicys>
    <ActivePolicy>
      <JobID></JobID>
      <PolicyName></PolicyName>
      <PolicyType></PolicyType>
      <EventType></EventType>
      <TimeActive></TimeActive>
    </ActivePolicy>
  </ActivePolicys>
</EAA>
```

## Table description

Item	Description
Feature name	EAA
Table name	ActivePolicys
Table type	Multi-instance table
Row name	ActivePolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
JobID	Job id	Index	Unsigned integer. Value range: 1 to 2147483647.	N/A
PolicyName	policy name	N/A	String. Length: 1 to 63 characters.	Monitoring strategy for executing action command.
PolicyType	Policy type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—CLI.</li><li>• 2—TCL.</li></ul>	N/A
EventType	Event type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—PROCESS.</li><li>• 1—INTERFACE.</li><li>• 2—HOTPLUG.</li><li>• 3—SYSLOG.</li><li>• 4—CLI.</li><li>• 5—SNMP.</li><li>• 6—SNMP_NOTIF.</li><li>• 7—TRACK.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>8—EMPTY</li> </ul>	
TimeActive	Active time	N/A	String. Length: 1 to 63 characters.	N/A

## EAA/RegisteredPolicy

This table contains information about the registered policy.

### XML structure

```

<EAA>
  <RegisteredPolicys>
    <RegisteredPolicy>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <EventType></EventType>
      <TimeRegistered></TimeRegistered>
      <PolicyUserRole>
        <UserRoleName></UserRoleName>
      </PolicyUserRole>
    </RegisteredPolicy>
  </RegisteredPolicys>
</EAA>

```

### Table description

Item	Description
Feature name	EAA
Table name	RegisteredPolicy
Table type	Multi-instance table
Row name	RegisteredPolicy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—CLI.</li> <li>2—TCL.</li> </ul>	N/A
PolicyName	policy name	Index	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 63 characters.	
EventType	Event type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—PROCESS.</li> <li>• 1—INTERFACE.</li> <li>• 2—HOTPLUG.</li> <li>• 3—SYSLOG.</li> <li>• 4—CLI.</li> <li>• 5—SNMP.</li> <li>• 6—SNMP_NOTIF.</li> <li>• 7—TRACK.</li> <li>• 8—EMPTY</li> </ul>	N/A
TimeRegistered	Registered time	N/A	String. Length: 1 to 63 characters.	N/A
PolicyUserRole	User role of a registration police.	Data structure	Members include: <ul style="list-style-type: none"> <li>• UserRoleName</li> </ul>	Multi-instance. The device can configure 64 effective user roles.
UserRoleName	Policy user role name	N/A	String. Length: 1 to 63 characters.	This column may not occur which mean no user role have set yet, or can repeat of up to 64.

# Contents

EPS .....	1
EPS/EPSEnable .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
EPS/EPSServerConfigure .....	2
XML structure .....	2
Table description .....	2
Columns .....	2

## EPS

### EPS/EPSEnable

This table contains EPS agent enabling information.

#### XML structure

```
<EPS>
  <EPSEnable>
    <AgentEnable></AgentEnable>
  </EPSEnable>
</EPS>
```

#### Table description

Item	Description
Feature name	EPS
Table name	EPSEnable
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AgentEnable	Enable EPS agent.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Disable (default).</li><li>• 1—Enable.</li></ul>	N/A

## EPS/EPSServerConfigure

This table contains EPS server configuration information.

## XML structure

```
<EPS>
  <EPSServerConfigure>
    <IPv4Address></IPv4Address>
    <PortNumber></PortNumber>
    <KeyType></KeyType>
    <KeyValue></KeyValue>
    <LogLevelValue></LogLevelValue>
    <UseServerSetting></UseServerSetting>
  </EPSServerConfigure>
</EPS>
```

## Table description

Item	Description
Feature name	EPS
Table name	EPSServerConfigure
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns



<b>C o l u m n n a m e</b>	<b>Colu mn descri ption</b>	<b>C o l u m n t y p e</b>	<b>Data type and restrictions</b>	<b>Remarks</b>
IPv4Address	IP address of the EPS server.	N/A	String, dotted decimal notation.	N/A
PortNumber	Port number of the EPS server.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
KeyType	Type of the key for communication between EPS agent and EPS server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Simple.</li> <li>• 1—Cipher.</li> </ul>	Optional.
KeyValue	Key for communication between EPS agent and EPS server.	N/A	String, case insensitive. Length of cipher key: 1 to 65 characters. Length of simple key: 1 to 24 characters.	Optional. Specify a cipher key or simple key depending on KeyType.
LogLevelValue	Level of log information output to the EPS server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Serious.</li> <li>• 1—Error.</li> <li>• 2—Warning.</li> <li>• 3—Hint.</li> <li>• 4—Debug.</li> <li>• 5—High debug.</li> </ul>	Optional.
UseServerSetting	Whether the EPS agent uses the values of the global parameters configured by the EPS server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Use.</li> </ul>	Optional.

# Contents

EPS .....	1
EPS/EPSEnterpriseEnable .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
EPS/EPSEnterpriseConfigure .....	1
XML structure .....	2
Table description .....	2
Columns .....	2

# EPS

## EPS/EPSSAgentEnable

This table contains EPS agent enabling information.

### XML structure

```
<EPS>
  <EPSSAgentEnable>
    <AgentEnable></AgentEnable>
  </EPSSAgentEnable>
</EPS>
```

### Table description

Item	Description
Feature name	EPS
Table name	EPSSAgentEnable
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AgentEnable	Enable the EPS agent.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable (default).</li><li>• <b>1</b>—Enable.</li></ul>	N/A

## EPS/EPSSServerConfigure

This table contains EPS server configuration information.

## XML structure

```
<EPS>
  <EPSServerConfigure>
    <IPv4Address></IPv4Address>
    <PortNumber></PortNumber>
    <KeyType></KeyType>
    <KeyValue></KeyValue>
    <LogLevelValue></LogLevelValue>
    <UseServerSetting></UseServerSetting>
  </EPSServerConfigure>
</EPS>
```

## Table description

Item	Description
Feature name	EPS
Table name	EPSServerConfigure
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

C o l u m n n a m e	Column description	Column type	Data type and restrictions	Remarks
IPv4Addresses	IP address of the EPS server.	N/A	String, dotted decimal notation.	N/A
PortNumber	Port number of the EPS server.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
KeyType	Type of the key for communication between EPS agent and EPS server.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Simple.</li><li>• 1—Cipher.</li></ul>	Optional.

C o l u m n n a m e	Column description	Column type	Data type and restrictions	Remarks
KeyValue	Key for communication between EPS agent and EPS server.	N/A	String, case insensitive. Length of cipher key: 1 to 65 characters. Length of simple key: 1 to 24 characters.	Optional. Specify a cipher key or simple key depending on KeyType.
LogLevelValue	Level of log information output to the EPS server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Serious.</li> <li>• 1—Error.</li> <li>• 2—Warning.</li> <li>• 3—Hint.</li> <li>• 4—Debug.</li> <li>• 5—High debug.</li> </ul>	Optional.
UseServerSetting	Whether the EPS agent uses the values of the global parameters configured by the EPS server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Use.</li> </ul>	Optional.

# Contents

EPS .....1

    EPS/EPSServerConfigure.....1

    EPS/EPSServerConfigure.....1

# EPS

## EPS/EPSSAgentEnable

Message	Explanation
Failed to enable the EPS agent. 启动EPS Agent功能失败。	Failed to enable the EPS agent. Please try again. 启动EPS Agent功能失败，请稍后重试。

## EPS/EPSSServerConfigure

Message	Explanation
Failed to save configuration. 保存配置失败。	Failed to save configuration. Please try again. 保存配置失败，请重新保存。
Invalid IP address. 非法的IP地址。	Invalid IP address configuration. 非法的IP地址配置。
Invalid key. 非法的密钥。	Invalid key configuration. 非法的密钥配置。
Failed to restore the default configuration. 恢复缺省配置失败。	Please input all configured columns. 请输入所有已配置的列。
Please input IP address. 请输入IP地址。	IP address is a required configuration parameter. IP地址是必选配置参数。
Please input port number. 请输入端口号。	Port number is a required configuration parameter. 端口号是必选配置参数。
Please input key type. 请输入密钥类型。	Key and key type have to be inputted together. 密钥和密钥类型需要一同输入。
Please input key. 请输入密钥。	Key and key type have to be inputted together. 密钥和密钥类型需要一同输入。

# Contents

ETH .....	1
ETH/SubInterfaces .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ETH/VlanQinQTermination .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
ETH/UnderlayForwardBypass .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
ETH/EthIfMacAddress .....	5
XML structure .....	5
Table description .....	6
Columns .....	6



# ETH

## ETH/SubInterfaces

This table contains VLAN termination information.

### XML structure

```
<ETH>
  <SubInterfaces>
    <SubInterface>
      <IfIndex></IfIndex>
      <EncapType></EncapType>
      <VlanID></VlanID>
      <FirstVlanList></FirstVlanList>
      <EncapFlag></EncapFlag>
      <IsUserVlanMode></IsUserVlanMode>
    </SubInterface>
  </SubInterfaces>
</ETH>
```

### Table description

Item	Description
Feature name	ETH
Table name	SubInterfaces
Table type	Multi-instance table
Row name	SubInterface
Restrictions	No
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.

Column name	Column description	Column type	Data type and restrictions	Remarks
EncapType	VLAN termination type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Dot1q unambiguous.</li> <li>2—Dot1q ambiguous.</li> <li>5—Untagged.</li> <li>6—Default.</li> </ul>	N/A
VlanID	Outermost VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094	Outermost VLAN tag for unambiguous VLAN termination. Used when the "EncapType" column is 1.
FirstVlanList	Outermost VLAN ID list	N/A	String.	Specifies a space-separated VLAN ID list items. Each item specifies a VLAN ID or a range of VLAN IDs in the form of <i>vlan-id1</i> to <i>vlan-id2</i> . The value range for VLAN IDs is 1 to 4094. The value for the <i>vlan-id2</i> argument must be equal to or greater than the value for the <i>vlan-id1</i> argument. Used when the "EncapType" column is 2.
EncapFlag	Configures the subinterface to terminate packets that include one or more layers of VLAN tags	N/A	Unsigned integer. Value range: 0 to 1	<ul style="list-style-type: none"> <li>0—STRICT</li> <li>1—LOOSE</li> </ul>
IsUserVlanMode	VLAN termination mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—user-vlan.</li> <li>false—vlan-type.</li> </ul>	Some version might not support this column.

## ETH/VlanQinQTermination

This table contains QinQ VLAN termination information.

### XML structure

```
<ETH>
  <VlanQinQTermination>
```

```

<QinqTermination>
  <IfIndex></IfIndex>
  <VlanID></VlanID>
  <SecondVlan></SecondVlan>
  <QinqAny></QinqAny>
  <EncapFlag></EncapFlag>
  <IsUserVlanMode></IsUserVlanMode>
</QinqTermination>
</VlanQinqTermination>
</ETH>

```

## Table description

Item	Description
Feature name	ETH
Table name	VlanQinqTermination
Table type	Multi-instance table
Row name	QinqTermination
Restrictions	No
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
VlanID	Layer 1 VLAN ID	Index	Unsigned integer. Value range: 1 to 4094	N/A
SecondVlan	Layer 2 VLAN ID or VLAN ID list	N/A	String.	Specifies a space-separated VLAN ID list items. Each item specifies a VLAN ID or a range of VLAN IDs in the form of <i>vlan-id1</i> to <i>vlan-id2</i> . The value range for VLAN IDs is 1 to 4094. The value for the <i>vlan-id2</i> argument must be equal to or greater than the value for the <i>vlan-id1</i>

Column name	Column description	Column type	Data type and restrictions	Remarks
				argument. Note: The “SecondVlan” column and the “QinqAny” column cannot be configured at the same time.
QinqAny	Specifies all values between 1 and 4094	N/A	Unsigned integer. Value range: 1	Note: The “SecondVlan” column and the “QinqAny” column cannot be configured at the same time.
EncapFlag	Configures the subinterface to receive and terminate packets that include two or more layers of VLAN tags	N/A	Unsigned integer. Value range: 0 to 1	<ul style="list-style-type: none"> <li>• <b>0</b>—STRICT</li> <li>• <b>1</b>—LOOSE</li> </ul>
IsUserVlanMode	VLAN termination mode	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—user-vlan.</li> <li>• <b>false</b>—vlan-type.</li> </ul>	Some versions might not support this column.

## ETH/UnderlayForwardBypass

This table contains underlay forward bypass information.

### XML structure

```

<ETH>
  <UnderlayForwardBypass>
    <Bypass>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </Bypass>
  </UnderlayForwardBypass>
</ETH>

```

### Table description

Item	Description
Feature name	ETH
Table name	UnderlayForwardBypass
Table type	Multi-instance table

Item	Description
Row name	Bypass
Restrictions	No
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 physical interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Enable	Specifies the action of whether or not to bypass the VXLAN packets from ETH.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable the function.</li> <li><b>false</b>—Disable the function.</li> </ul>	N/A

## ETH/EthIfMacAddress

This table contains Ethernet interface MAC address information.

## XML structure

```

<ETH>
  <EthIfMacAddress>
    <IfMacAddress>
      <IfIndex></IfIndex>
      <MacAddress></MacAddress>
    </IfMacAddress>
  </EthIfMacAddress>
</ETH>

```

## Table description

Item	Description
Feature name	ETH
Table name	EthIfMacAddress
Table type	Multi-instance table
Row name	IfMacAddress
Restrictions	No
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

# Contents

ETH .....	1
ETH/SubInterfaces .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ETH/ETHSpecification .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
ETH/VlanQinQTermination .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
ETH/UnderlayForwardBypass .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
ETH/EthIfMacAddress .....	6
XML structure .....	6
Table description .....	6
Columns .....	6

# ETH

## ETH/SubInterfaces

This table contains VLAN termination information.

### XML structure

```
<ETH>
  <SubInterfaces>
    <SubInterface>
      <IfIndex></IfIndex>
      <EncapType></EncapType>
      <VlanID></VlanID>
      <FirstVlanList></FirstVlanList>
      <EncapFlag></EncapFlag>
      <IsUserVlanMode></IsUserVlanMode>
    </SubInterface>
  </SubInterfaces>
</ETH>
```

### Table description

Item	Description
Feature name	ETH
Table name	SubInterfaces
Table type	Multi-instance table
Row name	SubInterface
Restrictions	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.



Column name	Column description	Column type	Data type and restrictions	Remarks
EncapType	VLAN termination type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Dot1q unambiguous.</li> <li>2—Dot1q ambiguous.</li> <li>3—Qinq unambiguous.</li> <li>4—Qinq ambiguous.</li> <li>5—Untagged.</li> <li>6—Default.</li> </ul>	N/A
VlanID	Outermost VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094	Outermost VLAN tag for unambiguous VLAN termination.
FirstVlanList	Outermost VLAN ID list	N/A	String.	A range of outermost VLAN IDs.
EncapFlag	Configures the subinterface to terminate packets that include one or more layers of VLAN tags	N/A	Unsigned integer. Value range: 0 to 1	<ul style="list-style-type: none"> <li>0—STRICT</li> <li>1—LOOSE</li> </ul>
IsUserVlanMode	VLAN termination mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—user-vlan.</li> <li>false—vlan-type.</li> </ul>	Some versions might not support this column.

## ETH/ETHSpecification

This table contains VLAN termination support information.

### XML structure

```

<ETH>
  <ETHSpecification>
    <SupportDot1q></SupportDot1q>
    <SupportQinq></SupportQinq>
    <SupportUntagged></SupportUntagged>
    <SupportDefault></SupportDefault>
    <SupportLoose></SupportLoose>
  </ETHSpecification>
</ETH>

```

### Table description

Item	Description
Feature name	ETH

Table name	ETHSpecification
Table type	Multi-instance table
Row name	N/A
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions
SupportDot1q	Whether Dot1q termination is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
SupportQinq	Whether Qinq termination is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
SupportUntagged	Whether Untagged termination is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
SupportDefault	Whether Default termination is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
SupportLoose	Whether the subinterface supports terminating packets that include one or more layers of VLAN tags.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>

## ETH/VlanQinQTermination

This table contains QinQ VLAN termination information.

## XML structure

```

<ETH>
  <VlanQinQTermination>
    <QinqTermination>
      <IfIndex></IfIndex>
      <VlanID></VlanID>
      <SecondVlan></SecondVlan>
      <QinqAny></QinqAny>
      <EncapFlag></EncapFlag>
      <IsUserVlanMode></IsUserVlanMode>
    </QinqTermination>
  </VlanQinQTermination>
</ETH>

```

## Table description

Item	Description
Feature name	ETH
Table name	VlanQinQTermination
Table type	Multi-instance table
Row name	QinqTermination
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
VlanID	Layer 1 VLAN ID	Index	Unsigned integer. Value range: 1 to 4094	N/A
SecondVlan	Layer 2 VLAN ID or VLAN ID list	N/A	String.	Specifies a space-separated VLAN ID list items. Each item specifies a VLAN ID or a range of VLAN IDs in the form of <i>vlan-id1</i> to <i>vlan-id2</i> . The value range for VLAN IDs is 1 to 4094. The value for the <i>vlan-id2</i> argument must be equal to or greater than the value for the <i>vlan-id1</i> argument.  Note: The "SecondVlan" column and the "QinqAny" column cannot be configured at the same time.
QinqAny	Specifies all values between 1 and 4094	N/A	Unsigned integer. Value range: 1	Note: The "SecondVlan" column and the "QinqAny" column cannot be configured at the same time.

Column name	Column description	Column type	Data type and restrictions	Remarks
EncapFlag	Configures the subinterface to receive and terminate packets that include two or more layers of VLAN tags	N/A	Unsigned integer. Value range: 0 to 1	<ul style="list-style-type: none"> <li>• <b>0</b>—STRICT</li> <li>• <b>1</b>—LOOSE</li> </ul>
IsUserVlanMode	VLAN termination mode	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—user-vlan.</li> <li>• <b>false</b>—vlan-type.</li> </ul>	Some versions might not support this column.

## ETH/UnderlayForwardBypass

This table contains underlay forward bypass information.

### XML structure

```

<ETH>
  <UnderlayForwardBypass>
    <Bypass>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </Bypass>
  </UnderlayForwardBypass>
</ETH>

```

### Table description

Item	Description
Feature name	ETH
Table name	UnderlayForwardBypass
Table type	Multi-instance table
Row name	Bypass
Restrictions	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 physical interfaces are supported. Some versions support interface name. For relevant

Column name	Column description	Column type	Data type and restrictions	Remarks
				information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Enable	Specifies the action of whether or not to bypass the VXLAN packets from ETH.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable the function.</li> <li><b>false</b>—Disable the function.</li> </ul>	N/A

## ETH/EthIfMacAddress

This table contains Ethernet interface MAC address information.

### XML structure

```

<ETH>
  <EthIfMacAddress>
    <IfMacAddress>
      <IfIndex></IfIndex>
      <MacAddress></MacAddress>
    </IfMacAddress>
  </EthIfMacAddress>
</ETH>

```

### Table description

Item	Description
Feature name	ETH
Table name	EthIfMacAddress
Table type	Multi-instance table
Row name	IfMacAddress
Restrictions	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant

Column name	Column description	Column type	Data type and restrictions	Remarks
				information, see the XSD document of your product.
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

# Contents

ETH/EthIfMacAddress.....2

# ETH/EthIfMacAddress

Message	Explanation
The MAC address is invalid. MAC地址非法。	The MAC address is invalid. MAC 地址非法。
The MAC address is reserved. 该MAC地址为保留MAC地址。	The MAC address is reserved. 该MAC地址为保留MAC地址。
The configuration is not supported on the interface. 此接口不支持该配置。	The configuration is not supported on the interface. 此接口不支持该配置。
The configuration is not supported on the interface because it is a shared port. 此接口为共享端口，不支持该配置。	The configuration is not supported on the interface because it is a shared port. 此接口为共享端口，不支持该配置。
The configuration is not supported on the interface because its host interface is a shared port. 此接口的主机端口为共享端口，不支持该配置。	The configuration is not supported on the interface because its host interface is a shared port. 此接口的主机端口为共享端口，不支持该配置。
Invalid MAC address: This address must have the same higher 36 bits as the base MAC address. MAC地址非法：MAC地址高36位取值必须和MAC基地址相同。	Invalid MAC address: This address must have the same higher 36 bits as the base MAC address. MAC地址非法：MAC地址高36位取值必须和MAC基地址相同。
Invalid MAC address: This address must be higher than or equal to the base MAC address plus 90 (decimal). MAC地址非法：MAC地址必须大于等于MAC基地址的值加上90。	Invalid MAC address: This address must be higher than or equal to the base MAC address plus 90 (decimal). MAC地址非法：MAC地址必须大于等于MAC基地址的值加上90。
The MAC address conflicts with existing configuration. Please specify another MAC address. MAC地址与当前配置冲突，请指定其他MAC地址。	The MAC address conflicts with existing configuration. Please specify another MAC address. MAC地址与当前配置冲突，请指定其他MAC地址。



# Contents

- FCFabric .....1
  - FCFabric/SmartSANStatus .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# FCFabric

## FCFabric/SmartSANStatus

This table contains the status of Smart SAN for FC/FCoE and iSCSI.

### XML structure

```
<FCFabric>
  <SmartSANStatus>
    <FCoEStatus></FCoEStatus>
    <iSCSIStatus></iSCSIStatus>
  </SmartSANStatus>
</FCFabric>
```

### Table description

Item	Description
Feature name	FCFabric
Table name	SmartSANStatus
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
FCoEStatus	Status of Smart SAN for FC/FCoE.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled.</li><li>false—Disabled(default).</li></ul>
iSCSIStatus	Status of Smart SAN for iSCSI.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled.</li><li>false—Disabled(default).</li></ul>

# Contents

- FCFabric .....1
  - FCFabric/SmartSANStatus .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# FCFabric

## FCFabric/SmartSANStatus

This table contains the status of Smart SAN for FC/FCoE and iSCSI.

### XML structure

```
<FCFabric>
  <SmartSANStatus>
    <FCoEStatus></FCoEStatus>
    <iSCSIStatus></iSCSIStatus>
  </SmartSANStatus>
</FCFabric>
```

### Table description

Item	Description
Feature name	FCFabric
Table name	SmartSANStatus
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
FCoEStatus	Status of Smart SAN for FC/FCoE.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled.</li><li>false—Disabled.</li></ul>
iSCSIStatus	Status of Smart SAN for iSCSI.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled.</li><li>false—Disabled.</li></ul>

# Contents

- FCLink .....1
  - FCLink/PortEntryInfo .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# FCLink

## FCLink/PortEntryInfo

This table contains information about a port.

### XML structure

```
<FCLink>
  <PortEntryInfo>
    <EntryInfo>
      <IfIndex></IfIndex>
      <PortWwn></PortWwn>
    </EntryInfo>
  </PortEntryInfo>
</FCLink>
```

### Table description

Item	Description
Feature name	FCLink
Table name	PortEntryInfo
Table type	Multi-instance table
Row name	EntryInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
PortWwn	WWN of the port.	N/A	Eight groups of two hexadecimal digits, colon-separated.	Example: 50:01:43:80:12:09:54:f4.

# Contents

- FCZone.....1
  - FCZone/ZoneStatus .....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# FCZone

## FCZone/ZoneStatus

This table contains zone status information in a VSAN.

### XML structure

```
<FCZone>
  <ZoneStatus>
    <StatusInfo>
      <VSANID></VSANID>
      <DefaultZoneStatus></DefaultZoneStatus>
      <Mode></Mode>
    </StatusInfo>
  </ZoneStatus>
</FCZone>
```

### Table description

Item	Description
Feature name	FCZone
Table name	ZoneStatus
Table type	Multi-instance table
Row name	StatusInfo
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
VSANID	VSAN ID.	Index	Unsigned integer. Value range: 1 to 3839.
DefaultZoneStatus	Default zone status.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Deny(default).</li><li>2—Permit.</li></ul>
Mode	Zoning mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Basic zoning(default).</li><li>2—Enhanced zoning.</li></ul>



# Contents

FCZone.....	1
FCZone/ZoneStatus .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
FCZone/ActiveZones .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
FCZone/ActiveZoneMembers .....	3
XML structure.....	3
Table description.....	3
Columns.....	4

# FCZone

## FCZone/ZoneStatus

This table contains zone status information in a VSAN.

### XML structure

```
<FCZone>
  <ZoneStatus>
    <StatusInfo>
      <VSANID></VSANID>
      <DefaultZoneStatus></DefaultZoneStatus>
      <Mode></Mode>
    </StatusInfo>
  </ZoneStatus>
</FCZone>
```

### Table description

Item	Description
Feature name	FCZone
Table name	ZoneStatus
Table type	Multi-instance table
Row name	StatusInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VSANID	VSAN ID.	Index	Unsigned integer. Value range: 1 to 3839.	N/A
DefaultZoneStatus	Default zone status.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Deny.</li><li>2—Permit.</li></ul>	N/A
Mode	Zoning mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Basic zoning.</li><li>2—Enhanced zoning.</li></ul>	N/A

# FCZone/ActiveZones

This table contains zone information about the active zone set in a VSAN.

## XML structure

```
<FCZone>
  <ActiveZones>
    <ActiveZone>
      <VSANID></VSANID>
      <ZoneName></ZoneName>
      <ZoneSetName></ZoneSetName>
      <ZoneType></ZoneType>
    </ActiveZone>
  </ActiveZones>
</FCZone>
```

## Table description

Item	Description
Feature name	FCZone
Table name	ActiveZones
Table type	Multi-instance table
Row name	ActiveZone
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VSANID	VSAN ID.	Index	Unsigned integer. Value range: 1 to 3839.	N/A
ZoneName	Name of the zone.	Index	String. Length: 1 to 64 characters.	The first character of a given name must be a letter. Any character other than the first character can be a lowercase character (a-z), an uppercase character (A-Z), a number (0-9), or one of the following symbols (\$-^_).
ZoneSetName	Name of the zone set.	N/A	String. Length: 1 to 64 characters.	The first character of a given name must be a letter. Any character other than the first character can be a

Column name	Column description	Column type	Data type and restrictions	Remarks
				lowercase character (a-z), an uppercase character (A-Z), a number (0-9), or one of the following symbols (\$^_).
ZoneType	Zone type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Base zone.</li> <li>2—Peer zone.</li> </ul>	N/A

## FCZone/ActiveZoneMembers

This table contains zone member information about the active zone set in a VSAN.

### XML structure

```

<FCZone>
  <ActiveZoneMembers>
    <ActiveZoneMember>
      <VSANID></VSANID>
      <ZoneName></ZoneName>
      <ZoneMemberIndex></ZoneMemberIndex>
      <ZoneMemberLoginFlag></ZoneMemberLoginFlag>
      <ZoneMemberPrincipalFlag></ZoneMemberPrincipalFlag>
      <ZoneMemberType></ZoneMemberType>
      <ZoneMemberFCID></ZoneMemberFCID>
      <ZoneMemberWWN></ZoneMemberWWN>
      <ZoneMemberRole></ZoneMemberRole>
    </ActiveZoneMember>
  </ActiveZoneMembers>
</FCZone>

```

### Table description

Item	Description
Feature name	FCZone
Table name	ActiveZoneMembers
Table type	Multi-instance table
Row name	ActiveZoneMember
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VSANID	VSAN ID.	Index	Unsigned integer. Value range: 1 to 3839.	N/A
ZoneName	Name of the zone.	Index	String. Length: 1 to 64 characters.	The first character of a given name must be a letter. Any character other than the first character can be a lowercase character (a-z), an uppercase character (A-Z), a number (0-9), or one of the following symbols (\$^_).
ZoneMemberIndex	Index of the zone member.	Index	Unsigned integer.	N/A
ZoneMemberLoginFlag	Whether the zone member can be found in the local name server database.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A.
ZoneMemberPrincipalFlag	Whether the zone member is a principal member in a peer zone.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	This column is displayed only when the zone type is peer zone.
ZoneMemberType	Zone member type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PWWN.</li> <li>3—FCID.</li> <li>6—FWWN.</li> </ul>	N/A.
ZoneMemberFCID	FC address of the zone member.	N/A	Hexadecimal representation of the three bytes.	This column is displayed only when the ZoneMemberType column is 3. Example: 050012.
ZoneMemberWWN	WWN of the zone member.	N/A	Eight groups of two hexadecimal digits, colon-separated.	This column is displayed only when the ZoneMemberType column is 1 or 6. Example: 11:11:11:11:11:11:11:12.
ZoneMemberRole	Role of the zone member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—initiator and target.</li> <li>1—initiator.</li> <li>2—target.</li> </ul>	N/A.

# Contents

- FDMI .....1
  - FDMI/RDPIInterval.....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# FDMI

## FDMI/RDPInterval

This table contains configurations of the interval for sending RDP request packets.

### XML structure

```
<FDMI>
  <RDPInterval>
    <Interval></Interval>
  </RDPInterval>
</FDMI>
```

### Table description

Item	Description
Feature name	FDMI
Table name	RDPInterval
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interval	Interval for sending RDP request packet	N/A	Unsigned integer. Value range: 5 to 1440.	The default value is 30 minutes.

# Contents

FDMI .....	1
FDMI/HBAAttributes .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
FDMI/PortAttributes .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
FDMI/DiagnosticParameterDescriptors .....	7
XML structure .....	7
Table description .....	10
Columns .....	11
FDMI/RDPIInterval .....	27
XML structure .....	27
Table description .....	27
Columns .....	27



# FDMI

## FDMI/HBAAttributes

This table contains the HBA(Host Bus Adapter) attribute descriptions.

### XML structure

```
<FDMI>
  <HBAAttributes>
    <Attribute>
      <VSANID></VSANID>
      <HBAID></HBAID>
      <Manufacturer></Manufacturer>
      <SerialNumber></SerialNumber>
      <Model></Model>
      <ModelDescription></ModelDescription>
      <NodeName></NodeName>
      <NodeSymbolicName></NodeSymbolicName>
      <HardwareVersion></HardwareVersion>
      <DriverVersion></DriverVersion>
      <OptionROMVersion></OptionROMVersion>
      <FirmwareVersion></FirmwareVersion>
      <OSName></OSName>
      <MaxCTPayload></MaxCTPayload>
      <VendorID></VendorID>
      <VendorInformation></VendorInformation>
      <PortNumber></PortNumber>
      <FabricName></FabricName>
      <BootBIOSVersion></BootBIOSVersion>
      <BootBIOSState></BootBIOSState>
    </Attribute>
  </HBAAttributes>
</FDMI>
```

### Table description

Item	Description
Feature name	FDMI
Table name	HBAAttributes
Table type	Multi-instance table
Row name	Attribute
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VSANID	VSAN ID.	Index	Unsigned integer. Value range: 1 to 3839.	N/A
HBAID	HBA ID.	Index	Eight groups of two hexadecimal digits, colon-separated.	Example: 50:01:43:80:12:09:54:f4.
Manufacturer	Manufacturer of the HBA.	N/A	String. Length: 1 to 63 characters.	N/A
SerialNumber	Serial number of the HBA.	N/A	String. Length: 1 to 63 characters.	N/A
Model	Model of the HBA.	N/A	String. Length: 1 to 255 characters.	N/A
ModelDescription	Model description of the HBA.	N/A	String. Length: 1 to 255 characters.	N/A
NodeName	WWN of the node containing the HBA.	N/A	Eight groups of two hexadecimal digits, colon-separated.	Example: 50:01:43:80:12:09:54:f5.
NodeSymbolicName	Node symbolic name.	N/A	String. Length: 1 to 255 characters.	N/A
HardwareVersion	Hardware version of the HBA.	N/A	String. Length: 1 to 255 characters.	N/A
DriverVersion	Version of the driver software.	N/A	String. Length: 1 to 255 characters.	N/A
OptionROMVersion	ROM version of the HBA.	N/A	String. Length: 1 to 255 characters.	N/A
FirmwareVersion	Version of the firmware.	N/A	String. Length: 1 to 255 characters.	N/A
OSName	Type and version of the operating system.	N/A	String. Length: 1 to 255 characters.	N/A
MaxCTPayload	Maximum CT payload.	N/A	Unsigned integer.	N/A
VendorID	Vendor identifier.	N/A	String. Length: 1 to 8characters.	This column contains the T10 vendor ID of the manufacturer of the HBA, or an OEM of the HBA.
VendorInformation	Vendor-specific information.	N/A	Unsigned integer.	N/A
PortNumber	Number of the Nx_Port on the HBA.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
FabricName	Fabric name.	N/A	Eight groups of two hexadecimal digits, colon-separated.	Example: 20:01:00:e0:fc:a1:58:00
BootBIOSVersion	Boot BIOS version.	N/A	String. Length: 1 to 255 characters.	N/A
BootBIOSState	Boot BIOS state.	N/A	Enumeration: <ul style="list-style-type: none"> <li>4294967295—Enabled.</li> <li>0—Disabled.</li> </ul>	If the HBA provides a boot BIOS and the boot BIOS is enabled, the value of the Boot BIOS State attribute is set to FF FF FF FFh. If the HBA provides a boot BIOS and the boot BIOS is disabled, the value of the Boot BIOS State attribute is set to zero.

## FDMI/PortAttributes

This table contains port attributes that are registered with the Name Server or HBA Management Server.

## XML structure

```

<FDMI>
  <PortAttributes>
    <Attribute>
      <VSANID></VSANID>
      <HBAID></HBAID>
      <PortName></PortName>
      <PortSymbolicName></PortSymbolicName>
      <PortID></PortID>
      <PortType></PortType>
      <ServiceClass></ServiceClass>
      <SupportedFC4Types></SupportedFC4Types>
      <PortActiveFC4Types></PortActiveFC4Types>
      <SupportedSpeed></SupportedSpeed>
      <CurrentPortSpeed></CurrentPortSpeed>
      <MaximumFrameSize></MaximumFrameSize>
      <OSDeviceName></OSDeviceName>
      <HostName></HostName>
      <NodeName></NodeName>
      <PortFabricName></PortFabricName>
      <PortState></PortState>
      <DiscoveredPortNumber></DiscoveredPortNumber>
      <SmartSANServiceCategory></SmartSANServiceCategory>
      <SmartSANGUID></SmartSANGUID>

```

```

    <SmartSANVersion></SmartSANVersion>
    <SmartSANProductName></SmartSANProductName>
    <SmartSANPortInformation></SmartSANPortInformation>
    <SmartSANQoSsupport></SmartSANQoSsupport>
    <SmartSANSecuritySupport></SmartSANSecuritySupport>
    <SmartSANConnectedPorts></SmartSANConnectedPorts>
  </Attribute>
</PortAttributes>
</FDMI>

```

## Table description

Item	Description
Feature name	FDMI
Table name	PortAttributes
Table type	Multi-instance table
Row name	Attribute
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VSANID	VSAN ID.	Index	Unsigned integer. Value range: 1 to 3839.	N/A
HBAID	HBA ID.	Index	Eight groups of two hexadecimal digits, colon-separated.	Example: 50:01:43:80:12:09:54:f4.
PortName	WWN of the port.	Index	Eight groups of two hexadecimal digits, colon-separated.	Example: 50:01:43:80:12:09:54:f4.
PortSymbolic Name	Symbolic name of the port.	N/A	String. Length: 1 to 255 characters.	N/A
PortID	FC address of the Port.	N/A	Hexadecimal representation of the three bytes.	Example: 020000.
PortType	Port type.	N/A	Unsigned integer.	<ul style="list-style-type: none"> <li>• 0—Unidentified.</li> <li>• 1—N_Port.</li> <li>• 2—NL_Port.</li> <li>• 3—FL_Port/NL_Port.</li> <li>• 127—Nx_Port.</li> <li>• 129—F_Port.</li> <li>• 130—FL_Port.</li> <li>• 132—E_Port.</li> <li>• 133—B_Port.</li> <li>• Other—Unknown.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceClass	Supported class of service.	N/A	<p>Each bit represents a type.</p> <p>As follows:</p> <ul style="list-style-type: none"> <li>• 1—Class F.</li> <li>• 2—Class 1.</li> <li>• 4—Class 2.</li> <li>• 8—Class 3.</li> <li>• 16—Class 4.</li> <li>• 64—Class 6.</li> <li>• Other—Unknown.</li> </ul>	N/A
SupportedFC4Types	Supported FC-4 types.	N/A	<p>Data transmission using Base64 encoding, decoding is as follows:</p> <p>Bitmap. Length: 256 bits.</p> <p>Each octet within this value specifies a set of eight types, with the first octet specifying types 0 through 7, the second octet specifying ports 8 through 15, etc. Within each octet, the most significant bit represents the lowest numbered type, and the least significant bit represents the highest numbered type.</p>	N/A
PortActiveFC4Types	Active FC-4 types of the port.	N/A	<p>Data transmission using Base64 encoding, decoding is as follows:</p> <p>Bitmap. Length: 256 bits.</p> <p>Each octet within this value specifies a set of eight types, with the first octet specifying types 0 through 7, the second octet specifying ports 8 through 15, etc. Within each octet, the most significant bit represents the lowest numbered type, and the least significant bit represents the highest numbered type.</p>	N/A
SupportedSpeed	Supported speed.	N/A	<p>Each bit represents a speed.</p> <p>As follows:</p> <ul style="list-style-type: none"> <li>• 1—1 Gbps.</li> <li>• 2—2 Gbps.</li> <li>• 4—10 Gbps.</li> <li>• 8—4 Gbps.</li> <li>• 16—8 Gbps.</li> <li>• 32—16 Gbps.</li> <li>• 64—32 Gbps.</li> <li>• 128—20 Gbps.</li> <li>• 256—40 Gbps.</li> <li>• 32768—The speed has not been obtained or cannot be obtained.</li> </ul>	Other values are reserved.

Column name	Column description	Column type	Data type and restrictions	Remarks
CurrentPortSpeed	Current port speed.	N/A	Each bit represents a speed. As follows: <ul style="list-style-type: none"> <li>• 1—1 Gbps.</li> <li>• 2—2 Gbps.</li> <li>• 4—10 Gbps.</li> <li>• 8—4 Gbps.</li> <li>• 16—8 Gbps.</li> <li>• 32—16 Gbps.</li> <li>• 64—32 Gbps.</li> <li>• 128—20 Gbps.</li> <li>• 256—40 Gbps.</li> <li>• 32768—The speed has not been obtained or cannot be obtained.</li> </ul>	Other values are reserved.
MaximumFrameSize	Maximum FC frame payload size.	N/A	Unsigned integer.	N/A
OSDeviceName	OS device name.	N/A	String. Length: 1 to 255 characters.	N/A
HostName	Name of the host associated with the Nx_Port.	N/A	String. Length: 1 to 255 characters.	N/A
NodeName	WWN of the node containing the port .	N/A	Eight groups of two hexadecimal digits, colon-separated.	Example: 50:01:43:80:12:09:54:f4.
PortFabricName	Port fabric name.	N/A	Eight groups of two hexadecimal digits, colon-separated.	Example: 20:01:00:e0:fc:a1:58:00.
PortState	Port state.	N/A	Unsigned integer.	N/A
DiscoveredPortNumber	Number of discovered ports.	N/A	Unsigned integer.	N/A
SmartSANServiceCategory	Smart SAN service category.	N/A	String. Length: 1 to 255 characters	N/A
SmartSANGUID	Smart SAN globally unique identifier.	N/A	Five groups of hexadecimal digits, hyphen-separated. Format: XXXXXXXX-XXXX-XXXX-XXX X-XXXXXXXXXXXX	Example: 50014380-1209-54f5-5001-4380120954f4.
SmartSANVersion	Smart SAN version.	N/A	String. Length: 1 to 255 characters	N/A
SmartSANProductName	Smart SAN product name (model).	N/A	String. Length: 1 to 255 characters	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SmartSANPortInformation	Smart SAN port information.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Physical.</li> <li>2—NPIV.</li> <li>3—SRIOV.</li> <li>Other—Unknown.</li> </ul>	N/A
SmartSANQoSsupport	Smart SAN QoS support.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not supported.</li> <li>1—Supported.</li> <li>Other—Unknown.</li> </ul>	N/A
SmartSANSecuritySupport	Smart SAN security support.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not supported.</li> <li>1—Tier-1.</li> <li>2—Tier-2.</li> <li>3—Tier-3.</li> <li>Other—Unknown.</li> </ul>	N/A
SmartSANConnectedPorts	Smart SAN connected ports. For Host Port registration, this field will display the connected Target Port information. For Target Port registration, this field will display the connected Initiator Port information.	N/A	The combination of the WWNs of ports, blank-separated.	N/A

## FDMI/DiagnosticParameterDescriptors

This table contains diagnostic parameter descriptors for the Fx\_Port and Nx\_Port.

### XML structure

```

<FDMI>
  <DiagnosticParameterDescriptors>
    <Descriptor>
      <PortName></PortName>
      <NodeName></NodeName>
      <FabricPortName></FabricPortName>
      <FabricNodeName></FabricNodeName>
      <PortSpeed>
        <SpeedCapabilities></SpeedCapabilities>
        <OperatingSpeed></OperatingSpeed>
      </PortSpeed>
      <PortPhyType></PortPhyType>
    </Descriptor>
  </DiagnosticParameterDescriptors>
</FDMI>

```

```

<FCoELinkErrorStatusBlock>
  <FCoELinkFailureCount></FCoELinkFailureCount>
  <VirtualLinkFailureCount></VirtualLinkFailureCount>
  <MissingFIPCount></MissingFIPCount>
  <SymbolErrorCount></SymbolErrorCount>
  <ErroredBlockCount></ErroredBlockCount>
  <FCSErrorCount></FCSErrorCount>
</FCoELinkErrorStatusBlock>
<FCLinkErrorStatusBlock>
  <FCLinkFailureCount></FCLinkFailureCount>
  <LossOfSyncCount></LossOfSyncCount>
  <LossOfSignalCount></LossOfSignalCount>
  <ProtocolError></ProtocolError>
  <InvalidWord></InvalidWord>
  <InvalidCRCCCount></InvalidCRCCCount>
</FCLinkErrorStatusBlock>
<SFPDiagnosticsParameters>
  <SFPNotValid></SFPNotValid>
  <SFPTemperature></SFPTemperature>
  <SFPTempState></SFPTempState>
  <SFPTempHAlarm></SFPTempHAlarm>
  <SFPTempLAlarm></SFPTempLAlarm>
  <SFPTempHWarn></SFPTempHWarn>
  <SFPTempLWarn></SFPTempLWarn>
  <SFPVoltage></SFPVoltage>
  <SFPVoltageState></SFPVoltageState>
  <SFPVoltageHAlarm></SFPVoltageHAlarm>
  <SFPVoltageLAlarm></SFPVoltageLAlarm>
  <SFPVoltageHWarn></SFPVoltageHWarn>
  <SFPVoltageLWarn></SFPVoltageLWarn>
  <TxBias></TxBias>
  <TxBiasState></TxBiasState>
  <TxBiasHAlarm></TxBiasHAlarm>
  <TxBiasLAlarm></TxBiasLAlarm>
  <TxBiasHWarn></TxBiasHWarn>
  <TxBiasLWarn></TxBiasLWarn>
  <TxPower></TxPower>
  <TxPowerState></TxPowerState>
  <TxPowerHAlarm></TxPowerHAlarm>
  <TxPowerLAlarm></TxPowerLAlarm>
  <TxPowerHWarn></TxPowerHWarn>
  <TxPowerLWarn></TxPowerLWarn>
  <RxPower></RxPower>
  <RxPowerState></RxPowerState>
  <RxPowerHAlarm></RxPowerHAlarm>
  <RxPowerLAlarm></RxPowerLAlarm>
  <RxPowerHWarn></RxPowerHWarn>
  <RxPowerLWarn></RxPowerLWarn>

```



```

<SFPPortTxType></SFPPortTxType>
<SFPOpticalPort></SFPOpticalPort>
<SFPCConnectorType></SFPCConnectorType>
<SFPFECActive></SFPFECActive>
</SFPDiagnosticsParameters>
<QSFPDiagnosticsParameters>
  <QSFPNotValid></QSFPNotValid>
  <QSFPTemperature></QSFPTemperature>
  <QSFPTempState></QSFPTempState>
  <QSFPTempHAlarm></QSFPTempHAlarm>
  <QSFPTempLAlarm></QSFPTempLAlarm>
  <QSFPTempHWarn></QSFPTempHWarn>
  <QSFPTempLWarn></QSFPTempLWarn>
  <QSFPVoltage></QSFPVoltage>
  <QSFPVoltageState></QSFPVoltageState>
  <QSFPVoltageHAlarm></QSFPVoltageHAlarm>
  <QSFPVoltageLAlarm></QSFPVoltageLAlarm>
  <QSFPVoltageHWarn></QSFPVoltageHWarn>
  <QSFPVoltageLWarn></QSFPVoltageLWarn>
  <LaneIdentifierFlag></LaneIdentifierFlag>
  <LaneIdentifier></LaneIdentifier>
  <QSFPTxBiasHAlarm></QSFPTxBiasHAlarm>
  <QSFPTxBiasLAlarm></QSFPTxBiasLAlarm>
  <QSFPTxBiasHWarn></QSFPTxBiasHWarn>
  <QSFPTxBiasLWarn></QSFPTxBiasLWarn>
  <Lane0TxBias></Lane0TxBias>
  <Lane0TxBiasState></Lane0TxBiasState>
  <Lane1TxBias></Lane1TxBias>
  <Lane1TxBiasState></Lane1TxBiasState>
  <Lane2TxBias></Lane2TxBias>
  <Lane2TxBiasState></Lane2TxBiasState>
  <Lane3TxBias></Lane3TxBias>
  <Lane3TxBiasState></Lane3TxBiasState>
  <QSFPTxPowerHAlarm></QSFPTxPowerHAlarm>
  <QSFPTxPowerLAlarm></QSFPTxPowerLAlarm>
  <QSFPTxPowerHWarn></QSFPTxPowerHWarn>
  <QSFPTxPowerLWarn></QSFPTxPowerLWarn>
  <Lane0TxPower></Lane0TxPower>
  <Lane0TxPowerState></Lane0TxPowerState>
  <Lane1TxPower></Lane1TxPower>
  <Lane1TxPowerState></Lane1TxPowerState>
  <Lane2TxPower></Lane2TxPower>
  <Lane2TxPowerState></Lane2TxPowerState>
  <Lane3TxPower></Lane3TxPower>
  <Lane3TxPowerState></Lane3TxPowerState>
  <QSFP RxPowerHAlarm></QSFP RxPowerHAlarm>
  <QSFP RxPowerLAlarm></QSFP RxPowerLAlarm>
  <QSFP RxPowerHWarn></QSFP RxPowerHWarn>

```

```

<QSFP RxPowerLWarn></QSFP RxPowerLWarn>
<Lane0RxPower></Lane0RxPower>
<Lane0RxPowerState></Lane0RxPowerState>
<Lane1RxPower></Lane1RxPower>
<Lane1RxPowerState></Lane1RxPowerState>
<Lane2RxPower></Lane2RxPower>
<Lane2RxPowerState></Lane2RxPowerState>
<Lane3RxPower></Lane3RxPower>
<Lane3RxPowerState></Lane3RxPowerState>
<QSFP PortTxType></QSFP PortTxType>
<QSFP OpticalPort></QSFP OpticalPort>
<QSFP ConnectorType></QSFP ConnectorType>
<QSFP FECActive></QSFP FECActive>
</QSFPDiagnosticsParameters>
<FECStatusDescriptor>
  <CorrectedBlocks></CorrectedBlocks>
  <UncorrectableBlocks></UncorrectableBlocks>
</FECStatusDescriptor>
<BufferCredit>
  <BBCredit></BBCredit>
  <AttachedBBCredit></AttachedBBCredit>
  <RoundTripTime></RoundTripTime>
</BufferCredit>
<OpticalProductData>
  <VendorName></VendorName>
  <Partnumber></Partnumber>
  <Serialnumber></Serialnumber>
  <Revision></Revision>
  <Date></Date>
</OpticalProductData>
</Descriptor>
</DiagnosticParameterDescriptors>
</FDMI>

```

## Table description

Item	Description
Feature name	FDMI
Table name	DiagnosticParameterDescriptors
Table type	Multi-instance table
Row name	Descriptor
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortName	WWN of the port.	Index	Eight groups of two hexadecimal digits, colon-separated.	Example: 28:05:00:e0:fc:f1:58:2a.
NodeName	WWN of the node containing the port.	N/A	Eight groups of two hexadecimal digits, colon-separated.	Example: 20:00:00:e0:fc:f1:e8:00.
FabricPortName	Name of a port on a node in the fabric.	N/A	Eight groups of two hexadecimal digits, colon-separated.	N/A
FabricNodeName	Name of a node in the fabric.	N/A	Eight groups of two hexadecimal digits, colon-separated.	This column takes effect only when the FabricPortName column is valid.
PortSpeed	Port speed descriptor.	Data structure	Members include: <ul style="list-style-type: none"> <li>SpeedCapabilities.</li> <li>OperatingSpeed.</li> </ul>	N/A
SpeedCapabilities	Port speed capabilities.	N/A	Each bit represents a port speed capability. As follows: <ul style="list-style-type: none"> <li>1—1 Gbps.</li> <li>2—2 Gbps.</li> <li>4—10 Gbps.</li> <li>8—4 Gbps.</li> <li>16—8 Gbps.</li> <li>32—16 Gbps.</li> <li>64—32 Gbps.</li> <li>Other—Unknown.</li> </ul>	N/A
OperatingSpeed	Port operating speed.	N/A	Each bit represents a port operating speed. As follows: <ul style="list-style-type: none"> <li>1—1 Gbps.</li> <li>2—2 Gbps.</li> <li>4—10 Gbps.</li> <li>8—4 Gbps.</li> <li>16—8 Gbps.</li> <li>32—16 Gbps.</li> <li>64—32 Gbps.</li> <li>32768—Speed not established.</li> <li>Other—Unknown.</li> </ul>	N/A
PortPhyType	Type of the physical interface for the PN_Port or PF_Port through which the RNID request was received.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—No Information about Phy Type is provided.</li> <li>64—FC.</li> <li>128—VFC.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
FCoELinkErrorStatusBlock	Link error status block format for FCoE	Data structure	Members include: <ul style="list-style-type: none"> <li>FCoELinkFailureCount.</li> <li>VirtualLinkFailureCount.</li> <li>MissingFIPCount.</li> <li>SymbolErrorCount.</li> <li>ErroredBlockCount.</li> <li>FCSErrorCount.</li> </ul>	This data structure takes effect only when the PortPhyType column is 128.
FCoELinkFailureCount	Number of link failures.	N/A	Unsigned integer.	N/A
VirtualLinkFailureCount	Number of Virtual Link failures.	N/A	Unsigned integer.	N/A
MissingFIPCount	Number of missing FIP keepalives or discovery advertisements.	N/A	Unsigned integer.	N/A
SymbolErrorCount	Number of symbol errors during carrier.	N/A	Unsigned integer.	N/A
ErroredBlockCount	Cumulative count of the events counted by the eight-bit errored blocks counter.	N/A	Unsigned integer.	N/A
FCSErrorCount	Number of frame check sequence errors.	N/A	Unsigned integer.	N/A
FCLinkErrorStatusBlock	Link error status block format for FC.	Data structure	Members include: <ul style="list-style-type: none"> <li>FCLinkFailureCount.</li> <li>LossOfSyncCount.</li> <li>LossOfSignalCount.</li> <li>ProtocolError.</li> <li>InvalidWord.</li> <li>InvalidCRCCCount.</li> </ul>	This data structure takes effect only when the PortPhyType column is 64.
FCLinkFailureCount	Number of link failures.	N/A	Unsigned integer.	N/A
LossOfSyncCount	Number of loss-of-synchronization errors.	N/A	Unsigned integer.	N/A
LossOfSignalCount	Number of loss-of-signal errors.	N/A	Unsigned integer.	N/A
ProtocolError	Number of primitive sequence protocol errors.	N/A	Unsigned integer.	N/A
InvalidWord	Number of invalid	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	transmission words.			
InvalidCRCCo unt	Number of invalid CRC errors.	N/A	Unsigned integer.	N/A
SFPDiagnosticsParameters	SFP diagnostic parameters descriptor.	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>• SFPNotValid.</li> <li>• SFPTemperature.</li> <li>• SFPTempState.</li> <li>• SFPTempHAlarm.</li> <li>• SFPTempLAlarm.</li> <li>• SFPTempHWarn.</li> <li>• SFPTempLWarn.</li> <li>• SFPVoltage.</li> <li>• SFPVoltageState.</li> <li>• SFPVoltageHAlarm.</li> <li>• SFPVoltageLAlarm.</li> <li>• SFPVoltageHWarn.</li> <li>• SFPVoltageLWarn.</li> <li>• TxBias.</li> <li>• TxBiasState.</li> <li>• TxBiasHAlarm.</li> <li>• TxBiasLAlarm.</li> <li>• TxBiasHWarn.</li> <li>• TxBiasLWarn.</li> <li>• TxPower.</li> <li>• TxPowerState.</li> <li>• TxPowerHAlarm.</li> <li>• TxPowerLAlarm.</li> <li>• TxPowerHWarn.</li> <li>• TxPowerLWarn.</li> <li>• RxPower.</li> <li>• RxPowerState.</li> <li>• RxPowerHAlarm.</li> <li>• RxPowerLAlarm.</li> <li>• RxPowerHWarn.</li> <li>• RxPowerLWarn.</li> <li>• SFPPortTxType.</li> <li>• SFPOpticalPort.</li> <li>• SFPConnectorType.</li> <li>• SFPFECActive.</li> </ul>	Data structure of SFPDiagnosticsParameters and data structure of QSFPDiagnosticsParameters are mutual exclusive and only one of them can be set in a single message.
SFPNotValid	SFP diagnostic parameters not valid.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 0—Valid.</li> <li>• 1—Invalid.</li> </ul>	<p>If the value is 1, the following columns are not valid:</p> <ul style="list-style-type: none"> <li>• SFPTemperature.</li> <li>• SFPTempState.</li> <li>• SFPTempHAlarm.</li> <li>• SFPTempLAlarm.</li> <li>• SFPTempHWarn.</li> <li>• SFPTempLWarn.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>SFPVoltage.</li> <li>SFPVoltageState.</li> <li>SFPVoltageHAlarm.</li> <li>SFPVoltageLAlarm.</li> <li>SFPVoltageHWarn.</li> <li>SFPVoltageLWarn.</li> <li>TxBias.</li> <li>TxBiasState.</li> <li>TxBiasHAlarm.</li> <li>TxBiasLAlarm.</li> <li>TxBiasHWarn.</li> <li>TxBiasLWarn.</li> <li>TxPower.</li> <li>TxPowerState.</li> <li>TxPowerHAlarm.</li> <li>TxPowerLAlarm.</li> <li>TxPowerHWarn.</li> <li>TxPowerLWarn.</li> <li>RxPower.</li> <li>RxPowerState.</li> <li>RxPowerHAlarm.</li> <li>RxPowerLAlarm.</li> <li>RxPowerHWarn.</li> <li>RxPowerLWarn.</li> </ul>
SFPTemperature	Temperature.	N/A	Short. Unit is 1/256 °C.	N/A
SFPTempState	Running state of temperature.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
SFPTempHAlarm	High alarm of temperature.	N/A	Short. Unit is 1/256 °C.	N/A
SFPTempLAlarm	Low alarm of temperature.	N/A	Short. Unit is 1/256 °C.	N/A
SFPTempHWarn	High warning of temperature.	N/A	Short. Unit is 1/256 °C.	N/A
SFPTempLWarn	Low warning of	N/A	Short.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Temperature	Temperature.		Unit is 1/256 °C.	
SFPVoltage	Voltage.	N/A	Unsigned short. Unit is 100uV.	N/A
SFPVoltageState	Running state of Voltage.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
SFPVoltageHAlarm	High alarm of Voltage.	N/A	Unsigned short. Unit is 100uV.	N/A
SFPVoltageLAlarm	Low alarm of Voltage.	N/A	Unsigned short. Unit is 100uV.	N/A
SFPVoltageHWarn	High warning of Voltage.	N/A	Unsigned short. Unit is 100uV.	N/A
SFPVoltageLWarn	Low warning of Voltage.	N/A	Unsigned short. Unit is 100uV.	N/A
TxBias	Tx laser bias current.	N/A	Unsigned short. Unit is 2uA.	N/A
TxBiasState	Running state of TxBias.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
TxBiasHAlarm	High alarm of TxBias.	N/A	Unsigned short. Unit is 2uA.	N/A
TxBiasLAlarm	Low alarm of TxBias.	N/A	Unsigned short. Unit is 2uA.	N/A
TxBiasHWarn	High warning of TxBias.	N/A	Unsigned short. Unit is 2uA.	N/A
TxBiasLWarn	Low warning of TxBias.	N/A	Unsigned short. Unit is 2uA.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TxPower	Tx output power.	N/A	Unsigned short. Unit is 0.1uW.	N/A
TxPowerState	Running state of TxPower.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
TxPowerHAlarm	High alarm of TxPower.	N/A	Unsigned short. Unit is 0.1uW.	N/A
TxPowerLAlarm	Low alarm of TxPower.	N/A	Unsigned short. Unit is 0.1uW.	N/A
TxPowerHWarn	High warning of TxPower.	N/A	Unsigned short. Unit is 0.1uW.	N/A
TxPowerLWarn	Low warning of TxPower.	N/A	Unsigned short. Unit is 0.1uW.	N/A
RxPower	Received optical TxPower.	N/A	Unsigned short. Unit is 0.1uW.	N/A
RxPowerState	Running state of RxPower.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
RxPowerHAlarm	High alarm of RxPower.	N/A	Unsigned short. Unit is 0.1uW.	N/A
RxPowerLAlarm	Low alarm of RxPower.	N/A	Unsigned short. Unit is 0.1uW.	N/A
RxPowerHWarn	High warning of RxPower.	N/A	Unsigned short. Unit is 0.1uW.	N/A
RxPowerLWarn	Low warning of RxPower.	N/A	Unsigned short. Unit is 0.1uW.	N/A
SFPPortTxTy	Port tx type.	N/A	Enumeration:	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
pe			<ul style="list-style-type: none"> <li>0—Other or unknown.</li> <li>1—Short Wave Laser.</li> <li>2—Long Wave Laser LC 1310nm.</li> <li>3—Long Wave Laser LL 1550nm.</li> </ul>	
SFPOpticalPort	Optical port flag.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—No.</li> <li>1—Yes.</li> </ul>	If the value is 1, the FC_Port is an optical port. If the value is 0, the FC_Port is not an optical port.
SFPConnectorType	Connector type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Other or unknown.</li> <li>64—SFP+.</li> <li>Other—Reserved.</li> </ul>	N/A
SFPFECActive	State of FEC active	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—16G FEC status is inactive or unknown.</li> <li>1—16G FEC is active.</li> </ul>	N/A
QSFPDiagnosticsParameters	QSFP diagnostic parameters descriptor.	Data structure	Members include: <ul style="list-style-type: none"> <li>QSFPNotValid.</li> <li>QSFPTemperature.</li> <li>QSFPTempState.</li> <li>QSFPTempHAlarm.</li> <li>QSFPTempLAlarm.</li> <li>QSFPTempHWarn.</li> <li>QSFPTempLWarn.</li> <li>QSFPVoltage.</li> <li>QSFPVoltageState.</li> <li>QSFPVoltageHAlarm.</li> <li>QSFPVoltageLAlarm.</li> <li>QSFPVoltageHWarn.</li> <li>QSFPVoltageLWarn.</li> <li>LaneIdentifierFlag.</li> <li>LaneIdentifier.</li> <li>QSFP Tx Bias HAlarm.</li> <li>QSFP Tx Bias LAlarm.</li> <li>QSFP Tx Bias HWarn.</li> <li>QSFP Tx Bias LWarn.</li> <li>Lane0TxBias.</li> <li>Lane0TxBiasState.</li> <li>Lane1TxBias.</li> <li>Lane1TxBiasState.</li> <li>Lane2TxBias.</li> <li>Lane2TxBiasState.</li> <li>Lane3TxBias.</li> <li>Lane3TxBiasState.</li> <li>QSFP Tx Power HAlarm.</li> </ul>	Data structure of SFPDiagnosticsParameters and data structure of QSFPDiagnosticsParameters are mutual exclusive and only one of them can be set in a single message.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• QSFP TxPowerLAlarm.</li> <li>• QSFP TxPowerHWarn.</li> <li>• QSFP TxPowerLWarn.</li> <li>• Lane0TxPower.</li> <li>• Lane0TxPowerState.</li> <li>• Lane1TxPower.</li> <li>• Lane1TxPowerState.</li> <li>• Lane2TxPower.</li> <li>• Lane2TxPowerState.</li> <li>• Lane3TxPower.</li> <li>• Lane3TxPowerState.</li> <li>• QSFPRxPowerHAlarm.</li> <li>• QSFPRxPowerLAlarm.</li> <li>• QSFPRxPowerHWarn.</li> <li>• QSFPRxPowerLWarn.</li> <li>• Lane0RxPower.</li> <li>• Lane0RxPowerState.</li> <li>• Lane1RxPower.</li> <li>• Lane1RxPowerState.</li> <li>• Lane2RxPower.</li> <li>• Lane2RxPowerState.</li> <li>• Lane3RxPower.</li> <li>• Lane3RxPowerState.</li> <li>• QSFPPortTxType.</li> <li>• QSFPOpticalPort.</li> <li>• QSFPCconnectorType.</li> <li>• QSFPFECActive.</li> </ul>	
QSFPNotValid	Whether QSFP diagnostic parameters are valid.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 0—Valid.</li> <li>• 1—Invalid.</li> </ul>	<p>If the value is 1, the following columns are invalid:</p> <ul style="list-style-type: none"> <li>• QSFP Temperature.</li> <li>• QSFP TempState.</li> <li>• QSFP TempHAlarm.</li> <li>• QSFP TempLAlarm.</li> <li>• QSFP TempHWarn.</li> <li>• QSFP TempLWarn.</li> <li>• QSFP Voltage.</li> <li>• QSFP VoltageState.</li> <li>• QSFP VoltageHAlarm.</li> <li>• QSFP VoltageLAlarm.</li> <li>• QSFP VoltageHWarn.</li> <li>• QSFP VoltageLWarn.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>• LaneIdentifierFlag.</li> <li>• LaneIdentifier.</li> <li>• QSFPTxBiasHAlarm.</li> <li>• QSFPTxBiasLAlarm.</li> <li>• QSFPTxBiasHWarn.</li> <li>• QSFPTxBiasLWarn.</li> <li>• Lane0TxBias.</li> <li>• Lane0TxBiasState.</li> <li>• Lane1TxBias.</li> <li>• Lane1TxBiasState.</li> <li>• Lane2TxBias.</li> <li>• Lane2TxBiasState.</li> <li>• Lane3TxBias.</li> <li>• Lane3TxBiasState.</li> <li>• QSFPTxPowerHAlarm.</li> <li>• QSFPTxPowerLAlarm.</li> <li>• QSFPTxPowerHWarn.</li> <li>• QSFPTxPowerLWarn.</li> <li>• Lane0TxPower.</li> <li>• Lane0TxPowerState.</li> <li>• Lane1TxPower.</li> <li>• Lane1TxPowerState.</li> <li>• Lane2TxPower.</li> <li>• Lane2TxPowerState.</li> <li>• Lane3TxPower.</li> <li>• Lane3TxPowerState.</li> <li>• QSFPRxPowerHAlarm.</li> <li>• QSFPRxPowerLAlarm.</li> <li>• QSFPRxPowerHWarn.</li> <li>• QSFPRxPowerLWarn.</li> <li>• Lane0RxPower.</li> <li>• Lane0RxPowerState.</li> <li>• Lane1RxPower.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>• Lane1RxPowerState.</li> <li>• Lane2RxPower.</li> <li>• Lane2RxPowerState.</li> <li>• Lane3RxPower.</li> <li>• Lane3RxPowerState.</li> </ul>
QSFPTemperature	Temperature.	N/A	Short. Unit is 1/256 °C.	N/A
QSFPTempState	Running state of Temperature.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>• 0—Normal.</li> <li>• 1—Transgress the low warning level.</li> <li>• 2—Transgress the high warning level.</li> <li>• 4—Transgress the low alarm level.</li> <li>• 8—Transgress the high alarm level.</li> <li>• Other—Unknown.</li> </ul>	N/A
QSFPTempHAlarm	High alarm of Temperature.	N/A	Short. Unit is 1/256 °C.	N/A
QSFPTempLAlarm	Low alarm of Temperature.	N/A	Short. Unit is 1/256 °C.	N/A
QSFPTempHWarn	High warning of Temperature.	N/A	Short. Unit is 1/256 °C.	N/A
QSFPTempLWarn	Low warning of Temperature.	N/A	Short. Unit is 1/256 °C.	N/A
QSFPVoltage	Voltage.	N/A	Unsigned short. Unit is 100uV.	N/A
QSFPVoltageState	Running state of Voltage.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>• 0—Normal.</li> <li>• 1—Transgress the low warning level.</li> <li>• 2—Transgress the high warning level.</li> <li>• 4—Transgress the low alarm level.</li> <li>• 8—Transgress the high alarm level.</li> <li>• Other—Unknown.</li> </ul>	N/A
QSFPVoltageHAlarm	High alarm of Voltage.	N/A	Unsigned short. Unit is 100uV.	N/A
QSFPVoltage	Low alarm of	N/A	Unsigned short.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LAlarm	Voltage.		Unit is 100uV.	
QSFPVoltageHWarn	High warning of Voltage.	N/A	Unsigned short. Unit is 100uV.	N/A
QSFPVoltageLWarn	Low warning of Voltage.	N/A	Unsigned short. Unit is 100uV.	N/A
LaneIdentifierFlag	Lane identifier validity flag.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Invalid.</li> <li>1—Valid.</li> </ul>	If the value is 0, the LaneIdentifier column is not meaningful. If the value is 1, the single lane is indicated by the LaneIdentifier column.
LaneIdentifier	Lane identifier.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Lane 0.</li> <li>1—Lane 1.</li> <li>2—Lane 2.</li> <li>3—Lane 3.</li> </ul>	This column takes effect only when the LaneIdentifierFlag column is 1, and the value decide which lane is valide about TxBias, TxBiasState, TxPower, TxPowerState,RxPower and RxPowerState.
QSFTxBiasHAlarm	High alarm of TxBias of a lane.	N/A	Unsigned short. Unit is 2uA.	N/A
QSFTxBiasLAlarm	Low alarm of TxBias of a lane.	N/A	Unsigned short. Unit is 2uA.	N/A
QSFTxBiasHWarn	High warning of TxBias of a lane.	N/A	Unsigned short. Unit is 2uA.	N/A
QSFTxBiasLWarn	Low warning of TxBias of a lane.	N/A	Unsigned short. Unit is 2uA.	N/A
Lane0TxBias	Tx laser bias current of lane 0.	N/A	Unsigned short. Unit is 2uA.	N/A
Lane0TxBiasState	Running state of TxBias of lane 0.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
Lane1TxBias	Tx laser bias current of lane 1.	N/A	Unsigned short. Unit is 2uA.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Lane1TxBias State	Running state of TxBias of lane 1.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
Lane2TxBias	Tx laser bias current of lane 2.	N/A	Unsigned short. Unit is 2uA.	N/A
Lane2TxBias State	Running state of TxBias of lane 2.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
Lane3TxBias	Tx laser bias current of lane 3.	N/A	Unsigned short. Unit is 2uA.	N/A
Lane3TxBias State	Running state of TxBias of lane 3.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
QSFP TxPowerHAlarm	High alarm of TxPow of a lane.	N/A	Unsigned short. Unit is 0.1uW.	N/A
QSFP TxPowerLAlarm	Low alarm of TxPow of a lane.	N/A	Unsigned short. Unit is 0.1uW.	N/A
QSFP TxPowerHWarn	High warning of TxPow of a lane.	N/A	Unsigned short. Unit is 0.1uW.	N/A
QSFP TxPowerLWarn	Low warning of TxPow of a lane.	N/A	Unsigned short. Unit is 0.1uW.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Lane0TxPower	Tx output power of lane 0.	N/A	Unsigned short. Unit is 0.1uW.	N/A
Lane0TxPowerState	Running state of TxPow of lane 0.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
Lane1TxPower	Tx output power of lane 1.	N/A	Unsigned short. Unit is 0.1uW.	N/A
Lane1TxPowerState	Running state of TxPow of lane 1.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
Lane2TxPower	Tx output power of lane 2.	N/A	Unsigned short. Unit is 0.1uW.	N/A
Lane2TxPowerState	Running state of TxPow of lane 2.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
Lane3TxPower	Tx output power of lane 3.	N/A	Unsigned short. Unit is 0.1uW.	N/A
Lane3TxPowerState	Running state of TxPow of lane 3.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			warning level. <ul style="list-style-type: none"> <li>• 2—Transgress the high warning level.</li> <li>• 4—Transgress the low alarm level.</li> <li>• 8—Transgress the high alarm level.</li> <li>• Other—Unknown.</li> </ul>	
QSFPRxPowerHAlarm	High alarm of RxPower of a lane.	N/A	Unsigned short. Unit is 0.1uW.	N/A
QSFPRxPowerLAlarm	Low alarm of RxPower of a lane.	N/A	Unsigned short. Unit is 0.1uW.	N/A
QSFPRxPowerHWarn	High warning of RxPower of a lane.	N/A	Unsigned short. Unit is 0.1uW.	N/A
QSFPRxPowerLWarn	Low warning of RxPower of a lane.	N/A	Unsigned short. Unit is 0.1uW.	N/A
Lane0RxPower	Received optical power of lane 0.	N/A	Unsigned short. Unit is 0.1uW.	N/A
Lane0RxPowerState	Running state of RxPower of lane 0.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>• 0—Normal.</li> <li>• 1—Transgress the low warning level.</li> <li>• 2—Transgress the high warning level.</li> <li>• 4—Transgress the low alarm level.</li> <li>• 8—Transgress the high alarm level.</li> <li>• Other—Unknown.</li> </ul>	N/A
Lane1RxPower	Received optical power of lane 1.	N/A	Unsigned short. Unit is 0.1uW.	N/A
Lane1RxPowerState	Running state of RxPower of lane 1.	N/A	Each bit represents a type. As follows: <ul style="list-style-type: none"> <li>• 0—Normal.</li> <li>• 1—Transgress the low warning level.</li> <li>• 2—Transgress the high warning level.</li> <li>• 4—Transgress the low alarm level.</li> <li>• 8—Transgress the high alarm level.</li> <li>• Other—Unknown.</li> </ul>	N/A
Lane2RxPower	Received optical power of lane 2.	N/A	Unsigned short.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit is 0.1uW.	
Lane2RxPowerState	Running state of RxPower of lane 2.	N/A	<p>Each bit represents a type.</p> <p>As follows:</p> <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
Lane3RxPower	Received optical power of lane 3.	N/A	<p>Unsigned short.</p> <p>Unit is 0.1uW.</p>	N/A
Lane3RxPowerState	Running state of RxPower of lane 3.	N/A	<p>Each bit represents a type.</p> <p>As follows:</p> <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Transgress the low warning level.</li> <li>2—Transgress the high warning level.</li> <li>4—Transgress the low alarm level.</li> <li>8—Transgress the high alarm level.</li> <li>Other—Unknown.</li> </ul>	N/A
QSFPPortTxType	Port tx type.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—Other or unknown.</li> <li>1—Short Wave Laser.</li> <li>2—Long Wave Laser LC.</li> </ul>	N/A
QSFPOpticalPort	Optical port flag.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—No.</li> <li>1—Yes.</li> </ul>	If the value is 1, the FC_Port is an optical port. If the value is 0, the FC_Port is not an optical port.
QSFPConnectorType	Connector type.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—Other or unknown.</li> <li>64—QSFP.</li> <li>Other—Reserved.</li> </ul>	N/A
QSFPFECActive	State of FEC active.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—16G FEC status is inactive or unknown.</li> <li>1—16G FEC is active.</li> </ul>	N/A
FECStatusDescriptor	FEC status descriptor.	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>CorrectedBlocks.</li> <li>UnCorrectableBlocks.</li> </ul>	N/A
CorrectedBlock	Number of FEC	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ks	encoding blocks reported as corrected by hardware.			
UnCorrectableBlocks	Number of FEC encoding blocks reported as uncorrectable by hardware.	N/A	Unsigned integer.	N/A
BufferCredit	Buffer Credit descriptor.	Data structure	Members include: <ul style="list-style-type: none"> <li>• BBCredit.</li> <li>• AttachedBBCredit.</li> <li>• RoundTripTime.</li> </ul>	N/A
BBCredit	FC_Port buffer-to-buffer credit.	N/A	Unsigned integer.	N/A
AttachedBBCredit	Attached FC_Port buffer-to-buffer credit.	N/A	Unsigned integer.	N/A
RoundTripTime	Nominal FC_Port RTT.	N/A	Unsigned integer.	A value of zero indicates the RTT is unknown and a non-zero value indicates the RTT of the link expressed in nanoseconds.
OpticalProductData	Optical Element Data Descriptor.	Data structure	Members include: <ul style="list-style-type: none"> <li>• VendorName.</li> <li>• Partnumber.</li> <li>• Serialnumber.</li> <li>• Revision.</li> <li>• Date.</li> </ul>	N/A
VendorName	Vendor name.	N/A	String. Length: 1 to 16 characters.	N/A
Partnumber	Vendor part number.	N/A	String. Length: 1 to 16 characters.	N/A
Serialnumber	Vendor serial number.	N/A	String. Length: 1 to 16 characters.	N/A
Revision	Vendor revision.	N/A	String. Length: 1 to 2 characters.	N/A
Date	Vendor's manufacturing date code.	N/A	String. Length: 1 to 8 characters.	N/A

# FDMI/RDPInterval

This table contains the interval for sending RDP request packets.

## XML structure

```
<FDMI>
  <RDPInterval>
    <Interval></Interval>
  </RDPInterval>
</FDMI>
```

## Table description

Item	Description
Feature name	FDMI
Table name	RDPInterval
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interval	Interval for sending RDP request packet.	N/A	Unsigned integer. Value range: 5 to 1440.	N/A

# Contents

FFILTER .....	1
FFILTER/Policy .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
FFILTER/PolicyInProfile .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
FFILTER/RuleInPolicy .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
FFILTER/FGroup .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
FFILTER/PatternInFGroup .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
FFILTER/FalseExtensionAction .....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# FFILTER

## FFILTER/Policy

This table contains file filter policie information.

### XML structure

```
<FFILTER>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <PolicyDescription></PolicyDescription>
    </Policy>
  </Policies>
</FFILTER>
```

### Table description

Item	Description
Feature name	FFILTER
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the file filter policy	Index	String, case-insensitive Length: 1 to 31 characters.	N/A
PolicyDescription	Description of the file filter policy	N/A	String, case-sensitive Length: 1 to 255 characters.	N/A

## FFILTER/PolicyInProfile

This table contains file filter policies applied to the profile.

## XML structure

```
<FFILTER>
  <PolicyInProfile>
    <Profile>
      <ProfileName></ProfileName>
      <PolicyName></PolicyName>
    </Profile>
  </PolicyInProfile>
</FFILTER>
```

## Table description

Item	Description
Feature name	FFILTER
Table name	PolicyInProfile
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the profile	Index	String, case-insensitive Length: 1 to 100 characters.	N/A
PolicyName	Name of the policy	NA	String, case-insensitive Length: 1 to 31 characters.	N/A

## FFILTER/RuleInPolicy

This table contains information about rules in a file filter policy.

## XML structure

```
<FFILTER>
  <RuleInPolicy>
    <Rule>
      <PolicyName></PolicyName>
      <RuleName></RuleName>
      <FGroupName></FGroupName>
      <Application></Application>
      <Direction></Direction>
```

```

    <Action></Action>
    <Logging></Logging>
  </Rule>
</RuleInPolicy>
</FFILTER>

```

## Table description

Item	Description
Feature name	FFILTER
Table name	RuleInPolicy
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
RuleName	Name of the rule	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
FGroupName	Name of the file type group	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
Application	Application of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—HTTP</li> <li>2—FTP</li> <li>4—SMTP</li> <li>8—IMAP</li> <li>16—POP3</li> <li>32—NFS</li> <li>64—SMB</li> <li>128—RTMP</li> </ul>	Examples: 3—Application is HTTP and FTP.
Direction	Direction of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—upload</li> <li>1—download</li> <li>2—both</li> </ul>	Default is 0.
Action	Action for packets matching the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—drop</li> <li>1—permit</li> </ul>	Default is 0.
Logging	Logging or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# FFILTER/FGroup

This table contains file filter file type group information.

## XML structure

```
<FFILTER>
  <FGroups>
    <FGroup>
      <FGroupName></FGroupName>
      <FGroupDescription></FGroupDescription>
    </FGroup>
  </FGroups>
</FFILTER>
```

## Table description

Item	Description
Feature name	FFILTER
Table name	FGroups
Table type	Multi-instance table
Row name	FGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FGroupName	Name of the file type group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
FGroupDescription	Description of the file type group	N/A	String, case-sensitive Length: 1 to 255 characters.	N/A

# FFILTER/PatternInFGroup

This table contains information about pattern in a file filter file type group.

## XML structure

```
<FFILTER>
  <PatternInFGroups>
    <PatternInFGroup>
      <FGroupName></FGroupName>
```



```

    <PatternName></PatternName>
    <PatternValue></PatternValue>
  </PatternInFGroup>
</PatternInFGroups>
</FFILTER>

```

## Table description

Item	Description
Feature name	FFILTER
Table name	PatternInFGroups
Table type	Multi-instance table
Row name	PatternInFGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FGroupName	Name of the file type group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternName	Name of the pattern	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternValue	Value of the pattern	N/A	String. Length: 1 to 8 characters.	N/A

## FFILTER/FalseExtensionAction

This table contains information about the default action when the extension name of file is false.

## XML structure

```

<FFILTER>
  <FalseExtensionAction>
    <Action></Action>
  </FalseExtensionAction>
</FFILTER>

```

## Table description

Item	Description
Feature name	FFILTER

Table name	FalseExtensionAction
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Value of the action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—permit</li> <li>1—drop</li> </ul>	Default is 0.

# Contents

FFILTER .....	1
FFILTER/Policy .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
FFILTER/PolicyInProfile .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
FFILTER/RuleInPolicy .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
FFILTER/FGroup .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
FFILTER/PatternInFGroup .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
FFILTER/FalseExtensionAction .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
FFILTER/FileTypes .....	6
XML structure .....	6
Table description .....	6
Columns .....	6

# FFILTER

## FFILTER/Policy

This table contains file filter policies information.

### XML structure

```
<FFILTER>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <PolicyDescription></PolicyDescription>
    </Policy>
  </Policies>
</FFILTER>
```

### Table description

Item	Description
Feature name	FFILTER
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the file filter policy	Index	String, case-insensitive Length: 1 to 31 characters.	N/A
PolicyDescription	Description of the file filter policy	N/A	String, case-sensitive Length: 1 to 255 characters.	N/A

## FFILTER/PolicyInProfile

This table contains file filter policies applied to the profile.

## XML structure

```
<FFILTER>
  <PolicyInProfile>
    <Profile>
      <ProfileName></ProfileName>
      <PolicyName></PolicyName>
    </Profile>
  </PolicyInProfile>
</FFILTER>
```

## Table description

Item	Description
Feature name	FFILTER
Table name	PolicyInProfile
Table type	Multi-instance table
Row name	Profile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the profile	Index	String, case-insensitive Length: 1 to 100 characters.	N/A
PolicyName	Name of the policy	NA	String, case-insensitive Length: 1 to 31 characters.	N/A

## FFILTER/RuleInPolicy

This table contains information about rules in a file filter policy.

## XML structure

```
<FFILTER>
  <RuleInPolicy>
    <Rule>
      <PolicyName></PolicyName>
      <RuleName></RuleName>
      <FGGroupName></FGGroupName>
      <Application></Application>
      <Direction></Direction>
      <Action></Action>
```

```

    <Logging></Logging>
  </Rule>
</RuleInPolicy>
</FFILTER>

```

## Table description

Item	Description
Feature name	FFILTER
Table name	RuleInPolicy
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
RuleName	Name of the rule	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
FGroupName	Name of the file type group	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
Application	Application of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—HTTP</li> <li>2—FTP</li> <li>4—SMTP</li> <li>8—IMAP</li> <li>16—POP3</li> <li>32—NFS</li> <li>64—SMB</li> <li>128—RTMP</li> </ul>	Examples: 3—Application is HTTP and FTP.
Direction	Direction of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—upload</li> <li>1—download</li> <li>2—both</li> </ul>	Default is 0.
Action	Action for packets matching the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—drop</li> <li>1—permit</li> </ul>	Default is 0.
Logging	Logging or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# FFILTER/FGroup

This table contains file filter file type group information.

## XML structure

```
<FFILTER>
  <FGroups>
    <FGroup>
      <FGroupName></FGroupName>
      <FGroupDescription></FGroupDescription>
    </FGroup>
  </FGroups>
</FFILTER>
```

## Table description

Item	Description
Feature name	FFILTER
Table name	FGroups
Table type	Multi-instance table
Row name	FGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FGroupName	Name of the file type group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
FGroupDescription	Description of the file type group	N/A	String, case-sensitive Length: 1 to 255 characters.	N/A

# FFILTER/PatternInFGroup

This table contains the information of pattern in a file filter file type group.

## XML structure

```
<FFILTER>
  <PatternInFGroups>
    <PatternInFGroup>
      <FGroupName></FGroupName>
      <PatternName></PatternName>
    </PatternInFGroup>
  </PatternInFGroups>
</FFILTER>
```

```

        <PatternValue></PatternValue>
    </PatternInFGroup>
</PatternInFGroups>
</FFILTER>

```

## Table description

Item	Description
Feature name	FFILTER
Table name	PatternInFGroups
Table type	Multi-instance table
Row name	PatternInFGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FGroupName	Name of the file type group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternName	Name of the pattern	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternValue	Value of the pattern	N/A	String. Length: 1 to 8 characters.	N/A

## FFILTER/FalseExtensionAction

This table contains information about the default action when the extension name of file is false.

## XML structure

```

<FFILTER>
  <FalseExtensionAction>
    <Action></Action>
  </FalseExtensionAction>
</FFILTER>

```

## Table description

Item	Description
Feature name	FFILTER
Table name	FalseExtensionAction
Table type	Single-instance table



Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Value of the action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—permit</li> <li>1—drop</li> </ul>	Default is 0.

## FFILTER/FileTypes

This table contains the information of file types.

## XML structure

```

<FFILTER>
  <FileTypes>
    <FileTypeInfo>
      <FileName></FileName>
      <PatternName></PatternName>
    </FileTypeInfo>
  </FileTypes>
</FFILTER>

```

## Table description

Item	Description
Feature name	FFILTER
Table name	FileTypes
Table type	Multi-instance table
Row name	FileTypeInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the file type	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PatternName	Name of the pattern	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A



# Contents

- FFILTER .....1
  - FFILTER/Policy .....1
  - FFILTER/RuleInPolicy.....1
  - FFILTER/FGroup .....1

# FFILTER

## FFILTER/Policy

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍等。	Please try later. 正在升级，稍后再试。
The default policy cannot be created. 默认策略不允许创建。	The default policy cannot be created. 默认策略不允许创建。
The default policy cannot be deleted. 默认策略不允许删除。	The default policy cannot be deleted. 默认策略不允许删除。
The default policy cannot be modified. 默认策略不允许修改。	The default policy cannot be modified. 默认策略不允许修改。
The policy is being used by a DPI application profile and cannot be deleted. 策略已被某个App-profile引用，不能被删除。	Policy cannot be deleted when it is being used by a DPI application profile. 不能删除被引用的策略。

## FFILTER/RuleInPolicy

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍等。	Please try later. 正在升级，稍后再试。
Maximum number of rules has already reached. 策略下的规则数目已达到上限。	The maximum number of rules has already reached. 可配置的规则数已达上限。

## FFILTER/FGroup

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍等。	Please try later. 正在升级，稍后再试。
The default file type group is not allowed to create. 默认文件类型组不允许创建。	The default file type group can't be created. 默认文件类型组不允许创建。
The default file type group cannot be deleted. 默认文件类型组不允许删除。	The default file type group cannot be deleted. 默认文件类型组不允许删除。
The default file type group cannot be used by a non-default policy. 默认文件类型组不允许被非默认策略引用。	The default file type group cannot be used by a non-default policy. 默认文件类型组不允许被非默认策略引用。
The default file type group cannot be modified. 默认文件类型组不允许修改。	The default file type group cannot be modified. 默认文件类型组不允许修改。

<p>The file type group is being used by a rule and cannot be deleted.</p> <p>文件类型组已被某个规则引用，不能被删除。</p>	<p>File type group can't be deleted when it is used by a rule.</p> <p>不能删除被引用的文件类型组。</p>
<p>The number of patterns has reached the maximum.</p> <p>文件类型组下的文件类型数目已达到上限。</p>	<p>The number of patterns has reached the maximum.</p> <p>可配置的文件类型数已达上限。</p>

# Contents

FileSystem.....	1
FileSystem/Files .....	1
XML structure.....	1
Table description.....	1
Columns.....	2
FileSystem/RecycleBin.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
FileSystem/Media .....	4
XML structure.....	4
Table description.....	4
Columns.....	5
FileSystem/Partitions .....	5
XML structure.....	5
Table description.....	5
Columns.....	6

# FileSystem

## FileSystem/Files

This table describes the actions that can be performed to the file.

### XML structure

```
<FileSystem>
  <Files>
    <File>
      <SrcName></SrcName>
      <DstName></DstName>
      <VRF></VRF>
      <Operations>
        <Delete></Delete>
        <UnReservedDelete></UnReservedDelete>
        <Copy></Copy>
        <Move></Move>
        <Rename></Rename>
        <Gzip></Gzip>
        <Gunzip></Gunzip>
        <sha256sum></sha256sum>
        <md5sum></md5sum>
        <Mkdir></Mkdir>
        <Rmdir></Rmdir>
      </Operations>
    </File>
  </Files>
</FileSystem>
```

### Table description

Item	Description
Feature name	FileSystem
Table name	Files
Table type	Multi-instance table
Row name	File
Restrictions	Delete, UnReservedDelete, Copy, Move, Rename, More, Gzip, Gunzip, Sha256sum, Md5sum, Mkdir and Rmdir are mutually exclusive.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcName	Full path and file name. For examples: flash:/logfile/logfile.log chassis3#slot1#cfa0:/main.cfg	Index	NameString Length: 1 to 4096 characters.	N/A
DstName	Full path and file name. For examples: flash:/logfile/logfile.log chassis3#slot1#cfa0:/main.cfg	N/A	NameString Length: 1 to 4096 characters.	N/A
VRF	The VRF name.	N/A	String. Length: 1 to 31 Characters.	If VRF is not specified, it is represented that host is on the public network.
Delete	Delete a file.	N/A	This column must be empty.	N/A
UnReservedDelete	Delete a file permanently.	N/A	This column must be empty.	N/A
Copy	Copy a file.	N/A	This column must be empty. DstName column must not be empty.	N/A
Move	Move a file.	N/A	This column must be empty. DstName column must not be empty.	N/A
Rename	Rename a file or directory.	N/A	This column must be empty. DstName column must not be empty.	N/A
Gzip	Compress file.	N/A	This column must be empty. DstName column must be empty.	N/A
Gunzip	Decompress file.	N/A	This column must be empty. DstName column must be empty.	N/A
Sha256sum	Compute the hash digest of a file using the SHA256 algorithm.	N/A	This column must be empty. DstName column must be empty.	N/A
Md5sum	Compute the hash digest of a file using the MD5 algorithm.		This column must be empty. DstName column must be empty.	N/A
Mkdir	Create a new	N/A	This column must be empty.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	directory.		DstName column must be empty.	
RmDir	Remove an empty directory.	N/A	This column must be empty. DstName column must be empty.	N/A

## FileSystem/RecycleBin

This table describes the actions that can be performed to the file under recycle-bin.

### XML structure

```

<FileSystem>
  <RecycleBin>
    <RecycleBinFile>
      <Name></Name>
      <Operations>
        <Undelete></Undelete>
        <Clear></Clear>
      </Operations>
    </RecycleBinFile>
  </RecycleBin>
</FileSystem>

```

### Table description

Item	Description
Feature name	FileSystem
Table name	RecycleBin
Table type	Multi-instance table
Row name	RecycleBinFile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Full path and file name. For examples: flash:/logfile/logfile.log chassis3#slot1#cfa0:/main.cfg	Index	String. Length: 1 to 4096 characters.
Undelete	Recover a deleted file.	N/A	This column must be empty.
Clear	Delete a deleted file permanently.	N/A	This column must be empty.

## FileSystem/Media

This table describes the actions that can be performed to the media.

## XML structure

```
<FileSystem>
  <Media>
    <Medium>
      <Name></Name>
      <Fdisk></Fdisk>
      <Part1Size></Part1Size>
      <Part2Size></Part2Size>
      <Part3Size></Part3Size>
      <Part4Size></Part4Size>
    </Medium>
  </Media>
</FileSystem>
```

## Table description

Item	Description
Feature name	FileSystem
Table name	Media
Table type	Multi-instance table
Row name	Medium
Restrictions	Part1Size, Part2Size, Part3Size and Part4Size should be assigned in order. It is not permitted to assign Part2Size without Part1Size.

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Storage medium name. For examples: flash: chassis3#slot1#cfa:	Index	String. Length: 1 to 255 characters.
Fdisk	Partition a storage medium.	N/A	This column must be empty.
Part1Size	The size of partition1. Unit: Mbyte.	Unsigned integer.	N/A
Part2Size	The size of partition2. Unit: Mbyte.	Unsigned integer.	N/A
Part3Size	The size of partition3. Unit: Mbyte.	Unsigned integer.	N/A
Part4Size	The size of partition4. Unit: Mbyte.	Unsigned integer.	N/A

## FileSystem/Partitions

### XML structure

```
<FileSystem>
  <Partitions>
    <Partition>
      <Name></Name>
      <Operations>
        <Format></Format>
        <FixDisk></FixDisk>
        <Umount></Umount>
        <Mount></Mount>
      </Operations>
    </Partition>
  </Partitions>
</FileSystem>
```

### Table description

Item	Description
Feature name	FileSystem

Table name	Partitions
Table type	Multi-instance table
Row name	Partition
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Storage medium partition name. For examples: flash: chassis3#slot1#cfa0:	Index	String. Length: 1 to 255 characters.
Format	Format a storage medium partition.	N/A	This column must be empty.
FixDisk	Check and repair a storage medium partition.	N/A	This column must be empty.
Umount	Unmount a storage medium partition.	N/A	This column must be empty.
Mount	Mount a storage medium partition.	N/A	This column must be empty.

# Contents

FileSystem.....	1
FileSystem/Files .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
FileSystem/RecycleBin .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
FileSystem/Media .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
FileSystem/Partitions .....	4
XML structure .....	4
Table description .....	4
Columns .....	4

# FileSystem

## FileSystem/Files

This table contains the file information.

### XML structure

```
<FileSystem>
  <Files>
    <File>
      <Name></Name>
      <Path></Path>
      <Size></Size>
      <Time></Time>
      <IsDirectory></IsDirectory>
    </File>
  </Files>
</FileSystem>
```

### Table description

Item	Description
Feature name	FileSystem
Table name	Files
Table type	Multi-instance table
Row name	File
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remark
Name	Fully qualified name of a directory or file	Index	String, case insensitive. Length: 1 to 4096 characters.	Examples: <ul style="list-style-type: none"><li>flash:/logfile/logfile.log</li><li>chassis3#slot1#cfa0:/main.cfg</li></ul>

Column name	Column description	Column type	Data type and restrictions	Remark
Path	Absolute path to the file	N/A	String, case insensitive. Length: 1 to 4096 characters.	Examples: <ul style="list-style-type: none"> <li>flash:/logfile</li> <li>chassis3#slot1#cfa0:</li> </ul>
Size	File size in bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Time	Latest modification time.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
IsDirectory	Whether the Name column carries a directory	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## FileSystem/RecycleBin

This Table contains recycle bin files information.

### XML structure

```

<FileSystem>
  <RecycleBin>
    <RecycleBinFile>
      <Medium></Medium>
      <TrashFiles>
        <FileName></FileName>
      </TrashFiles>
    </RecycleBinFile>
  </RecycleBin>
</FileSystem>

```

### Table description

Item	Description
Feature name	FileSystem
Table name	RecycleBin
Table type	Multi-instance table
Row name	RecycleBinFile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
Medium	File system name	Index	String. Length: 1 to 255 characters.	Examples: <ul style="list-style-type: none"><li>chassis2#slot1#flash:</li><li>chassis1#slot2#cfa0:</li></ul>
TrashFiles	Files in the recycle bin	Data structure	Members: FileName	N/A
FileName	File name.	N/A	String, case insensitive. Length: 1 to 4096 characters.	Examples: <ul style="list-style-type: none"><li>logfile/logfile.log</li><li>main.cfg</li></ul>

## FileSystem/Media

This Table contains medium information.

## XML structure

```
<FileSystem>
  <Media>
    <Medium>
      <Name></Name>
      <PartitionCapability></PartitionCapability>
    </Medium>
  </Media>
</FileSystem>
```

## Table description

Item	Description
Feature name	FileSystem
Table name	Media
Table type	Multi-instance table
Row name	Medium
Restrictions	None

## Columns



Column name	Column description	Column type	Data type and restrictions	Remark
Name	Storage medium name	Index	String. Length: 1 to 255 characters.	Examples: <ul style="list-style-type: none"> <li>chassis2#slot1#flash:</li> <li>chassis1#slot2#cfa:</li> </ul>
PartitionCapability	Whether the medium can be partitioned	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## FileSystem/Partitions

This Table contains partition information.

### XML structure

```

<FileSystem>
  <Partitions>
    <Partition>
      <Name></Name>
      <Total></Total>
      <Used></Used>
      <Free></Free>
      <Bootable></Bootable>
      <MountState></MountState>
    </Partition>
  </Partitions>
</FileSystem>

```

### Table description

Item	Description
Feature name	FileSystem
Table name	Partitions
Table type	Multi-instance table
Row name	Partition
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remark
Name	Partition name	Index	String.	Examples:

Column name	Column description	Column type	Data type and restrictions	Remark
			Length: 1 to 255 characters.	<ul style="list-style-type: none"> <li>chassis2#slot1#flash:</li> <li>chassis1#slot2#cfa0:</li> </ul>
Total	Total size of the partition in bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Used	Used size of the partition in bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Free	Available size of the partition in bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Bootable	Whether the partition is the startup partition	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
MountState	Whether the partition is mounted	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	If the value of this column is false, only this column and the Name column can be read.

# Contents

- FileSystem.....2
  - FileSystem/Files .....2
  - FileSystem/Media .....3
  - FileSystem/Partitions .....4

# FileSystem

## FileSystem/Files

Message	Explanation
The destination file name can't be the same as the source file name. 目标文件名不能与源文件名相同。	During executing copy or move operation, the destination file name must not be the same as the source file name. 目标文件名不能与源文件名相同。
Permission denied. 权限不足。	During executing copy, move, delete or rename operation, user lacks permissions. 权限不足。
The file or directory doesn't exist. 文件或目录不存在。	During executing copy, move, delete or rename operation on a file or directory, the file or directory doesn't exist. 源文件或目标文件目录不存在。
Insufficient storage or disk space. 存储空间不足或者磁盘资源不足。	During executing copy or move operation, insufficient storage or disk space. 存储空间不足或者磁盘资源不足，拷贝失败。
Wrong file name or directory name. Please check. 文件名(或目录名)错误，请检查。	During executing rename operation, the source file name and the destination file name must not end with '\'. 文件名(或目录名)错误，请检查。
SrcName and DstName are not in the same directory. 源文件名和目标文件名中的路径不同。	During executing rename operation, the source file and the destination file must in the same parent directory. 重命名操作的源文件和目标文件路径必须相同。
The destination file name is already used. 目标文件名已经被使用。	During executing rename operation, the destination file name must not be used. 重命名操作的目标文件名已被使用。
The directory already exists. 该目录已经存在。	During executing make directory operation, the directory must not exist. 新创建的目录已经存在。
The parent directory doesn't exist. 指定目录不存在。	During executing make directory operation, the parent directory doesn't exist. 新创建目录路径错误，父目录不存在。
A file with the same name already exists. 已存在同名文件。	During executing make directory operation, the directory must not be the same as an exist file. 新创建目录名不能和已存在的文件重名。
Can't remove the directory because it is not empty. 目录非空，无法删除。	During executing delete directory operation, the directory must be empty. 目录非空，无法删除。
Can't execute this command. The security log file is already saved in the storage medium. 不能执行该命令，安全日志文件已经保存在该存储介质。	Before partition a storage device, delete all the saved security log files first. 安全日志文件所在存储介质不能做分区操作。
Please use 'Rmdir' to remove the directory. 请使用Rmdir删除文件夹。	The directory can't be deleted by 'Delete' operation, but 'Rmdir'. 删除目录需要用 'Rmdir' 命令。

Can't overwrite directory %s with non-directory %s. 不能将目录文件%s改写为非目录文件%s”。	During executing copy or move operation, the destination file name must not be the same as an exist directory. 不能拷贝目录文件到非目录文件。
DstName is not required for this operation. 该操作无需指定DstName列的值。	The 'DstName' must not be set in operation 'Delete', 'UnReservedDelete', 'Gzip', 'Gunzip', 'Sha256sum', 'Md5sum', 'Mkdir' and 'Rmdir'. 'Delete', 'UnReservedDelete', 'Gzip', 'Gunzip', 'Sha256sum', 'Md5sum', 'Mkdir' 和 'Rmdir'等操作不能有'DstName'参数。
Please enter a value for the DstName column. 请输入DstName列的值	The 'DstName' must be set in operation 'Copy', 'Move', 'Rename', 'Sha256sum', 'Md5sum', 'Mkdir' and 'Rmdir'. 'Copy', 'Move', 'Rename', 'Sha256sum', 'Md5sum', 'Mkdir' 和 'Rmdir'等操作必须有'DstName'参数。
Operation failed. Curl unsupported protocol. 操作失败，Curl不支持的协议类型。	Failed to copy file through network, unsupported protocol. 文件URL协议不支持，获取文件失败。
Operation failed. Remote server login denied. 操作失败，登录服务器失败，用户名或密码错误。	Failed to copy file through network, wrong user name or password. 用户名或密码错误，登录服务器失败。
Operation failed. Remote file or directory not found. 操作失败，远端服务器文件或目录不存在。	Failed to copy file through network, remote file or directory not found. 远端服务器文件或目录不存在，下载失败。
Operation failed. Remote server can't connect. 操作失败，远端服务器不可达。	Failed to copy file through network, remote server can't connect. 远端服务器不可达。
Invalid VPN name. 不可用的VPN名字。	Failed to copy file through network, invalid VPN name. 不可用的VPN名字。
Invalid URL. 不可用的URL。	Failed to copy file through network, invalid URL. 无效URL。

## FileSystem/Media

Message	Explanation
Storage device error. 存储设备错误。	Can't read storage device. 解析存储设备失败。
The storage space is too small to partition. 存储空间太小，无法分区。	Do not need to partition. 存储空间太小，无法分区。
The partition size must be greater than or equal to %dMB. 新建分区大小必须大于等于%dMB。	The partition size is set too small. 新建分区大小必须大于等于系统设定的最小值。
The partition size must be less than or equal to %uMB. 新建分区大小必须小于等于%uMB。	The partition size is set too big. 新建分区大小必须小于等于系统设定的最大值。
The remaining space is less than %uMB. 剩余空间不足%uMB。	The remaining space is not enough. 存储设备剩余空间不足。

# FileSystem/Partitions

Message	Explanation
The storage device is being used and locked by another process. 设备正在使用中，已被其他进程加锁。	Wait for the storage device to be released. 设备正在使用中，已被其他进程加锁。
Operation failed. The device is in use and locked by another process. 操作失败。此分区正在使用中。	Operation failed, wait for the storage device to be released. 操作失败。此分区正在使用中。

# Contents

- FTP.....1
  - FTP/Server.....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# FTP

## FTP/Server

This table contains information about global FTP Server functions.

### XML structure

```
<FTP>
  <Server>
    <State></State>
    <Ipv4DSCP></Ipv4DSCP>
    <Ipv6DSCP></Ipv6DSCP>
    <Ipv4ACLNum></Ipv4ACLNum>
    <Ipv6ACLNum></Ipv6ACLNum>
    <Timeout></Timeout>
    <SslServerPolicy></SslServerPolicy>
  </Server>
</FTP>
```

### Table description

Item	Description
Feature name	FTP
Table name	Server
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global FTP Server functions.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
State	Global FTP Server feature	N/A	EnableState: <ul style="list-style-type: none"><li>enable Enable FTP Server</li><li>disable Disable FTP Server(default)</li></ul>
Ipv4DSCP	Set the IPv4 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:0



Column name	Column description	Column type	Data type and restrictions
Ipv6DSCP	Set the IPv6 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:0.
Ipv4ACLNum	Specify an IPv4 ACL used to control the FTP clients' access	N/A	Unsigned integer. Value range: 2000 to 3999.
Ipv6ACLNum	Specify an IPv6 ACL used to control the FTP clients' access	N/A	Unsigned integer. Value range: 2000 to 3999.
Timeout	Specify FTP timeout value	N/A	Unsigned integer. Value range: 1 to 35791. Default value: 30.
SslServerPolicy	Specify an SSL server policy for the FTP server	N/A	String. Length: 1 to 31 characters.

# Contents

- FTP.....1
  - FTP/Capabilities .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1
  - FTP/Server.....1
    - XML structure.....1
    - Table description.....2
    - Columns.....2

# FTP

## FTP/Capabilities

This table contains the capabilities information of the FTP.

### XML structure

```
<FTP>
  <Capabilities>
    <FtpServerSupport></FtpServerSupport>
  </Capabilities>
</FTP>
```

### Table description

Item	Description
Feature name	FTP
Table name	Capabilities
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
FtpServerSupport	Whether The FTP Server capability is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>

## FTP/Server

This table contains global FTP Server information.

### XML structure

```
<FTP>
  <Server>
    <State></State>
    <Ipv4DSCP></Ipv4DSCP>
    <Ipv6DSCP></Ipv6DSCP>
    <Ipv4ACLNum></Ipv4ACLNum>
  </Server>
</FTP>
```

```

    <Ipv6ACLNum></Ipv6ACLNum>
    <Timeout></Timeout>
    <SslServerPolicy></SslServerPolicy>
  </Server>
</FTP>

```

## Table description

Item	Description
Feature name	FTP
Table name	Server
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global FTP Server functions.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
State	Global FTP Server feature	N/A	EnableState: <ul style="list-style-type: none"> <li>enable Enable FTP Server</li> <li>disable Disable FTP Server(default)</li> </ul>
Ipv4DSCP	Set the IPv4 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:0
Ipv6DSCP	Set the IPv6 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:0.
Ipv4ACLNum	Specify an IPv4 ACL used to control the FTP clients' access	N/A	Unsigned integer. Value range: 2000 to 3999.
Ipv6ACLNum	Specify an IPv6 ACL used to control the FTP clients' access	N/A	Unsigned integer. Value range: 2000 to 3999.
Timeout	Specify FTP timeout value	N/A	Unsigned integer. Value range: 1 to 35791. Default value: 30.
SslServerPolicy	Specify an SSL server policy for the FTP server	N/A	String. Length: 1 to 31 characters.

# Contents

FTP.....1

    FTP/Server.....1

# FTP

## FTP/Server

Message	Explanation
Failed to enable FTP server. 使能FTP server失败	When the FTP service port number has been used by other services, it does not support to enable FTP server.
Failed to set the idle-timeout interval for FTP connections. 配置空闲超时失败.	If the idle-timeout interval for FTP connections can't be processed by the daemon of FTP, the configuration of specified idle-timeout interval for FTP will fail.
Failed to specify ACL. 配置ACL失败.	If the ACL configuration can't be processed by the daemon of FTP, the specified ACL configuration will fail.
Failed to specify the SSL server policy. 配置SSL失败.	The specified SSL server policy name that need to be configured must already exist.

# Contents

- Fundamentals .....1
  - Fundamentals/CurrentSessionOpt .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# Fundamentals

## Fundamentals/CurrentSessionOpt

This table describes the actions that can be performed to current session.

### XML structure

```
<Fundamentals>
  <CurrentSessionOpt>
    <DisableEditConfigWhenRollback/>
    <EnableLightRollback/>
  </CurrentSessionOpt>
</Fundamentals>
```

### Table description

Item	Description
Feature name	Fundamentals
Table name	CurrentSessionOpt
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DisableEditConfigWhenRollback	Reject edit-config request when system is performing rollback.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A
EnableLightRollback	Enable rollback in a light weight method.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	This column is used to enable or disable the light rollback(a light way to rollback when you get an error in the edit-config operation while the error-option is set to be rollback-on-error). By default, it is false



# Contents

Fundamentals .....	1
Fundamentals/WebUI .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Fundamentals/SoapUI .....	2
XML structure .....	2
Table description .....	3
Columns .....	3

# Fundamentals

## Fundamentals/WebUI

This table contains Web service information.

### XML structure

```
<Fundamentals>
  <WebUI>
    <SessionAgingTime></SessionAgingTime>
    <HTTP>
      <State></State>
      <Port></Port>
      <AclNumber></AclNumber>
      <AclName></AclName>
    </HTTP>
    <HTTPS>
      <State></State>
      <Port></Port>
      <AclNumber></AclNumber>
      <AclName></AclName>
    </HTTPS>
  </WebUI>
</Fundamentals>
```

### Table description

Item	Description
Feature name	Fundamentals
Table name	WebUI
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SessionAgingTime	Web user connection timeout (minutes)	N/A	Unsigned integer. Value range: 1 to 999.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
HTTP	HTTP configuration information.	Data structure	Members include: <ul style="list-style-type: none"> <li>State</li> <li>Port</li> <li>AclNumber</li> </ul>	N/A
State	HTTP status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>	N/A
Port	HTTP port number.	N/A	Unassigned integer. Value range: 1 to 65535.	N/A
AclNumber	Number of the ACL for HTTP access control.	N/A	Unassigned integer. Value range: 2000 to 2999.	Only basic ACLs are supported. This column and the <b>AclName</b> column overwrites each other.
AclName	Name of the ACL for HTTP access control.	N/A	String, case insensitive. Length: 1 to 63 characters. The string must start with an English letter.	Only basic ACLs are supported. This column and the <b>AclNumber</b> column overwrites each other. The name of an ACL cannot be <b>all</b> .
HTTPS	HTTPS configuration information.	Data structure	Members include: <ul style="list-style-type: none"> <li>State</li> <li>Port</li> <li>AclNumber</li> </ul>	N/A
State	HTTPS status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>	N/A
Port	HTTPS port number.	N/A	Unassigned integer. Value range: 1 to 65535.	N/A
AclNumber	Number of the ACL for HTTP access control.	N/A	Unassigned integer. Value range: 2000 to 2999.	Only basic ACLs are supported. This column and the <b>AclName</b> column overwrites each other.
AclName	Name of the ACL for HTTP access control.	N/A	String, case insensitive. Length: 1 to 63 characters. The string must start with an English letter	Only basic ACLs are supported. This column and the <b>AclNumber</b> column overwrites each other. The name of an ACL cannot be <b>all</b> .

## Fundamentals/SoapUI

This table contains SOAP service information.

### XML structure

<Fundamentals>

```

<SoapUI>
  <HTTP>
    <IPv4AclNumber></IPv4AclNumber>
    <IPv4AclName></IPv4AclName>
    <IPv6AclNumber></IPv6AclNumber>
    <IPv6AclName></IPv6AclName>
  </HTTP>
</SoapUI>
</Fundamentals>

```

## Table description

Item	Description
Feature name	Fundamentals
Table name	SoapUI
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HTTP	HTTP configuration information.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4AclNumber</li> <li>IPv4AclName</li> <li>IPv6AclNumber</li> <li>IPv6AclName</li> </ul>	N/A
IPv4AclNumber	Number of the IPv4 ACL for HTTP access control.	N/A	Unassigned integer. Value range: 2000 to 2999.	Only basic ACLs are supported. This column and the <b>IPv4AclName</b> column overwrites each other.
IPv4AclName	Name of the IPv4 ACL for HTTP access control.	N/A	String, case insensitive. Length: 1 to 63 characters. The string must start with an English letter.	Only basic ACLs are supported. This column and the <b>IPv4AclNumber</b> column overwrites each other. An ACL name cannot be <b>all</b> .
IPv6AclNumber	Number of the IPv6 ACL for HTTP access control.	N/A	Unassigned integer. Value range: 2000 to 2999.	Only basic ACLs are supported. This column and the <b>IPv6AclName</b> column overwrites each other.
IPv6AclName	Name of the IPv6 ACL for HTTP access control.	N/A	String, case insensitive. Length: 1 to 63	Only basic ACLs are supported. This column and the

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters. The string must start with an English letter.	<b>IPv6AclNumber</b> column overwrites each other. An ACL name cannot be <b>all</b> .

# Contents

Fundamentals .....	1
Fundamentals/WebUI .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
Fundamentals/NetconfResXPath .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
Fundamentals/WebMenuPath .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
Fundamentals/SoapUI .....	5
XML structure .....	5
Table description .....	5
Columns .....	5

# Fundamentals

## Fundamentals/WebUI

This table contains Web service information.

### XML structure

```
<Fundamentals>
  <WebUI>
    <SessionAgingTime></SessionAgingTime>
    <HTTP>
      <State></State>
      <Port></Port>
      <AclNumber></AclNumber>
      <AclName></AclName>
    </HTTP>
    <HTTPS>
      <State></State>
      <Port></Port>
      <AclNumber></AclNumber>
      <AclName></AclName>
    </HTTPS>
  </WebUI>
</Fundamentals>
```

### Table description

Item	Description
Feature name	Fundamentals
Table name	WebUI
Table type	Single-instance table
Row name	N/A
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SessionAgingTime	Web user connection timeout in minutes.	N/A	Unsigned integer. Value range: 1 to 999.	N/A
HTTP	HTTP configuration information.	Data structure	Members include: <ul style="list-style-type: none"> <li>State</li> <li>Port</li> <li>AclNumber</li> </ul>	N/A
State	HTTP status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>	N/A
Port	HTTP port number.	N/A	Unassigned integer. Value range: 1 to 65535.	N/A
AclNumber	Number of the ACL for HTTP access control.	N/A	Unassigned integer. Value range: 2000 to 2999.	Only basic ACLs are supported. This column and the <b>AclName</b> column overwrites each other.
AclName	Name of the ACL for HTTP access control.	N/A	String, case insensitive. Length: 1 to 63 characters. The string must start with an English letter.	Only basic ACLs are supported. This column and the <b>AclNumber</b> column overwrites each other. The name of an ACL cannot be <b>all</b> .
HTTPS	HTTPS configuration information.	Data structure	Members include: <ul style="list-style-type: none"> <li>State</li> <li>Port</li> <li>AclNumber</li> </ul>	N/A
State	HTTPS status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>	N/A
Port	HTTPS port number.	N/A	Unassigned integer. Value range: 1 to 65535.	N/A
AclNumber	Number of the ACL for HTTPS access control.	N/A	Unassigned integer. Value range: 2000 to 2999.	Only basic ACLs are supported. This column and the <b>AclName</b> column overwrites each other.
AclName	Name of the ACL for HTTPS access control.	N/A	String, case-insensitive. Length: 1 to 63 characters. The string must start with an English letter.	Only basic ACLs are supported. This column and the <b>AclNumber</b> column overwrites each other. The name of an ACL cannot be <b>all</b> .



# Fundamentals/NetconfResXPath

This table contains NETCONF XML path information.

## XML structure

```
<Fundamentals>
  <NetconfResXPath>
    <XPath>
      <Path></Path>
      <Type></Type>
    </XPath>
  </NetconfResXPath>
</Fundamentals>
```

## Table description

Item	Description
Feature name	Fundamentals
Table name	NetconfResXPath
Table type	Multi-instance table
Row name	xPath
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Path	The operational XML resource path .	Index	String. case-insensitive.
Type	The type of the operational XML resource path .	N/A	Enumeration: <ul style="list-style-type: none"><li>0 —The XML path of NETCONF protocol. Example: “rpc/kill-session”.</li><li>1— The intermediate XML path of NETCONF protocol. Example: “rpc/”.</li><li>2 —The XML path of device resources. Example: “ifmgr/interfaces/interface/if index”.</li><li>3 —The intermediate</li></ul>

Column name	Column description	Column type	Data type and restrictions
			XML path of device resources. Example: "ifmgr/interfaces/interface/" .

## Fundamentals/WebMenuPath

This table contains web menu path information.

### XML structure

```

<Fundamentals>
  <WebMenuPath>
    <MenuPath>
      <Path></Path>
      <Title></Title>
      <Type></Type>
    </MenuPath>
  </WebMenuPath>
</Fundamentals>

```

### Table description

Item	Description
Feature name	Fundamentals
Table name	WebMenuPath
Table type	Multi-instance table
Row name	MenuPath
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Path	Web path of menu.	Index	String. Case-insensitive.	N/A
Title	The description of WEB menu.	N/A	String. Length: 1 to 31 characters.	Depend on the language of current user.
Type	The type of WEB	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	menu.		<ul style="list-style-type: none"> <li>0 – Leaf menu which is corresponding to the specific web page.</li> <li>1 – Intermediate menu node which is not corresponding to the specific web page.</li> </ul>	

## Fundamentals/SoapUI

This table contains SOAP service information.

### XML structure

```

<Fundamentals>
  <SoapUI>
    <HTTP>
      <IPv4AclNumber></IPv4AclNumber>
      <IPv4AclName></IPv4AclName>
      <IPv6AclNumber></IPv6AclNumber>
      <IPv6AclName></IPv6AclName>
    </HTTP>
  </SoapUI>
</Fundamentals>

```

### Table description

Item	Description
Feature name	Fundamentals
Table name	SoapUI
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HTTP	HTTP	Data	Members include:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	configuration information.	structure	<ul style="list-style-type: none"> <li>IPv4AcINumber</li> <li>IPv4AcIName</li> <li>IPv6AcINumber</li> <li>IPv6AcIName</li> </ul>	
IPv4AcINumber	Number of the IPv4 ACL for HTTP access control.	N/A	Unassigned integer. Value range: 2000 to 2999.	Only basic ACLs are supported. This column and the <b>IPv4AcIName</b> column overwrites each other.
IPv4AcIName	Name of the IPv4 ACL for HTTP access control.	N/A	String, case insensitive. Length: 1 to 63 characters. The string must start with an English letter.	Only basic ACLs are supported. This column and the <b>IPv4AcINumber</b> column overwrites each other. An ACL name cannot be <b>all</b> .
IPv6AcINumber	Number of the IPv6 ACL for HTTP access control.	N/A	Unassigned integer. Value range: 2000 to 2999.	Only basic ACLs are supported. This column and the <b>IPv6AcIName</b> column overwrites each other.
IPv6AcIName	Name of the IPv6 ACL for HTTP access control.	N/A	String, case insensitive. Length: 1 to 63 characters. The string must start with an English letter.	Only basic ACLs are supported. This column and the <b>IPv6AcINumber</b> column overwrites each other. An ACL name cannot be <b>all</b> .

# Contents

GDVPNGM .....	1
ResetAllGdoiGmInfo .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ResetGdoiGmInfo .....	1
XML structure .....	1
Table description .....	2
Columns .....	2

# GDVPNGM

## ResetAllGdoiGmInfo

The table is used to clear GDOI information for all GM groups, and trigger to the GMs to re-register with the KS.

### XML structure

```
<ResetAllGdoiGmInfo>
  <Reset></Reset>
</ResetAllGdoiGmInfo>
```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	ResetAllGdoiGmInfo
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Reset	Clear gdoi gm information of all groups.	N/A	N/A	This column must not be empty.

## ResetGdoiGmInfo

The table is used to clear GDOI information for a GDOI GM group, and to trigger the GMs to re-register with the KS.

### XML structure

```
<ResetGdoiGmInfo>
  <Reset>
    <GroupName></GroupName>
  </Reset>
</ResetGdoiGmInfo>
```

## Table description

Item	Description
Feature name	GDVPNGM
Table name	ResetGdoiGmInfo
Table type	Multi-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Name of the GDOI GM group.	Index	String, Case insensitive Length: 1 to 63 characters.

# Contents

GDVPNGM .....	1
GdoiGmGroups .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
GdoiGmGroupServers .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
GdoiGmGroupTransformSets .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
GdoiIPv4Policies .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
GdoiIPv6Policies .....	6
XML structure .....	6
Table description .....	6
Columns .....	7



# GDVPNGM

## GdoiGmGroups

This table displays GM group information.

### XML structure

```
<GdoiGmGroups>
  <GdoiGmGroup>
    <GroupName></GroupName>
    <IPVersion></IPVersion>
    <Identity>
      <Type></Type>
      <Number></Number>
      <Address></Address>
    </Identity>
    <RegistrationInterface></RegistrationInterface>
    <Encryption>
      <ThreeDesCbc></ThreeDesCbc>
      <AesCbc128></AesCbc128>
      <AesCbc192></AesCbc192>
      <AesCbc256></AesCbc256>
      <DesCbc></DesCbc>
    </Encryption>
  </GdoiGmGroup>
</GdoiGmGroups>
```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmGroups
Table type	Multi-instance table
Row name	GdoiGmGroup
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the	Index	String.	N/A.

Column name	Column description GDOI GM group	Column type	Data type and restrictions	Remarks
			Length: 1 to 63 characters Case insensitive.	
IPVersion	GM group IP version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4(Default).</li> <li>2—IPv6.</li> </ul>	N/A.
Identity	GDOI GM group ID.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Address</li> <li>Number</li> </ul>	Use Type to specify which member is valid
Type	Identity type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—invalid(Default)</li> <li>1—Number Type</li> <li>2—Address Type</li> </ul>	0 means Identity is not specified. In this case neither Address nor Number is valid. 1 means Identity is Address. In this case, only Address is valid. 2 means Identity is Number. In this case only Number is valid.
Number	A number to identify the GDOI GM group.	N/A	Unsigned integer. Value range of 0 to 2147483647.	Number is ignored if Type is not 2.
Address	IPv4 address to identify the GDOI GM group	N/A	IPv4 address.	Address is ignored if Type is not 1.
RegistrationInterface	Registration interface name for a group member	N/A	String, case-insensitive. Length: 1 to 63 characters The default is empty.	N/A.
Encryption	KEK encryption algorithms	Data structure	Members include: <ul style="list-style-type: none"> <li>ThreeDesCbc</li> <li>AesCbc128</li> <li>AesCbc192</li> <li>AesCbc256</li> <li>DesCbc</li> </ul>	The encryption algorithms is from 0 to 1."1"means the encryption algorithms is enable, "0" means disable.
ThreeDesCbc	The 3DES-CBC encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1. The default is 1.	N/A
AesCbc128	The AES-CBC-128 encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1. The default is 1	N/A
AesCbc192	The AES-CBC-192 encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1. The default is 1.	N/A
AesCbc256	The AES-CBC-256 encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1 The default is 1.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DecCbc	The DEC-CBC encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1. The default is 1	N/A

## GdoiGmGroupServers

This table displays key servers (KS) of a GM group.

### XML structure

```

<GdoiGmGroupServers>
  <Server>
    <GroupName></GroupName>
    <Host></Host>
    <Vrf></Vrf>
  </Server>
</GdoiGmGroupServers>

```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmGroupServers
Table type	Multi-instance table
Row name	Server
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the GDOI GM group	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A.
Host	Key server IP address or hostname	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Hostname: String, 1 to 253 characters, case-sensitive.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8. Hostname can contains letters, digits, hyphens (-), and underscores (_).
Vrf	VRF instance	Index	String, case-sensitive.	If the server is on the

Column name	Column description	Column type	Data type and restrictions	Remarks
	name		Length: 0 to 31 characters. The default is empty.	public network, the length of characters is 0.

## GdoiGmGroupTransformSets

This table displays transform sets of a GM group.

### XML structure

```

<GdoiGmGroupTransformSets>
  <TransformSet>
    <GroupName></GroupName>
    <TransformSetList>
      <TransformSetName></TransformSetName>
    </TransformSetList>
  </TransformSet>
</GdoiGmGroupTransformSets>

```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmGroupTransformSets
Table type	Multi-instance table
Row name	TransformSet
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the GDOI GM group	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A.
TransformSet List	List of transform set names	Data structure	Members include: <ul style="list-style-type: none"> <li>TransformSetName</li> </ul>	N/A.
TransformSet Name	IPsec transform set name	Column	String, case-insensitive. Length :1 to 63 characters.	This Column can be repeated for 0 to 6 times.

# GdoiIPv4Policies

This table displays GDOI policies of a GM group.

## XML structure

```
<GdoiIPv4Policies>
  <Policy>
    <PolicyName></PolicyName>
    <SeqNum></SeqNum>
    <GroupName></GroupName>
    <ACL>
      <Name></Name>
      <Number></Number>
    </ACL>
  </Policy>
</GdoiIPv4Policies>
```

## Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiIPv4Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the IPsec policy	Index	String, case-insensitive. Length: 1 to 63 characters.	An IPv4 IPsec policy and an IPv6 IPsec policy can use the same PolicyName.
SeqNum	Sequence number of the IPsec policy entry	Index	Unsigned integer. <ul style="list-style-type: none"><li>Value range: 1 to 65535.</li></ul>	An IPv4 IPsec policy and an IPv6 IPsec policy can use the same sequence number.
GroupName	Name of the GDOI GM group	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A.
ACL	Reference an ACL for an IPsec	Data structure	Members include: <ul style="list-style-type: none"><li>Name</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	policy		<ul style="list-style-type: none"> <li>Number</li> </ul>	
Name	ACL name	N/A	String. <ul style="list-style-type: none"> <li>Length: 1 to 63 characters.</li> <li>Default is empty.</li> </ul>	If ACL Name is not empty, the ACL Number does not make sense.
Number	ACL number	N/A	Integer. Value range: 3000 to 3999. <ul style="list-style-type: none"> <li>Default is -1.</li> </ul>	<ul style="list-style-type: none"> <li>Only when the ACL Name is empty, does the ACL Number make sense.</li> </ul>

## GdoiIPv6Policies

This table displays GDOI IPv6 policies of a GM group.

### XML structure

```

<GdoiIPv6Policies>
  <Policy>
    <PolicyName></PolicyName>
    <SeqNum></SeqNum>
    <GroupName></GroupName>
    <ACL>
      <Name></Name>
      <Number></Number>
    </ACL>
  </Policy>
</GdoiIPv6Policies>

```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiIPv6Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description		Column type	Data type and restrictions	Remarks
PolicyName	Name of the IPsec policy		Index	String, case-insensitive. Length: 1 to 63 characters.	An IPv4 IPsec policy and an IPv6 IPsec policy can use the same PolicyName.
SeqNum	Sequence number of the IPsec policy entry		Index	Unsigned integer. • Value range: 1 to 65535.	An IPv4 IPsec policy and an IPv6 IPsec policy can use the same sequence number.
GroupName	Name for the GDOI GM group		N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A.
ACL	Reference an ACL for an IPsec policy		Data structure	Members include: • Name • Number	N/A
Name	ACL name	N/A		String. • Length: 1 to 63 characters. • Default is empty.	If ACL Name is not empty, the ACL Number does not make sense.
Number	ACL number	N/A		Unsigned integer. Value range: 3000 to 3999. • Default is 0.	<ul style="list-style-type: none"> <li>Only when the ACL Name is empty, does the ACL Number make sense.</li> </ul>

# Contents

GDVPNGM .....	1
GdoiGmGroups .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
GdoiGmGroupServers .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
GdoiGmGroupTransformSets .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
GdoiGroupMembers .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
GdoiGmDownloadIPv4AclRules .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
GdoiGmDownloadIPv6AclRules .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
GdoiGmLocalIPv4AclRules .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
GdoiGmLocalIPv6AclRules .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
GdoiKeks .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
GdoiGmTeks .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
GdoiIPv4Policies .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
GdoiIPv6Policies .....	21
XML structure .....	21
Table description .....	21
Columns .....	22



# GDVPNGM

## GdoiGmGroups

This table displays GM group information.

### XML structure

```
<GdoiGmGroups>
  <GdoiGmGroup>
    <GroupName></GroupName>
    <IPVersion></IPVersion>
    <Identity>
      <Type></Type>
      <Number></Number>
      <Address></Address>
    </Identity>
    <RegistrationInterface></RegistrationInterface>
    <Encryption>
      <ThreeDesCbc></ThreeDesCbc>
      <AesCbc128></AesCbc128>
      <AesCbc192></AesCbc192>
      <AesCbc256></AesCbc256>
      <DesCbc></DesCbc>
    </Encryption>
  </GdoiGmGroup>
</GdoiGmGroups>
```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmGroups
Table type	Multi-instance table
Row name	GdoiGmGroup
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the	Index	String, Case insensitive.	N/A.

Column name	Column description GDOI GM group	Column type	Data type and restrictions Length: 1 to 63 characters	Remarks
IPVersion	GM group IP version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4(Default)</li> <li>2—IPv6</li> </ul>	It is not suggested to change a group's IPVersion from IPv4 to IPV6 or IPV6 to IPV4, some config of the group may lost.
Identity	GDOI GM group ID.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Address</li> <li>Number</li> </ul>	Use Type to specify which member is valid
Type	Identity type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—invalid(Default)</li> <li>1—Number Type</li> <li>2—Address Type</li> </ul>	0 means Identity is not specified,in this case neither Address nor Number is valid. 1 means Identity is Address,in this case, only Address is valid. 2 means Identity is Number,in this case only Number is valid.
Number	A number to identify the GDOI GM group.	N/A	Unsigned integer. Value range of 0 to 2147483647.	Number is ignored if Type is not 2.
Address	IPv4 address to identify the GDOI GM group	N/A	IPv4 address.	Address is ignored if Type is not 1.
RegistrationInterface	Registration interface name for a group member	N/A	String, Case insensitive. Length: 1 to 63 characters The default is empty.	N/A.
Encryption	KEK encryption algorithms	Data structure	Members include: <ul style="list-style-type: none"> <li>ThreeDesCbc</li> <li>AesCbc128</li> <li>AesCbc192</li> <li>AesCbc256</li> <li>DesCbc</li> </ul>	The encryption algorithms is from 0 to 1."1"means the encryption algorithms is enable, "0" means disable.
ThreeDesCbc	The 3DES-CBC encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1. The default is 1.	N/A
AesCbc128	The AES-CBC-128 encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1. The default is 1	N/A
AesCbc192	The AES-CBC-192 encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1. The default is 1.	N/A
AesCbc256	The AES-CBC-256 encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1 The default is 1.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DecCbc	The DEC-CBC encryption algorithm	N/A	Unsigned integer. Value range: 0 to 1. The default is 1	N/A

## GdoiGmGroupServers

This table displays key servers (KS) of a GM group.

### XML structure

```
<GdoiGmGroupServers>
  <Server>
    <GroupName></GroupName>
    <Host></Host>
    <Vrf></Vrf>
  </Server>
</GdoiGmGroupServers>
```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmGroupServers
Table type	Multi-instance table
Row name	Server
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the GDOI GM group	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A.
Host	Key server IP address or hostname	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Hostname: String, 1 to 253 characters, case-sensitive.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8. Hostname can contains letters, digits, hyphens (-), and underscores (_).
Vrf	VRF instance name	Index	String, case-sensitive. Length: 0 to 31 characters.	If the server is on the public network, the length of characters is

Column name	Column description	Column type	Data type and restrictions	Remarks
			The default is empty.	0.

## GdoiGmGroupTransformSets

This table displays transform sets of a GM group.

### XML structure

```

<GdoiGmGroupTransformSets>
  <TransformSet>
    <GroupName></GroupName>
    <TransformSetList>
      <TransformSetName></TransformSetName>
    </TransformSetList>
  </TransformSet>
</GdoiGmGroupTransformSets>

```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmGroupTransformSets
Table type	Multi-instance table
Row name	TransformSet
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the GDOI GM group	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A.
TransformSet List	List of transform set names	Data structure	Members include: <ul style="list-style-type: none"> <li>TransformSetName</li> </ul>	N/A.
TransformSet Name	IPsec transform set name	Column	String, case-insensitive. Length :1 to 63 characters.	This Column can be repeated for 0 to 6 times.

# GdoiGroupMembers

This table displays GDOI group members.

## XML structure

```
<GdoiGroupMembers>
  <GroupMember>
    <GroupName></GroupName>
    <IPAddress></IPAddress>
    <VRFName></VRFName>
    <RegStatus></RegStatus>
    <RegServer></RegServer>
    <ReRegTime></ReRegTime>
    <SucceedRegs></SucceedRegs>
    <AttemptedRegs></AttemptedRegs>
    <LastRekeyFrom></LastRekeyFrom>
    <LastRekeySeqNum></LastRekeySeqNum>
    <MulticastRekeysReceived></MulticastRekeysReceived>
    <UnicastRekeysReceived></UnicastRekeysReceived>
    <RekeyAcKSent></RekeyAcKSent>
    <AllowableRekeyCipher></AllowableRekeyCipher>
    <AllowableRekeyHash></AllowableRekeyHash>
    <AllowableTransforms>
      <AllowableTransform></AllowableTransform>
    <AllowableTransforms>
    <RekeyCumulative>
      <TotalReceived></TotalReceived>
      <AfterLatestReg></AfterLatestReg>
      <LastRekeyReceivedFor></LastRekeyReceivedFor>
      <TotalRekeyAckSent></TotalRekeyAckSent>
    </RekeyCumulative>
  </GroupMember>
</GdoiGroupMembers>
```

## Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGroupMembers
Table type	Multi-instance table
Row name	GroupMember
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	GDOI GM group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPAddress	IP address of the GM.	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
VRFName	Name of the VRF to which the KS belongs.	N/A	String. Length: 0 to 31 characters. The default is empty.	If the KS belongs to the public network, this field is not displayed.
RegStatus	The registration status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Not registered.</li> <li>2—Registering.</li> <li>3—Registered.</li> </ul>	N/A
RegServer	IP address or host name of the KS with which the GM registers.	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Hostname: String, 1 to 253 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8. Hostname can contains letters, digits, hyphens (-), and underscores (_).
ReRegTime	Period of time after which the GM re-registers with a KS.	N/A	Unsigned integer.	Unit: second.
SucceedRegs	Number of successful registrations.	N/A	Unsigned integer.	N/A
AttemptedRegs	Number of registration attempts.	N/A	Unsigned integer.	N/A
LastRekeyFrom	KS from which the GM receives the last rekey message.	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Hostname: String, 1 to 253 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8. Hostname can contains letters, digits, hyphens (-), and underscores (_).
LastRekeySeqNum	Sequence number of the last received rekey message.	N/A	Unsigned integer.	N/A
MulticastRekeysReceived	Number of multicast rekeys received.	N/A	Unsigned integer.	Valid only when the GDOI GM group is a multicast group.

Column name	Column description	Column type	Data type and restrictions	Remarks
UnicastRekeysReceived	Number of unicast rekeys received.	N/A	Unsigned integer.	Valid only when the GDOI GM group is a unicast group.
RekeyAckSent	Number of rekey ACK messages sent.	N/A	Unsigned integer.	This field is displayed only when the GDOI GM group is a unicast group.
AllowableRekeyCipher	Rekey encryption algorithms that the GM allows.	N/A	Each bit represents a algorithm As follows: <ul style="list-style-type: none"> <li>1—DES-CBC.</li> <li>2—3DES-CBC.</li> <li>4—AES-CBC-128.</li> <li>8—AES-CBC-192.</li> <li>16—AES-CBC-256.</li> </ul>	In non-FIPS mode, a GM supports DES-CBC, 3DES-CBC, AES-CBC-128, AES-CBC-192, and AES-CBC-256.  In FIPS mode, a GM supports AES-CBC-128, AES-CBC-192, and AES-CBC-256.
AllowableRekeyHash	Rekey hash algorithms that the GM allows.	N/A	Each bit represents a algorithm As follows: <ul style="list-style-type: none"> <li>1—MD5</li> <li>2—SHA1</li> <li>4—SHA2-224</li> <li>8—SHA2-256</li> <li>16—SHA2-384</li> <li>32—SHA2-512</li> <li>64—AES-XCBC</li> </ul>	0 represents any hash algorithm.
AllowableTransforms	List of transform set names	Data structure	Members include: <ul style="list-style-type: none"> <li>TransformSetName</li> </ul>	N/A
TransformSetName	IPsec transform set name	N/A	String, case-insensitive. Length :1 to 63 characters.	This column can be repeated for 0 to 6 times.
RekeyCumulative	Rekey statistics.	Data structure	Members include: <ul style="list-style-type: none"> <li>TotalReceived.</li> <li>AfterLatestReg.</li> <li>TotalRekeyAckSent.</li> </ul>	N/A
TotalReceived	Total number of rekeys that the GM has received.	N/A	Unsigned integer.	N/A
AfterLatestReg	Number of rekeys that the GM has received after the last successful registration.	N/A	Unsigned integer.	N/A
LastRekeyReceivedFor	Period of time for which the key has existed after the last rekey	N/A	Unsigned integer.	Unit: second 0 represents N/A.

Column name	Column description	Column type	Data type and restrictions	Remarks
	operation.			
TotalRekeyAckSent	Number of rekey ACK messages sent.	N/A	Unsigned integer.	N/A

## GdoiGmDownloadIPv4AclRules

This table displays ACL information that the GM downloaded from the KS.

### XML structure

```

<GdoiGmDownloadIPv4AclRules>
  <Rule>
    <GroupName></GroupName>
    <ID></ID>
    <KeyServer></KeyServer>
    <Action></Action>
    <Protocol></Protocol>
    <Source>
      <SrcAddr></SrcAddr>
      <SrcWildLen></SrcWildLen>
      <SrcPort></SrcPort>
    </Source>
    <Destination>
      <DesAddr></DesAddr>
      <DesWildLen></DesWildLen>
      <DesPort></DesPort>
    </Destination>
  </Rule>
</GdoiGmDownloadIPv4AclRules>

```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmDownloadIPv4AclRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	GDOI GM group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	The ID of a rule.	Index	Unsigned integer.	N/A
KeyServer	The key server IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
Action	The rule action	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
Protocol	IP protocol number	N/A	Unsigned integer.	Protocols common to RFC 1700, POSIX, and X/Open
Source	ACL of source address	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcAddr.</li> <li>SrcWildLen</li> <li>SrcPort.</li> </ul>	
SrcAddr	The source address of packets.	N/A	IPv4 address.	N/A
SrcWildLen	The wildcard length of source address.	N/A	Unsigned integer.	N/A
SrcPort	The source port of packets.	N/A	Unsigned integer. Range: 1 to 65535.	N/A
Destination	ACL of destination address	Data structure	Members include: <ul style="list-style-type: none"> <li>DesAddr.</li> <li>DesWildLen</li> <li>DesPort.</li> </ul>	
DesAddr	The destination address of packets.	N/A	IPv4 address.	N/A
DesWildLen	The wildcard length of destination address.	N/A	Unsigned integer.	N/A
DesPort	The destination port of packets.	N/A	Unsigned integer. Range: 1 to 65535.	N/A

# GdoiGmDownloadIPv6AclRules

This table displays ACL information that the GM downloaded from the KS.

## XML structure

```
<GdoiGmDownloadIPv6AclRules>
  <Rule>
    <GroupName></GroupName>
    <ID></ID>
    <KeyServer></KeyServer>
    <Action></Action>
    <Protocol></Protocol>
    <Source>
      <SrcAddr></SrcAddr>
      <SrcWildLen></SrcWildLen>
      <SrcPort></SrcPort>
    </Source>
    <Destination>
      <DesAddr></DesAddr>
      <DesWildLen></DesWildLen>
      <DesPort></DesPort>
    </Destination>
  </Rule>
</GdoiGmDownloadIPv6AclRules>
```

## Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmDownloadIPv6AclRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	GDOI GM group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	The ID of a rule.	Index	Unsigned integer.	N/A
KeyServer	The key server IP address	N/A	IPv4: String, dotted decimal notation.	IPv4 example: 1.1.1.1. IPv6 example:

Column name	Column description	Column type	Data type and restrictions	Remarks
			IPv6: Hexadecimal string, colon-separated.	1:2:3:4:5:6:7:8.
Action	The rule action	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
Protocol	IP protocol number	N/A	Unsigned integer.	Protocols common to RFC 1700, POSIX, and X/Open
Source	ACL of source address	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcAddr.</li> <li>SrcWildLen</li> <li>SrcPort.</li> </ul>	
SrcAddr	The source address of packets.	N/A	IPv4 address.	N/A
SrcWildLen	The wildcard length of source address.	N/A	Unsigned integer.	N/A
SrcPort	The source port of packets.	N/A	Unsigned integer. Range: 1 to 65535.	N/A
Destination	ACL of destination address	Data structure	Members include: <ul style="list-style-type: none"> <li>DesAddr.</li> <li>DesWildLen</li> <li>DesPort.</li> </ul>	
DesAddr	The destination address of packets.	N/A	IPv4 address.	N/A
DesWildLen	The wildcard length of destination address.	N/A	Unsigned integer.	N/A
DesPort	The destination port of packets.	N/A	Unsigned integer. Range: 1 to 65535.	N/A

## GdoiGmLocalIPv4AclRules

This table displays the ACL information locally configured on the GM.

### XML structure

```

<GdoiGmLocalIPv4AclRules>
  <Rule>
    <GroupName></GroupName>
    <ID></ID>
  
```

```

<ACL>
  <ACLNumber></ACLNumber>
  <AclNum></AclNum>
  <ACLRuleID></ACLRuleID>
  <ACLMode></ACLMode>
  <Action></Action>
  <Protocol></Protocol>
  <SrcAddr></SrcAddr>
  <SrcWildLen></SrcWildLen>
  <SrcPort></SrcPort>
  <DesAddr></DesAddr>
  <DesWildLen></DesWildLen>
  <DesPort></DesPort>
</ACL>
</Rule>
</GdoiGmLocalIPv4AclRules>

```

## Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmLocalIPv4AclRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	GDOI GM group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	The ID of a rule.	Index	Integer	
ACL	Reference an ACL for a gdoi group	Data structure	Members include: <ul style="list-style-type: none"> <li>• ACLName</li> <li>• ACLNumber</li> <li>• ACLRuleID</li> <li>• ACLMode</li> <li>• Action</li> <li>• Protocol</li> <li>• SrcAddr</li> <li>• SrcWildLen</li> <li>• SrcPort</li> <li>• DesAddr</li> <li>• DesWildLen</li> </ul>	If the ACLRuleID is 65535, it means the ACL is an empty ACL.  The ACL does not support to display object-group configuration.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>DesPort</li> </ul>	
ACLName	ACL name	N/A	String. <ul style="list-style-type: none"> <li>Length: 1 to 63 characters.</li> <li>Default is empty.</li> </ul>	If ACL Name is not empty, the ACL Number does not make sense.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999. <ul style="list-style-type: none"> <li>Default is 0.</li> </ul>	<ul style="list-style-type: none"> <li>Only when the ACL Name is empty, does the ACL Number make sense.</li> </ul>
ACLRuleID	ACL Rule ID	N/A	Unsigned integer. Value range: 0 to 65535.	<ul style="list-style-type: none"> <li>65535 means the ACL rule is empty</li> </ul>
ACLMode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—per-rule(default).</li> <li>2—per-host.</li> <li>3—aggregation.</li> </ul>	<ul style="list-style-type: none"> <li>per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it.</li> <li>per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be protected.</li> <li>aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an ACL. This mode is only used to communicate with</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				old-version devices.
Action	The rule action	N/A	Enumeration: • 1—Deny. • 2—Permit.	N/A
Protocol	IP protocol number	N/A	Unsigned integer.	Protocols common to RFC 1700, POSIX, and X/Open
SrcAddr	The source address of packets.	N/A	IPv4 address.	N/A
SrcWildLen	The wildcard length of source address.	N/A	Unsigned integer.	N/A
SrcPort	The source port of packets.	N/A	Unsigned integer. Range: 1 to 65535.	N/A
DesAddr	The destination address of packets.	N/A	IPv4 address.	N/A
DesWildLen	The wildcard length of destination address.	N/A	Unsigned integer.	N/A
DesPort	The destination port of packets.	N/A	Unsigned integer. Range: 1 to 65535.	N/A

## GdoiGmLocalIPv6AclRules

This table displays the ACL information locally configured on the GM.

### XML structure

```

<GdoiGmLocalIPv6AclRules>
  <Rule>
    <GroupName></GroupName>
    <ID></ID>
    <ACL>
      <ACLName></ACLName>
      <ACLNumber></ACLNumber>
      <ACLRuleID></ACLRuleID>
      <ACLMode></ACLMode>
      <Action></Action>
      <Protocol></Protocol>
      <SrcAddr></SrcAddr>

```

```

    <SrcWildLen></SrcWildLen>
    <SrcPort></SrcPort>
    <DesAddr></DesAddr>
    <DesWildLen></DesWildLen>
    <DesPort></DesPort>
  </ACL>
</Rule>
</GdoiGmLocalIPv6AclRules>

```

## Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmLocalIPv6AclRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	GDOI GM group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	The ID of a rule.	Index	Integer	
ACL	Reference an ACL for a gdoi group	Data structure	Members include: <ul style="list-style-type: none"> <li>ACLName</li> <li>ACLNumber</li> <li>ACLRuleID</li> <li>ACLMode</li> <li>Action</li> <li>Protocol</li> <li>SrcAddr</li> <li>SrcWildLen</li> <li>SrcPort</li> <li>DesAddr</li> <li>DesWildLen</li> <li>DesPort</li> </ul>	If the ACLRuleID is 65535, it means the ACL is an empty ACL. The ACL does not support to display object-group configuration.
ACLName	ACL name	N/A	String. <ul style="list-style-type: none"> <li>Length: 1 to 63 characters.</li> <li>Default is empty.</li> </ul>	If ACL Name is not empty, the ACL Number does not make sense.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999. <ul style="list-style-type: none"> <li>Default is 0.</li> </ul>	<ul style="list-style-type: none"> <li>Only when the ACL Name is empty, does the ACL Number make</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				sense.
ACLRuleID	ACL Rule ID	N/A	Unsigned integer. Value range: 0 to 65535.	<ul style="list-style-type: none"> <li>65535 means the ACL rule is empty</li> </ul>
ACLMode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—per-rule(default).</li> <li>2—per-host.</li> <li>3—aggregation.</li> </ul>	<ul style="list-style-type: none"> <li>per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it.</li> <li>per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be protected.</li> <li>aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an ACL. This mode is only used to communicate with old-version devices.</li> </ul>
Action	The rule action	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	N/A
Protocol	IP protocol number	N/A	Unsigned integer.	Protocols common to RFC 1700, POSIX, and X/Open



Column name	Column description	Column type	Data type and restrictions	Remarks
SrcAddr	The source address of packets.	N/A	IPv6 address.	N/A
SrcWildLen	The wildcard length of source address.	N/A	Unsigned integer.	N/A
SrcPort	The source port of packets.	N/A	Unsigned integer. Range: 1 to 65535.	N/A
DesAddr	The destination address of packets.	N/A	IPv6 address.	N/A
DesWildLen	The wildcard length of destination address.	N/A	Unsigned integer.	N/A
DesPort	The destination port of packets.	N/A	Unsigned integer. Range: 1 to 65535.	N/A

## GdoiKeks

This table displays KEK information.

## XML structure

```

<GdoiKeks>
  <KEK>
    <GroupName></GroupName>
    <RekeyTransportType></RekeyTransportType>
    <RemainingKeyLifetime></RemainingKeyLifetime>
    <EncryptionAlgorithm></EncryptionAlgorithm>
    <KeySize></KeySize>
    <SignatureAlg></SignatureAlg>
    <SignatureHashAlg></SignatureHashAlg>
    <SignatureKeyLength></SignatureKeyLength>
  </KEK>
</GdoiKeks>

```

## Table description

Item	Description
Feature name	GDVPNGM

Table name	GdoiKeks
Table type	Multi-instance table
Row name	KEK
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	GDOI GM group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RekeyTransportType	Transport type of rekey messages.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Unicast</li> <li>2—Multicast</li> </ul>	N/A
RemainingKeyLifetime	KEK lifetime in seconds.	N/A	Unsigned integer.	Unit: second
EncryptionAlgorithm	KEK encryption algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—DES-CBC.</li> <li>2—3DES-CBC.</li> <li>3—AES-CBC.</li> </ul>	N/A
KeySize	KEK key length.	N/A	Unsigned integer	N/A
SignatureAlg	KEK signature algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—RSA.</li> <li>2—DSS.</li> <li>3—ECDSS.</li> <li>4—ECDSS-256.</li> <li>5—ECDSS-384.</li> <li>6—ECDSS-521.</li> </ul>	N/A
SignatureHashAlg	KEK signature hash algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—MD5.</li> <li>2—SHA1.</li> <li>3—SHA256.</li> <li>4—SHA384.</li> <li>5—SHA512.</li> </ul>	N/A
SignatureKeyLength	KEK signature key length in bits.	N/A	Unsigned integer.	N/A

## GdoiGmTeks

This table displays TEK information of a group member.

## XML structure

```
<GdoiGmTeks>
```

```

<TEK>
  <GroupName></GroupName>
  <SPI></SPI>
  <Transform>
    <EncryptAlg></EncryptAlg>
    <AuthAlg></AuthAlg>
  </Transform>
  <RemainLifetime></RemainLifetime>
</TEK>
</GdoiGmTeks>

```

## Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiGmTeks
Table type	Multi-instance table
Row name	TEK
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name for the GDOI GM group	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A.
SPI	SPI of the IPsec SA.	Index	Unsigned integer. Value range: 256 to 4294967295.	N/A
Transform	Transform encryption and authentication algorithm	Data structure	Members include: <ul style="list-style-type: none"> <li>EncryptAlg.</li> <li>AuthAlg.</li> </ul>	N/A
EncryptAlg	Encryption algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NULL.</li> <li>1—3DES-CBC.</li> <li>2—AES-CBC-128.</li> <li>3—AES-CBC-192.</li> <li>4—AES-CBC-256.</li> <li>5—DES-CBC.</li> <li>6—Unknown.</li> </ul>	N/A
AuthAlg	Authentication algorithm	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NULL.</li> <li>1—MD5.</li> <li>2—SHA1.</li> <li>3—Unknown.</li> </ul>	N/A
RemainLifetime	IPsec SA remaining	N/A	Unsigned integer.	Unit: second.

Column name	Column description	Column type	Data type and restrictions	Remarks
	lifetime in seconds.			

## GdoiIPv4Policies

This table displays GDOI policies of a GM group.

### XML structure

```

<GdoiIPv4Policies>
  <Policy>
    <PolicyName></PolicyName>
    <SeqNum></SeqNum>
    <GroupName></GroupName>
    <ACL>
      <Name></Name>
      <Number></Number>
    </ACL>
  </Policy>
</GdoiIPv4Policies>

```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiIPv4Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the IPsec policy	Index	String, case-insensitive. Length: 1 to 63 characters.	An IPv4 IPsec policy and an IPv6 IPsec policy can use the same PolicyName.
SeqNum	Sequence number of the IPsec policy entry	Index	Unsigned integer. Value range: 1 to 65535.	An IPv4 IPsec policy and an IPv6 IPsec policy can use the same sequence

Column name	Column description	Column type	Data type and restrictions	Remarks
				number.
GroupName	Name of the GDOI GM group	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A.
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Number</li> </ul>	Use Type to specify which member is valid.
Name	ACL name	N/A	String. Length: 1 to 63 characters. Default is empty.	If ACL Name is not empty, the ACL Number does not make sense.
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999. Default is 0.	<ul style="list-style-type: none"> <li>Only when the ACL Name is empty, does the ACL Number make sense.</li> </ul>

## GdoiIPv6Policies

This table displays GDOI IPv6 policies of a GM group.

### XML structure

```

<GdoiIPv6Policies>
  <Policy>
    <PolicyName></PolicyName>
    <SeqNum></SeqNum>
    <GroupName></GroupName>
    <ACL>
      <Name></Name>
      <Number></Number>
    </ACL>
  </Policy>
</GdoiIPv6Policies>

```

### Table description

Item	Description
Feature name	GDVPNGM
Table name	GdoiIPv6Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the IPsec policy	Index	String, case-insensitive. Length: 1 to 63 characters.	An IPv4 IPsec policy and an IPv6 IPsec policy can use the same PolicyName.
SeqNum	Sequence number for the IPsec policy entry	Index	Unsigned integer. Value range: 1 to 65535.	An IPv4 IPsec policy and an IPv6 IPsec policy can use the same sequence number.
GroupName	Name for the GDOI GM group	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A.
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Number.</li> </ul>	N/A
Name	ACL name	N/A	String. Length: 1 to 63 characters. Default is empty.	If ACL Name is not empty, the ACL Number does not make sense.
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999. Default is 0.	<ul style="list-style-type: none"> <li>Only when the ACL Name is empty, does the ACL Number make sense.</li> </ul>

# Contents

GLB .....	1
GLB/ClearDNSMapStats .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
GLB/ClearAllDNSMapStats .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
GLB/TestIpv4Requests .....	2
XML structure .....	2
Responded XML structure .....	3
Table description .....	3
Columns .....	4
Return columns .....	5
GLB/TestIpv6Requests .....	9
XML structure .....	9
Responded XML structure .....	10
Table description .....	10
Columns .....	11
Return columns .....	12
GLB/ClearAllDNSRecords .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
GLB/ClearGlobalDNSListenerStats .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
GLB/ClearAllGlobalDNSListenerStats .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
GLB/ClearGlobalDNSMapStats .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
GLB/ClearAllGlobalDNSMapStats .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
GLB/DelGlobalVRFProximities .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
GLB/DelGlobalIpv4Proximities .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
GLB/DelAllGlobalIPv4Proximities .....	22
XML structure .....	22
Table description .....	22
Columns .....	22
GLB/DefaultSyncGroupDistribute .....	23
XML structure .....	23
Table description .....	23
Columns .....	23

# GLB

## GLB/ClearDNSMapStats

This table is used to clear the statistics of the DNS mapping.

### XML structure

```
<GLB>
  <ClearDNSMapStats>
    <ClearDNSMapStat>
      <Name></Name>
      <Clear></Clear>
    </ClearDNSMapStat>
  </ClearDNSMapStats>
</GLB>
```

### Table description

Item	Description
Feature name	GLB
Table name	ClearDNSMapStats
Table type	Multi-instance table
Row name	ClearDNSMapStat
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS mapping.	Index	String, case-insensitive. <ul style="list-style-type: none"><li>Length: 1 to 63 characters.</li></ul>	N/A
Clear	Action of clearing the specified DNS mapping.	N/A	This column must be empty.	<ul style="list-style-type: none"><li>N/A</li></ul>

## GLB/ClearAllDNSMapStats

This table is used to clear all DNS mapping' statistics.



## XML structure

```
<GLB>
  <ClearAllDNSMapStats>
    <Clear></Clear>
  </ClearAllDNSMapStats>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	ClearAllDNSMapStats
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all DNS mapping' statistics.	N/A	This column must be empty.	<ul style="list-style-type: none"><li>N/A</li></ul>

## GLB/TestIpv4Requests

This table is used to test IPv4 DNS requests in the specified VPN.

## XML structure

```
<GLB>
  <TestIpv4Requests>
    <TestIpv4Request>
      <VRF></VRF>
      <DstIpv4Address></DstIpv4Address>
      <DstPort></DstPort>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcPort></SrcPort>
      <Type></Type>
      <DomainName></DomainName>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
    </TestIpv4Request>
  </TestIpv4Requests>
</GLB>
```

```

    </TestIpv4Requests>
  </GLB>

```

## Responded XML structure

```

<GLB>
  <TestIpv4Results>
    <TestIpv4Result>
      <VRF></VRF>
      <DstIpv4Address></DstIpv4Address>
      <DstPort></DstPort>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcPort></SrcPort>
      <Type></Type>
      <DomainName></DomainName>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <DNSListener></DNSListener>
      <DNSZone></DNSZone>
      <DNSMap></DNSMap>
      <VSP></VSP>
      <PreferredAlgorithm></PreferredAlgorithm>
      <AlternateAlgorithm></AlternateAlgorithm>
      <FallbackAlgorithm></FallbackAlgorithm>
      <PrfAlgorithmFailedCause></PrfAlgorithmFailedCause>
      <AltAlgorithmFailedCause></AltAlgorithmFailedCause>
      <FbkAlgorithmFailedCause></FbkAlgorithmFailedCause>
      <VirtualServer></VirtualServer>
      <RespondType></RespondType>
      <FailedCause></FailedCause>
    </TestIpv4Result>
  </TestIpv4Results>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	TestIpv4Requests/TestIpv4Results
Table type	Multi-instance table
Row name	TestIpv4Request/TestIpv4Result
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	A null string indicates the public network.
DstIpv4Address	The IPv4 destination address of DNS request packets.	Index	String. Dotted decimal notation.	N/A
DstPort	The destination port of DNS request packets.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
SrcIpv4Address	The IPv4 source address of DNS request packets.	Index	String. Dotted decimal notation.	N/A
SrcPort	The source port of DNS request packets.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Type	The type of DNS request packets.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—A.</li> <li>1—AAAA.</li> <li>2—MX.</li> <li>3—NS.</li> <li>4—CNAME.</li> <li>5—SOA.</li> <li>6—PTR.</li> <li>7—TXT.</li> <li>8—SRV.</li> </ul>	N/A
DomainName	The domain of DNS request packets.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.). If the type is set to PTR, the DomainName must be set in the format of "1.1.1.1.in-addr.arpa." or "1.1.0.0.1.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.1.1.0.0.1.1.0.0.ip6.arpa". It means you must translate an IPv4 or IPv6 address to a domain name manually.
ChassisID	Chassis ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Slot ID of the card on the device.	Index	Unsigned integer. Value range: 0 to 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A

## Return columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	A null string indicates the public network.
DstIpv4Address	The IPv4 destination address of DNS request packets.	Index	String. Dotted decimal notation.	N/A
DstPort	The destination port of DNS request packets.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
SrcIpv4Address	The IPv4 source address of DNS request packets.	Index	String. Dotted decimal notation.	N/A
SrcPort	The source port of DNS request packets.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Type	The type of DNS request packets.	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—A.</li> <li>• 1—AAAA.</li> <li>• 2—MX.</li> <li>• 3—NS.</li> <li>• 4—CNAME.</li> <li>• 5—SOA.</li> <li>• 6—PTR.</li> <li>• 7—TXT.</li> <li>• 8—SRV.</li> </ul>	N/A
DomainName	The domain of DNS request packets.	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.). If the type is set to PTR, the DomainName must be set in the format of "1.1.1.1.in-addr.arpa." or "1.1.0.0.1.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.1.1.0.0.1.1.0.0.ip6.arpa".
ChassisID	Chassis ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SlotID	Slot ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
DNSListener	Name of the DNS listener.	N/A	String, case-insensitive. Length: 0 to 63 characters.	A null string indicates the label is not configured.
DNSZone	Name of the DNS zone or reverse zone.	N/A	String, case-insensitive. Length: 0 to 253 characters.	A null string indicates the label is not configured.
DNSMap	Name of the DNS mapping.	N/A	String, case-insensitive. Length: 0 to 63 characters.	A null string indicates the label is not configured.
VSP	Name of the virtual server pool.	N/A	String, case-insensitive. Length: 0 to 63 characters.	A null string indicates the label is not configured.
PreferredAlgorithm	Algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None</li> <li>1—Round-robin</li> <li>2—Random.</li> <li>3—Least-connection.</li> <li>4—Topology</li> <li>5—Proximity.</li> <li>6—Hash source address.</li> <li>7—Hash source port.</li> <li>8—Hash destination address.</li> <li>9—Bandwidth.</li> <li>10—Inbound bandwidth.</li> <li>11—Outbound bandwidth.</li> <li>12—Max bandwidth.</li> <li>13—Max inbound bandwidth.</li> <li>14—Max outbound bandwidth.</li> </ul>	N/A
AlternateAlgorithm	Algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None</li> <li>1—Round-robin</li> <li>2—Random.</li> <li>3—Least-connection.</li> <li>4—Topology</li> <li>5—Proximity.</li> <li>6—Hash source address.</li> <li>7—Hash source port.</li> <li>8—Hash destination address.</li> <li>9—Bandwidth.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>10—Inbound bandwidth.</li> <li>11—Outbound bandwidth.</li> <li>12—Max bandwidth.</li> <li>13—Max inbound bandwidth.</li> <li>14—Max outbound bandwidth.</li> </ul>	
FallbackAlgorithm	Algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None</li> <li>1—Round-robin</li> <li>2—Random.</li> <li>3—Least-connection.</li> <li>4—Topology</li> <li>5—Proximity.</li> <li>6—Hash source address.</li> <li>7—Hash source port.</li> <li>8—Hash destination address.</li> <li>9—Bandwidth.</li> <li>10—Inbound bandwidth.</li> <li>11—Outbound bandwidth.</li> <li>12—Max bandwidth.</li> <li>13—Max inbound bandwidth.</li> <li>14—Max outbound bandwidth.</li> </ul>	N/A
PrfAlgorithmFailedCause	The cause of preferred algorithm schedule failure.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Successful.</li> <li>1—No matched DNS listener.</li> <li>2—No matched DNS mapping.</li> <li>3—No matched virtual server pool.</li> <li>4—No matched DNS zone.</li> <li>5—No matched DNS reverse zone.</li> <li>6—Fails to get buffer.</li> <li>7—Fails to get MDC.</li> <li>8—No matched record.</li> <li>9—No enough memory resource.</li> <li>10—Fails to parse domain.</li> <li>11—Fails to find DNS listener by ID.</li> <li>12—No scheduling content.</li> <li>13—Scheduling failed.</li> <li>14—No matched virtual server.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AltAlgorithmFailedCause	The cause of alternate algorithm schedule failure.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Successful.</li> <li>1—No matched DNS listener.</li> <li>2—No matched DNS mapping.</li> <li>3—No matched virtual server pool.</li> <li>4—No matched DNS zone.</li> <li>5—No matched DNS reverse zone.</li> <li>6—Fails to get buffer.</li> <li>7—Fails to get MDC.</li> <li>8—No matched record.</li> <li>9—No enough memory resource.</li> <li>10—Fails to parse domain.</li> <li>11—Fails to find DNS listener by ID.</li> <li>12—No scheduling content.</li> <li>13—Scheduling failed.</li> <li>14—No matched virtual server.</li> </ul>	N/A
FbkAlgorithmFailedCause	The cause of fallback algorithm schedule failure.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Successful.</li> <li>1—No matched DNS listener.</li> <li>2—No matched DNS mapping.</li> <li>3—No matched virtual server pool.</li> <li>4—No matched DNS zone.</li> <li>5—No matched DNS reverse zone.</li> <li>6—Fails to get buffer.</li> <li>7—Fails to get MDC.</li> <li>8—No matched record.</li> <li>9—No enough memory resource.</li> <li>10—Fails to parse domain.</li> <li>11—Fails to find DNS listener by ID.</li> <li>12—No scheduling content.</li> <li>13—Scheduling failed.</li> <li>14—No matched virtual server.</li> </ul>	N/A
VirtualServer	Name of the virtual server.	N/A	String, case-insensitive.	A null string indicates the label is not

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 0 to 63 characters.	configured.
RespondType	Response type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Send response.</li> <li>1—Send rejected.</li> <li>2—No response.</li> <li>3—Proxy.</li> </ul>	N/A
FailedCause	The cause of DNS request parse failure.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Successful.</li> <li>1—No matched DNS listener.</li> <li>2—No matched DNS mapping.</li> <li>3—No matched virtual server pool.</li> <li>4—No matched DNS zone.</li> <li>5—No matched DNS reverse zone.</li> <li>6—Fails to get buffer.</li> <li>7—Fails to get MDC.</li> <li>8—No matched record.</li> <li>9—No enough memory resource.</li> <li>10—Fails to parse domain.</li> <li>11—Fails to find DNS listener by ID.</li> <li>12—No scheduling content.</li> <li>13—Scheduling failed.</li> <li>14—No matched virtual server.</li> </ul>	N/A

## GLB/TestIpv6Requests

This table is used to test IPv6 DNS requests in the specified VPN.

### XML structure

```

<GLB>
  <TestIpv6Requests>
    <TestIpv6Request>
      <VRF></VRF>
      <DstIpv6Address></DstIpv6Address>
      <DstPort></DstPort>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcPort></SrcPort>
      <Type></Type>
      <DomainName></DomainName>
    </TestIpv6Request>
  </TestIpv6Requests>
</GLB>

```



```

    <ChassisID></ChassisID>
    <SlotID></SlotID>
    <CPUID></CPUID>
  </TestIpv6Request>
</TestIpv6Requests>
</GLB>

```

## Responded XML structure

```

<GLB>
  <TestIpv6Results>
    <TestIpv6Result>
      <VRF></VRF>
      <DstIpv6Address></DstIpv6Address>
      <DstPort></DstPort>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcPort></SrcPort>
      <Type></Type>
      <DomainName></DomainName>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <DNSListener></DNSListener>
      <DNSZone></DNSZone>
      <DNSMap></DNSMap>
      <VSP></VSP>
      <PreferredAlgorithm></PreferredAlgorithm>
      <AlternateAlgorithm></AlternateAlgorithm>
      <FallbackAlgorithm></FallbackAlgorithm>
      <PrfAlgorithmFailedCause></PrfAlgorithmFailedCause>
      <AltAlgorithmFailedCause></AltAlgorithmFailedCause>
      <FbkAlgorithmFailedCause></FbkAlgorithmFailedCause>
      <VirtualServer></VirtualServer>
      <RespondType></RespondType>
      <FailedCause></FailedCause>
    </TestIpv6Result>
  </TestIpv6Results>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	TestIpv6Requests/TestIpv6Results
Table type	Multi-instance table

Row name	TestIpv6Request/TestIpv6Result
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	A null string indicates the public network.
DstIpv6Address	The IPv6 destination address of DNS request packets.	Index	String. Dotted decimal notation.	N/A
DstPort	The destination port of DNS request packets.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
SrcIpv6Address	The IPv6 source address of DNS request packets.	Index	String. Dotted decimal notation.	N/A
SrcPort	The source port of DNS request packets.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Type	The type of DNS request packets.	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—A.</li> <li>• 1—AAAA.</li> <li>• 2—MX.</li> <li>• 3—NS.</li> <li>• 4—CNAME.</li> <li>• 5—SOA.</li> <li>• 6—PTR.</li> <li>• 7—TXT.</li> <li>• 8—SRV.</li> </ul>	N/A
DomainName	The domain of DNS request packets.	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.). If the type is set to PTR, the DomainName must be set in the format of "1.1.1.1.in-addr.arpa." or "1.1.0.0.1.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.1.1.0.0.1.1.0.0.ip6.arpa". It means you must translate an IPv4 or IPv6 address to a domain name manually.
ChassisID	Chassis ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SlotID	Slot ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A

## Return columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	A null string indicates the public network.
DstIpv6Address	The IPv6 destination address of DNS request packets.	Index	String. Dotted decimal notation.	N/A
DstPort	The destination port of DNS request packets.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
SrcIpv6Address	The IPv6 source address of DNS request packets.	Index	String. Dotted decimal notation.	N/A
SrcPort	The source port of DNS request packets.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Type	The type of DNS request packets.	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—A.</li> <li>• 1—AAAA.</li> <li>• 2—MX.</li> <li>• 3—NS.</li> <li>• 4—CNAME.</li> <li>• 5—SOA.</li> <li>• 6—PTR.</li> <li>• 7—TXT.</li> <li>• 8—SRV.</li> </ul>	N/A
DomainName	The domain of DNS request packets.	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.). If the type is set to PTR, the DomainName must be set in the format of "1.1.1.1.in-addr.arpa." or "1.1.0.0.1.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.1.1.0.0.1.1.0.0.ip6.arpa".
ChassisID	Chassis ID of the device that holds	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the card.		Value range: 0 to 255.	
SlotID	Slot ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
DNSListener	Name of the DNS listener.	N/A	String, case-insensitive. Length: 0 to 63 characters.	A null string indicates the label is not configured.
DNSZone	Name of the DNS zone or reverse zone.	N/A	String, case-insensitive. Length: 0 to 253 characters.	A null string indicates the label is not configured.
DNSMap	Name of the DNS mapping.	N/A	String, case-insensitive. Length: 0 to 63 characters.	A null string indicates the label is not configured.
VSP	Name of the virtual server pool.	N/A	String, case-insensitive. Length: 0 to 63 characters.	A null string indicates the label is not configured.
PreferredAlgorithm	Algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None</li> <li>• 1—Round-robin</li> <li>• 2—Random.</li> <li>• 3—Least-connection.</li> <li>• 4—Topology</li> <li>• 5—Proximity.</li> <li>• 6—Hash source address.</li> <li>• 7—Hash source port.</li> <li>• 8—Hash destination address.</li> <li>• 9—Bandwidth.</li> <li>• 10—Inbound bandwidth.</li> <li>• 11—Outbound bandwidth.</li> <li>• 12—Max bandwidth.</li> <li>• 13—Max inbound bandwidth.</li> <li>• 14—Max outbound bandwidth.</li> </ul>	N/A
AlternateAlgorithm	Algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None</li> <li>• 1—Round-robin</li> <li>• 2—Random.</li> <li>• 3—Least-connection.</li> <li>• 4—Topology</li> <li>• 5—Proximity.</li> <li>• 6—Hash source address.</li> <li>• 7—Hash source port.</li> <li>• 8—Hash destination address.</li> <li>• 9—Bandwidth.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>10—Inbound bandwidth.</li> <li>11—Outbound bandwidth.</li> <li>12—Max bandwidth.</li> <li>13—Max inbound bandwidth.</li> <li>14—Max outbound bandwidth.</li> </ul>	
FallbackAlgorithm	Algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None</li> <li>1—Round-robin</li> <li>2—Random.</li> <li>3—Least-connection.</li> <li>4—Topology</li> <li>5—Proximity.</li> <li>6—Hash source address.</li> <li>7—Hash source port.</li> <li>8—Hash destination address.</li> <li>9—Bandwidth.</li> <li>10—Inbound bandwidth.</li> <li>11—Outbound bandwidth.</li> <li>12—Max bandwidth.</li> <li>13—Max inbound bandwidth.</li> <li>14—Max outbound bandwidth.</li> </ul>	N/A
PrfAlgorithmFailedCause	The cause of preferred algorithm schedule failure.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Successful.</li> <li>1—No matched DNS listener.</li> <li>2—No matched DNS mapping.</li> <li>3—No matched virtual server pool.</li> <li>4—No matched DNS zone.</li> <li>5—No matched DNS reverse zone.</li> <li>6—Fails to get buffer.</li> <li>7—Fails to get MDC.</li> <li>8—No matched record.</li> <li>9—No enough memory resource.</li> <li>10—Fails to parse domain.</li> <li>11—Fails to find DNS listener by ID.</li> <li>12—No scheduling content.</li> <li>13—Scheduling failed.</li> <li>14—No matched virtual server.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AltAlgorithmFailedCause	The cause of alternate algorithm schedule failure.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Successful.</li> <li>1—No matched DNS listener.</li> <li>2—No matched DNS mapping.</li> <li>3—No matched virtual server pool.</li> <li>4—No matched DNS zone.</li> <li>5—No matched DNS reverse zone.</li> <li>6—Fails to get buffer.</li> <li>7—Fails to get MDC.</li> <li>8—No matched record.</li> <li>9—No enough memory resource.</li> <li>10—Fails to parse domain.</li> <li>11—Fails to find DNS listener by ID.</li> <li>12—No scheduling content.</li> <li>13—Scheduling failed.</li> <li>14—No matched virtual server.</li> </ul>	N/A
FbkAlgorithmFailedCause	The cause of fallback algorithm schedule failure.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Successful.</li> <li>1—No matched DNS listener.</li> <li>2—No matched DNS mapping.</li> <li>3—No matched virtual server pool.</li> <li>4—No matched DNS zone.</li> <li>5—No matched DNS reverse zone.</li> <li>6—Fails to get buffer.</li> <li>7—Fails to get MDC.</li> <li>8—No matched record.</li> <li>9—No enough memory resource.</li> <li>10—Fails to parse domain.</li> <li>11—Fails to find DNS listener by ID.</li> <li>12—No scheduling content.</li> <li>13—Scheduling failed.</li> <li>14—No matched virtual server.</li> </ul>	N/A
VirtualServer	Name of the virtual server.	N/A	String, case-insensitive.	A null string indicates the label is not

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 0 to 63 characters.	configured.
RespondType	Response type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Send response.</li> <li>1—Send rejected.</li> <li>2—No response.</li> <li>3—Proxy.</li> </ul>	N/A
FailedCause	The cause of DNS request parse failure.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Successful.</li> <li>1—No matched DNS listener.</li> <li>2—No matched DNS mapping.</li> <li>3—No matched virtual server pool.</li> <li>4—No matched DNS zone.</li> <li>5—No matched DNS reverse zone.</li> <li>6—Fails to get buffer.</li> <li>7—Fails to get MDC.</li> <li>8—No matched record.</li> <li>9—No enough memory resource.</li> <li>10—Fails to parse domain.</li> <li>11—Fails to find DNS listener by ID.</li> <li>12—No scheduling content.</li> <li>13—Scheduling failed.</li> <li>14—No matched virtual server.</li> </ul>	N/A

## GLB/ClearAllDNSRecords

This table is used to clear all DNS parsing failure records.

### XML structure

```

<GLB>
  <ClearAllDNSRecords>
    <Clear></Clear>
  </ClearAllDNSRecords>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	ClearAllDNSRecords
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all DNS parsing failure records.	N/A	This column must be empty.	<ul style="list-style-type: none"><li>N/A</li></ul>

## GLB/ClearGlobalDNSListenerStats

This table is used to clear the statistics of a global DNS listener.

## XML structure

```
<GLB>
  <ClearGlobalDNSListenerStats>
    <ClearGlobalDNSListenerStat>
      <Name></Name>
      <Clear></Clear>
    </ClearGlobalDNSListenerStat>
  </ClearGlobalDNSListenerStats>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	ClearGlobalDNSListenerStats
Table type	Multi-instance table
Row name	ClearGlobalDNSListenerStat
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global DNS listener.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Clear	Action of clearing the statistics of the specified global DNS listener.	N/A	This column must be empty.	N/A

## GLB/ClearAllGlobalDNSListenerStats

This table is used to clear the statistics of all global DNS listeners.

## XML structure

```
<GLB>
  <ClearAllGlobalDNSListenerStats>
    <Clear></Clear>
  </ClearAllGlobalDNSListenerStats>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	ClearAllGlobalDNSListenerStats
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Action of clearing statistics of all global DNS listeners.	N/A	This column must be empty.	N/A

# GLB/ClearGlobalDNSMapStats

This table is used to clear the statistics of a global DNS map.

## XML structure

```
<GLB>
  <ClearGlobalDNSMapStats>
    <ClearGlobalDNSMapStat>
      <Name></Name>
      <Clear></Clear>
    </ClearGlobalDNSMapStat>
  </ClearGlobalDNSMapStats>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	ClearGlobalDNSMapStats
Table type	Multi-instance table
Row name	ClearGlobalDNSMapStat
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Clear	Action of clearing the statistics of the specified global DNS map.	N/A	This column must be empty.	N/A

# GLB/ClearAllGlobalDNSMapStats

This table is used to clear the statistics of all global DNS maps.

## XML structure

```
<GLB>
  <ClearAllGlobalDNSMapStats>
    <Clear></Clear>
```

```

    </ClearAllGlobalDNSMapStats>
  </GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	ClearAllGlobalDNSMapStats
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Action of clearing the statistics of all global DNS maps.	N/A	This column must be empty.	N/A

## GLB/DelGlobalVRFPproximities

This table is used to delete all global proximity entries that belong to a VPN instance.

## XML structure

```

<GLB>
  <DelGlobalVRFPproximities>
    <DelGlobalVRFPproximity>
      <VRF></VRF>
      <AF></AF>
      <Delete></Delete>
    </DelGlobalVRFPproximity>
  </DelGlobalVRFPproximities>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DelGlobalVRFPproximities
Table type	Multi-instance table

Row name	DelGlobalVRFPximity
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	A null string indicates the public network.
AF	Address family.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> <li>3—All.</li> </ul>	N/A
Delete	Action of deleting global proximity entries.	N/A	This column must be empty.	N/A

## GLB/DelGlobalIpv4Proximities

This table is used to delete all global IPv4 proximity entries that belong to a VPN instance.

## XML structure

```

<GLB>
  <DelGlobalIpv4Proximities>
    <DelGlobalIpv4Proximity>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Delete></Delete>
    </DelGlobalIpv4Proximity>
  </DelGlobalIpv4Proximities>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DelGlobalIpv4Proximities
Table type	Multi-instance table
Row name	DelGlobalIpv4Proximity
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	A null string indicates the public network.
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation.	N/A
Delete	Action of deleting the specified global IPv4 proximity.	N/A	This column must be empty.	N/A

## GLB/DelAllGlobalIPv4Proximities

This table is used to delete all global IPv4 proximity entries.

## XML structure

```
<GLB>
  <DelAllGlobalIpv4Proximities>
    <Delete></Delete>
  </DelAllGlobalIpv4Proximities>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DelAllGlobalIpv4Proximities
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Delete	Action of deleting all global IPv4 proximity entries.	N/A	This column must be empty.	N/A

# GLB/DefaultSyncGroupDistribute

This table is used to trigger data synchronization among synchronization group members.

## XML structure

```
<GLB>
  <DefaultSyncGroupDistribute>
    <SyncType></SyncType>
    <DataType></DataType>
    <Sync></Sync>
  </DefaultSyncGroupDistribute>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DefaultSyncGroupDistribute
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SyncType	Synchronization type	Index	Enumeration: <ul style="list-style-type: none"><li>0—sync</li><li>1—sync all</li></ul>	N/A
DataType	The type of synchronized data	Index	Enumeration: <ul style="list-style-type: none"><li>0—running data</li><li>1—proximity data</li><li>2—config data</li></ul>	The Datatype only can be proximity data(1) or config data(2) when the SyncType is sync all(1).
Sync	Synchronize data among default synchronization group members.	N/A	This column must be empty.	N/A

# Contents

GLB .....	1
GLB/DNSMaps .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
GLB/DNSMapDomains .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
GLB/VirtualServerPools .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
GLB/VSPVirtualServers .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
GLB/DNSZones .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
GLB/DNSZoneSOAs .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
GLB/DNSZoneMXRRs .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
GLB/DNSZoneCNAMERRs .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
GLB/DNSZoneNSRRs .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
GLB/DNSRevZones .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
GLB/DNSRevZoneRRs .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
GLB/DNSRevZoneIPv6s .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
GLB/DNSRevZoneIPv6RRs .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
GLB/DNSRecordMaxNum .....	17
XML structure .....	17
Table description .....	18
Columns .....	18

GLB/DNSRecordType.....	18
XML structure.....	18
Table description.....	19
Columns.....	19
GLB/DNSZoneTXTRRs.....	19
XML structure.....	20
Table description.....	20
Columns.....	20
GLB/DNSZoneSRVRRs.....	21
XML structure.....	21
Table description.....	21
Columns.....	21
GLB/LocalDefaultSyncGroupMems.....	22
XML structure.....	22
Table description.....	22
Columns.....	23
GLB/RemoteDefaultSyncGroupMems.....	23
XML structure.....	24
Table description.....	24
Columns.....	24
GLB/SyncGroupMemberIPAddresses.....	24
XML structure.....	24
Table description.....	25
Columns.....	25
GLB/DataCenters.....	25
XML structure.....	25
Table description.....	26
Columns.....	26
GLB/DataCenterLinks.....	26
XML structure.....	26
Table description.....	27
Columns.....	27
GLB/Servers.....	27
XML structure.....	27
Table description.....	28
Columns.....	28
GLB/LocalServers.....	29
XML structure.....	29
Table description.....	29
Columns.....	29
GLB/ServerIPAddresses.....	30
XML structure.....	30
Table description.....	30
Columns.....	30
GLB/LocalVirtualServers.....	31
XML structure.....	31
Table description.....	31
Columns.....	31
GLB/GlobalDNSListeners.....	32
XML structure.....	32
Table description.....	32
Columns.....	32
GLB/GlobalDNSMaps.....	33
XML structure.....	33
Table description.....	33
Columns.....	34
GLB/GlobalDNSMapDomains.....	34
XML structure.....	34
Table description.....	35
Columns.....	35
GLB/GlobalDNSMapVirtualServerPools.....	35
XML structure.....	36



Table description .....	36
Columns .....	36
GLB/GlobalVirtualServerPools .....	36
XML structure .....	36
Table description .....	37
Columns .....	37
GLB/GVSPVirtualServers .....	38
XML structure .....	38
Table description .....	39
Columns .....	39
GLB/GVSPVirtualIPs .....	39
XML structure .....	40
Table description .....	40
Columns .....	40
GLB/GVSPProbes .....	41
XML structure .....	41
Table description .....	41
Columns .....	42
GLB/GVSPVirtualServerProbes .....	42
XML structure .....	42
Table description .....	42
Columns .....	43
GLB/GVSPVIPProbes .....	43
XML structure .....	43
Table description .....	43
Columns .....	44
GLB/GTopoRegionVSPs .....	44
XML structure .....	44
Table description .....	45
Columns .....	45
GLB/GTopoRegionIPv4s .....	45
XML structure .....	45
Table description .....	46
Columns .....	46
GLB/GlobalRegions .....	46
XML structure .....	46
Table description .....	47
Columns .....	47
GLB/GlobalRegionISPs .....	47
XML structure .....	47
Table description .....	47
Columns .....	48
GLB/GlobalISPs .....	48
XML structure .....	48
Table description .....	48
Columns .....	49
GLB/GlobalIPv4ISPAddressGroups .....	49
XML structure .....	49
Table description .....	49
Columns .....	49
GLB/GlobalISPFile .....	50
XML structure .....	50
Table description .....	50
Columns .....	50
GLB/GlobalVRFProximityParameters .....	50
XML structure .....	51
Table description .....	51
Columns .....	51
GLB/GlobalDNSZones .....	52
XML structure .....	52
Table description .....	53
Columns .....	53

GLB/GlobalDNSZoneSOAs.....	53
XML structure.....	53
Table description.....	54
Columns.....	54
GLB/GlobalDNSZoneMXRRs .....	55
XML structure.....	55
Table description.....	55
Columns.....	55
GLB/GlobalDNSZoneCNAMERRs.....	56
XML structure.....	56
Table description.....	56
Columns.....	57
GLB/GlobalDNSZoneNSRRs.....	57
XML structure.....	57
Table description.....	57
Columns.....	58
GLB/GlobalDNSRevZones.....	58
XML structure.....	58
Table description.....	58
Columns.....	59
GLB/GlobalDNSRevZoneRRs .....	59
XML structure.....	59
Table description.....	59
Columns.....	60
GLB/GlobalIPv4ISPLists .....	60
XML structure.....	60
Table description.....	60
Columns.....	61

# GLB

## GLB/DNSMaps

This table contains information about DNS map.

### XML structure

```
<GLB>
  <DNSMaps>
    <DNSMap>
      <Name></Name>
      <VRF></VRF>
      <TTL></TTL>
      <VirtualServerPool></VirtualServerPool>
      <ServiceEnable></ServiceEnable>
    </DNSMap>
  </DNSMaps>
</GLB>
```

### Table description

Item	Description
Feature name	GLB
Table name	DNSMaps
Table type	Multi-instance table
Row name	DNSMap
Restrictions	Only DNS map can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates public network.
TTL	TTL time of the	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	DNS recorder.		Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	
VirtualServerPool	Name of the virtualserverpool.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ServiceEnable	Enable the DNS map.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## GLB/DNSMapDomains

This table contains information about DNS map domain.

### XML structure

```

<GLB>
  <DNSMapDomains>
    <DNSMapDomain>
      <DNSMap></DNSMap>
      <Domain></Domain>
    </DNSMapDomain>
  </DNSMapDomains>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	DNSMapDomains
Table type	Multi-instance table
Row name	DNSMapDomain
Restrictions	Only DNS map domain can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSMap	Name of the DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
				<p>The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).</p> <p>The domain name supports wildcards including question marks (?) and asterisks (*).</p> <p>The following rules apply when you use wildcards:</p> <p>Use a question mark (?) to replace one character, except the dot (.).</p> <p>Multiple question marks can appear in the domain name.</p> <p>Use an asterisk (*) to replace multiple characters, except the dot (.).</p> <p>Multiple asterisks can appear in the domain name.</p> <p>Question marks and asterisks can appear in the domain name at the same time.</p>
Domain	Domain for the DNS map.	Index	String, case-insensitive. Length: 1 to 253 characters.	

## GLB/VirtualServerPools

This table contains information about virtual server pool.

### XML structure

```

<GLB>
  <VirtualServerPools>
    <VirtualServerPool>
      <Name></Name>
      <PredictorAlternate></PredictorAlternate>
      <PredictorFallback></PredictorFallback>
      <PredictorPreferred></PredictorPreferred>
      <BusyProtectEnable></BusyProtectEnable>
      <HashPreIpv4PrefixLength></HashPreIpv4PrefixLength>
      <HashPreIpv6PrefixLength></HashPreIpv6PrefixLength>
      <HashAltIpv4PrefixLength></HashAltIpv4PrefixLength>
      <HashAltIpv6PrefixLength></HashAltIpv6PrefixLength>
      <HashFbIpv4PrefixLength></HashFbIpv4PrefixLength>
      <HashFbIpv6PrefixLength></HashFbIpv6PrefixLength>
    </VirtualServerPool>
  </VirtualServerPools>

```

</GLB>

## Table description

Item	Description
Feature name	GLB
Table name	VirtualServerPools
Table type	Multi-instance table
Row name	VirtualServerPool
Restrictions	Only virtual server pool can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
PredictorAlternate	Predictor alternate algorithm for LB to select a virtual server to be the DNS recorder for client response.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—None</li><li>1—Round-robin</li><li>2—Random.</li><li>3—Least-connection.</li><li>4—Topology</li><li>5—Proximity.</li><li>6—Hash source address.</li><li>7—Hash source port.</li><li>8—Hash destination address.</li><li>9—Bandwidth.</li><li>10—Inbound bandwidth.</li><li>11—Outbound bandwidth.</li><li>12—Max bandwidth.</li><li>13—Max inbound bandwidth.</li><li>14—Max outbound bandwidth.</li></ul>	N/A
PredictorFallback	Predictor fallback	N/A	Enumeration: <ul style="list-style-type: none"><li>0—None</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	algorithm for LB to select a virtual server to be the DNS recorder for client response.		<ul style="list-style-type: none"> <li>• 1—Round-robin</li> <li>• 2—Random.</li> <li>• 3—Least-connection.</li> <li>• 4—Topology</li> <li>• 5—Proximity.</li> <li>• 6—Hash source address.</li> <li>• 7—Hash source port.</li> <li>• 8—Hash destination address.</li> <li>• 9—Bandwidth.</li> <li>• 10—Inbound bandwidth.</li> <li>• 11—Outbound bandwidth.</li> <li>• 12—Max bandwidth.</li> <li>• 13—Max inbound bandwidth.</li> <li>• 14—Max outbound bandwidth.</li> </ul>	
PredictorPreferred	Predictor preferred algorithm for LB to select a virtual server to be the DNS recorder for client response.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Round-robin (default).</li> <li>• 2—Random.</li> <li>• 3—Least-connection.</li> <li>• 4—Topology</li> <li>• 5—Proximity</li> <li>• 6—Hash source address.</li> <li>• 7—Hash source port.</li> <li>• 8—Hash destination address.</li> <li>• 9—Bandwidth.</li> <li>• 10—Inbound bandwidth.</li> <li>• 11—Outbound bandwidth.</li> <li>• 12—Max bandwidth.</li> <li>• 13—Max inbound bandwidth.</li> <li>• 14—Max outbound bandwidth.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
BusyProtect Enable	Enable the busy protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
HashPreIpv4PrefixLength	Length of IPv4 address mask for preferred hash algorithm.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column only can be configured when the Predictor is hash source address (6), hash source port (7) and hash destination address (8).
HashPreIpv6PrefixLength	Length of IPv6 address prefix for preferred hash algorithm.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column only can be configured when the Predictor hash source address (6), hash source port (7) and hash destination address (8).
HashAltIpv4PrefixLength	Length of IPv4 address mask for alternate hash algorithm.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column only can be configured when the Predictor is hash source address (6), hash source port (7) and hash destination address (8).
HashAltIpv6PrefixLength	Length of IPv6 address prefix for alternate hash algorithm.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column only can be configured when the Predictor hash source address (6), hash source port (7) and hash destination address (8).
HashFbIpv4PrefixLength	Length of IPv4 address mask for fallback hash algorithm.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column only can be configured when the Predictor is hash source address (6), hash source port (7) and hash destination address (8).
HashFbIpv6PrefixLength	Length of IPv6 address prefix for fallback hash algorithm.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column only can be configured when the Predictor hash source address (6), hash source port (7) and hash destination address (8).

## GLB/VSPVirtualServers

This table contains information about Virtual Server Pool Virtual Server.

### XML structure

```

<GLB>
  <VSPVirtualServers>
    <VSPVirtualServer>
      <VirtualServerPool></VirtualServerPool>
      <VirtualServer></VirtualServer>
      <Link></Link>
      <Weight></Weight>
    </VSPVirtualServer>
  </VSPVirtualServers>

```



</GLB>

## Table description

Item	Description
Feature name	GLB
Table name	VSPVirtualServers
Table type	Multi-instance table
Row name	VSPVirtualServer
Restrictions	Only VSP virtual server can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VirtualServerPool	Name of the virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VirtualServer	Virtual server of the virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Link	Link of the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Weight	Weight of the virtual server.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	Larger number means higher weight.

## GLB/DNSZones

This table contains information about DNS zone.

## XML structure

```
<GLB>
  <DNSZones>
    <DNSZone>
      <DomainName></DomainName>
      <TTL></TTL>
    </DNSZone>
  </DNSZones>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSZones
Table type	Multi-instance table
Row name	DNSZone
Restrictions	Only DNS zone can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain Name	Domain name of the DNS zone,.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the DNS zone.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/DNSZoneSOAs

This table contains information about DNS zone soa resource record.

## XML structure

```
<GLB>
  <DNSZoneSOAs>
    <DNSZoneSOA>
      <Zone></Zone>
      <PrimaryNS></PrimaryNS>
      <ResponsibleMail></ResponsibleMail>
      <Serial></Serial>
      <Refresh></Refresh>
      <Retry></Retry>
      <Expire></Expire>
      <MinTTL></MinTTL>
    </DNSZoneSOA>
  </DNSZoneSOAs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSZoneSOAs
Table type	Multi-instance table
Row name	DNSZoneSOA
Restrictions	Only DNS zone soa resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
PrimaryNS	Name of the Primary name server.	N/A	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Responsible Mail	Responsible mail address.	N/A	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Serial	Serial number	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . By default, the value is 1.	N/A
Refresh	Refresh interval	N/A	Unsigned integer. Value range: 300 to 2419200. Unit: second. By default, the value is 3600s.	N/A
Retry	Retry interval	N/A	Unsigned integer. Value range: 500 to $2^{32}-1$ . Unit: second. By default, the value is 600s.	N/A
Expire	Expire time	N/A	Unsigned integer. Value range: 500 to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit: second. By default, the value is 86400s.	
MinTTL	Minimum TTL	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/DNSZoneMXRRs

This table contains information about DNS zone mx resource record.

### XML structure

```

<GLB>
  <DNSZoneMXRRs>
    <DNSZoneMXRR>
      <Zone></Zone>
      <Host></Host>
      <MailServer></MailServer>
      <Preference></Preference>
      <TTL></TTL>
    </DNSZoneMXRR>
  </DNSZoneMXRRs>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	DNSZoneMXRRs
Table type	Multi-instance table
Row name	DNSZoneMXRR
Restrictions	Only DNS zone mx resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Host	Host name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
MailServer	Mail exchange name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Preference	Preference value	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/DNSZoneCNAMERRs

This table contains information about DNS zone cname resource record.

## XML structure

```

<GLB>
  <DNSZoneCNAMERRs>
    <DNSZoneCNAMERR>
      <Zone></Zone>
      <Alias></Alias>
      <Canonical></Canonical>
      <TTL></TTL>
    </DNSZoneCNAMERR>
  </DNSZoneCNAMERRs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB

Table name	DNSZoneCNAMERRs
Table type	Multi-instance table
Row name	DNSZoneCNAMERR
Restrictions	Only DNS zone cname resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Alias	Alias name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Canonical	Canonical name	N/A	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/DNSZoneNSRRs

This table contains information about DNS zone ns resource record.

## XML structure

```

<GLB>
  <DNSZoneNSRRs>
    <DNSZoneNSRR>
      <Zone></Zone>
      <SubName></SubName>
      <NameServerName></NameServerName>
      <TTL></TTL>
    </DNSZoneNSRR>
  </DNSZoneNSRRs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DNSZoneNSRRs
Table type	Multi-instance table
Row name	DNSZoneNSRR
Restrictions	Only DNS zone ns resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
SubName	Sub domain name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
NameServer Name	Authoritative nameserver name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/DNSRevZones

This table contains information about DNS reverse zone.

## XML structure

```
<GLB>
  <DNSRevZones>
    <DNSRevZone>
      <IPv4Address></IPv4Address>
      <IPv4PrefixLength></IPv4PrefixLength>
    </DNSRevZone>
  </DNSRevZones>
</GLB>
```

```

    </DNSRevZones>
  </GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DNSRevZones
Table type	Multi-instance table
Row name	DNSRevZone
Restrictions	Only DNS reverse zone can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Addresses	IPv4 address of the reverse zone.	Index	String. Dotted decimal notation.	Example: 1.1.1.1.
IPv4PrefixLength	IPv4 mask length of the reverse zone.	Index	Unsigned integer. Value range: 0 to 32.	N/A

## GLB/DNSRevZoneRRs

This table contains information about DNS reverse zone resource record.

## XML structure

```

<GLB>
  <DNSRevZoneRRs>
    <DNSRevZoneRR>
      <ReverseZoneIP></ReverseZoneIP>
      <ReverseZoneMask></ReverseZoneMask>
      <IPv4Address></IPv4Address>
      <DomainName></DomainName>
      <TTL></TTL>
    </DNSRevZoneRR>
  </DNSRevZoneRRs>
</GLB>

```



## Table description

Item	Description
Feature name	GLB
Table name	DNSRevZoneRRs
Table type	Multi-instance table
Row name	DNSRevZoneRR
Restrictions	Only DNS reverse zone resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReverseZoneIP	IPv4 address of the reverse zone.	Index	String. Dotted decimal notation.	Example: 1.1.1.1.
ReverseZoneMask	IPv4 mask length of the reverse zone.	Index	Unsigned integer. Value range: 0 to 32.	N/A
IPv4Addresses	IPv4 address of the PTR resource record.	Index	String. Dotted decimal notation. By default, no IPv4 address is specified.	N/A
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/DNSRevZoneIPv6s

This table contains information about DNS ipv6 reverse zone.

## XML structure

```
<GLB>
  <DNSRevZoneIPv6s>
```

```

<DNSRevZoneIPv6>
  <IPv6Address></IPv6Address>
  <IPv6PrefixLength></IPv6PrefixLength>
</DNSRevZoneIPv6>
</DNSRevZoneIPv6s>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DNSRevZoneIPv6s
Table type	Multi-instance table
Row name	DNSRevZoneIPv6
Restrictions	Only DNS ipv6 reverse zone can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv6Addresses	IPv6 address of the reverse zone.	Index	Hexadecimal string, colon-separated.	Example: 2::2.
IPv6PrefixLength	IPv6 prefix length of the reverse zone.	Index	Unsigned integer. Value range: 0 to 128.	N/A

## GLB/DNSRevZoneIPv6RRs

This table contains information about DNS reverse zone ipv6 resource record.

## XML structure

```

<GLB>
  <DNSRevZoneIPv6RRs>
    <DNSRevZoneIPv6RR>
      <ReverseZoneIPv6></ReverseZoneIPv6>
      <ReverseZonePrefix></ReverseZonePrefix>
      <IPv6Address></IPv6Address>
      <DomainName></DomainName>
      <TTL></TTL>
    </DNSRevZoneIPv6RR>
  </DNSRevZoneIPv6RRs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DNSRevZoneIPv6RRs
Table type	Multi-instance table
Row name	DNSRevZoneIPv6RR
Restrictions	Only DNS reverse zone ipv6 resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReverseZoneIPv6	IPv6 address of the reverse zone.	Index	Hexadecimal string, colon-separated.	Example: 2::2.
ReverseZoneMask	IPv6 prefix length of the reverse zone.	Index	Unsigned integer. Value range: 0 to 128.	N/A
IPv6Addresses	IPv6 address of the PTR resource record.	Index	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	N/A
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/DNSRecordMaxNum

This table contains information about DNS record max number.

## XML structure

```
<GLB>
  <DNSRecordMaxNum>
    <MaxNumber></MaxNumber>
  </DNSRecordMaxNum>
```

</GLB>

## Table description

Item	Description
Feature name	GLB
Table name	DNSRecordMaxNum
Table type	Simple-instance table
Row name	DNSRecordMaxNum
Restrictions	Only DNS Record max number can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxNumber	The max number of the DNS record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 10000.	N/A

## GLB/DNSRecordType

This table contains information about DNS record type.

## XML structure

```
<GLB>
  <DNSRecordType>
    <A></A>
    <AAAA></AAAA>
    <CNAME></CNAME>
    <MX></MX>
    <NS></NS>
    <SOA></SOA>
    <SRV></SRV>
    <TXT></TXT>
    <PTR></PTR>
  </DNSRecordType>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSRecordType
Table type	Simple-instance table
Row name	DNSRecordType
Restrictions	Only DNS Record type can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
A	The A type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li><li>1—record.</li></ul>	N/A
AAAA	The AAAA type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li><li>1—record.</li></ul>	N/A
CNAME	The CNAME type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li><li>1—record.</li></ul>	N/A
MX	The MX type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li><li>1—record.</li></ul>	N/A
NS	The NS type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li><li>1—record.</li></ul>	N/A
SOA	The SOA type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li><li>1—record.</li></ul>	N/A
SRV	The SRV type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li><li>1—record.</li></ul>	N/A
TXT	The TXT type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li><li>1—record.</li></ul>	N/A
PTR	The PTR type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li><li>1—record.</li></ul>	N/A

## GLB/DNSZoneTXTRRs

This table contains information about DNS zone txt resource record.

# XML structure

```
<GLB>
  <DNSZoneTXTRRs>
    <DNSZoneTXTRR>
      <Zone></Zone>
      <Sub></Sub>
      <Description></Description>
      <TTL></TTL>
    </DNSZoneTXTRR>
  </DNSZoneTXTRRs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSZoneTXTRRs
Table type	Multi-instance table
Row name	DNSZoneTXTRR
Restrictions	Only DNS zone txt resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Sub	Sub name of the resource record.	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Description	Description text of the resource record.	Index	String, case-insensitive. Length: 1 to 255 characters.	N/A
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

# GLB/DNSZoneSRVRRs

This table contains information about DNS zone srv resource record.

## XML structure

```
<GLB>
  <DNSZoneSRVRRs>
    <DNSZoneSRVRR>
      <Zone></Zone>
      <ServiceName></ServiceName>
      <HostName></HostName>
      <Port></Port>
      <Priority></Priority>
      <Weight></Weight>
      <TTL></TTL>
    </DNSZoneSRVRR>
  </DNSZoneSRVRRs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneSRVRRs
Table type	Multi-instance table
Row name	GlobalDNSZoneSRVRR
Restrictions	Only Global DNS zone ns resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
ServiceName	Service name.	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
HostName	Host name offering the service.	Index	String, case-insensitive. Length: 1 to 254	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).

Column name	Column description	Column type	Data type and restrictions characters.	Remarks
Port	Port number of the resource record.	Index	Unsigned integer. Value range: 0 to 65535.	Index
Priority	Priority of the resource record.	N/A	Unsigned integer. Value range: 0 to 100.	The smaller the value, the higher the priority.
Weight	Weight value of the resource record.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/LocalDefaultSyncGroupMems

This table contains information about the local default synchronization group member.

### XML structure

```

<GLB>
  <LocalDefaultSyncGroupMems>
    <LocalDefaultSyncGroupMem>
      <Name></Name>
      <Port></Port>
      <ServiceEnable></ServiceEnable>
      <Interval></Interval>
      <RetryTimes></RetryTimes>
      <CipherKey></CipherKey>
      <SimpleKey></SimpleKey>
    </LocalDefaultSyncGroupMem>
  </LocalDefaultSyncGroupMems>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	LocalDefaultSyncGroupMems
Table type	Multi-instance table
Row name	LocalDefaultSyncGroupMem
Restrictions	None.



Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the local default synchronization group member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Port	Specify the communication port number of the local default synchronization group member.	N/A	Unsigned integer. Value range: 1024 to 65535. By default, the value is 3936.	N/A
ServiceEnable	Enable the communicating function of the local default synchronization group member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
Interval	Specify the probe interval for the local default synchronization group member.	N/A	Unsigned integer. Value range: 1 to 259200. Unit: second. By default, the value is 5 seconds.	N/A
RetryTimes	Specify the probe retry times for the local default synchronization group member.	N/A	Unsigned integer. Value range: 1 to 10. By default, the value is 5.	N/A
CipherKey	Specify an authentication key in encrypted form.	N/A	String, case-sensitive. Length: 1 to 53 characters.	Configure <b>CipherKey</b> or <b>SimpleKey</b> , but not both.
SimpleKey	Specify an authentication key in plaintext form.	N/A	String, case-sensitive. Length: 1 to 16 characters.	Configure <b>CipherKey</b> or <b>SimpleKey</b> , but not both.

## GLB/RemoteDefaultSyncGroupMems

This table contains information about a remote default synchronization group member.

## XML structure

```
<GLB>
  <RemoteDefaultSyncGroupMems>
    <RemoteDefaultSyncGroupMem>
      <Name></Name>
      <Port></Port>
    </RemoteDefaultSyncGroupMem>
  </RemoteDefaultSyncGroupMems>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	RemoteDefaultSyncGroupMems
Table type	Multi-instance table
Row name	RemoteDefaultSyncGroupMem
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the remote default synchronization group member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Port	Specify the communication port number of the remote default synchronization group member.	N/A	Unsigned integer. Value range: 1024 to 65535. By default, the value is 3936.	N/A

## GLB/SyncGroupMemberIPAddresses

This table contains information about the IP address of the synchronization group member.

## XML structure

```
<GLB>
  <SyncGroupMemberIPAddresses>
```

```

<SyncGroupMemberIPAddress>
  <SyncGroupMemberType></SyncGroupMemberType>
  <SyncGroupMemberName></SyncGroupMemberName>
  <Ipv4Address></Ipv4Address>
</SyncGroupMemberIPAddress>
</SyncGroupMemberIPAddresses>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	SyncGroupMemberIPAddresses
Table type	Multi-instance table
Row name	SyncGroupMemberIPAddress
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SyncGroupMemberType	Type of the synchronization group member.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Local</li> <li>1—Remote</li> </ul>	N/A
SyncGroupMemberName	Name of the synchronization group member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	Specify the IPv4 address of the synchronization group member.	Index	Hexadecimal string, colon-separated.	Example: 1.1.1.1. Loopback addresses, multicast addresses and broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either.

## GLB/DataCenters

This table contains information about a data center.

## XML structure

```

<GLB>
  <DataCenters>

```

```

<DataCenter>
  <Name></Name>
  <Description></Description>
  <ServiceEnable></ServiceEnable>
</DataCenter>
</DataCenters>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DataCenters
Table type	Multi-instance table
Row name	DataCenter
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Specify the description of the data center.	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A
ServiceEnable	Enable the data center function.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## GLB/DataCenterLinks

This table contains information about the links of a data center.

## XML structure

```

<GLB>
  <DataCenterLinks>
    <DataCenterLink>
      <DataCenter></DataCenter>

```

```

    <Link></Link>
  </DataCenterLink>
</DataCenterLinks>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DataCenterLinks
Table type	Multi-instance table
Row name	DataCenterLink
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Link	Name of the link.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## GLB/Servers

This table contains information about a server.

## XML structure

```

<GLB>
  <Servers>
    <Server>
      <DataCenter></DataCenter>
      <Name></Name>
      <ServiceEnable></ServiceEnable>
      <Interval></Interval>
      <User></User>
      <CipherPassword></CipherPassword>
      <SimplePassword></SimplePassword>
    </Server>
  </Servers>
</GLB>

```

```
</Servers>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	Servers
Table type	Multi-instance table
Row name	Server
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Name	Server name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ServiceEnable	Enable the server function.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
Interval	Specify the communication interval of the server.	N/A	Unsigned integer. Value range: 5 to 2419200. By default, the value is 10.	N/A
User	Specify the communication user of the server.	N/A	String, case-sensitive. Length: 1 to 55 characters.	N/A
CipherPassword	Specify the encrypted password of the server.	N/A	String, case-sensitive. Length: 1 to 113 characters.	Configure CipherPassword <b>or</b> SimplePassword, but not both.
SimplePassword	Specify the plaintext password of the server.	N/A	String, case-sensitive. Length: 1 to 63 characters.	Configure CipherPassword <b>or</b> SimplePassword, but not both.

# GLB/LocalServers

This table contains information about the local server.

## XML structure

```
<GLB>
  <LocalServers>
    <LocalServer>
      <DataCenter></DataCenter>
      <Name></Name>
      <ServiceEnable></ServiceEnable>
    </LocalServer>
  </LocalServers>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	LocalServers
Table type	Multi-instance table
Row name	LocalServer
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Name	Local server name.	Index	String, case-insensitive. Must be localhost.	N/A
ServiceEnable	Enable the server function.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable (default).</li><li>1—Enable.</li></ul>	N/A

# GLB/ServerIPAddresses

This table contains information about the IP address of a server.

## XML structure

```
<GLB>
  <ServerIPAddresses>
    <ServerIPAddress>
      <DataCenter></DataCenter>
      <Server></Server>
      <Ipv4Address></Ipv4Address>
    </ServerIPAddress>
  </ServerIPAddresses>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	ServerIPAddresses
Table type	Multi-instance table
Row name	ServerIPAddress
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Server name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	Specify the IPv4 address of the server.	Index	Hexadecimal string, colon-separated.	Example: 1.1.1.1. Loopback addresses, multicast addresses and broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either.



# GLB/LocalVirtualServers

This table contains information about the virtual server of a local server.

## XML structure

```
<GLB>
  <LocalVirtualServers>
    <LocalVirtualServer>
      <DataCenter></DataCenter>
      <LocalServer></LocalServer>
      <VirtualServerType></VirtualServerType>
      <VirtualServer></VirtualServer>
    </LocalVirtualServer>
  </LocalVirtualServers>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	LocalVirtualServers
Table type	Multi-instance table
Row name	LocalVirtualServer
Restrictions	Only virtual server of local server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
LocalServer	Local server name.	Index	String, case-insensitive.	Must be localhost.
VirtualServerType	Virtual server type.	Index	Enumeration: <ul style="list-style-type: none"><li>0—virtual server</li><li>1—virtual IP.</li></ul>	N/A
VirtualServer	Virtual server name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

# GLB/GlobalDNSListeners

This table contains information about a global DNS listener.

## XML structure

```
<GLB>
  <GlobalDNSListeners>
    <GlobalDNSListener>
      <Name></Name>
      <Ipv4Address></Ipv4Address>
      <Ipv4PortNumber></Ipv4PortNumber>
      <ServiceEnable></ServiceEnable>
      <Fallback></Fallback>
    </GlobalDNSListener>
  </GlobalDNSListeners>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSListeners
Table type	Multi-instance table
Row name	GlobalDNSListener
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global DNS listener.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, and broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either.
Ipv4PortNumber	IPv4 port number.	N/A	Unsigned integer. Value range: 1 to 65535. By default, the value	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			is 53.	
ServiceEnable	Enable the global DNS listener.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
Fallback	Fallback action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—No response.</li> <li>1—Reject (default).</li> </ul>	N/A

## GLB/GlobalDNSMaps

This table contains information about a global DNS map.

### XML structure

```

<GLB>
  <GlobalDNSMaps>
    <GlobalDNSMap>
      <Name></Name>
      <TTL></TTL>
      <PredictorAlternate></PredictorAlternate>
      <PredictorFallback></PredictorFallback>
      <PredictorPreferred></PredictorPreferred>
      <ServiceEnable></ServiceEnable>
    </GlobalDNSMap>
  </GlobalDNSMaps>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSMaps
Table type	Multi-instance table
Row name	GlobalDNSMap
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
TTL	TTL time of the DNS recorder.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600 seconds.	N/A
PredictorAlternate	Alternative predictor algorithm for GLB to select a virtual server pool to service a DNS request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Round-robin.</li> <li>2—Random.</li> <li>3—Topology.</li> <li>4—Proximity.</li> </ul>	N/A
PredictorFallback	Backup predictor algorithm for GLB to select a virtual server pool to service a DNS request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Round-robin.</li> <li>2—Random.</li> <li>3—Topology.</li> <li>4—Proximity.</li> </ul>	N/A
PredictorPreferred	Preferred predictor algorithm for GLB to select a virtual server pool to service a DNS request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Round-robin (default).</li> <li>2—Random.</li> <li>3—Topology.</li> <li>4—Proximity.</li> </ul>	N/A
ServiceEnable	Enable the global DNS map.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## GLB/GlobalDNSMapDomains

This table contains information about the domains of a global DNS map.

## XML structure

```

<GLB>
  <GlobalDNSMapDomains>
    <GlobalDNSMapDomain>
      <GlobalDNSMap></GlobalDNSMap>
    
```

```

    <Domain></Domain>
  </GlobalDNSMapDomain>
</GlobalDNSMapDomains>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSMapDomains
Table type	Multi-instance table
Row name	GlobalDNSMapDomain
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalDNS Map	Name of the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Domain	Domain for the global DNS map.	Index	String, case-insensitive. Length: 1 to 253 characters.	<p>The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).</p> <p>The domain name supports wildcards including question marks (?) and asterisks (*).</p> <p>The following rules apply when you use wildcards:</p> <ul style="list-style-type: none"> <li>• Use a question mark (?) to replace one character, except the dot (.).</li> <li>• Multiple question marks can appear in the domain name.</li> <li>• Use an asterisk (*) to replace multiple characters, except the dot (.).</li> <li>• Multiple asterisks can appear in the domain name.</li> <li>• Question marks and asterisks can appear in the domain name at the same time.</li> </ul>

## GLB/GlobalDNSMapVirtualServerPools

This table contains information about the virtual server pool of a global DNS map.

## XML structure

```
<GLB>
  <GlobalDNSMapVirtualServerPools>
    <GlobalDNSMapVirtualServerPool>
      <GlobalDNSMap></GlobalDNSMap>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <Weight></Weight>
    </GlobalDNSMapVirtualServerPool>
  </GlobalDNSMapVirtualServerPools>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSMapVirtualServerPools
Table type	Multi-instance table
Row name	GlobalDNSMapVirtualServerPool
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalDNSMap	Name of the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
GlobalVirtualServerPool	Virtual server pool for the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Weight	Weight of the global virtual pool.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger number means a higher weight.

## GLB/GlobalVirtualServerPools

This table contains information about a global virtual server pool.

## XML structure

```
<GLB>
```

```

<GlobalVirtualServerPools>
  <GlobalVirtualServerPool>
    <Name></Name>
    <ProbeSuccessCriteria></ProbeSuccessCriteria>
    <PredictorAlternate></PredictorAlternate>
    <PredictorFallback></PredictorFallback>
    <PredictorPreferred></PredictorPreferred>
    <BusyProtectEnable></BusyProtectEnable>
  </GlobalVirtualServerPool>
</GlobalVirtualServerPools>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalVirtualServerPools
Table type	Multi-instance table
Row name	GlobalVirtualServerPool
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ProbeSuccessCriteria	Probe success criteria for virtual server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0, which indicates that probe success criteria is all.	N/A
PredictorAlternate	Alternative predictor algorithm for GLB to select a virtual server to be the DNS recorder for client response.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Round-robin.</li> <li>2—Random.</li> <li>3—Least-connection (not supported)</li> <li>4—Topology.</li> <li>5—Proximity.</li> <li>15—First-available.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PredictorFallback	Backup predictor algorithm for GLB to select a virtual server to be the DNS recorder for client response.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Round-robin.</li> <li>2—Random.</li> <li>3—Least-connection (not supported)</li> <li>4—Topology.</li> <li>5—Proximity.</li> <li>15—First-available.</li> </ul>	N/A
PredictorPreferred	Preferred predictor algorithm for GLB to select a virtual server to be the DNS recorder for client response.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Round-robin (default).</li> <li>2—Random.</li> <li>3—Least-connection (not supported)</li> <li>4—Topology.</li> <li>5—Proximity.</li> <li>15—First-available.</li> </ul>	N/A
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## GLB/GVSPVirtualServers

This table contains information about a virtual server of the global virtual server pool.

### XML structure

```

<GLB>
  <GVSPVirtualServers>
    <GVSPVirtualServer>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <DataCenter></DataCenter>
      <Server></Server>
      <VirtualServer></VirtualServer>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <Link></Link>
      <Weight></Weight>
    </GVSPVirtualServer>
  </GVSPVirtualServers>
</GLB>

```



## Table description

Item	Description
Feature name	GLB
Table name	GVSPVirtualServers
Table type	Multi-instance table
Row name	GVSPVirtualServer
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
DataCenter	Name of the virtual server's data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Name of the virtual server's server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VirtualServer	Virtual server of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ProbeSuccessCriteria	Probe success criteria for virtual server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0, which indicates that probe success criteria is all.	N/A
Link	Link of the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Weight	Weight of the virtual server.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger number means a higher weight.

## GLB/GVSPVirtualIPs

This table contains information about the virtual IP address of a global virtual server pool.

# XML structure

```
<GLB>
  <GVSPVirtualIPs>
    <GVSPVirtualIP>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <DataCenter></DataCenter>
      <Server></Server>
      <VirtualIP></VirtualIP>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <Link></Link>
      <Weight></Weight>
    </GVSPVirtualIP>
  </GVSPVirtualIPs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GVSPVirtualIPs
Table type	Multi-instance table
Row name	GVSPVirtualIP
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
DataCenter	Name of the virtual IP's data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Name of the virtual IP's server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VirtualIP	Virtual IP address of the global virtual server pool.	Index	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
ProbeSucces	Probe success	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ssCriteria	criteria for virtual IP.		Value range: 0 to $2^{32}-1$ . By default, the value is 0, which indicates that probe success criteria is all.	
Link	Link of the virtual IP.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Weight	Weight of the virtual IP.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger number means a higher weight.

## GLB/GVSPProbes

This table contains information the probe method of a global virtual server pool.

### XML structure

```

<GLB>
  <GVSPProbes>
    <GVSPProbe>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <Probe></Probe>
    </GVSPProbe>
  </GVSPProbes>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GVSPProbes
Table type	Multi-instance table
Row name	GVSPProbe
Restrictions	Only global virtual server pool probe can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## GLB/GVSPVirtualServerProbes

This table contains information the probe method of a virtual server.

## XML structure

```
<GLB>
  <GVSPVirtualServerProbes>
    <GVSPVirtualServerProbe>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <DataCenter></DataCenter>
      <Server></Server>
      <VirtualServer></VirtualServer>
      <Probe></Probe>
    </GVSPVirtualServerProbe>
  </GVSPVirtualServerProbes>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GVSPVirtualServerProbes
Table type	Multi-instance table
Row name	GVSPVirtualServerProbe
Restrictions	Only virtual server probe can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
DataCenter	Name of the virtual server's data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Name of the virtual server's server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VirtualServer	Virtual server of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the virtual server member.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## GLB/GVSPVIPProbes

This table contains information the probe method of a virtual IP.

## XML structure

```

<GLB>
  <GVSPVIPProbes>
    <GVSPVIPProbe>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <DataCenter></DataCenter>
      <Server></Server>
      <VirtualIP></VirtualIP>
      <Probe></Probe>
    </GVSPVIPProbe>
  </GVSPVIPProbes>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GVSPVIPProbes
Table type	Multi-instance table
Row name	GVSPVIPProbe

Restrictions	Only global virtual ip probe can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
DataCenter	Name of the virtual IP's data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Name of the virtual IP's server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VirtualIP	Virtual IP address of the virtual IP.	Index	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
Probe	Probe method for the virtual IP.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## GLB/GTopoRegionVSPs

This table contains information about the mapping between a global region and a global virtual server pool.

## XML structure

```

<GLB>
  <GTopoRegionVSPs>
    <GTopoRegionVSP>
      <GlobalRegion></GlobalRegion>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <Priority></Priority>
    </GTopoRegionVSP>
  </GTopoRegionVSPs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GTopoRegionVSPs
Table type	Multi-instance table
Row name	GTopoRegionVSP
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalRegion	Name of the global region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Priority	Priority of the global region.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger number means a higher priority.

## GLB/GTopoRegionIPv4s

This table contains information about the mapping between a global region and an IP address.

## XML structure

```
<GLB>
  <GTopoRegionIPv4s>
    <GTopoRegionIPv4>
      <GlobalRegion></GlobalRegion>
      <IPv4Address></IPv4Address>
      <IPv4MaskLength></IPv4MaskLength>
      <Priority></Priority>
    </GTopoRegionIPv4>
  </GTopoRegionIPv4s>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GTopoRegionIPv4s
Table type	Multi-instance table
Row name	GTopoRegionIPv4
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalRegion	Name of the global region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPv4Addresses	IPv4 address.	Index	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
IPv4MaskLength	IPv4 mask length.	Index	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column cannot be configured if no IPv4 address is configured.
Priority	Priority of the global region.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger number means a higher priority.

## GLB/GlobalRegions

This table contains information about a global region.

## XML structure

```
<GLB>
  <GlobalRegions>
    <GlobalRegion>
      <Name></Name>
    </GlobalRegion>
  </GlobalRegions>
```



</GLB>

## Table description

Item	Description
Feature name	GLB
Table name	GlobalRegions
Table type	Multi-instance table
Row name	GlobalRegion
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## GLB/GlobalRegionISPs

This table contains information about the global ISP for a global region.

## XML structure

```
<GLB>
  <GlobalRegionISPs>
    <GlobalRegionISP>
      <GlobalRegion></GlobalRegion>
      <GlobalISP></GlobalISP>
    </GlobalRegionISP>
  </GlobalRegionISPs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalRegionISPs
Table type	Multi-instance table
Row name	GlobalRegionISP

Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalRegion	Name of the global region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
GlobalISP	ISP for the global region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## GLB/GlobalSPs

This table contains information about a global ISP.

## XML structure

```

<GLB>
  <GlobalISPs>
    <GlobalISP>
      <Name></Name>
    </GlobalISP>
  </GlobalISPs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalISPs
Table type	Multi-instance table
Row name	GlobalISP
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## GLB/GlobalIpv4ISPAddressGroups

This table contains information about a global IPv4 ISP address group.

## XML structure

```
<GLB>
  <GlobalIpv4ISPAddressGroups>
    <GlobalIpv4ISPAddressGroup>
      <GlobalISP></GlobalISP>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
    </GlobalIpv4ISPAddressGroup>
  </GlobalIpv4ISPAddressGroups>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	Globalpv4ISPAddressGroups
Table type	Multi-instance table
Row name	Globalpv4ISPAddressGroup
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalISP	Name of the global ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	IPv4 address.	Index	String.	The value must be equal to the summation of the address and the

Column name	Column description	Column type	Data type and restrictions	Remarks
			Dotted decimal notation. By default, no IPv4 address is specified.	mask. Example: 1.1.1.0/24.
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range: 1 to 32.	N/A

## GLB/GlobalISPFile

This table contains information about a global ISP file.

### XML structure

```

<GLB>
  <GlobalISPFile>
    <FileName></FileName>
  </GlobalISPFile>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalISPFile
Table type	Single-instance table
Row name	N/A
Restrictions	None.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the global ISP file.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## GLB/GlobalVRFProximityParameters

This table contains information about global proximity parameters.

## XML structure

```
<GLB>
  <GlobalVRFPximityParameters>
    <GlobalVRFPximityParameter>
      <VRF></VRF>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Timeout></Timeout>
      <RTTWeight></RTTWeight>
      <TTLWeight></TTLWeight>
      <InBandwidthWeight></InBandwidthWeight>
      <OutBandwidthWeight></OutBandwidthWeight>
      <CostWeight></CostWeight>
      <MaxNumber></MaxNumber>
      <DefaultProbe></DefaultProbe>
    </GlobalVRFPximityParameter>
  </GlobalVRFPximityParameters>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalVRFPximityParameters
Table type	Multi-instance table
Row name	GlobalVRFPximityParameter
Restrictions	None.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates the public network.
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 24.	Zero means a natural mask.
Timeout	The lifetime of global proximity entries.	N/A	Unsigned integer. Value range: 60 to 3600. By default, the value is 60.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RTTWeight	The weight of RTT.	N/A	Unsigned integer. Value range: 0 to 255. By default, the value is 100.	N/A
TTLWeight	The weight of TTL.	N/A	Unsigned integer. Value range: 0 to 255. By default, the value is 100.	N/A
InBandwidthWeight	The weight of inbound bandwidth.	N/A	Unsigned integer. Value range: 0 to 255. By default, the value is 100.	N/A
OutBandwidthWeight	The weight of outbound bandwidth.	N/A	Unsigned integer. Value range: 0 to 255. By default, the value is 100.	N/A
CostWeight	The weight of link cost.	N/A	Unsigned integer. Value range: 0 to 255. By default, the value is 100.	N/A
MaxNumber	Upper limit for global proximity entries.	N/A	Unsigned integer. Value range: 0 to 10000000. By default, the value is 0, which indicates the number of global proximity entries is unlimited.	N/A
DefaultProbe	Default probe method for the global proximity.	N/A	String, case-insensitive. Length: 1 to 32 characters. By default, no default probe is specified.	N/A

## GLB/GlobalDNSZones

This table contains information about a global DNS zone.

### XML structure

```

<GLB>
  <GlobalDNSZones>
    <GlobalDNSZone>
      <DomainName></DomainName>
      <TTL></TTL>
    </GlobalDNSZone>
  </GlobalDNSZones>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZones
Table type	Multi-instance table
Row name	GlobalDNSZone
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain Name	Domain name of the global DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the global DNS zone.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600 seconds.	N/A

## GLB/GlobalDNSZoneSOAs

This table contains information about an SOA resource record for a global DNS zone.

## XML structure

```
<GLB>
  <GlobalDNSZoneSOAs>
    <GlobalDNSZoneSOA>
      <Zone></Zone>
      <PrimaryNS></PrimaryNS>
      <ResponsibleMail></ResponsibleMail>
      <Serial></Serial>
      <Refresh></Refresh>
      <Retry></Retry>
      <Expire></Expire>
      <MinTTL></MinTTL>
    </GlobalDNSZoneSOA>
  </GlobalDNSZoneSOAs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneSOAs
Table type	Multi-instance table
Row name	GlobalDNSZoneSOA
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the global DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
PrimaryNS	Name of the primary name server.	N/A	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Responsible Mail	Responsible mail address.	N/A	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Serial	Serial number	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . By default, the value is 1.	N/A
Refresh	Refresh interval	N/A	Unsigned integer. Value range: 300 to 2419200. Unit: second. By default, the value is 3600 seconds.	N/A
Retry	Retry interval	N/A	Unsigned integer. Value range: 500 to $2^{32}-1$ . Unit: second. By default, the value is 600 seconds.	N/A
Expire	Expiration time	N/A	Unsigned integer. Value range: 500 to $2^{32}-1$ .	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit: second. By default, the value is 86400 seconds.	
MinTTL	Minimum TTL	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600 seconds.	N/A

## GLB/GlobalDNSZoneMXRRs

This table contains information about MX resource records for a global DNS zone.

### XML structure

```

<GLB>
  <GlobalDNSZoneMXRRs>
    <GlobalDNSZoneMXRR>
      <Zone></Zone>
      <Host></Host>
      <MailServer></MailServer>
      <Preference></Preference>
    </GlobalDNSZoneMXRR>
  </GlobalDNSZoneMXRRs>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneMXRRs
Table type	Multi-instance table
Row name	GlobalDNSZoneMXRR
Restrictions	None.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the global DNS	Index	String, case-insensitive.	The string can contain letters, numbers, hyphens (-), underscores

Column name	Column description	Column type	Data type and restrictions	Remarks
	zone.		Length: 1 to 253 characters.	(_), and dots (.).
Host	Host name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
MailServer	Mail exchange name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Preference	Preference value	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## GLB/GlobalDNSZoneCNAMERRs

This table contains information about CNAME resource records for a global DNS zone.

### XML structure

```

<GLB>
  <GlobalDNSZoneCNAMERRs>
    <GlobalDNSZoneCNAMERR>
      <Zone></Zone>
      <Alias></Alias>
      <Canonical></Canonical>
    </GlobalDNSZoneCNAMERR>
  </GlobalDNSZoneCNAMERRs>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneCNAMERRs
Table type	Multi-instance table
Row name	GlobalDNSZoneCNAMERR
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the global DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Alias	Alias name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Canonical	Canonical name	N/A	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).

## GLB/GlobalDNSZoneNSRRs

This table contains information about NS resource records for a global DNS zone.

## XML structure

```
<GLB>
  <GlobalDNSZoneNSRRs>
    <GlobalDNSZoneNSRR>
      <Zone></Zone>
      <SubName></SubName>
      <NameServerName></NameServerName>
    </GlobalDNSZoneNSRR>
  </GlobalDNSZoneNSRRs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneNSRRs
Table type	Multi-instance table
Row name	GlobalDNSZoneNSRR
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the global DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
SubName	Sub domain name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
NameServer Name	Authoritative name server name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).

## GLB/GlobalDNSRevZones

This table contains information about a global DNS reverse zone.

## XML structure

```
<GLB>
  <GlobalDNSRevZones>
    <GlobalDNSRevZone>
      <IPv4Address></IPv4Address>
      <IPv4PrefixLength></IPv4PrefixLength>
      <TTL></TTL>
    </GlobalDNSRevZone>
  </GlobalDNSRevZones>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSRevZones
Table type	Multi-instance table
Row name	GlobalDNSRevZone
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Addresses	IPv4 address of the global reverse zone.	Index	String. Dotted decimal notation.	Example: 1.1.1.1.
IPv4PrefixLength	IPv4 mask length of the global reverse zone.	Index	Unsigned integer. Value range: 0 to 32.	N/A
TTL	TTL time of the global reverse zone.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600 seconds.	N/A

## GLB/GlobalDNSRevZoneRRs

This table contains information about a resource record for a global DNS reverse zone.

## XML structure

```
<GLB>
  <GlobalDNSRevZoneRRs>
    <GlobalDNSRevZoneRR>
      <ReverseZoneIP></ReverseZoneIP>
      <ReverseZoneMask></ReverseZoneMask>
      <IPv4Address></IPv4Address>
      <DomainName></DomainName>
    </GlobalDNSRevZoneRR>
  </GlobalDNSRevZoneRRs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSRevZoneRRs
Table type	Multi-instance table
Row name	GlobalDNSRevZoneRR
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReverseZoneIP	IPv4 address of the global reverse zone.	Index	String. Dotted decimal notation.	Example: 1.1.1.1.
ReverseZoneMask	IPv4 mask length of the global reverse zone.	Index	Unsigned integer. Value range: 0 to 32.	N/A
IPv4Addresses	IPv4 address of the PTR resource record.	Index	String. Dotted decimal notation. By default, no IPv4 address is specified.	N/A
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).

## GLB/GlobalIpv4ISPLists

This table contains information about a global IPv4 ISP address group.

## XML structure

```
<GLB>
  <GlobalIpv4ISPLists>
    <GlobalIpv4ISPList>
      <GlobalISP></GlobalISP>
      <IsIncrement></IsIncrement>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
    </GlobalIpv4ISPList>
  </GlobalIpv4ISPLists>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalIpv4ISPLists
Table type	Multi-instance table
Row name	GlobalIpv4ISPList
Restrictions	None.
Support for row creation and	Yes

---

deletion

---

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalISP	Name of the global ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IsIncrement	Whether to increment the data.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—False.</li><li>• 1—True.</li></ul>	N/A
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation. By default, no IPv4 address is specified.	The value must be equal to the summation of the address and the mask. Example: 1.1.1.0/24.
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range: 1 to 32.	N/A

# Contents

GLB .....	1
GLB/DNSMaps .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
GLB/DNSMapDomains .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
GLB/DNSMapStats .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
GLB/VirtualServerPools .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
GLB/VSPVirtualServers .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
GLB/DNSZones .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
GLB/DNSZoneSOAs .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
GLB/DNSZoneMXRRs .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
GLB/DNSZoneCNAMERRs .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
GLB/DNSZoneNSRRs .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
GLB/DNSRevZones .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
GLB/DNSRevZoneRRs .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
GLB/DNSRevZoneIPv6s .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
GLB/DNSRevZoneIPv6RRs .....	18
XML structure .....	18
Table description .....	18
Columns .....	19



GLB/DNSRecordMaxNum .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
GLB/DNSRecordType .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
GLB/AllDNSRecords .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
GLB/DNSZoneTXTRRs .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
GLB/DNSZoneSRVRRs .....	25
XML structure .....	25
Table description .....	25
Columns .....	25
GLB/LocalDefaultSyncGroupMems .....	26
XML structure .....	26
Table description .....	27
Columns .....	27
GLB/RemoteDefaultSyncGroupMems .....	28
XML structure .....	28
Table description .....	28
Columns .....	29
GLB/SyncGroupMemberIPAddresses .....	29
XML structure .....	29
Table description .....	30
Columns .....	30
GLB/DataCenters .....	30
XML structure .....	30
Table description .....	31
Columns .....	31
GLB/DataCenterLinks .....	31
XML structure .....	31
Table description .....	32
Columns .....	32
GLB/Servers .....	32
XML structure .....	33
Table description .....	33
Columns .....	33
GLB/LocalServers .....	34
XML structure .....	34
Table description .....	34
Columns .....	35
GLB/ServerIPAddresses .....	35
XML structure .....	35
Table description .....	35
Columns .....	36
GLB/ServerVirtualServers .....	36
XML structure .....	36
Table description .....	36
Columns .....	37
GLB/LocalVirtualServers .....	37
XML structure .....	37
Table description .....	37
Columns .....	38
GLB/GlobalDNSListeners .....	38
XML structure .....	38

Table description .....	38
Columns .....	39
<b>GLB/GlobalDNSListenerStats .....</b>	<b>39</b>
XML structure .....	39
Table description .....	40
Columns .....	40
<b>GLB/GlobalDNSListenerTypeStats .....</b>	<b>41</b>
XML structure .....	41
Table description .....	41
Columns .....	41
<b>GLB/GlobalDNSMaps .....</b>	<b>42</b>
XML structure .....	42
Table description .....	43
Columns .....	43
<b>GLB/GlobalDNSMapDomains .....</b>	<b>44</b>
XML structure .....	44
Table description .....	44
Columns .....	44
<b>GLB/GlobalDNSMapVirtualServerPools .....</b>	<b>45</b>
XML structure .....	45
Table description .....	45
Columns .....	45
<b>GLB/GlobalDNSMapStats .....</b>	<b>46</b>
XML structure .....	46
Table description .....	46
Columns .....	46
<b>GLB/GlobalVirtualServerPools .....</b>	<b>47</b>
XML structure .....	47
Table description .....	47
Columns .....	48
<b>GLB/GVSPVirtualServers .....</b>	<b>49</b>
XML structure .....	49
Table description .....	49
Columns .....	49
<b>GLB/GVSPVirtualIPs .....</b>	<b>50</b>
XML structure .....	50
Table description .....	51
Columns .....	51
<b>GLB/GVSPProbes .....</b>	<b>52</b>
XML structure .....	52
Table description .....	52
Columns .....	52
<b>GLB/GVSPVirtualServerProbes .....</b>	<b>53</b>
XML structure .....	53
Table description .....	53
Columns .....	53
<b>GLB/GVSPVIPProbes .....</b>	<b>54</b>
XML structure .....	54
Table description .....	54
Columns .....	55
<b>GLB/GTopoRegionVSPs .....</b>	<b>55</b>
XML structure .....	55
Table description .....	56
Columns .....	56
<b>GLB/GTopoRegionIPv4s .....</b>	<b>56</b>
XML structure .....	56
Table description .....	57
Columns .....	57
<b>GLB/GlobalRegions .....</b>	<b>57</b>
XML structure .....	57
Table description .....	58
Columns .....	58

GLB/GlobalRegionISPs .....	58
XML structure .....	58
Table description .....	58
Columns .....	59
GLB/GlobalISPs .....	59
XML structure .....	59
Table description .....	59
Columns .....	59
GLB/GlobalIpv4ISPAddressGroups .....	60
XML structure .....	60
Table description .....	60
Columns .....	60
GLB/GlobalISPFile .....	61
XML structure .....	61
Table description .....	61
Columns .....	61
GLB/GlobalVRFProximityParameters .....	61
XML structure .....	62
Table description .....	62
Columns .....	62
GLB/GlobalIpv4ProximityTables .....	63
XML structure .....	63
Table description .....	63
Columns .....	64
GLB/GlobalIpv4ProximityNodes .....	64
XML structure .....	64
Table description .....	65
Columns .....	65
GLB/GlobalProximityStats .....	66
XML structure .....	66
Table description .....	66
Columns .....	66
GLB/GlobalDNSZones .....	67
XML structure .....	67
Table description .....	67
Columns .....	67
GLB/GlobalDNSZoneSOAs .....	68
XML structure .....	68
Table description .....	68
Columns .....	68
GLB/GlobalDNSZoneMXRRs .....	69
XML structure .....	69
Table description .....	69
Columns .....	70
GLB/GlobalDNSZoneCNAMERRs .....	70
XML structure .....	70
Table description .....	70
Columns .....	71
GLB/GlobalDNSZoneNSRRs .....	71
XML structure .....	71
Table description .....	71
Columns .....	72
GLB/GlobalDNSRevZones .....	72
XML structure .....	72
Table description .....	72
Columns .....	73
GLB/GlobalDNSRevZoneRRs .....	73
XML structure .....	73
Table description .....	73
Columns .....	74
GLB/GlobalIpv4ISPLists .....	74
XML structure .....	74

Table description .....	74
Columns .....	75
<b>GLB/GlobalIpv4ProximityTableLists .....</b>	<b>75</b>
XML structure .....	75
Table description .....	76
Columns .....	76

# GLB

## GLB/DNSMaps

This table contains information about DNS map.

### XML structure

```
<GLB>
  <DNSMaps>
    <DNSMap>
      <Name></Name>
      <VRF></VRF>
      <TTL></TTL>
      <VirtualServerPool></VirtualServerPool>
      <ServiceEnable></ServiceEnable>
    </DNSMap>
  </DNSMaps>
</GLB>
```

### Table description

Item	Description
Feature name	GLB
Table name	DNSMaps
Table type	Multi-instance table
Row name	DNSMap
Restrictions	Only DNS map can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VRF	VRF name.	N/A	String, Length: 0 to 31 characters.	The null string indicates public network.
TTL	TTL time of the DNS recorder.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit: second.	
VirtualServerPool	Name of the virtualserverpool.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ServiceEnable	Enable the DNS map.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable.</li> </ul>	N/A

## GLB/DNSMapDomains

This table contains information about DNS map domain.

### XML structure

```

<GLB>
  <DNSMapDomains>
    <DNSMapDomain>
      <DNSMap></DNSMap>
      <Domain></Domain>
    </DNSMapDomain>
  </DNSMapDomains>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	DNSMapDomains
Table type	Multi-instance table
Row name	DNSMapDomain
Restrictions	Only DNS map domain can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSMap	Name of the DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Domain	Domain for the DNS map.	Index	String, case-insensitive. Length: 1 to 253	The string can contain letters, numbers, hyphens (-), underscores

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	<p>(_), and dots (.).</p> <p>The domain name supports wildcards including question marks (?) and asterisks (*).</p> <p>The following rules apply when you use wildcards:</p> <p>Use a question mark (?) to replace one character, except the dot (.).</p> <p>Multiple question marks can appear in the domain name.</p> <p>Use an asterisk (*) to replace multiple characters, except the dot (.).</p> <p>Multiple asterisks can appear in the domain name.</p> <p>Question marks and asterisks can appear in the domain name at the same time.</p>

## GLB/DNSMapStats

This table contains stat information about DNS map.

## XML structure

```

<GLB>
  <DNSMapStats>
    <DNSMapStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <MatchedDnsReqs></MatchedDnsReqs>
    </DNSMapStat>
  </DNSMapStats>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DNSMapStats
Table type	Multi-instance table
Row name	DNSMapStat
Restrictions	Only stats of DNS map can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
MatchedDnsReqs	Matched DNS Requests that the DNS listener received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## GLB/VirtualServerPools

This table contains information about virtual server pool.

### XML structure

```

<GLB>
  <VirtualServerPools>
    <VirtualServerPool>
      <Name></Name>
      <PredictorAlternate></PredictorAlternate>
      <PredictorFallback></PredictorFallback>
      <PredictorPreferred></PredictorPreferred>
      <BusyProtectEnable></BusyProtectEnable>
      <TotalVirtualServers></TotalVirtualServers>
      <ActiveVirtualServers></ActiveVirtualServers>
      <HashPreIpv4PrefixLength></HashPreIpv4PrefixLength>
      <HashPreIpv6PrefixLength></HashPreIpv6PrefixLength>
      <HashAltIpv4PrefixLength></HashAltIpv4PrefixLength>
      <HashAltIpv6PrefixLength></HashAltIpv6PrefixLength>
      <HashFbIpv4PrefixLength></HashFbIpv4PrefixLength>
      <HashFbIpv6PrefixLength></HashFbIpv6PrefixLength>
    </VirtualServerPool>
  </VirtualServerPools>
</GLB>

```



## Table description

Item	Description
Feature name	GLB
Table name	VirtualServerPools
Table type	Multi-instance table
Row name	VirtualServerPool
Restrictions	Only virtual server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
PredictorAlternate	Predictor alternate algorithm for LB to select a virtual server to be the DNS recorder for client response.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None</li> <li>1—Round-robin</li> <li>2—Random.</li> <li>3—Least-connection.</li> <li>4—Topology</li> <li>5—Proximity.</li> <li>6—Hash source address.</li> <li>7—Hash source port.</li> <li>8—Hash destination address.</li> <li>9—Bandwidth.</li> <li>10—Inbound bandwidth.</li> <li>11—Outbound bandwidth.</li> <li>12—Max bandwidth.</li> <li>13—Max inbound bandwidth.</li> <li>14—Max outbound bandwidth.</li> </ul>	N/A
PredictorFallback	Predictor fallback algorithm for LB to select a	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None</li> <li>1—Round-robin</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	virtual server to be the DNS recorder for client response.		<ul style="list-style-type: none"> <li>• 2—Random.</li> <li>• 3—Least-connection.</li> <li>• 4—Topology</li> <li>• 5—Proximity.</li> <li>• 6—Hash source address.</li> <li>• 7—Hash source port.</li> <li>• 8—Hash destination address.</li> <li>• 9—Bandwidth.</li> <li>• 10—Inbound bandwidth.</li> <li>• 11—Outbound bandwidth.</li> <li>• 12—Max bandwidth.</li> <li>• 13—Max inbound bandwidth.</li> <li>• 14—Max outbound bandwidth.</li> </ul>	
PredictorPreferred	Predictor preferred algorithm for LB to select a virtual server to be the DNS recorder for client response.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Round-robin.</li> <li>• 2—Random.</li> <li>• 3—Least-connection.</li> <li>• 4—Topology</li> <li>• 5—Proximity.</li> <li>• 6—Hash source address.</li> <li>• 7—Hash source port.</li> <li>• 8—Hash destination address.</li> <li>• 9—Bandwidth.</li> <li>• 10—Inbound bandwidth.</li> <li>• 11—Outbound bandwidth.</li> <li>• 12—Max bandwidth.</li> <li>• 13—Max inbound bandwidth.</li> <li>• 14—Max outbound bandwidth.</li> </ul>	N/A
BusyProtectEnable	Enable the busy	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	protection.		<ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	
TotalVirtualServers	Total number of virtual servers in the virtual server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ActiveVirtualServer	Active number of virtual servers in the virtual server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
HashPreIpv4PrefixLength	Length of IPv4 address mask for preferred hash algorithm.	N/A	Unsigned integer. Value range: 0 to 32.	The column only can be configured when the Predictor is hash source address (6), hash source port (7) and hash destination address (8).
HashPreIpv6PrefixLength	Length of IPv6 address prefix for preferred hash algorithm.	N/A	Unsigned integer. Value range: 0 to 128.	The column only can be configured when the Predictor hash source address (6), hash source port (7) and hash destination address (8).
HashAltIpv4PrefixLength	Length of IPv4 address mask for alternate hash algorithm.	N/A	Unsigned integer. Value range: 0 to 32.	The column only can be configured when the Predictor is hash source address (6), hash source port (7) and hash destination address (8).
HashAltIpv6PrefixLength	Length of IPv6 address prefix for alternate hash algorithm.	N/A	Unsigned integer. Value range: 0 to 128.	The column only can be configured when the Predictor hash source address (6), hash source port (7) and hash destination address (8).
HashFbIpv4PrefixLength	Length of IPv4 address mask for fallback hash algorithm.	N/A	Unsigned integer. Value range: 0 to 32.	The column only can be configured when the Predictor is hash source address (6), hash source port (7) and hash destination address (8).
HashFbIpv6PrefixLength	Length of IPv6 address prefix for fallback hash algorithm.	N/A	Unsigned integer. Value range: 0 to 128.	The column only can be configured when the Predictor hash source address (6), hash source port (7) and hash destination address (8).

## GLB/VSPVirtualServers

This table contains information about Virtual Server Pool Virtual Server.

### XML structure

```

<GLB>
  <VSPVirtualServers>
    <VSPVirtualServer>

```

```

<VirtualServerPool></VirtualServerPool>
<VirtualServer></VirtualServer>
<Link></Link>
<Weight></Weight>
<Ipv4Address></Ipv4Address>
<Ipv6Address></Ipv6Address>
<PortNumber></PortNumber>
<State></State>
</VSPVirtualServer>
</VSPVirtualServers>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	VSPVirtualServers
Table type	Multi-instance table
Row name	VSPVirtualServer
Restrictions	Only VSP virtual server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VirtualServerPool	Name of the virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VirtualServer	Virtual server of the virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Link	Link of the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Weight	Weight of the virtual server.	N/A	Unsigned integer. Value range: 1 to 255.	Larger number means higher weight.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
State	State of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Busy.</li> </ul>	N/A

## GLB/DNSZones

This table contains information about DNS zone.

## XML structure

```

<GLB>
  <DNSZones>
    <DNSZone>
      <DomainName></DomainName>
      <TTL></TTL>
    </DNSZone>
  </DNSZones>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DNSZones
Table type	Multi-instance table
Row name	DNSZone
Restrictions	Only DNS zone can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain Name	Domain name of the DNS zone,.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the DNS zone.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			By default, the value is 3600s.	

## GLB/DNSZoneSOAs

This table contains information about DNS zone soa resource record.

### XML structure

```

<GLB>
  <DNSZoneSOAs>
    <DNSZoneSOA>
      <Zone></Zone>
      <PrimaryNS></PrimaryNS>
      <ResponsibleMail></ResponsibleMail>
      <Serial></Serial>
      <Refresh></Refresh>
      <Retry></Retry>
      <Expire></Expire>
      <MinTTL></MinTTL>
    </DNSZoneSOA>
  </DNSZoneSOAs>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	DNSZoneSOAs
Table type	Multi-instance table
Row name	DNSZoneSOA
Restrictions	Only DNS zone soa resource record can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).

Column name	Column description	Column type	Data type and restrictions	Remarks
PrimaryNS	Name of the Primary name server.	N/A	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Responsible Mail	Responsible mail address.	N/A	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Serial	Serial number	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . By default, the value is 1.	N/A
Refresh	Refresh interval	N/A	Unsigned integer. Value range: 300 to 2419200. Unit: second. By default, the value is 3600s.	N/A
Retry	Retry interval	N/A	Unsigned integer. Value range: 500 to $2^{32}-1$ . Unit: second. By default, the value is 600s.	N/A
Expire	Expire time	N/A	Unsigned integer. Value range: 500 to $2^{32}-1$ . Unit: second. By default, the value is 86400s.	N/A
MinTTL	Minimum TTL	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/DNSZoneMXRRs

This table contains information about DNS zone mx resource record.

### XML structure

```

<GLB>
  <DNSZoneMXRRs>
    <DNSZoneMXRR>

```

```

    <Zone></Zone>
    <Host></Host>
    <MailServer></MailServer>
    <Preference></Preference>
    <TTL></TTL>
  </DNSZoneMXRR>
</DNSZoneMXRRs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DNSZoneMXRRs
Table type	Multi-instance table
Row name	DNSZoneMXRR
Restrictions	Only DNS zone mx resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Host	Host name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
MailServer	Mail exchange name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Preference	Preference value	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A



# GLB/DNSZoneCNAMERRs

This table contains information about DNS zone cname resource record.

## XML structure

```
<GLB>
  <DNSZoneCNAMERRs>
    <DNSZoneCNAMERR>
      <Zone></Zone>
      <Alias></Alias>
      <Canonical></Canonical>
      <TTL></TTL>
    </DNSZoneCNAMERR>
  </DNSZoneCNAMERRs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSZoneCNAMERRs
Table type	Multi-instance table
Row name	DNSZoneCNAMERR
Restrictions	Only DNS zone cname resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Alias	Alias name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Canonical	Canonical name	N/A	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the resource	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	record.		Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	

## GLB/DNSZoneNSRRs

This table contains information about DNS zone ns resource record.

### XML structure

```

<GLB>
  <DNSZoneNSRRs>
    <DNSZoneNSRR>
      <Zone></Zone>
      <SubName></SubName>
      <NameServerName></NameServerName>
      <TTL></TTL>
    </DNSZoneNSRR>
  </DNSZoneNSRRs>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	DNSZoneNSRRs
Table type	Multi-instance table
Row name	DNSZoneNSRR
Restrictions	Only DNS zone ns resource record can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
SubName	Sub domain	Index	String,	The string can contain letters,

Column name	Column description	Column type	Data type and restrictions	Remarks
	name		case-insensitive. Length: 1 to 254 characters.	numbers, hyphens (-), underscores (_), and dots (.).
NameServer Name	Authoritative nameserver name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second. By default, the value is 3600s.	N/A

## GLB/DNSRevZones

This table contains information about DNS reverse zone.

### XML structure

```

<GLB>
  <DNSRevZones>
    <DNSRevZone>
      <IPv4Address></IPv4Address>
      <IPv4PrefixLength></IPv4PrefixLength>
    </DNSRevZone>
  </DNSRevZones>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	DNSRevZones
Table type	Multi-instance table
Row name	DNSRevZone
Restrictions	Only DNS reverse zone can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Addresses	IPv4 address of the reverse zone.	Index	String. Dotted decimal notation.	Example: 1.1.1.1.
IPv4PrefixLength	IPv4 mask length of the reverse zone.	Index	Unsigned integer. Value range: 0 to 32.	N/A

## GLB/DNSRevZoneRRs

This table contains information about DNS reverse zone resource record.

## XML structure

```
<GLB>
  <DNSRevZoneRRs>
    <DNSRevZoneRR>
      <ReverseZoneIP></ReverseZoneIP>
      <ReverseZoneMask></ReverseZoneMask>
      <IPv4Address></IPv4Address>
      <DomainName></DomainName>
      <TTL></TTL>
    </DNSRevZoneRR>
  </DNSRevZoneRRs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSRevZoneRRs
Table type	Multi-instance table
Row name	DNSRevZoneRR
Restrictions	Only DNS reverse zone resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReverseZoneIP	IPv4 address of the reverse zone.	Index	String. Dotted decimal notation.	Example: 1.1.1.1.
ReverseZoneMask	IPv4 mask length of the reverse zone.	Index	Unsigned integer. Value range: 0 to 32.	N/A
IPv4Addresses	IPv4 address of the PTR resource record.	Index	String. Dotted decimal notation.	N/A
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second.	N/A

## GLB/DNSRevZoneIPv6s

This table contains information about DNS ipv6 reverse zone.

## XML structure

```
<GLB>
  <DNSRevZoneIPv6s>
    <DNSRevZoneIPv6>
      <IPv6Address></IPv6Address>
      <IPv6PrefixLength></IPv6PrefixLength>
    </DNSRevZoneIPv6>
  </DNSRevZoneIPv6s>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSRevZoneIPv6s
Table type	Multi-instance table
Row name	DNSRevZoneIPv6
Restrictions	Only DNS ipv6 reverse zone can be configured by this table.

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv6Addresses	IPv6 address of the reverse zone.	Index	Hexadecimal string, colon-separated.	Example: 2::2.
IPv6PrefixLength	IPv6 prefix length of the reverse zone.	Index	Unsigned integer. Value range: 0 to 128.	N/A

## GLB/DNSRevZoneIPv6RRs

This table contains information about DNS reverse zone ipv6 resource record.

## XML structure

```
<GLB>
  <DNSRevZoneIPv6RRs>
    <DNSRevZoneIPv6RR>
      <ReverseZoneIPv6></ReverseZoneIPv6>
      <ReverseZonePrefix></ReverseZonePrefix>
      <IPv6Address></IPv6Address>
      <DomainName></DomainName>
      <TTL></TTL>
    </DNSRevZoneIPv6RR>
  </DNSRevZoneIPv6RRs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSRevZoneIPv6RRs
Table type	Multi-instance table
Row name	DNSRevZoneIPv6RR
Restrictions	Only DNS reverse zone ipv6 resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReverseZoneIPv6	IPv6 address of the reverse zone.	Index	Hexadecimal string, colon-separated.	Example: 2::2.
ReverseZoneMask	IPv6 prefix length of the reverse zone.	Index	Unsigned integer. Value range: 0 to 128.	N/A
IPv6Addresses	IPv6 address of the PTR resource record.	Index	Hexadecimal string, colon-separated.	N/A
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second.	N/A

## GLB/DNSRecordMaxNum

This table contains information about the DNS record max number.

### XML structure

```
<GLB>
  <DNSRecordMaxNum>
    <MaxNumber></MaxNumber>
  </DNSRecordMaxNum>
</GLB>
```

### Table description

Item	Description
Feature name	GLB
Table name	DNSRecordMaxNum
Table type	Simple-instance table
Row name	DNSRecordMaxNum
Restrictions	Only DNS Record max number can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxNumber	The max number of DNS records.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

## GLB/DNSRecordType

This table contains information about DNS record types.

## XML structure

```
<GLB>
  <DNSRecordType>
    <A></A>
    <AAAA></AAAA>
    <CNAME></CNAME>
    <MX></MX>
    <NS></NS>
    <SOA></SOA>
    <SRV></SRV>
    <TXT></TXT>
    <PTR></PTR>
  </DNSRecordType>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSRecordType
Table type	Simple-instance table
Row name	DNSRecordType
Restrictions	Only DNS Record type can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
A	The A type of the DNS	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0—don't record.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	record.		<ul style="list-style-type: none"> <li>1—record.</li> </ul>	
AAAA	The AAAA type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—don't record.</li> <li>1—record.</li> </ul>	N/A
CNAME	The CNAME type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—don't record.</li> <li>1—record.</li> </ul>	N/A
MX	The MX type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—don't record.</li> <li>1—record.</li> </ul>	N/A
NS	The NS type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—don't record.</li> <li>1—record.</li> </ul>	N/A
SOA	The SOA type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—don't record.</li> <li>1—record.</li> </ul>	N/A
SRV	The SRV type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—don't record.</li> <li>1—record.</li> </ul>	N/A
TXT	The TXT type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—don't record.</li> <li>1—record.</li> </ul>	N/A
PTR	The PTR type of the DNS record.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—don't record.</li> <li>1—record.</li> </ul>	N/A

## GLB/AIIDNSRecords

This table contains information about DNS records.

### XML structure

```

<GLB>
  <AllDNSRecords>
    <AllDNSRecord>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <OrderNumber></OrderNumber>
      <Time></Time>
      <Type></Type>
      <SrcIpAddress></SrcIpAddress>
      <SrcPort></SrcPort>
      <DstIpAddress></DstIpAddress>
      <DstPort></DstPort>
    </AllDNSRecord>
  </AllDNSRecords>
</GLB>

```

```

    <VRF></VRF>
    <Domain></Domain>
    <FailedCourse></FailedCourse>
  </AllDNSRecord>
</AllDNSRecords>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DNSRecord
Table type	Simple-instance table
Row name	DNSRecord
Restrictions	Only DNS Record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
OrderNumber	The number of DNS records.	Index	Unsigned integer. Value range: 1 to $2^{32}-1$ .	N/A
Time	Time when the DNS request was received.	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.	N/A
Type	The type of the DNS record.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—A .</li> <li>1—AAAA .</li> <li>2—MX .</li> <li>3—NS .</li> <li>4—CNAME .</li> <li>5—SOA .</li> <li>6—PTR .</li> <li>7—TXT.</li> <li>8—SRV.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIpAddresses	The IP source address of DNS record.	N/A	String. Dotted decimal notation.	N/A
SrcPort	The source port of DNS record.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstIpAddresses	The IP destination address of DNS record.	N/A	String. Dotted decimal notation.	N/A
DstPort	The destination port of DNS record.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
VRF	The VRF name of the DNS record.	N/A	String. Length: 0 to 31 characters.	N/A
Domain	The domain of the DNS record.	N/A	String, case-insensitive. Length: 1 to 253 characters.	N/A
FailedCause	The failure cause of the DNS record.	N/A	Enumeration. <ul style="list-style-type: none"> <li>0—" ".</li> <li>1—No matched DNS listener.</li> <li>2—No matched DNS map.</li> <li>3—No matched virtual-server-pool.</li> <li>4—No matched DNS zone.</li> <li>5—Failed to get buffer.</li> <li>6—Failed to get MDC.</li> <li>7—No matched record.</li> <li>8 No enough memory resource.</li> <li>9—Failed to parse domain.</li> <li>10—Failed to find DNS listener by ID.</li> <li>11—No schedule content.</li> <li>12—Schedule failed.</li> <li>13—No matched virtual-server-member.</li> </ul>	N/A

# GLB/DNSZoneTXTRRs

This table contains information about DNS zone txt resource records.

## XML structure

```
<GLB>
  <DNSZoneTXTRRs>
    <DNSZoneTXTRR>
      <Zone></Zone>
      <Sub></Sub>
      <Description></Description>
      <TTL></TTL>
    </DNSZoneTXTRR>
  </DNSZoneTXTRRs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	DNSZoneTXTRRs
Table type	Multi-instance table
Row name	DNSZoneTXTRR
Restrictions	Only DNS zone txt resource record can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Sub	Sub name of the resource record.	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Description	Description text of the resource record.	Index	String, case-insensitive. Length: 1 to 255 characters.	N/A
TTL	TTL time of the resource	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	record.		Value range: 0 to $2^{32}-1$ . Unit: second.	

## GLB/DNSZoneSRVRRs

This table contains information about DNS zone srv resource records.

### XML structure

```

<GLB>
  <DNSZoneSRVRRs>
    <DNSZoneSRVRR>
      <Zone></Zone>
      <ServiceName></ServiceName>
      <HostName></HostName>
      <Port></Port>
      <Priority></Priority>
      <Weight></Weight>
      <TTL></TTL>
    </DNSZoneSRVRR>
  </DNSZoneSRVRRs>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneSRVRRs
Table type	Multi-instance table
Row name	GlobalDNSZoneSRVRR
Restrictions	Only Global DNS zone ns resource record can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceName	Service name.	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
HostName	Host name offering the service.	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Port	Port number of the resource record.	Index	Unsigned integer. Value range: 0 to 65535.	Index
Priority	Priority of the resource record.	N/A	Unsigned integer. Value range: 0 to 100.	The smaller the value, the higher the priority.
Weight	Weight value of the resource record.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
TTL	TTL time of the resource record.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second.	N/A

## GLB/LocalDefaultSyncGroupMems

This table contains information about the local default synchronization group member.

### XML structure

```

<GLB>
  <LocalDefaultSyncGroupMems>
    <LocalDefaultSyncGroupMem>
      <Name></Name>
      <Port></Port>
      <ServiceEnable></ServiceEnable>
      <Interval></Interval>
      <RetryTimes></RetryTimes>
      <CipherKey></CipherKey>
      <Role></Role>
      <Online></Online>
    </LocalDefaultSyncGroupMem>
  </LocalDefaultSyncGroupMems>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	LocalDefaultSyncGroupMems
Table type	Multi-instance table
Row name	LocalDefaultSyncGroupMem
Restrictions	Only local default synchronization group member can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the local default synchronization group member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Port	Specify the communication port number of the local default synchronization group member.	N/A	Unsigned integer. Value range: 1024 to 65535.	N/A
ServiceEnable	Enable the communicating function of the local default synchronization group member.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable</li><li>1—Enable</li></ul>	N/A
Interval	Specify the probe interval for the local default synchronization group member.	N/A	Unsigned integer. Value range: 1 to 259200. Unit: second.	N/A
RetryTimes	Specify the probe retry times for the local default synchronization group member.	N/A	Unsigned integer. Value range: 1 to 10.	N/A
CipherKey	Specify an authentication key in encrypted	N/A	String, case-sensitive. Length: 1 to 53 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	form.			
Role	Role of the default synchronization group member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Master</li> <li>2—Standby</li> </ul>	N/A
Online	Online state of the default synchronization group member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Offline</li> <li>1—Online</li> </ul>	N/A

## GLB/RemoteDefaultSyncGroupMems

This table contains information about a remote default synchronization group member.

### XML structure

```

<GLB>
  <RemoteDefaultSyncGroupMems>
    <RemoteDefaultSyncGroupMem>
      <Name></Name>
      <Port></Port>
      <Role></Role>
      <ConnectState></ConnectState>
      <Online></Online>
    </RemoteDefaultSyncGroupMem>
  </RemoteDefaultSyncGroupMems>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	RemoteDefaultSyncGroupMems
Table type	Multi-instance table
Row name	RemoteDefaultSyncGroupMem
Restrictions	Only remote default synchronization group member can be gotten by this table.



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the remote default synchronization group member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Port	Specify the communication port number of the remote default synchronization group member.	N/A	Unsigned integer. Value range: 1024 to 65535.	N/A
Role	Role of the default synchronization group member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Master</li> <li>2—Standby</li> </ul>	N/A
ConnectState	Connection state of the default synchronization group member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled</li> <li>1—Connecting</li> <li>2—Listening</li> <li>3—Established</li> </ul>	N/A
Online	Online state of the default synchronization group member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Offline</li> <li>1—Online.</li> </ul>	N/A

## GLB/SyncGroupMemberIPAddresses

This table contains information about the IP address of the synchronization group member.

### XML structure

```

<GLB>
  <SyncGroupMemberIPAddresses>
    <SyncGroupMemberIPAddress>
      <SyncGroupMemberType></SyncGroupMemberType>
      <SyncGroupMemberName></SyncGroupMemberName>
      <Ipv4Address></Ipv4Address>
    </SyncGroupMemberIPAddress>
  </SyncGroupMemberIPAddresses>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	SyncGroupMemberIPAddresses
Table type	Multi-instance table
Row name	SyncGroupMemberIPAddress
Restrictions	Only synchronization group member IP address can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SyncGroupMemberType	Type of the synchronization group member.	Index	Enumeration: <ul style="list-style-type: none"><li>0—Local</li><li>1—Remote</li></ul>	N/A
SyncGroupMemberName	Name of the synchronization group member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	Specify the IPv4 address of the synchronization group member.	Index	Hexadecimal string, colon-separated.	Example: 1.1.1.1. Loopback addresses, multicast addresses and broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either.

## GLB/DataCenters

This table contains information about a data center.

## XML structure

```
<GLB>
  <DataCenters>
    <DataCenter>
      <Name></Name>
      <Description></Description>
      <ServiceEnable></ServiceEnable>
      <Online></Online>
      <Servers></Servers>
      <Links></Links>
    </DataCenter>
  </DataCenters>
```

</GLB>

## Table description

Item	Description
Feature name	GLB
Table name	DataCenters
Table type	Multi-instance table
Row name	DataCenter
Restrictions	Only data center can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Specify the description of the data center.	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A
ServiceEnable	Enable the data center function.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	N/A
Online	Online state of the data center.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Offline</li><li>1—Online.</li></ul>	N/A
Servers	The server num of the data center.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
Links	The link num of the data center.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## GLB/DataCenterLinks

This table contains information about the links of a data center.

## XML structure

```
<GLB>
  <DataCenterLinks>
    <DataCenterLink>
```

```

    <DataCenter></DataCenter>
    <Link></Link>
    <InputRate></InputRate>
    <OutputRate></OutputRate>
  </DataCenterLink>
</DataCenterLinks>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	DataCenterLinks
Table type	Multi-instance table
Row name	DataCenterLink
Restrictions	None.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Link	Name of the link.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
InputRate	Input rate of the link.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Bytes/s.	N/A
OutputRate	Output rate of the link.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Bytes/s.	N/A

## GLB/Servers

This table contains information about a server.

## XML structure

```
<GLB>
  <Servers>
    <Server>
      <DataCenter></DataCenter>
      <Name></Name>
      <ServiceEnable></ServiceEnable>
      <Interval></Interval>
      <User></User>
      <CipherPassword></CipherPassword>
      <SimplePassword></SimplePassword>
      <Online></Online>
      <VirtualServers></VirtualServers>
    </Server>
  </Servers>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	Servers
Table type	Multi-instance table
Row name	Server
Restrictions	Only server of server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Name	Server name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ServiceEnable	Enable the server function.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	N/A
Interval	Specify the communication interval of the server.	N/A	Unsigned integer. Value range: 5 to 2419200.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
User	Specify the communication user of the server.	N/A	String, case-sensitive. Length: 1 to 55 characters.	N/A
CipherPassword	Specify the encrypted password of the server.	N/A	String, case-sensitive. Length: 1 to 113 characters.	N/A
SimplePassword	Specify the plaintext password of the server.	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
Online	Online state of the server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Offline</li> <li>1—Online.</li> </ul>	N/A
VirtualServers	The virtual server number of the server.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A

## GLB/LocalServers

This table contains information about the local server.

### XML structure

```

<GLB>
  <LocalServers>
    <LocalServer>
      <DataCenter></DataCenter>
      <Name></Name>
      <ServiceEnable></ServiceEnable>
      <Online></Online>
    </LocalServer>
  </LocalServers>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	LocalServers
Table type	Multi-instance table
Row name	LocalServer
Restrictions	None.
Support for row creation and	No

---

deletion

---

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Name	Local server name.	Index	String, case-insensitive.	Must be localhost.
ServiceEnable	Enable the server function.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable</li><li>1—Enable.</li></ul>	N/A
Online	Online state of the local server.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Offline</li><li>1—Online.</li></ul>	N/A

## GLB/ServerIPAddresses

This table contains information about the IP address of a server.

## XML structure

```
<GLB>
  <ServerIPAddresses>
    <ServerIPAddress>
      <DataCenter></DataCenter>
      <Server></Server>
      <Ipv4Address></Ipv4Address>
    </ServerIPAddress>
  </ServerIPAddresses>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	ServerIPAddresses
Table type	Multi-instance table
Row name	ServerIPAddress
Restrictions	Only server address can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Server name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	Specify the IPv4 address of the server.	Index	Hexadecimal string, colon-separated.	Example: 1.1.1.1. Loopback addresses, multicast addresses and broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either.

## GLB/ServerVirtualServers

This table contains information about the virtual servers of a server.

### XML structure

```
<GLB>
  <ServerVirtualServers>
    <ServerVirtualServer>
      <DataCenter></DataCenter>
      <Server></Server>
      <VirtualServer></VirtualServer>
    </ServerVirtualServer>
  </ServerVirtualServers>
</GLB>
```

### Table description

Item	Description
Feature name	GLB
Table name	ServerVirtualServers
Table type	Multi-instance table
Row name	ServerVirtualServer
Restrictions	Only virtual server of server can be gotten by this table.



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Server name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VirtualServer	Virtual server name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## GLB/LocalVirtualServers

This table contains information about the virtual server of a local server.

### XML structure

```
<GLB>
  <LocalVirtualServers>
    <LocalVirtualServer>
      <DataCenter></DataCenter>
      <LocalServer></LocalServer>
      <VirtualServerType></VirtualServerType>
      <VirtualServer></VirtualServer>
    </LocalVirtualServer>
  </LocalVirtualServers>
</GLB>
```

### Table description

Item	Description
Feature name	GLB
Table name	LocalVirtualServers
Table type	Multi-instance table
Row name	LocalVirtualServer
Restrictions	Only virtual server of local server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DataCenter	Name of the data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
LocalServer	Local server name.	Index	String, case-insensitive.	Must be localhost.
VirtualServerType	Virtual server type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—virtual server</li><li>• 1—virtual IP.</li></ul>	N/A
VirtualServer	Virtual server name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## GLB/GlobalDNSListeners

This table contains information about a global DNS listener.

## XML structure

```
<GLB>
  <GlobalDNSListeners>
    <GlobalDNSListener>
      <Name></Name>
      <Ipv4Address></Ipv4Address>
      <Ipv4PortNumber></Ipv4PortNumber>
      <ServiceEnable></ServiceEnable>
      <Fallback></Fallback>
    </GlobalDNSListener>
  </GlobalDNSListeners>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSListeners
Table type	Multi-instance table
Row name	GlobalDNSListener
Restrictions	Only global listener can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global DNS listener.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1. Loopback addresses, multicast addresses, and broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either.
Ipv4PortNumber	IPv4 port number.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
ServiceEnable	Enable the global DNS listener.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable</li><li>1—Enable.</li></ul>	N/A
Fallback	Fallback action.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—No response.</li><li>1—Reject.</li></ul>	N/A

## GLB/GlobalDNSListenerStats

This table contains statistics about a global DNS listener.

### XML structure

```
<GLB>
  <GlobalDNSListenerStats>
    <GlobalDNSListenerStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <ReceivedRequests></ReceivedRequests>
      <ReceivedValidRequests></ReceivedValidRequests>
      <UnrespondedRequests></UnrespondedRequests>
      <RejectedRequests></RejectedRequests>
    </GlobalDNSListenerStat>
  </GlobalDNSListenerStats>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSListenerStats
Table type	Multi-instance table
Row name	GlobalDNSListenerStat
Restrictions	Only stats of global listener can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global DNS listener.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Slot ID of the card on the device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
ReceivedRequests	Number of requests that the global DNS listener received from the device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ReceivedValidRequests	Number of valid requests that the global DNS listener received from the device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
UnrespondedRequests	Number of unresponded requests that the global DNS listener received from the device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
RejectedRequests	Number of rejected requests that the global DNS listener received from	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the device.			

## GLB/GlobalDNSListenerTypeStats

This table contains different types of statistics about a global DNS listener.

### XML structure

```

<GLB>
  <GlobalDNSListenerTypeStats>
    <GlobalDNSListenerTypeStat>
      <Name></Name>
      <Type></Type>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <ReceivedRequests></ReceivedRequests>
      <ReceivedValidRequests></ReceivedValidRequests>
      <UnrespondedRequests></UnrespondedRequests>
      <RejectedRequests></RejectedRequests>
    </GlobalDNSListenerTypeStat>
  </GlobalDNSListenerTypeStats>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSListenerTypeStats
Table type	Multi-instance table
Row name	GlobalDNSListenerTypeStat
Restrictions	Only stats of global listener can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global DNS listener.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the	Index	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	global DNS listener statistics.		<ul style="list-style-type: none"> <li>0—A.</li> <li>1—AAAA.</li> <li>2—CNAME.</li> <li>3—MX.</li> <li>4—NS.</li> <li>5—PTR.</li> <li>6—SOA.</li> </ul>	
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Slot ID of the card on the device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
ReceivedRequests	Number of requests that the global DNS listener received from the device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ReceivedValidRequests	Number of valid requests that the global DNS listener received from the device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
UnrespondedRequests	Number of unresponded requests that the global DNS listener received from the device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
RejectedRequests	Number of rejected requests that the global DNS listener received from the device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## GLB/GlobalDNSMaps

This table contains information about a global DNS map.

### XML structure

```

<GLB>
  <GlobalDNSMaps>
    <GlobalDNSMap>

```

```

<Name></Name>
<TTL></TTL>
<PredictorAlternate></PredictorAlternate>
<PredictorFallback></PredictorFallback>
<PredictorPreferred></PredictorPreferred>
<ServiceEnable></ServiceEnable>
</GlobalDNSMap>
</GlobalDNSMaps>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSMaps
Table type	Multi-instance table
Row name	GlobalDNSMap
Restrictions	Only global dns map can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
TTL	TTL time of the DNS recorder.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second.	N/A
PredictorAlternate	Alternative predictor algorithm for GLB to select a virtual server pool to service a DNS request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Round-robin.</li> <li>2—Random.</li> <li>3—Topology.</li> <li>4—Proximity.</li> </ul>	N/A
PredictorFallback	Backup predictor algorithm for GLB to select a virtual server pool to service a DNS request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Round-robin.</li> <li>2—Random.</li> <li>3—Topology.</li> <li>4—Proximity.</li> </ul>	N/A
PredictorPreferred	Preferred predictor	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	algorithm for GLB to select a virtual server pool to service a DNS request.		<ul style="list-style-type: none"> <li>1—Round-robin</li> <li>2—Random.</li> <li>3—Topology.</li> <li>4—Proximity.</li> </ul>	
ServiceEnable	Enable the global DNS map.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## GLB/GlobalDNSMapDomains

This table contains information about the domains of a global DNS map.

### XML structure

```

<GLB>
  <GlobalDNSMapDomains>
    <GlobalDNSMapDomain>
      <GlobalDNSMap></GlobalDNSMap>
      <Domain></Domain>
    </GlobalDNSMapDomain>
  </GlobalDNSMapDomains>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSMapDomains
Table type	Multi-instance table
Row name	GlobalDNSMapDomain
Restrictions	Only domain of global dns map can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalDNS Map	Name of the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Domain	Domain for the	Index	String,	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	global DNS map.		case-insensitive. Length: 1 to 253 characters.	

## GLB/GlobalDNSMapVirtualServerPools

This table contains information about the virtual server pool of a global DNS map.

### XML structure

```

<GLB>
  <GlobalDNSMapVirtualServerPools>
    <GlobalDNSMapVirtualServerPool>
      <GlobalDNSMap></GlobalDNSMap>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <Weight></Weight>
    </GlobalDNSMapVirtualServerPool>
  </GlobalDNSMapVirtualServerPools>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSMapVirtualServerPools
Table type	Multi-instance table
Row name	GlobalDNSMapVirtualServerPool
Restrictions	Only virtual server pool of global dns map can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalDNS Map	Name of the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
GlobalVirtualServerPool	Virtual server pool for the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Weight	Weight of the	N/A	Unsigned integer.	A larger number means a higher

Column name	Column description	Column type	Data type and restrictions	Remarks
	global virtual pool.		Value range: 1 to 255.	weight.

## GLB/GlobalDNSMapStats

This table contains statistics about a global DNS map.

### XML structure

```

<GLB>
  <GlobalDNSMapStats>
    <GlobalDNSMapStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <MatchedDnsReqs></MatchedDnsReqs>
      <MatchedDnsRequestRate></MatchedDnsRequestRate>
    </GlobalDNSMapStat>
  </GlobalDNSMapStats>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSMapStats
Table type	Multi-instance table
Row name	GlobalDNSMapStat
Restrictions	Only stats of global dns map can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global DNS map.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Slot ID of the	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	card on the device.		Value range: 0 to 255.	
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
MatchedDns Reqs	Matched DNS requests that the global DNS listener received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
MatchedDns RequestRate	Matched DNS requests that the global DNS map received per second.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## GLB/GlobalVirtualServerPools

This table contains information about a global virtual server pool.

### XML structure

```

<GLB>
  <GlobalVirtualServerPools>
    <GlobalVirtualServerPool>
      <Name></Name>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <PredictorAlternate></PredictorAlternate>
      <PredictorFallback></PredictorFallback>
      <PredictorPreferred></PredictorPreferred>
      <BusyProtectEnable></BusyProtectEnable>
      <TotalVirtualServers></TotalVirtualServers>
      <ActiveVirtualServers></ActiveVirtualServers>
    </GlobalVirtualServerPool>
  </GlobalVirtualServerPools>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalVirtualServerPools
Table type	Multi-instance table
Row name	GlobalVirtualServerPool
Restrictions	Only global virtual server pool can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ProbeSuccessCriteria	Probe success criteria for virtual server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
PredictorAlternate	Alternative predictor algorithm for GLB to select a virtual server to be the DNS recorder for client response.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Round-robin.</li> <li>2—Random.</li> <li>3—Least-connection(not supported)</li> <li>4—Topology.</li> <li>5—Proximity.</li> <li>15—First-available.</li> </ul>	N/A
PredictorFallback	Backup predictor algorithm for GLB to select a virtual server to be the DNS recorder for client response.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Round-robin.</li> <li>2—Random.</li> <li>3—Least-connection(not supported)</li> <li>4—Topology.</li> <li>5—Proximity.</li> <li>15—First-available.</li> </ul>	N/A
PredictorPreferred	Preferred predictor algorithm for GLB to select a virtual server to be the DNS recorder for client response.	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Enumeration:</li> <li>1—Round-robin.</li> <li>2—Random.</li> <li>3—Least-connection(not supported)</li> <li>4—Topology.</li> <li>5—Proximity.</li> <li>15—First-available.</li> </ul>	N/A
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
TotalVirtualServers	Total number of virtual servers in the global virtual server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ActiveVirtual Servers	Active number of virtual servers in the global virtual server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

## GLB/GVSPVirtualServers

This table contains information about a virtual server of the global virtual server pool.

### XML structure

```

<GLB>
  <GVSPVirtualServers>
    <GVSPVirtualServer>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <DataCenter></DataCenter>
      <Server></Server>
      <VirtualServer></VirtualServer>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <Link></Link>
      <Weight></Weight>
      <Ipv4Address>
      <PortNumber>
      <State></State>
    </GVSPVirtualServer>
  </GVSPVirtualServers>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GVSPVirtualServers
Table type	Multi-instance table
Row name	GVSPVirtualServer
Restrictions	Only virtual server can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtua	Name of the	Index	String,	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IServerPool	global virtual server pool.		case-insensitive. Length: 1 to 63 characters.	
DataCenter	Name of the virtual server's data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Name of the virtual server's server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VirtualServer	Virtual server of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ProbeSuccessCriteria	Probe success criteria for virtual server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
Link	Link of the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Weight	Weight of the virtual server.	N/A	Unsigned integer. Value range: 1 to 255.	A larger number means a higher weight.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
PortNumber	Port number.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
State	State of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Busy.</li> </ul>	N/A

## GLB/GVSPVirtualIPs

This table contains information about the virtual IP address of a global virtual server pool.

### XML structure

```

<GLB>
  <GVSPVirtualIPs>
    <GVSPVirtualIP>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <DataCenter></DataCenter>
    
```

```

    <Server></Server>
    <VirtualIP></VirtualIP>
    <ProbeSuccessCriteria></ProbeSuccessCriteria>
    <Link></Link>
    <Weight></Weight>
    <State></State>
  </GVSPVirtualIP>
</GVSPVirtualIPs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GVSPVirtualIPs
Table type	Multi-instance table
Row name	GVSPVirtualIP
Restrictions	Only virtual ip can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
DataCenter	Name of the virtual IP's data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Name of the virtual IP's server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VirtualIP	Virtual IP address of the global virtual server pool.	Index	String. Dotted decimal notation.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
ProbeSuccessCriteria	Probe success criteria for virtual IP.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
Link	Link of the virtual IP.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Weight	Weight of the virtual IP.	N/A	Unsigned integer. Value range: 1 to 255.	A larger number means a higher weight.
State	State of the virtual IP.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Busy.</li> </ul>	N/A

## GLB/GVSPProbes

This table contains information the probe method of a global virtual server pool.

### XML structure

```

<GLB>
  <GVSPProbes>
    <GVSPProbe>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <Probe></Probe>
    </GVSPProbe>
  </GVSPProbes>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GVSPProbes
Table type	Multi-instance table
Row name	GVSPProbe
Restrictions	Only global virtual server pool probe can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the global virtual server	Index	String, case-insensitive. Length: 1 to 32	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	pool.		characters.	

## GLB/GVSPVirtualServerProbes

This table contains information the probe method of a virtual server.

### XML structure

```

<GLB>
  <GVSPVirtualServerProbes>
    <GVSPVirtualServerProbe>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <DataCenter></DataCenter>
      <Server></Server>
      <VirtualServer></VirtualServer>
      <Probe></Probe>
      <State></State>
    </GVSPVirtualServerProbe>
  </GVSPVirtualServerProbes>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GVSPVirtualServerProbes
Table type	Multi-instance table
Row name	GVSPVirtualServerProbe
Restrictions	Only virtual server probe can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
DataCenter	Name of the virtual server's data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Name of the virtual server's	Index	String, case-insensitive. Length: 1 to 63	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	server.		characters.	
VirtualServer	Virtual server of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the virtual server member.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
State	Probe state of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Invalid.</li> <li>• 1—Succeeded.</li> <li>• 2—Failed.</li> <li>• 3—In progress</li> </ul>	N/A

## GLB/GVSPVIPProbes

This table contains information the probe method of a virtual IP.

### XML structure

```

<GLB>
  <GVSPVIPProbes>
    <GVSPVIPProbe>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <DataCenter></DataCenter>
      <Server></Server>
      <VirtualIP></VirtualIP>
      <Probe></Probe>
      <State></State>
    </GVSPVIPProbe>
  </GVSPVIPProbes>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GVSPVIPProbes
Table type	Multi-instance table
Row name	GVSPVIPProbe
Restrictions	Only global virtual ip probe can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
DataCenter	Name of the virtual IP's data center.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Server	Name of the virtual IP's server.	Index	String, case-insensitive. Length: 1 to 63 characters.	Must be "localhost"
VirtualIP	Virtual IP address of the virtual IP.	Index	String. Dotted decimal notation.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the virtual IP.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
State	Probe state of the virtual IP.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0— Invalid.</li> <li>• 1— Succeeded.</li> <li>• 2—Failed.</li> <li>• 3---In progress</li> </ul>	N/A

## GLB/GTopoRegionVSPs

This table contains information about the mapping between a global region and a global virtual server pool.

## XML structure

```

<GLB>
  <GTopoRegionVSPs>
    <GTopoRegionVSP>
      <GlobalRegion></GlobalRegion>
      <GlobalVirtualServerPool></GlobalVirtualServerPool>
      <Priority></Priority>
    </GTopoRegionVSP>
  </GTopoRegionVSPs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GTopoRegionVSPs
Table type	Multi-instance table
Row name	GTopoRegionVSP
Restrictions	Only Topology Region VSP can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalRegion	Name of the global region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
GlobalVirtualServerPool	Name of the global virtual server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Priority	Priority of the global region.	N/A	Unsigned integer. Value range: 1 to 255.	A larger number means a higher priority.

## GLB/GTopoRegionIPv4s

This table contains information about the mapping between a global region and an IP address.

## XML structure

```
<GLB>
  <GTopoRegionIPv4s>
    <GTopoRegionIPv4>
      <GlobalRegion></GlobalRegion>
      <IPv4Address></IPv4Address>
      <IPv4MaskLength></IPv4MaskLength>
      <Priority></Priority>
    </GTopoRegionIPv4>
  </GTopoRegionIPv4s>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GTopoRegionIPv4s
Table type	Multi-instance table
Row name	GTopoRegionIPv4
Restrictions	Only Topology Region IP can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalRegion	Name of the global topology region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPv4Addresses	IPv4 address.	Index	String. Dotted decimal notation.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
IPv4MaskLength	IPv4 mask length.	Index	Unsigned integer. Value range: 0 to 32.	The column cannot be configured if no IPv4 address is configured.
Priority	Priority of the global topology region.	N/A	Unsigned integer. Value range: 1 to 255.	A larger number means a higher priority.

## GLB/GlobalRegions

This table contains information about a global region.

## XML structure

```
<GLB>
  <GlobalRegions>
    <GlobalRegion>
      <Name></Name>
    </GlobalRegion>
  </GlobalRegions>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalRegions
Table type	Multi-instance table
Row name	GlobalRegion
Restrictions	Only region can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global region.	Index	String, case-insensitive. Length: 1 to 63 characters.	Name

## GLB/GlobalRegionISPs

This table contains information about the global ISP for a global region.

## XML structure

```
<GLB>
  <GlobalRegionISPs>
    <GlobalRegionISP>
      <GlobalRegion></GlobalRegion>
      <GlobalISP></GlobalISP>
    </GlobalRegionISP>
  </GlobalRegionISPs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalRegionISPs
Table type	Multi-instance table
Row name	GlobalRegionISP
Restrictions	Only Region ISP can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalRegion	Name of the global region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
GlobalISP	ISP for the global region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## GLB/GlobalISPs

This table contains information about a global ISP.

## XML structure

```
<GLB>
  <GlobalISPs>
    <GlobalISP>
      <Name></Name>
      <Origin></Origin>
    </GlobalISP>
  </GlobalISPs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalISPs
Table type	Multi-instance table
Row name	GlobalISP
Restrictions	Only ISP can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the global ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Origin	Origin of the IPv4 address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Import.</li> <li>2—Manual.</li> <li>3—Import and manual.</li> </ul>	N/A

## GLB/GlobalIpv4ISPAddressGroups

This table contains information about a global IPv4 ISP address group.

### XML structure

```

<GLB>
  <GlobalIpv4ISPAddressGroups>
    <GlobalIpv4ISPAddressGroup>
      <GlobalISP></GlobalISP>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Origin></Origin>
    </GlobalIpv4ISPAddressGroup>
  </GlobalIpv4ISPAddressGroups>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalIpv4ISPAddressGroups
Table type	Multi-instance table
Row name	GlobalIpv4ISPAddressGroup
Restrictions	Only IPv4 ISP can be configured by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalISP	Name of the global ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation.	The value must be equal to the summation of the address and the mask.



Column name	Column description	Column type	Data type and restrictions	Remarks
				Example: 1.1.1.0/24.
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range: 1 to 32.	N/A
Origin	Origin of the IPv4 address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Import.</li> <li>2—Manual.</li> <li>3—Import and manual.</li> </ul>	N/A

## GLB/GlobalISPFile

This table contains information about a global ISP file.

### XML structure

```

<GLB>
  <GlobalISPFile>
    <FileName></FileName>
  </GlobalISPFile>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalISPFile
Table type	Single-instance table
Row name	N/A
Restrictions	Only ISP file can be configured by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the global ISP file.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## GLB/GlobalVRFProximityParameters

This table contains information about global proximity parameters.

## XML structure

```
<GLB>
  <GlobalVRFPproximityParameters>
    <GlobalVRFPproximityParameter>
      <VRF></VRF>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Timeout></Timeout>
      <RTTWeight></RTTWeight>
      <TTLWeight></TTLWeight>
      <InBandwidthWeight></InBandwidthWeight>
      <OutBandwidthWeight></OutBandwidthWeight>
      <CostWeight></CostWeight>
      <MaxNumber></MaxNumber>
      <DefaultProbe></DefaultProbe>
    </GlobalVRFPproximityParameter>
  </GlobalVRFPproximityParameters>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalVRFPproximityParameters
Table type	Multi-instance table
Row name	GlobalVRFPproximityParameter
Restrictions	Only proximity parameter can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates the public network.
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32.	Zero means a natural mask.
Timeout	The lifetime of global proximity entries.	N/A	Unsigned integer. Value range: 60 to 3600.	N/A
RTTWeight	The weight of RTT.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TTLWeight	The weight of	N/A	Unsigned integer.	N/A

	TTL.		Value range: 0 to 255.	
InBandwidthWeight	The weight of inbound bandwidth.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
OutBandwidthWeight	The weight of outbound bandwidth.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
CostWeight	The weight of link cost.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
MaxNumber	Upper limit for global proximity entries.	N/A	Unsigned integer. Value range: 0 to 10000000.	N/A
DefaultProbe	Default probe method for the global proximity.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

## GLB/GlobalIpv4ProximityTables

This table contains information about global IPv4 proximity items.

### XML structure

```

<GLB>
  <GlobalIpv4ProximityTables>
    <GlobalIpv4ProximityTable>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Lifetime></Lifetime>
      <BestLink></BestLink>
    </GlobalIpv4ProximityTable>
  </GlobalIpv4ProximityTables>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalIpv4ProximityTables
Table type	Multi-instance table
Row name	GlobalIpv4ProximityTable

Restrictions	Only IPv4 proximity items can be configured by this table.
--------------	--

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Slot ID of the card on the device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates the public network.
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation.	N/A
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range: 0 to 32.	N/A
Lifetime	Lifetime of global proximity items.	N/A	Unsigned integer. Value range: 0 to 3600.	N/A
BestLink	The best link name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## GLB/GlobalIpv4ProximityNodes

This table contains information about the real servers of global IPv4 proximity items.

### XML structure

```

<GLB>
  <GlobalIpv4ProximityNodes>
    <GlobalIpv4ProximityNode>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>

```

```

    <Ipv4PrefixLength></Ipv4PrefixLength>
    <Priority></Priority>
    <Link></Link>
  </GlobalIpv4ProximityNode>
</GlobalIpv4ProximityNodes>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	Globallpv4ProximityNodes
Table type	Multi-instance table
Row name	Globallpv4ProximityNode
Restrictions	Only IPv4 proximity node can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Slot ID of the card on the device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates the public network.
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation.	N/A
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range: 0 to 32.	N/A
Priority	Priority.	Index	Unsigned integer. Value range: 1 to $2^{32}-1$ .	N/A
Link	Link name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

# GLB/GlobalProximityStats

This table contains information about global proximity entries.

## XML structure

```
<GLB>
  <GlobalProximityStats>
    <GlobalProximityStat>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <VRF></VRF>
      <TotalCount></TotalCount>
      <Ipv4Count></Ipv4Count>
    </GlobalProximityStat>
  </GlobalProximityStats>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalProximityStats
Table type	Multi-instance table
Row name	GlobalProximityStat
Restrictions	Only proximity can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Slot ID of the card on the device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates the public network.
TotalCount	Total number of global	N/A	Unsigned integer. Value range: 0 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	proximity entries.		$2^{32}-1$ .	
Ipv4Count	The number of global IPv4 proximity entries.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

## GLB/GlobalDNSZones

This table contains information about a global DNS zone.

### XML structure

```
<GLB>
  <GlobalDNSZones>
    <GlobalDNSZone>
      <DomainName></DomainName>
      <TTL></TTL>
    </GlobalDNSZone>
  </GlobalDNSZones>
</GLB>
```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZones
Table type	Multi-instance table
Row name	GlobalDNSZone
Restrictions	Only global DNS zone can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain Name	Domain name of the global DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
TTL	TTL time of the global DNS zone.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second.	N/A

# GLB/GlobalDNSZoneSOAs

This table contains information about an SOA resource record for a global DNS zone.

## XML structure

```
<GLB>
  <GlobalDNSZoneSOAs>
    <GlobalDNSZoneSOA>
      <Zone></Zone>
      <PrimaryNS></PrimaryNS>
      <ResponsibleMail></ResponsibleMail>
      <Serial></Serial>
      <Refresh></Refresh>
      <Retry></Retry>
      <Expire></Expire>
      <MinTTL></MinTTL>
    </GlobalDNSZoneSOA>
  </GlobalDNSZoneSOAs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneSOAs
Table type	Multi-instance table
Row name	GlobalDNSZoneSOA
Restrictions	Only SOA record of global DNS zone can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the global DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
PrimaryNS	Name of the primary name server.	N/A	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Responsible Mail	Responsible mail address.	N/A	String, case-insensitive. Length: 1 to 253	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).



Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
Serial	Serial number	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ .	N/A
Refresh	Refresh interval	N/A	Unsigned integer. Value range: 300 to 2419200. Unit: second.	N/A
Retry	Retry interval	N/A	Unsigned integer. Value range: 500 to $2^{32}-1$ . Unit: second.	N/A
Expire	Expiration time	N/A	Unsigned integer. Value range: 500 to $2^{32}-1$ . Unit: second.	N/A
MinTTL	Minimum TTL	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second.	N/A

## GLB/GlobalDNSZoneMXRRs

This table contains information about MX resource records for a global DNS zone.

### XML structure

```

<GLB>
  <GlobalDNSZoneMXRRs>
    <GlobalDNSZoneMXRR>
      <Zone></Zone>
      <Host></Host>
      <MailServer></MailServer>
      <Preference></Preference>
    </GlobalDNSZoneMXRR>
  </GlobalDNSZoneMXRRs>
</GLB>

```

### Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneMXRRs

Table type	Multi-instance table
Row name	GlobalDNSZoneMXRR
Restrictions	Only MX records of global DNS zone can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the global DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Host	Host name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
MailServer	Mail exchange name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Preference	Preference value	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## GLB/GlobalDNSZoneCNAMERRs

This table contains information about CNAME resource records for a global DNS zone.

## XML structure

```

<GLB>
  <GlobalDNSZoneCNAMERRs>
    <GlobalDNSZoneCNAMERR>
      <Zone></Zone>
      <Alias></Alias>
      <Canonical></Canonical>
    </GlobalDNSZoneCNAMERR>
  </GlobalDNSZoneCNAMERRs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneCNAMERRs

Table type	Multi-instance table
Row name	GlobalDNSZoneCNAMERR
Restrictions	Only CNAME records of global DNS zone can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the global DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Alias	Alias name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Canonical	Canonical name	N/A	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).

## GLB/GlobalDNSZoneNSRRs

This table contains information about NS resource records for a global DNS zone.

## XML structure

```

<GLB>
  <GlobalDNSZoneNSRRs>
    <GlobalDNSZoneNSRR>
      <Zone></Zone>
      <SubName></SubName>
      <NameServerName></NameServerName>
    </GlobalDNSZoneNSRR>
  </GlobalDNSZoneNSRRs>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSZoneNSRRs
Table type	Multi-instance table
Row name	GlobalDNSZoneNSRR

Restrictions	Only NS records of global DNS zone can be gotten by this table.
--------------	---

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Zone	Name of the global DNS zone.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
SubName	Sub domain name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
NameServer Name	Authoritative name server name	Index	String, case-insensitive. Length: 1 to 254 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).

## GLB/GlobalDNSRevZones

This table contains information about a global DNS reverse zone.

## XML structure

```

<GLB>
  <GlobalDNSRevZones>
    <GlobalDNSRevZone>
      <IPv4Address></IPv4Address>
      <IPv4PrefixLength></IPv4PrefixLength>
      <TTL></TTL>
    </GlobalDNSRevZone>
  </GlobalDNSRevZones>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSRevZones
Table type	Multi-instance table
Row name	GlobalDNSRevZone
Restrictions	Only global DNS reverse zone can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Addresses	IPv4 address of the global reverse zone.	Index	String. Dotted decimal notation.	Example: 1.1.1.1.
IPv4PrefixLength	IPv4 mask length of the global reverse zone.	Index	Unsigned integer. Value range: 0 to 32.	N/A
TTL	TTL time of the global reverse zone.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: second.	N/A

## GLB/GlobalDNSRevZoneRRs

This table contains information about a resource record for a global DNS reverse zone.

## XML structure

```
<GLB>
  <GlobalDNSRevZoneRRs>
    <GlobalDNSRevZoneRR>
      <ReverseZoneIP></ReverseZoneIP>
      <ReverseZoneMask></ReverseZoneMask>
      <IPv4Address></IPv4Address>
      <DomainName></DomainName>
    </GlobalDNSRevZoneRR>
  </GlobalDNSRevZoneRRs>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalDNSRevZoneRRs
Table type	Multi-instance table
Row name	GlobalDNSRevZoneRR
Restrictions	Only records of global DNS reverse zone can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReverseZoneIP	IPv4 address of the global reverse zone.	Index	String. Dotted decimal notation.	Example: 1.1.1.1.
ReverseZoneMask	IPv4 mask length of the global reverse zone.	Index	Unsigned integer. Value range: 0 to 32.	N/A
IPv4Addresses	IPv4 address of the PTR resource record.	Index	String. Dotted decimal notation.	N/A
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).

## GLB/GlobalIpv4ISPLists

This table contains information about a global IPv4 ISP address group.

## XML structure

```
<GLB>
  <GlobalIpv4ISPLists>
    <GlobalIpv4ISPList>
      <GlobalISP></GlobalISP>
      <AllCount></AllCount>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Origin></Origin>
    </GlobalIpv4ISPList>
  </GlobalIpv4ISPLists>
</GLB>
```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalIpv4ISPLists
Table type	Multi-instance table
Row name	GlobalIpv4ISPList
Restrictions	Only IPv4 ISP can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalISP	Name of the global ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
AllCount	The number of all IPv4 address.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation.	The value must be equal to the summation of the address and the mask. Example: 1.1.1.0/24.
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range: 1 to 32.	N/A
Origin	Origin of the IPv4 address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Import.</li> <li>2—Manual.</li> <li>3—Import and manual.</li> </ul>	N/A

## GLB/GlobalIpv4ProximityTableLists

This table contains information about global IPv4 proximity items.

### XML structure

```

<GLB>
  <GlobalIpv4ProximityTableLists>
    <GlobalIpv4ProximityTableList>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <AllCount></AllCount>
      <Lifetime></Lifetime>
      <BestLink></BestLink>
    </GlobalIpv4ProximityTableList>
  </GlobalIpv4ProximityTableLists>
</GLB>

```

## Table description

Item	Description
Feature name	GLB
Table name	GlobalIpv4ProximityTables
Table type	Multi-instance table
Row name	GlobalIpv4ProximityTable
Restrictions	Only IPv4 proximity items can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Slot ID of the card on the device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates the public network.
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation.	N/A
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range: 0 to 32.	N/A
AllCount	The number of all global proximity items.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
Lifetime	Lifetime of global proximity items.	N/A	Unsigned integer. Value range: 0 to 3600.	N/A
BestLink	The best link name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A



# Contents

GLB .....	1
GLB/DNSZoneTXRRs .....	1
GLB/DNSZoneSRVRRs .....	1
GLB/DNSRevZoneRRs .....	1
GLB/DNSZones .....	1
GLB/DNSZoneSOAs .....	2
GLB/DNSZoneMXRRs .....	2
GLB/DNSZoneCNAMERRs .....	2
GLB/DNSZoneNSRRs .....	2
GLB/LocalDefaultSyncGroupMems .....	3
GLB/RemoteDefaultSyncGroupMems .....	3
GLB/SyncGroupMemberIPAddresses .....	3
GLB/DataCenters .....	3
GLB/DataCenterLinks .....	3
GLB/Servers .....	4
GLB/ServerIPAddresses .....	4
GLB/LocalVirtualServers .....	4
GLB/GlobalDNSListeners .....	5
GLB/GlobalDNSMaps .....	5
GLB/GlobalDNSMapDomains .....	5
GLB/GlobalDNSMapVirtualServerPools .....	5
GLB/GlobalVirtualServerPools .....	6
GLB/GVSPVirtualServers .....	6
GLB/GVSPVirtualIPs .....	6
GLB/GTopoRegionIPv4s .....	6
GLB/GlobalRegions .....	7
GLB/GlobalRegionISPs .....	7
GLB/GlobalISPs .....	7
GLB/GlobalIpv4ISPAddressGroups .....	7
GLB/GlobalISPFile .....	8
GLB/GlobalVRFProximityParameters .....	8
GLB/GlobalDNSRevZoneRRs .....	8
GLB/GlobalDNSZones .....	8
GLB/GlobalDNSZoneSOAs .....	9
GLB/GlobalDNSZoneMXRRs .....	9
GLB/GlobalDNSZoneCNAMERRs .....	9
GLB/GlobalDNSZoneNSRRs .....	9
GLB/GlobalIpv4ISPLists .....	10

# GLB

## GLB/DNSZoneTXRRs

Message	Explanation
The total length exceeded the limit. 总长度超过限制。	The total length exceeded the limit. 总长度超过限制。

## GLB/DNSZoneSRVRRs

Message	Explanation
The total length exceeded the limit. 总长度超过限制。	The total length exceeded the limit. 总长度超过限制。

## GLB/DNSRevZoneRRs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/DNSZones

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/DNSZoneSOAs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/DNSZoneMXRRs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/DNSZoneCNAMERRs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/DNSZoneNSRRs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/LocalDefaultSyncGroupMems

Message	Explanation
The member name has been used by another synchronization group member. 该名字已被其他类型同步组成员使用。	The member name has been used by another synchronization group member. 该名字已被其他类型同步组成员使用。

## GLB/RemoteDefaultSyncGroupMems

Message	Explanation
The member name has been used by another synchronization group member. 该名字已被其他类型同步组成员使用。	The member name has been used by another synchronization group member. 该名字已被其他类型同步组成员使用。

## GLB/SyncGroupMemberIPAddresses

Message	Explanation
The IPv4 address has been configured for another synchronization group member. 该地址已被其他类型同步组成员使用。	The IPv4 address has been configured for another synchronization group member. 该地址已被其他类型同步组成员使用。

## GLB/DataCenters

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/DataCenterLinks

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync</b>	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default

Message	Explanation
<b>config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/Servers

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/ServerIPAddresses

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/LocalVirtualServers

Message	Explanation
The member has been referenced by the local SLB device of another data center. 该成员已经被其他数据中心的本地负载均衡设备引用。	The member has been referenced by the local SLB device of another data center. 该成员已经被其他数据中心的本地负载均衡设备引用。
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalDNSListeners

Message	Explanation
The IP address and port number have been configured. IP地址和端口已配置。	The IP address and port number have been configured. IP 地址和端口已配置。

## GLB/GlobalDNSMaps

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalDNSMapDomains

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalDNSMapVirtualServerPools

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

# GLB/GlobalVirtualServerPools

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

# GLB/GVSPVirtualServers

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

# GLB/GVSPVirtualIPs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

# GLB/GTopoRegionIPv4s

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalRegions

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalRegionISPs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalISPs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置， 请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置， 请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/Globalpv4ISPAddressGroups

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance</b>	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。



Message	Explanation
default-syncgroup sync config命令。	

## GLB/GlobalISPFile

Message	Explanation
The ISP name is invalid. ISP名称不合法。	The ISP name is invalid. ISP 名称不合法。

## GLB/GlobalVRFProximityParameters

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalDNSRevZoneRRs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置， 请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalDNSZones

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance</b>	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

Message	Explanation
default-syncgroup sync config命令。	

## GLB/GlobalDNSZoneSOAs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalDNSZoneMXRRs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalDNSZoneCNAMERRs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/GlobalDNSZoneNSRRs

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync</b>	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default

Message	Explanation
<b>config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

## GLB/Globalpv4ISPLists

Message	Explanation
Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。	Configuration conflicts exist. Please execute the <b>loadbalance default-syncgroup sync config</b> command on a default synchronization group member. 存在配置冲突，不允许下发配置，请选择一个缺省同步组成员设备执行 <b>loadbalance default-syncgroup sync config</b> 命令。

# Contents

GRPC.....	1
GRPC/Configuration.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
GRPC/SensorGroups.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
GRPC/SensorGroups/SensorGroup.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
GRPC/SensorGroups/SensorGroup/SensorPaths.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
GRPC/SensorGroups/SensorGroup/SensorPaths/SensorPath.....	4
XML structure.....	4
Table description.....	4
Columns.....	4
GRPC/DestinationGroups.....	4
XML structure.....	4
Table description.....	5
Columns.....	5
GRPC/DestinationGroups/DestinationGroup.....	5
XML structure.....	5
Table description.....	5
Columns.....	6
GRPC/DestinationGroups/DestinationGroup/Destinations.....	6
XML structure.....	6
Table description.....	6
Columns.....	7
GRPC/DestinationGroups/DestinationGroup/Destinations/Destination.....	7
XML structure.....	7
Table description.....	7
Columns.....	7
GRPC/Subscriptions.....	8
XML structure.....	8
Table description.....	8
Columns.....	8
GRPC/Subscriptions/Subscription.....	9
XML structure.....	9
Table description.....	9
Columns.....	9
GRPC/Subscriptions/Subscription/SensorProfiles.....	9
XML structure.....	10
Table description.....	10
Columns.....	10
GRPC/Subscriptions/Subscription/SensorProfiles/SensorProfile.....	10
XML structure.....	10
Table description.....	10
Columns.....	11
GRPC/Subscriptions/Subscription/DestinationProfiles.....	11
XML structure.....	11
Table description.....	11
Columns.....	12

GRPC/Subscriptions/Subscription/DestinationProfiles/DestinationProfile..... 12

XML structure..... 12

Table description..... 12

Columns..... 12

# GRPC

## GRPC/Configuration

This table contains gRPC configuration information.

### XML structure

```
<GRPC>
  <Configuration>
    <State></State>
    <Port></Port>
    <IdleTime></IdleTime>
  </Configuration>
</GRPC>
```

### Table description

Item	Description
Feature name	GRPC
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
State	Status of the gRPC service	N/A	Enumeration: <ul style="list-style-type: none"><li><b>enable</b>—The gRPC service is enabled.</li><li><b>disable</b>—The gRPC service is disabled.</li></ul>	When State is to be disabled all gRPC configuration will be deleted.
Port	Port number of the gRPC service	N/A	Unsigned integer. Value range: 1 to 65535.	Configuring Port is not allowed when State is or is to be disabled.
IdleTime	Idle timeout time for gRPC sessions in minutes	N/A	Unsigned integer. Value range: 0 to 30.	N/A

批注 [(1): 问题单 201811010077, 除显示命令外, grpc 所有命令都在 grpc enable 之后配置, undo grpc enable 将输出所有 grpc 配置

# GRPC/SensorGroups

This table contains gRPC sensor group information.

## XML structure

```
<GRPC>
  <SensorGroups>
    <SensorGroup>
      <GroupName></GroupName>
      <SensorPaths>
        <SensorPath>
          <Path></Path>
        </SensorPath>
      </SensorPaths>
    </SensorGroup>
  </SensorGroups>
</GRPC>
```

## Table description

Item	Description
Feature name	GRPC
Table name	SensorGroups
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SensorGroup	SensorGroup table	Multi-instance table	N/A	For more information, see the SensorGroup table.

# GRPC/SensorGroups/SensorGroup

This table contains gRPC sensor group information.

## XML structure

Please refer to the XML structure of GRPC/SensorGroups.

## Table description

Item	Description
Feature name	GRPC
Table name	SensorGroup
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Sensor group name	index	String. Length: 1 to 31 characters.	N/A
SensorPaths	Sensor path information	Sublist	N/A	For more information, see the SensorPaths table.

## GRPC/SensorGroups/SensorGroup/SensorPaths

This table contains gRPC sensor path information.

## XML structure

Please refer to the XML structure of GRPC/SensorGroups.

## Table description

Item	Description
Feature name	GRPC
Table name	SensorPaths
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns



Column name	Column description	Column type	Data type and restrictions	Remarks
SensorPath	SensorPath table	Multi-instance table	N/A	For more information, see the SensorPath table.

## GRPC/SensorGroups/SensorGroup/SensorPaths/SensorPath

This table contains gRPC sensor path information.

### XML structure

Please refer to the XML structure of GRPC/SensorGroups.

### Table description

Item	Description
Feature name	GRPC
Table name	SensorPath
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Sensor group name	Index	Index of the parent table.	This column cannot be present.
Path	Path of the node to be monitored	Index	String. Case insensitive. Length: 1 to 127 characters.	Whether the path is supported or not depends on specific device.

批注 [1(2): 问题单 201809170278, 配置 sensor path 时根据设备是否支持提示成功或失败

## GRPC/DestinationGroups

This table contains gRPC destination group information.

### XML structure

<GRPC>

```

<DestinationGroups>
  <DestinationGroup>
    <GroupName></GroupName>
    <Destinations>
      <Destination>
        <IpAddress></IpAddress>
        <VRF></VRF>
        <Port></Port>
      </Destination>
    </Destinations>
  </DestinationGroup>
</DestinationGroups>
</GRPC>

```

## Table description

Item	Description
Feature name	GRPC
Table name	DestinationGroups
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestinationGroup	DestinationGroup table	Multi-instance table	N/A	For more information, see the DestinationGroup table.

## GRPC/DestinationGroups/DestinationGroup

This table contains gRPC destination group information.

## XML structure

Please refer to the XML structure of GRPC/DestinationGroups.

## Table description

Item	Description
Feature name	GRPC

Item	Description
Table name	DestinationGroup
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Destination group name	index	String. Length: 1 to 31 characters.	N/A
Destinations	Destination info	Sublist	N/A	For more information, see the Destinations table.

## GRPC/DestinationGroups/DestinationGroup/Destinations

This table contains gRPC destination information.

## XML structure

Please refer to the XML structure of GRPC/DestinationGroups.

## Table description

Item	Description
Feature name	GRPC
Table name	Destinations
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Destination	Destination table	Multi-instance table	N/A	For more information, see the Destination table.

## GRPC/DestinationGroups/DestinationGroup/Destinations/Destination

This table contains gRPC destination information.

## XML structure

Please refer to the XML structure of GRPC/DestinationGroups.

## Table description

Item	Description
Feature name	GRPC
Table name	Destination
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Destination group name	Index	Index of the parent table.	This column cannot be present.
IpAddress	Address of the destination group	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
VRF	VRF instance name	Index	String. Length: 0 to 31 characters.	If the address is a public network address, leave this column empty.
Port	Port number of the destination group	Index	Unsigned integer. Value range: 1 to 65535.	N/A

## GRPC/Subscriptions

This table contains gRPC subscription information.

### XML structure

```
<GRPC>
  <Subscriptions>
    <Subscription>
      <SubscriptionName></SubscriptionName>
      <SourceAddress></SourceAddress>
      <SensorProfiles>
        <SensorProfile>
          <GroupName></GroupName>
          <SampleInterval></SampleInterval>
        </SensorProfile>
      </SensorProfiles>
      <DestinationProfiles>
        <DestinationProfile>
          <GroupName></GroupName>
        </DestinationProfile>
      </DestinationProfiles>
    </Subscription>
  </Subscriptions>
</GRPC>
```

### Table description

Item	Description
Feature name	GRPC
Table name	Subscriptions
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Subscription	Subscription table	Multi-instance table	N/A	For more information, see the Subscription table.

## GRPC/Subscriptions/Subscription

This table contains gRPC subscription information.

### XML structure

Please refer to the XML structure of GRPC/Subscriptions.

### Table description

Item	Description
Feature name	GRPC
Table name	Subscription
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SubscriptionName	Subscription name	Index	String. Length: 1 to 31 characters.	N/A
SourceAddress	Source address packets	IP for N/A	IPv4: String, in dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Interface: String, interface type and number	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8. Interface example: LoopBack2 In the current software version, it must be a loopback interface.
SensorProfiles	Sensor profile information	Sublist	N/A	For more information, see the SensorProfiles table.
DestinationProfiles	Destination profile information	Sublist	N/A	For more information, see the DestinationProfiles table.

## GRPC/Subscriptions/Subscription/SensorProfiles

This table contains gRPC sensor profile information.

## XML structure

Please refer to the XML structure of GRPC/Subscriptions.

## Table description

Item	Description
Feature name	GRPC
Table name	SensorProfiles
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SensorProfile	SensorProfile table	Multi-instance table	N/A	For more information, see the SensorProfile table.

## GRPC/Subscriptions/Subscription/SensorProfiles/SensorProfile

This table contains gRPC sensor profile information.

## XML structure

Please refer to the XML structure of GRPC/Subscriptions.

## Table description

Item	Description
Feature name	GRPC
Table name	SensorProfile
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SubscriptionName	Subscription name	Index	Index of the parent table.	This column cannot be present.
GroupName	Sensor group name	Index	String. Length: 1 to 31 characters.	N/A
SampleInterval	Sampling interval in seconds	N/A	Unsigned integer. Value range: 1 to 86400.	<p>Specify this column for periodic sensor paths and only for periodic sensor paths.</p> <ul style="list-style-type: none"> <li>If you specify this column for event-triggered sensor paths, the sensor paths do not take effect.</li> <li>If you do not specify this column for periodic sensor paths, the device does not sample or push data.</li> </ul>

## GRPC/Subscriptions/Subscription/DestinationProfiles

This table contains gRPC destination profile information.

## XML structure

Please refer to the XML structure of GRPC/Subscriptions.

## Table description

Item	Description
Feature name	GRPC
Table name	DestinationProfiles
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestinationProfile	DestinationProfile table	Multi-instance table	N/A	For more information, see the DestinationProfile table.

## GRPC/Subscriptions/Subscription/DestinationProfiles/DestinationProfile

This table contains gRPC destination profile information.

## XML structure

Please refer to the XML structure of GRPC/Subscriptions.

## Table description

Item	Description
Feature name	GRPC
Table name	DestinationProfile
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SubscriptionName	Subscription name	Index	Index of the parent table.	This column cannot be present.
GroupName	Destination group name	Index	String. Length: 1 to 31 characters.	N/A

# Contents

GRPC.....	1
GRPC/Configuration.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
GRPC/SensorGroups.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
GRPC/SensorGroups/SensorGroup.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
GRPC/SensorGroups/SensorGroup/SensorPaths.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
GRPC/SensorGroups/SensorGroup/SensorPaths/SensorPath.....	4
XML structure.....	4
Table description.....	4
Columns.....	4
GRPC/DestinationGroups.....	4
XML structure.....	4
Table description.....	5
Columns.....	5
GRPC/DestinationGroups/DestinationGroup.....	5
XML structure.....	5
Table description.....	5
Columns.....	6
GRPC/DestinationGroups/DestinationGroup/Destinations.....	6
XML structure.....	6
Table description.....	6
Columns.....	6
GRPC/DestinationGroups/DestinationGroup/Destinations/Destination.....	7
XML structure.....	7
Table description.....	7
Columns.....	7
GRPC/Subscriptions.....	7
XML structure.....	7
Table description.....	8
Columns.....	8
GRPC/Subscriptions/Subscription.....	8
XML structure.....	8
Table description.....	9
Columns.....	9
GRPC/Subscriptions/Subscription/SensorProfiles.....	9
XML structure.....	9
Table description.....	9
Columns.....	10
GRPC/Subscriptions/Subscription/SensorProfiles/SensorProfile.....	10
XML structure.....	10
Table description.....	10
Columns.....	10
GRPC/Subscriptions/Subscription/DestinationProfiles.....	11
XML structure.....	11
Table description.....	11
Columns.....	11

GRPC/Subscriptions/Subscription/DestinationProfiles/DestinationProfile.....	12
XML structure.....	12
Table description.....	12
Columns.....	12

# GRPC

## GRPC/Configuration

This table contains gRPC configuration information.

### XML structure

```
<GRPC>
  <Configuration>
    <State></State>
    <Port></Port>
    <IdleTime></IdleTime>
  </Configuration>
</GRPC>
```

### Table description

Item	Description
Feature name	GRPC
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
State	Status of the gRPC service	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>enable</b>—The gRPC service is enabled.</li><li>• <b>disable</b>—The gRPC service is disabled.</li></ul>
Port	Port number of the gRPC service	N/A	Unsigned integer. Value range: 1 to 65535.
IdleTime	Idle timeout time for gRPC sessions in minutes	N/A	Unsigned integer. Value range: 0 to 30.

# GRPC/SensorGroups

This table contains gRPC sensor group information.

## XML structure

```
<GRPC>
  <SensorGroups>
    <SensorGroup>
      <GroupName></GroupName>
      <SensorPaths>
        <SensorPath>
          <Path></Path>
        </SensorPath>
      </SensorPaths>
    </SensorGroup>
  </SensorGroups>
</GRPC>
```

## Table description

Item	Description
Feature name	GRPC
Table name	SensorGroups
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SensorGroup	SensorGroup table	Multi-instance table	N/A	For more information, see the SensorGroup table.

# GRPC/SensorGroups/SensorGroup

This table contains gRPC sensor group information.

## XML structure

Please refer to the XML structure of GRPC/SensorGroups.

## Table description

Item	Description
Feature name	GRPC
Table name	SensorGroup
Table type	Multi-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Sensor group name	index	String. Length: 1 to 31 characters.	N/A
SensorPaths	Sensor path information	Sublist	N/A	For more information, see the SensorPaths table.

## GRPC/SensorGroups/SensorGroup/SensorPaths

This table contains gRPC sensor path information.

## XML structure

Please refer to the XML structure of GRPC/SensorGroups.

## Table description

Item	Description
Feature name	GRPC
Table name	SensorPaths
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SensorPath	SensorPath table	Multi-instance table	N/A	For more information, see the SensorPath table.

## GRPC/SensorGroups/SensorGroup/SensorPaths/SensorPath

This table contains gRPC sensor path information.

### XML structure

Please refer to the XML structure of GRPC/SensorGroups.

### Table description

Item	Description
Feature name	GRPC
Table name	SensorPath
Table type	Multi-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Sensor group name	Index	Index of the parent table.	This column cannot be present.
Path	Path of the node to be monitored	Index	String. Case insensitive. Length: 1 to 127 characters.	N/A

**批注 [(1):** 参考 sensor path 命令行帮助信息  
[H3C-telemetry-sensor-group-1] sensor pat? path Specify the path of the node to be monitored

**批注 [(2):** 早期设计，未实现过，现在所有分支都不支持

## GRPC/DestinationGroups

This table contains gRPC destination group information.

### XML structure

```
<GRPC>
  <DestinationGroups>
```

```

<DestinationGroup>
  <GroupName></GroupName>
  <Destinations>
    <Destination>
      <IpAddress></IpAddress>
      <VRF></VRF>
      <Port></Port>
    </Destination>
  </Destinations>
</DestinationGroup>
</DestinationGroups>
</GRPC>

```

## Table description

Item	Description
Feature name	GRPC
Table name	DestinationGroups
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestinationGroup	DestinationGroup table	Multi-instance table	N/A	For more information, see the DestinationGroup table.

## GRPC/DestinationGroups/DestinationGroup

This table contains gRPC destination group information.

## XML structure

Please refer to the XML structure of GRPC/DestinationGroups.

## Table description

Item	Description
Feature name	GRPC
Table name	DestinationGroup



Item	Description
Table type	Multi-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Destination group name	index	String. Length: 1 to 31 characters.	N/A
Destinations	Destination info	Sublist	N/A	For more information, see the Destinations table.

## GRPC/DestinationGroups/DestinationGroup/Destinations

This table contains gRPC destination information.

## XML structure

Please refer to the XML structure of GRPC/DestinationGroups.

## Table description

Item	Description
Feature name	GRPC
Table name	Destinations
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Destination	Destination table	Multi-instance table	N/A	For more information, see the Destination table.

## GRPC/DestinationGroups/DestinationGroup/Destinations/Destination

This table contains gRPC destination information.

### XML structure

Please refer to the XML structure of GRPC/DestinationGroups.

### Table description

Item	Description
Feature name	GRPC
Table name	Destination
Table type	Multi-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Destination group name	Index	Index of the parent table.	This column cannot be present.
IpAddress	Address of the destination group	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
VRF	VRF instance name	Index	String. Length: 0 to 31 characters.	If the address is a public network address, leave this column empty.
Port	Port number of the destination group	Index	Unsigned integer. Value range: 1 to 65535.	N/A

## GRPC/Subscriptions

This table contains gRPC subscription information.

### XML structure

```
<GRPC>
  <Subscriptions>
```

```

<Subscription>
  <SubscriptionName></SubscriptionName>
  <SourceAddress></SourceAddress>
  <SensorProfiles>
    <SensorProfile>
      <GroupName></GroupName>
      <SampleInterval></SampleInterval>
    </SensorProfile>
  </SensorProfiles>
  <DestinationProfiles>
    <DestinationProfile>
      <GroupName></GroupName>
    </DestinationProfile>
  </DestinationProfiles>
</Subscription>
</Subscriptions>
</GRPC>

```

## Table description

Item	Description
Feature name	GRPC
Table name	Subscriptions
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Subscription	Subscription table	Multi-instance table	N/A	For more information, see the Subscription table.

## GRPC/Subscriptions/Subscription

This table contains gRPC subscription information.

## XML structure

Please refer to the XML structure of GRPC/Subscriptions.

## Table description

Item	Description
Feature name	GRPC
Table name	Subscription
Table type	Multi-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SubscriptionName	Subscription name	Index	String. Length: 1 to 31 characters.	N/A
SourceAddress	Source address packets	IP for N/A	IPv4: String, in dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Interface: String, interface type and number	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8. Interface example: LoopBack2 In the current software version, it must be a loopback interface.
SensorProfiles	Sensor profile information	Sublist	N/A	For more information, see the SensorProfiles table.
DestinationProfiles	Destination profile information	Sublist	N/A	For more information, see the DestinationProfiles table.

## GRPC/Subscriptions/Subscription/SensorProfiles

This table contains gRPC sensor profile information.

## XML structure

Please refer to the XML structure of GRPC/Subscriptions.

## Table description

Item	Description
Feature name	GRPC
Table name	SensorProfiles

Item	Description
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SensorProfile	SensorProfile table	Multi-instance table	N/A	For more information, see the SensorProfile table.

## GRPC/Subscriptions/Subscription/SensorProfiles/SensorProfile

This table contains gRPC sensor profile information.

## XML structure

Please refer to the XML structure of GRPC/Subscriptions.

## Table description

Item	Description
Feature name	GRPC
Table name	SensorProfile
Table type	Multi-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SubscriptionName	Subscription name	Index	Index of the parent table.	This column cannot be present.
GroupName	Sensor group name	Index	String. Length: 1 to 31 characters.	N/A
SampleInterval	Sampling interval in seconds	N/A	Unsigned integer. Value range: 1 to 86400.	This column is intended for periodic sensor paths and only for

批注 [13]: 根据资料意见修改

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>periodic sensor paths.</p> <ul style="list-style-type: none"> <li>If this column is present for event-triggered sensor paths, the sensor paths do not take effect.</li> <li>If this column is absent for periodic sensor paths, the device does not sample or push data.</li> </ul>

**批注 [(4)]:** 当传感器组中的采样路径为事件触发类型时, 请不要配置 `sample-interval` 参数, 否则该采样路径不生效; 当采样路径为周期采样类型时, 必须配置 `sample-interval` 参数才会采样和推送数据  
根据资料意见修改

## GRPC/Subscriptions/Subscription/DestinationProfiles

This table contains gRPC destination profile information.

### XML structure

Please refer to the XML structure of GRPC/Subscriptions.

### Table description

Item	Description
Feature name	GRPC
Table name	DestinationProfiles
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestinationProfile	DestinationProfile table	Multi-instance table	N/A	For more information, see the DestinationProfile table.

## GRPC/Subscriptions/Subscription/DestinationProfiles/DestinationProfile

This table contains gRPC destination profile information.

### XML structure

Please refer to the XML structure of GRPC/Subscriptions.

### Table description

Item	Description
Feature name	GRPC
Table name	DestinationProfile
Table type	Multi-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SubscriptionName	Subscription name	Index	Index of the parent table.	This column cannot be present.
GroupName	Destination group name	Index	String. Length: 1 to 31 characters.	N/A

# Contents

GRPC.....2

    GRPC/Configuration.....2

    GRPC/SensorGroups.....2

    GRPC/DestinationGroups.....2

    GRPC/Subscriptions.....3



# GRPC

## GRPC/Configuration

Message	Explanation
Please enable the gRPC service first. 请先启动gRPC服务。	Enable GRPC first. 需要先启动GRPC服务，再提供相关服务。
Please stop gRPC server first. 请先去使能gRPC服务。	Disable GRPC first. 请先去使能gRPC服务。

批注 [(1): 问题单 201811010077, grpc 命令解耦, 除显示命令外的所有 grpc 命令都必须在 grpc enable 之后配置: grpc port 也是, 因此删除去使能相关提示

## GRPC/SensorGroups

Message	Explanation
Incomplete parameter. 参数输入不完整。	Specified sampling data filter parameters are incomplete. 必须制定过滤列的值。
Please enable the gRPC service first. 请先启动gRPC服务。	Enable grpc first. 需要先启动GRPC服务，再提供相关服务。
The path doesn't exist, or it is invalid. path不存在或者格式错误。	Invalid sampling path. path不存在或者格式错误。
The sensor group has been used by subscriptions. Please remove the sensor group from the subscriptions first. 当前sensor group正在被订阅使用, 请先从相关订阅下移除。	A user failed to delete a sensor group, failed to assign a sensor path to a sensor group, or failed to remove a sensor path from a sensor group. 用户删除sensor group失败, 或者在当前sensor group下配置或移除sensor path失败。
Path path is not supported. 不支持指定path。	Unsupported sampling path. 不支持指定path。

批注 [(2): 问题单 201811010077, grpc 命令解耦, 除显示命令外的所有 grpc 命令都必须在 grpc enable 之后配置

批注 [(3): 问题单 201809170278, 在配置 sensor-path 时检查是否支持, 不支持需提示

## GRPC/DestinationGroups

Message	Explanation
Please enable the gRPC service first. 请先启动gRPC服务。	Enable grpc first. 需要先启动GRPC服务，再提供相关服务。
The destination group has been used by subscriptions. Please remove the destination group from the subscriptions first. 当前destination group正在被订阅使用, 请先从相关订阅下移除。	A user failed to delete a destination group, failed to assign a collector to a destination group, or failed to remove a collector from a destination group. 用户删除destination group失败, 或者在当前destination group下配置或移除采集器失败。

批注 [(4): 问题单 201811010077, grpc 命令解耦, 除显示命令外的所有 grpc 命令都必须在 grpc enable 之后配置

# GRPC/Subscriptions

Message	Explanation
Please enable the gRPC service first. 请先启动gRPC服务。	Enable grpc first. 需要先启动GRPC服务，再提供相关服务。
The sensor group is subscribing, do not support modify sample-interval. 当前sensor group正在被订阅，不支持修改sample-interval。	Can't delete sample interval in delete or remove request. 当前sensor group正在被订阅，不支持修改sample-interval，请先去使能相关订阅。
The sensor group doesn't exist. 指定的sensor group不存在。	A user specified a non-existent sensor group. 用户指定了一个不存在的sensor group。
The destination group doesn't exist. 指定的destination group不存在。	A user specified a non-existent destination group. 用户指定了一个不存在的destination group。

批注 [I(5)]: 问题单 201811010077, grpc 命令解耦, 除显示命令外的所有 grpc 命令都必须在 grpc enable 之后配置

# Contents

- arp .....1
  - arp/arpInterfaces .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# arp

## arp/arpInterfaces

This table contains ARP configuration on interfaces.

### XML structure

```
<arp xmlns="http://www.gsta.com/netconf/gsta-arp">
  <arpInterfaces>
    <arpInterface>
      <ifName></ifName>
      <expireTime></expireTime>
      <arpLearnDisable></arpLearnDisable>
      <innerProxyEnable></innerProxyEnable>
      <interProxyEnable></interProxyEnable>
      <localProxyEnable></localProxyEnable>
    </arpInterface>
  </arpInterfaces>
</arp>
```

### Table description

Item	Description
Feature name	arp
Table name	arpInterfaces
Table type	Multi-instance table
Row name	arpInterface
Restrictions	This table supports interface types: Layer 3 Ethernet subinterface Layer 3 aggregate subinterface Layer 3 L3VE subinterface
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Interface name	Index	String Value range: 1 to 47.	Only Layer 3 physical interfaces are supported. Some versions support interface name. For relevant information,

Column name	Column description	Column type	Data type and restrictions	Remarks
				see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
expireTime	Aging time of a dynamic ARP entry	N/A	Unsigned integer. Value Range: 60 to 86400 seconds.	Not used
arpLearnDisable	Disable ARP learning	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	Not used
innerProxyEnable	Enable intra-VLAN proxy ARP	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	Not used
interProxyEnable	Enable inter-VLAN proxy ARP	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
localProxyEnable	Enable local proxy ARP	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	Not used

# Contents

- arp .....1
  - arp/arpInterfaces .....1
  - XML structure .....1
  - Table description .....1
  - Columns .....1

# arp

## arp/arpInterfaces

This table contains ARP configuration on interfaces.

### XML structure

```
<arp xmlns="http://www.gsta.com/netconf/gsta-arp">
  <arpInterfaces>
    <arpInterface>
      <ifName></ifName>
      <expireTime></expireTime>
      <arpLearnDisable></arpLearnDisable>
      <innerProxyEnable></innerProxyEnable>
      <interProxyEnable></interProxyEnable>
      <localProxyEnable></localProxyEnable>
    </arpInterface>
  </arpInterfaces>
</arp>
```

### Table description

Item	Description
Feature name	arp
Table name	arpInterfaces
Table type	Multi-instance table
Row name	arpInterface
Restrictions	This table supports interface types: Layer 3 Ethernet subinterface Layer 3 aggregate subinterface Layer 3 L3VE subinterface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Interface name	Index	String Value range: 1 to 47.	Only Layer 3 physical interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
expireTime	Aging time of a dynamic ARP entry	N/A	Unsigned integer. Value Range: 60 to 86400 seconds.	Not used
arpLearnDisable	Disable ARP learning	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	Not used
innerProxyEnable	Enable intra-VLAN proxy ARP	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	Not used
interProxyEnable	Enable inter-VLAN proxy ARP	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	N/A
localProxyEnable	Enable local proxy ARP	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	Not used



# Contents

<b>gsta-bgp</b>	<b>1</b>
gsta-bgp/bgp	1
XML structure	1
Table description	2
Columns	2
gsta-bgp/bgp/bgpcomm	2
XML structure	2
Table description	2
Columns	3
gsta-bgp/bgp/bgpcomm/bgpSite	3
XML structure	3
Table description	3
Columns	3
gsta-bgp/bgp/bgpcomm/bgpVrfs	4
XML structure	4
Table description	4
Columns	4
gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf	4
XML structure	4
Table description	5
Columns	5
gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs	5
XML structure	5
Table description	5
Columns	6
gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF	6
XML structure	6
Table description	6
Columns	6
gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/peerAFs	8
XML structure	8
Table description	8
Columns	9
gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/peerAFs/peerAF	9
XML structure	9
Table description	9
Columns	9
gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/importRoutes	10
XML structure	10
Table description	10
Columns	11
gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/importRoutes/importRoute	11
XML structure	11
Table description	11
Columns	11

# gsta-bgp

## gsta-bgp/bgp

This table contains BGP information.

### XML structure

```
<gsta-bgp>
  <bgp>
    <bgpcomm>
      <bgpSite>
        <asNumber></asNumber>
      </bgpSite>
    <bgpVrfs>
      <bgpVrf>
        <vrfName></vrfName>
        <bgpVrfAFs>
          <bgpVrfAF>
            <afType></afType>
            <preferenceExternal></preferenceExternal>
            <preferenceInternal></preferenceInternal>
            <preferenceLocal></preferenceLocal>
            <loadBalancingEibgp></loadBalancingEibgp>
            <loadBalancingAsPathIgnore></loadBalancingAsPathIgnore>
            <loadBalancingAsPathRelax></loadBalancingAsPathRelax>
            <nexthopDelayTime></nexthopDelayTime>
            <tunnelSelectorName></tunnelSelectorName>
            <tunnelSelectorAll></tunnelSelectorAll>
            <peerAFs>
              <peerAF>
                <remoteAddress></remoteAddress>
                <advertiseCommunity></advertiseCommunity>
                <advertiseExtCommunity></advertiseExtCommunity>
              </peerAF>
            </peerAFs>
          </bgpVrfAF>
        </bgpVrfAFs>
      </bgpVrf>
    </bgpVrfs>
    <importRoutes>
      <importRoute>
        <importProtocol></importProtocol>
        <importProcessId></importProcessId>
        <importRoutePolicy></importRoutePolicy>
        <medNew></medNew>
      </importRoute>
    </importRoutes>
  </bgp>
</gsta-bgp>
```

```

        </bgpVrf>
    </bgpVrfs>
</bgpcomm>
</bgp>
</gsta-bgp>

```

## Table description

Item	Description
Feature name	gsta-bgp
Table name	bgp
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
bgpcomm	Universal BGP configurations that contain the basic BGP configurations and the query information.	Subtable	N/A	For more information, see the gsta-bgp/bgp/bgpcomm table.

## gsta-bgp/bgp/bgpcomm

This table contains BGP common information.

## XML structure

Please refer to the XML structure of gsta-bgp/bgp.

## Table description

Item	Description
Feature name	gsta-bgp
Table name	bgpcomm
Table type	Single-instance table
Row name	N/A

Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
bgpSite	Site containing the global BGP information, such as the protocol version, AS number, and system identifier	Subtable	N/A	For more information, see the gsta-bgp/bgp/bgpcomm/bgpSite table.
bgpVrfs	Site containing the global BGP information, such as the protocol version, AS number, and system identifier.	Subtable	N/A	For more information, see the gsta-bgp/bgp/bgpcomm/bgpVrfs table.

## gsta-bgp/bgp/bgpcomm/bgpSite

This table contains BGP site information.

## XML structure

Please refer to the XML structure of gsta-bgp/bgp.

## Table description

Item	Description
Feature name	gsta-bgp
Table name	bgpSite
Table type	Single-instance table
Row name	asNumber
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
-------------	--------------------	-------------	----------------------------	---------

Column name	Column description	Column type	Data type and restrictions	Remarks
asNumber	Local AS number.	N/A	UInt32.. Value range: 1 to 4294967295. or 0.1~65535.65535	N/A

## gsta-bgp/bgp/bgpcomm/bgpVrfs

This table contains BGP VPN instance information.

### XML structure

Please refer to the XML structure of gsta-bgp/bgp.

### Table description

Item	Description
Feature name	gsta-bgp
Table name	bgpVrfs
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
bgpVrf	Create a BGP instance.	Subtable	N/A	For more information, see the gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf table.

## gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf

This table contains information for a BGP VPN instance.

### XML structure

Please refer to the XML structure of gsta-bgp/bgp.

## Table description

Item	Description
Feature name	gsta-bgp
Table name	bgpVrf
Table type	Multi-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vrfName	VPN instance name of a BGP instance.	Index	String. Length: 1 to 31 characters.	N/A
bgpVrfAFs	List of BGP address family instances.	Subtable	N/A	For more information, see the gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs table.

## gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs

This table contains BGP address family information.

## XML structure

Please refer to the XML structure of gsta-bgp/bgp.

## Table description

Item	Description
Feature name	gsta-bgp
Table name	bgpVrfAFs
Table type	Single-instance table
Row name	vrfName
Restrictions	None
Support for row creation and deletion	Yes

deletion	
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## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
bgpVrfAF	List of BGP address family instances.	Subtable	N/A	For more information, see the gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs table.

## gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF

This table contains information of a BGP address family.

## XML structure

Please refer to the XML structure of gsta-bgp/bgp.

## Table description

Item	Description
Feature name	gsta-bgp
Table name	bgpVrfAF
Table type	Multi-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afType	Address family type of a BGP instance.	index	Enumeration: <ul style="list-style-type: none"> <li>• ipv4uni.</li> <li>• ipv4multi.</li> <li>• ipv4vpn.</li> <li>• ipv6uni.</li> <li>• ipv6vpn.</li> <li>• ipv4flow.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• l2vpnad.</li> <li>• mvpn.</li> <li>• evpn.</li> <li>• ls.</li> <li>• mdt.</li> <li>• vpnv4flow.</li> <li>•</li> </ul>	
preferenceExternal	Set the protocol priority of EBGp routes.	N/A	uint8. Value range: 1 to 255	N/A
preferenceInternal	Set the protocol priority of IBGP routes.	N/A	uint8. Value range: 1 to 255	N/A
preferenceLocal	Set the protocol priority of a local BGP route.	N/A	uint8. Value range: 1 to 255.	N/A
loadBalancingEibgp	Configure EBGp and IBGP route load balancing. By default, load balancing cannot be implemented among IBGP and EBGp routes.	N/A	Uint32. Value range: 1 to 16.	N/A
loadBalancingAsPathIgnore	Configure BGP to ignore the AS_Path of each BGP route to the next hop when selecting routes for load balancing. By default, only the routes with the same AS_Path can participate in load balancing.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—false.</li> <li>• 1—true.</li> </ul>	N/A
loadBalancingAsPathRelax	Configure BGP to ignore comparison of AS_Path attributes with the same length. By default, only the routes with the same AS_Path can participate in load balancing.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—false.</li> <li>• 1—true.</li> </ul>	N/A
nextHopDelayTime	Configure the delay-time of next hop.	N/A	Uint32. Value range: 1 to 100.	N/A
tunnelSelectorName	Configure a tunnel selector and apply it to the	N/A	String, case-sensitive. Length: 1 to 40 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	BGP IPv4 unicast, BGP VPNv4, and BGP VPNv6 address families so that IPv4, VPNv4, and VPNv6 labeled routes can recurse to tunnels based on the tunnel selector. By default, no tunnel selector is configured.			
tunnelSelectorAll	Tunnel selector for labeled, imported, and network segment routes.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—false.</li> <li>1—true.</li> </ul>	N/A
peerAFs	Peers in a specified address family.	Subtable	N/A	For more information, see the gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/peerAFs table.
importRoutes	List of imported routes.	Subtable	N/A	For more information, see the gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/importRoutes table.

## gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/peerAFs

This table contains BGP peer address family information.

### XML structure

Please refer to the XML structure of gsta-bgp/bgp.

### Table description

Item	Description
Feature name	gsta-bgp
Table name	bgpVrfAFs
Table type	Single-instance table

Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
peerAF	Peer in a specified address family.	Subtable	N/A	For more information, see the gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/peerAFs/peerAF table.

## gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/peerAFs/peerAF

This table contains address family information for a BGP peer.

## XML structure

Please refer to the XML structure of gsta-bgp/bgp

## Table description

Item	Description
Feature name	gsta-bgp
Table name	peerAF
Table type	Multi-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
remoteAddress	IPv4 or IPv6 peer address.	Index	IPv4: String, dotted decimal notation. IPv6: String.	IPv4 example: 1.1.1.1 IPv6 example: 2001::1

Column name	Column description	Column type	Data type and restrictions	Remarks
advertiseCommunity	Advertise the community attribute to a peer or peer group. By default, the community attribute is not advertised to any peer or peer group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—false.</li> <li>• 1—true.</li> </ul>	N/A
advertiseExtCommunity	Advertise the extended community attribute to a peer or peer group. By default, the extended community attribute is not advertised to any peer or peer group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—false.</li> <li>• 1—true.</li> </ul>	N/A

## gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/importRoutes

This table contains route redistribution information.

### XML structure

Please refer to the XML structure of gsta-bgp/bgp.

### Table description

Item	Description
Feature name	gsta-bgp
Table name	importRoutes
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
importRoute	Route redistribution. Routes of other protocol types can be redistributed by BGP. By default, BGP does not redistribute routes of other protocol types.	Subtable	N/A	For more information, see the <a href="#">gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/importRoutes/importRoute</a> table.

## gsta-bgp/bgp/bgpcomm/bgpVrfs/bgpVrf/bgpVrfAFs/bgpVrfAF/importRoutes/importRoute

This table contains information of redistributed routes.

## XML structure

Please refer to the XML structure of [gsta-bgp/bgp](#)

## Table description

Item	Description
Feature name	gsta-bgp
Table name	importRoute
Table type	Multi-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
importProtocol	Routing protocol from which routes can be redistributed. The routing	Index	Enumeration: <ul style="list-style-type: none"> <li>1—direct.</li> <li>2—ospf.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	protocol can be IS-IS, OSPF, static, direct, or RIP for an IPv4 unicast address family or an IPv4 multicast address family. The routing protocol can be IS-IS, OSPFv3, static, direct, or RIPng for an IPv6 unicast address family.		<ul style="list-style-type: none"> <li>• 3—isis</li> <li>• 4—static</li> <li>• 5—rip</li> <li>• 6—ospfv3</li> <li>• 7—ripng</li> </ul>	
importProcessId	Process ID of the routing protocol. The process ID must be specified if the routing protocol is RIP, OSPF, RIPng, or OSPFv3.	Index	Uint32. Value range: 0 to 65535	N/A
importRoutePolicy	When routes are redistributed from other routing protocols, the route-policy filter can be used to filter the routes and change route attributes.	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
medNew	Specify the MED of imported routes.	N/A	uint64 Value range: 0 to 4294967295	N/A

# Contents

ethernet .....	1
ethernet/eth/ethSublfs .....	1
XML structure .....	1
Table description .....	1
Columns .....	1

# ethernet

## ethernet/eth/ethSubIfs

This table contains the subinterface attribute list.

### XML structure

```
<ethernet xmlns="http://www.gsta.com/netconf/gsta-ethernet">
  <ethSubIfs>
    <ethSubIf>
      <ifName></ifName>
      <flowType></flowType>
      <arpBroadcastEnable></arpBroadcastEnable>
      <vlanTypeVid></vlanTypeVid>
      <flowDot1qs>
        <flowDot1q>
          <segIndex></segIndex>
          <vlanIdBgn></vlanIdBgn>
          <vlanIdEnd></vlanIdEnd>
          <groupId></groupId>
        </flowDot1q>
      </flowDot1qs>
    </ethSubIf>
  </ethSubIfs>
</ethernet>
```

### Table description

Item	Description
Feature name	ethernet
Table name	ethSubIfs
Table type	Multi-instance table
Row name	ethSubIf
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Name of a subinterface. For example, Ethernet 0/1/0.1.	index	String Value range: 1 to 47.	Name of a subinterface.

Column name	Column description	Column type	Data type and restrictions	Remarks
flowType	Subinterface type, including VLAN subinterfaces, subinterfaces for Dot1q VLAN tag termination, subinterfaces for QinQ VLAN tag termination, and stacking subinterfaces.	N/A	Members include: <ul style="list-style-type: none"> <li>VlanType</li> <li>Dot1qTerm</li> <li>Stacking</li> <li>QinQTerm</li> <li>Mapping1to1</li> </ul>	Not used.
arpBroadcast Enable	Enable ARP broadcast.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Not used.
vlanTypeVid	VLAN ID of the VLAN subinterface.	N/A	Unsigned Short. Value range: 1 to 4094.	Not used.
flowDot1qs	Dot1q VLAN tag termination list.	N/A	Include: <ul style="list-style-type: none"> <li>Value</li> <li>Unit</li> </ul>	Dot1q VLAN tag termination list.
flowDot1q	Dot1q VLAN tag termination.	N/A	Include: <ul style="list-style-type: none"> <li>Value</li> <li>Unit</li> </ul>	Dot1q VLAN tag termination.
segIndex	QinQ segment.	index	Unsigned integer	Dot1q segment.
vlanIdBgn	Start VLAN ID in the user packet.	N/A	Unsigned integer. Value range: 1 to 4094.	Start VLAN ID.
vlanIdEnd	End VLAN ID in the user packet.	N/A	Unsigned short. Value range: 1 to 4094.	End VLAN ID.
groupId	VLAN group ID.	N/A	Unsigned char. Value range: 1 to 16.	Not used.



# Contents

- ifm .....1
  - ifm/interfaces .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# ifm

## ifm/interfaces

This table contains basic interface information for GSTA.

### XML structure

```
<ifm>
  <interfaces>
    <interface>
      <ifName></ifName>
      <ifDescr></ifDescr>
      <ifAdminStatus></ifAdminStatus>
      <ifTrapEnable></ifTrapEnable>
      <ifStatiEnable></ifStatiEnable>
      <statMode></statMode>
      <ifMtu></ifMtu>
      <spreadMtuFlag></spreadMtuFlag>
      <ifBandwidth></ifBandwidth>
      <ifStatItvl></ifStatItvl>
      <downDelayTime></downDelayTime>
      <ifCfgMac></ifCfgMac>
    </interface>
  </interfaces>
</ifm>
```

### Table description

Item	Description
Feature name	ifm
Table name	interfaces
Table type	Multi-instance table
Row name	interface
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Information about an	Index	String. Length: 2 to 47 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	interface		Example: GigabitEthernet2/0/2	
ifDescr	Description of an interface	N/A	String. Length: 1 to 255 characters. Default: Interface name.	N/A
IfAdminStatus	Administrative status of an interface	N/A	String enumeration: <ul style="list-style-type: none"> <li>up.</li> <li>down.</li> </ul>	N/A
ifTrapEnable	Enable the trap function on an interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
ifStatiEnable	Enable the statistics function on an interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
statMode	Mode of statistics collection. statistics by interface or vlangroup	N/A	String enumeration: <ul style="list-style-type: none"> <li>baseInterface.</li> <li>baseVlanGroup.</li> </ul>	The baseVlanGroup value is not supported.
ifMtu	IPV4 Maximum transmission unit of an interface	N/A	Unsigned integer. Value range: 0-64000	Applicable to only Layer 3 interfaces.
spreadMtuFlag	Spread the MTU of main interface to subinterface(optional)	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Applicable to only Layer 3 main interfaces.
ifBandwidth	Specify MIB-referenced bandwidth of an interface	N/A	Unsigned integer. Value range: 1 to 400000000.	N/A
ifStatIntvl	Interval at which flow statistics are collected on an interface	N/A	Unsigned integer. Value range: 5 to 300	Configured at multiples of 5.
downDelayTime	Specify down-delay-time value in milliseconds	N/A	Unsigned integer. Value range: 1 to 1000 Unit: Milliseconds.	Configured at multiples of 10 when the interface type is eth-trunk.
ifCfgMac	Config MAC Address	N/A	String: Length: 0 to 255 characters.	Config MAC Address, in the format of HH-HH-HH

# Contents

- ifm .....1
  - ifm/interfaces .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....2

# ifm

## ifm/interfaces

This table contains basic interface information for GSTA.

### XML structure

```
<ifm>
  <interfaces>
    <interface>
      <ifName></ifName>
      <ifClass></ifClass>
      <ifPhyType></ifPhyType>
      <ifParentIfName></ifParentIfName>
      <ifNumber></ifNumber>
      <ifDescr></ifDescr>
      <ifAdminStatus></ifAdminStatus>
      <ifTrapEnable></ifTrapEnable>
      <ifStatIEnable></ifStatIEnable>
      <statMode></statMode>
      <ifMtu></ifMtu>
      <spreadMtuFlag></spreadMtuFlag>
      <ifBandwidth></ifBandwidth>
      <ifStatItvl></ifStatItvl>
      <downDelayTime></downDelayTime>
      <ifCfgMac></ifCfgMac>
    </interface>
  </interfaces>
</ifm>
```

### Table description

Item	Description
Feature name	ifm
Table name	interfaces
Table type	Multi-instance table
Row name	interface
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Information about an interface	Index	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A
ifClass	Identify a main interface or a sub-interface	N/A	String enumeration: <ul style="list-style-type: none"> <li>mainInterface.</li> <li>subInterface.</li> </ul>	N/A
ifPhyType	Type of an interface	N/A	String enumeration. For more information, see <a href="#">Table 1</a> .	N/A
ifParentIfName	Name of the main interface	N/A	String. Length: 2 to 47 characters.	Available when the ifClass is subInterface. Example: GigabitEthernet2/0/2
ifNumber	Number of an interface	N/A	String. Length: 1 to 47 characters.	For example: 1, 0/1/0, or 2:1.
ifDescr	Description of an interface	N/A	String. Length: 1 to 255 characters. Default: Interface name.	N/A
ifAdminStatus	Administrative status of an interface	N/A	String enumeration: <ul style="list-style-type: none"> <li>up.</li> <li>down.</li> </ul>	N/A
ifTrapEnable	Enable the trap function on an interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
ifStatEnable	Enable the statistics function on an interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
statMode	Mode of statistics collection	N/A	String enumeration: <ul style="list-style-type: none"> <li>baseInterface.</li> <li>baseVlanGroup.</li> </ul>	The baseVlanGroup value is not supported.
ifMtu	IPV4 Maximum transmission unit of an interface	N/A	Unsigned integer. Value range: 0-64000	Applicable to only Layer 3 interfaces.
spreadMtuFlag	Spread the MTU of main interface to subinterface(optional)	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Applicable to only Layer 3 main interfaces.
ifBandwidth	Specify MIB-referenced bandwidth of an interface	N/A	Unsigned integer. Value range: 1 to 400000000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ifStatItvl	Interval at which flow statistics are collected on an interface	N/A	Unsigned integer. Value range: 5 to 300.	The value must be a multiple of 5 in seconds.
downDelayTime	Specify the down-delay-time value in milliseconds	N/A	Unsigned integer. Value range: 0 to 1000. Unit: Milliseconds.	Configured at multiples of 10, when ifPhyType is Eth-Trunk.
ifCfgMac	Config MAC Address	N/A	String. Length: 0 to 255 characters.	Config MAC Address, in the format of HH-HH-HH.

**Table 1 Interface extension types**

String enum	Interface type	Description
ATM	IF_ATM_TYPE	ATM interface.
Cpos	IF_CPOS_TYPE	CPOS interface.
E1	IF_E1_TYPE	E1 interface.
InLoopBack	IF_INLOOPBACK_TYPE	Internal loopback interface.
LoopBack	IF_LOOPBACK_TYPE	Loopback interface.
Ethernet	IF_L2ETHERNET_TYPE	Layer 2 FE interface.
GigabitEthernet	IF_L2GE_TYPE	Layer 2 GE interface.
VEB	IF_L2VE_TYPE	Layer 2 VE interface.
XGigabitEthernet	IF_L2XGE_TYPE	Layer 2 10-GE interface.
Ethernet	IF_L3ETHERNET_TYPE	Layer 3 FE interface.
GigabitEthernet	IF_L3GE_TYPE	Layer 3 GE interface.
XGigabitEthernet	IF_L3XGE_TYPE	Layer 3 10-GE interface.
MEth	IF_ME_TYPE	Management Ethernet interface.
MGE	IF_MGE_TYPE	Management GE interface.
Mp-group	IF_MPGROUP_TYPE	MP-group interface.
NULL	IF_NULL_TYPE	Null interface.
Pos	IF_POS_TYPE	POS interface.
Serial	IF_SERIAL_TYPE	Serial interface.
T1	IF_T1_TYPE	T1 interface.
Tunnel	IF_TUNNEL_TYPE	Tunnel interface.
Vlanif	IF_VLAN_TYPE	VLAN interface.
Virtual-Template	IF_VT_TYPE	VT interface.
MTunnel	IF_MTUNNEL_TYPE	M-Tunnel interface.
InAsy	IF_INASY_TYPE	Internal asynchronous serial interface.
Eth-trunk	IF_BAGG_TYPE	Layer 2 aggregate interface.

String enum	Interface type	Description
Register-Tunnel	IF_REGISTER_TUNNEL_TYPE	Register-Tunnel interface.
Ethernet	IF_LOOPFE_TYPE	Loopback FE interface.
GigabitEthernet	IF_LOOPGE_TYPE	Loopback GE interface.
XGigabitEthernet	IF_LOOPXGE_TYPE	Loopback 10-GE interface.
Ethernet	IF_MIRRORFE_TYPE	Mirroring FE interface.
GigabitEthernet	IF_MIRRORGE_TYPE	Mirroring GE interface.
XGigabitEthernet	IF_MIRRORXGE_TYPE	Mirroring 10-GE interface.
Ethernet	IF_IDSFE_TYPE	IDS FE interface.
GigabitEthernet	IF_IDSGE_TYPE	IDS GE interface.
XGigabitEthernet	IF_IDSXGE_TYPE	IDS 10-GE interface.
Eth-trunk	IF_RAGG_TYPE	Layer 3 aggregate interface.
40GE	IF_L2FGE_TYPE	Layer 2 40-GE interface.
100GE	IF_L2HGE_TYPE	Layer 2 100-GE interface.
40GE	IF_L3FGE_TYPE	Layer 3 40-GE interface.
100GE	IF_L3HGE_TYPE	Layer 3 100-GE interface.
40GE	IF_LOOPFGE_TYPE	Loopback 40-GE interface.
100GE	IF_LOOPHGE_TYPE	Loopback 100-GE interface.
40GE	IF_MIRRORFGE_TYPE	Mirroring 40-GE interface.
100GE	IF_MIRRORHGE_TYPE	Mirroring 100-GE interface.
40GE	IF_IDSFGGE_TYPE	IDS 40-GE interface.
100GE	IF_IDSHGE_TYPE	IDS 100-GE interface.
VPPP	IF_VPPP_TYPE	Virtual PPP interface.
HDLC-B	IF_HDLCBUNDLE_TYPE	HDLC bundle interface.
Virtual-Ethernet	IF_VE_L2VPN_TYPE	L2VPN virtual Ethernet interface
Virtual-Ethernet	IF_VE_L3VPN_TYPE	L3VPN virtual Ethernet interface
VSI	IF_VSI_TYPE	VSI interface
BAS	IF_LOCAL_BAS_IF_TYPE	Local BAS interface
BAS	IF_GLOBAL_BAS_IF_TYPE	Global BAS interface



# Contents

ipv4Config .....	1
ipv4Config .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ipv4Config/am4CfgAddrs .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
ipv4Config/am4CfgAddrs/am4CfgAddr .....	2
XML structure .....	2
Table description .....	3
Columns .....	3

# ipv4Config

## ipv4Config

This table contains IPv4 configuration.

### XML structure

```
<ipv4Config>
  <addrCfgType></addrCfgType>
  <am4CfgAddrs>
    <am4CfgAddr>
      <ifIpAddr></ifIpAddr>
      <subnetMask></subnetMask>
      <addrType></addrType>
    </am4CfgAddr>
  </am4CfgAddrs>
  <unNumIfName></unNumIfName>
</ipv4Config>
```

### Table description

Item	Description
Feature name	ipv4Config
Table name	ipv4Config
Table type	Single-instance table
Row name	N/A
Restrictions	none
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
addrCfgType	IPv4 address configuration type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—config.</li><li>2—negotiation.</li><li>3—unnumbered.</li></ul>	N/A
am4CfgAddrs	List of IPv4 addresses	Subtable	N/A	For more information, see the <a href="#">ipv4Config/am4CfgAdd</a>

Column name	Column description	Column type	Data type and restrictions	Remarks
				rs/am4CfgAddr table.
unNumIfName	Name of an unnumbered interface	N/A	String.	N/A

## ipv4Config/am4CfgAddrs

This table contains a list of IPv4 addresses.

### XML structure

Please refer to the XML structure of ipv4Config.

### Table description

Item	Description
Feature name	ipv4Config
Table name	am4CfgAddrs
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
am4CfgAddr	IPv4 address configuration	Subtable	N/A.	When "addrCfgType" is neither "negotiation" nor "unnumbered". For more information, see the ipv4Config/am4CfgAddrs/am4CfgAddr table.

## ipv4Config/am4CfgAddrs/am4CfgAddr

This table contains IPv4 address configuration.

### XML structure

Please refer to the XML structure of ipv4Config.

## Table description

Item	Description
Feature name	ipv4Config
Table name	am4CfgAddr
Table type	Single-instance table
Row name	N/A
Restrictions	When addrCfgType is neither “negotiation” nor “unnumbered”.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifIpAddr	IPv4 address	index	String, dotted decimal.	IPv4 example: 1.1.1.1.
subnetMask	IPv4 address mask	N/A	String. Value length: 9 to 15	N/A
addrType	IPv4 address type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—main.</li><li>• 2—sub.</li><li>• 3—neg.</li><li>• 4—neg remote.</li><li>• 5—unnumber.</li><li>• 6—nap.</li></ul>	“addrType” must be “main” or “sub”.

# Contents

ipv6Config .....	1
ipv6Config .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ipv6Config/am6CfgAddrs .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
ipv6Config/am6CfgAddrs/am6CfgAddr .....	2
XML structure .....	2
Table description .....	3
Columns .....	3

# ipv6Config

## ipv6Config

This table contains IPv6 configuration.

### XML structure

```
<ipv6Config>
  <enableFlag></enableFlag>
  <autoLinkLocal></autoLinkLocal>
  <am6CfgAddrs>
    <am6CfgAddr>
      <ifIp6Addr></ifIp6Addr>
      <addrPrefixLen></addrPrefixLen>
      <addrType6></ addrType6>
      <ifIDGenType></ifIDGenType>
    </am6CfgAddr>
  </am6CfgAddrs>
</ipv6Config>
```

### Table description

Item	Description
Feature name	ipv6Config
Table name	ipv6Config
Table type	Single-instance table
Row name	N/A
Restrictions	none
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
enableFlag	Enabling status of the IPv6 function on an interface	N/A	Boolean: <ul style="list-style-type: none"><li>True</li><li>False</li></ul>	N/A
autoLinkLocal	Enabling status of the auto link-local address feature on	N/A	Boolean: <ul style="list-style-type: none"><li>True</li></ul>	"enableFlag" must be "true" and "autoLinkLocal" must

Column name	Column description	Column type	Data type and restrictions	Remarks
	an interface		<ul style="list-style-type: none"> <li>False</li> </ul>	be "true".
am6CfgAddrs	List of IPv6 addresses	subtable	N/A	When "enableFlag" is "true". For more information, see the ipv6Config/am6CfgAddrs/am6CfgAddr table.

## ipv6Config/am6CfgAddrs

This table contains a list of IPv6 addresses.

## XML structure

Please refer to the XML structure of ipv6Config.

## Table description

Item	Description
Feature name	ipv6Config
Table name	am6CfgAddrs
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
am6CfgAddr	IPv6 address configuration	subtable	N/A.	For more information, see the ipv6Config/am6CfgAddrs/am6CfgAddr table.

## ipv6Config/am6CfgAddrs/am6CfgAddr

This table contains IPv6 address configuration.

## XML structure

Please refer to the XML structure of ipv6Config.

## Table description

Item	Description
Feature name	ipv6Config
Table name	am6CfgAddr
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifIp6Addr	IPv6 address	index	String, dotted decimal.	IPv6 example: 1:2:3:4:5:6:7:8.
addrPrefixLen	Length of the IPv6 address prefix	N/A	Unsigned integer. Value range: 1 to 128.	"addrType6" must not be "linkLocal" but "addrPrefixLen" is 10.
addrType6	IPv6 address type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—global.</li><li>• 2—linkLocal.</li><li>• 3—ndPrefix.</li><li>• 4—eui64.</li><li>• 5—anycast.</li></ul>	"addrType6" must be "global" or "linkLocal" or "anycast"
ifIDGenType	Address algorithm	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—none.</li><li>• 2—cga.</li><li>• 3—eui64.</li></ul>	When "addrType6" is "global", then "ifIDGenType" must be "none" or "cga" or "eui64", when "addrType6" is "linklocal", "ifIDGenType" must be "none" or "cga", and When "addrType6" is "anycast", then "ifIDGenType" must be "none".



# Contents

gsta-l3vpn.....	1
gsta-l3vpn/l3vpn .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
gsta-l3vpn/l3vpn/l3vpncomm .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances/ vpnInstAFs .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances/ vpnInstAFs/ vpnTargets .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances/ vpnInstAFs/ exVpnTargets .....	6
XML structure .....	6
Table description .....	6
Columns .....	7

# gsta-l3vpn

## gsta-l3vpn/l3vpn

This table contains L3VPN information.

### XML structure

```
<gsta-l3vpn>
  <l3vpn>
    <l3vpncomm>
      <l3vpnInstances>
        <l3vpnInstance>
          <vrfName></vrfName>
          <vpnInstAFs>
            <vpnInstAF>
              <afType></afType>
              <imPolicyName></imPolicyName>
              <exPolicyName></exPolicyName>
              <vrfLabelMode></vrfLabelMode>
              <tnlPolicyName></tnlPolicyName>
              <vpnTargets>
                <vpnTarget>
                  <vrfRTValue></vrfRTValue>
                  <vrfRTType></vrfRTType>
                </vpnTarget>
              </vpnTargets>
              <exVpnTargets>
                <exVpnTarget>
                  <vrfRTValue></vrfRTValue>
                  <vrfRTType></vrfRTType>
                  <extAddrFamily></extAddrFamily>
                </exVpnTarget>
              </exVpnTargets>
            </vpnInstAF>
          </vpnInstAFs>
        </l3vpnInstance>
      </l3vpnInstances>
    </l3vpncomm>
  </l3vpn>
</gsta-l3vpn>
```

## Table description

Item	Description
Feature name	gsta-l3vpn
Table name	l3vpn
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
l3vpncomm	Container of L3VPN common information	Subtable	N/A	For more information, see the gsta-l3vpn/l3vpncomm table.

## gsta-l3vpn/l3vpn/l3vpncomm

This table contains L3VPN common information.

## XML structure

Please refer to the XML structure of gsta-l3vpn/l3vpn.

## Table description

Item	Description
Feature name	gsta-l3vpn
Table name	l3vpncomm
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
l3vpnInstances	List of VPN	Subtable	N/A	For more

Column name	Column description	Column type	Data type and restrictions	Remarks
	instances			information, see the gsta-l3vpn/l3vpn/l3vpncomm/l3vpninstances table.

## gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances

This table contains Layer 3 VPN instance information.

### XML structure

Please refer to the XML structure of gsta-l3vpn/l3vpn.

### Table description

Item	Description
Feature name	gsta-l3vpn
Table name	l3vpnInstances
Table type	Multi-instance table
Row name	l3vpnInstance
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vrfName	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters. The name cannot be "_public_".	N/A
vpnInstAFs	List of VPN address families	Subtable	N/A	For more information, see the gsta-l3vpn/l3vpn/l3vpncomm/l3vpninstances/vpnInstAFs table.

# gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances/vpnInstAFs

This table contains VPN instance address family information.

## XML structure

Please refer to the XML structure of gsta-l3vpn/l3vpn.

## Table description

Item	Description
Feature name	gsta-l3vpn
Table name	vpnInstAFs
Table type	Multi-instance table
Row name	vpnInstAF
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vrfName	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters. The name cannot be "_public_".	N/A
afType	Address families of the VPN instance	Index	Enumeration: <ul style="list-style-type: none"><li>ipv4uni</li><li>ipv6uni</li></ul>	N/A
imPolicyName	Name of the import routing policy for the VPN instance	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
exPolicyName	Name of the export routing policy for the VPN instance	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
vrfLabelMode	The Mode of L3vpncommonLabel	N/A	Enumeration: <ul style="list-style-type: none"><li>perInstance</li><li>perRoute</li><li>perNexthop</li></ul>	N/A
tnlPolicyName	Name of the tunnel policy for the VPN	N/A	String, case-sensitive. Length: 1 to 19 characters.	N/A

Column name	Column description instance	Column type	Data type and restrictions	Remarks
vpnTargets	A group of RTs	Subtable	N/A	The number of RTs in the group ranges from 1 to 8. For more information, see the gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances/ vpnInstAFs/ vpnTargets table.
exVpnTargets	A group of extended RTs	Subtable	N/A	The number of RTs in the group ranges from 1 to 8. For more information, see the gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances/ vpnInstAFs/ exVpnTargets table.

## gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances/ vpnInstAFs/ vpnTargets

This table contains route target (RT) information of VPN instances.

### XML structure

Please refer to the XML structure of gsta-l3vpn/l3vpn.

### Table description

Item	Description
Feature name	gsta-l3vpn
Table name	vpnTargets
Table type	Multi-instance table
Row name	vpnTarget
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vrfName	VPN instance name	index	String, case-sensitive. Length: 1 to 31 characters. The name cannot be "_public_".	N/A
afType	Address families of the VPN instance	index	Enumeration: <ul style="list-style-type: none"> <li>1—ipv4uni</li> <li>2—ipv6uni</li> </ul>	N/A
vrfRTValue	Route targets of the VPN instance	index	String. Length: 3 to 21 characters. An RT can be in one of the following formats: <ul style="list-style-type: none"> <li>16-bit AS number:32-bit user-defined number</li> <li>32-bit IP address:16-bit user-defined number</li> <li>32-bit AS number:16-bit user-defined number</li> </ul>	N/A
vrfRTType	Route target types	index	Enumeration: <ul style="list-style-type: none"> <li>1—export_extcommunity</li> <li>2—import_extcommunity</li> </ul>	N/A

## gsta-l3vpn/l3vpn/l3vpncomm/l3vpnInstances/vpnInstAFs/ exVpnTargets

This table contains route target information for VPN instances in extended address families.

## XML structure

Please refer to the XML structure of gsta-l3vpn/l3vpn.

## Table description

Item	Description
Feature name	gsta-l3vpn
Table name	vpnTargets
Table type	Multi-instance table
Row name	exVpnTarget
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vrfName	VPN instance name	index	String, case-sensitive. Length: 1 to 31 characters. The name cannot be "_public_".	N/A
afType	Address family of the VPN instance	index	Enumeration: <ul style="list-style-type: none"> <li>1—ipv4uni</li> </ul>	N/A
vrfRTValue	Route targets of the VPN instance	index	String. Length: 3 to 21 characters. An RT can be in one of the following formats: <ul style="list-style-type: none"> <li>16-bit AS number:32-bit user-defined number</li> <li>32-bit IP address:16-bit user-defined number</li> <li>32-bit AS number:16-bit user-defined number</li> </ul>	N/A
vrfRTType	Route target types	index	Enumeration: <ul style="list-style-type: none"> <li>1—export_extcommunity</li> <li>2—import_extcommunity</li> </ul>	N/A
extAddrFamily	Extended address family of the VPN instance	index	Enumeration: <ul style="list-style-type: none"> <li>1—evpn</li> </ul>	N/A



# Contents

- monitorgroup ..... 1
  - monitorgroup/monitorGroups ..... 1
  - monitorgroup/monitorGroups/bindInterfaces ..... 1
  - monitorgroup/monitorGroups/trackedInterfaces ..... 1

# monitorgroup

## monitorgroup/monitorGroups

Message	Explanation
"The Monitor Link group doesn't exist." "指定Monitor Link组不存在。"	
"The Monitor Link group has members." "删除指定Monitor Link组失败，因为该Monitor Link组包含成员端口。"	删除组时，组内不能包含成员端口
"The number of Monitor Link groups reaches the limit." "支持的Monitor Link组已经达到最大支持数量。"	最大支持 Monitor Link 组数量限制
"The ID corresponding to the default group name is occupied." "默认Monitor Link组名对应的id已经被使用。"	Monitor Link 组的 ID 与默认格式组名为一一对应关系

## monitorgroup/monitorGroups/bindInterfaces

Message	Explanation
"%s已经加入其他Monitor Link组。" "%s has been assigned to another Monitor Link group."	接口不能重复加入其它Monitor Link组
"The role of port has been configured." "接口已指定角色。"	不能修改已指定接口的角色

## monitorgroup/monitorGroups/trackedInterfaces

Message	Explanation
"%s已经加入其他Monitor Link组。" "%s has been assigned to another Monitor Link group."	接口不能重复加入其它Monitor Link组
"The role of port has been configured." "接口已指定角色。"	不能修改已指定接口的角色

# Contents

- monitorgroup.....1
  - monitorgroup/monitorGroups .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....2
  - monitorgroup/monitorGroups/monitorGroup .....2
    - XML structure.....2
    - Table description.....2
    - Columns.....2
  - monitorgroup/monitorGroups/bindInterfaces.....2
    - XML structure.....3
    - Table description.....3
    - Columns.....3
  - monitorgroup/monitorGroups/bindInterfaces/ bindInterface .....3
    - XML structure.....3
    - Table description.....3
    - Columns.....4
  - monitorgroup/monitorGroups/trackedInterfaces.....4
    - XML structure.....4
    - Table description.....4
    - Columns.....4
  - monitorgroup/monitorGroups/trackedInterfaces/ trackedInterface .....4
    - XML structure.....5
    - Table description.....5
    - Columns.....5

# monitorgroup

## monitorgroup/monitorGroups

This table contains information about monitorGroups.

### XML structure

```
<monitorgroup>
  <monitorGroups>
    <monitorGroup>
      <groupName></groupName>
      <triggerUpDelay></triggerUpDelay>
      <enableStatus></enableStatus>
      <bindInterfaces>
        <bindInterface>
          <ifName></ifName>
          <downWeight></downWeight>
        </bindInterface>
      </bindInterfaces>
      <trackedInterfaces>
        <trackedInterface>
          <ifName></ifName>
          <downWeight></downWeight>
        </trackedInterface>
      </trackedInterfaces>
    </monitorGroup>
  </monitorGroups>
</monitorgroup>
```

### Table description

Item	Description
Feature name	monitorgroup
Table name	monitorGroups
Table type	Multi-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
monitorGroup	A set of monitor group.	Sublist	N/A

## monitorgroup/monitorGroups/monitorGroup

This table contains information about monitorGroup.

## XML structure

See the XML structure of monitorgroup/monitorGroups

## Table description

Item	Description
Feature name	monitorgroup
Table name	monitorGroups
Table type	Multi-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
groupName	The name of an interface monitoring group.	Index	String. <ul style="list-style-type: none"><li>Length: 1 to 31 characters.</li></ul>
triggerUpDelay	Delay for a track interface to go up.	N/A	Unsigned integer32. The value is an integer ranging from 0 to 4294967295, in seconds. Default: 0.
enableStatus	The enable status of monitorgroup.	N/A	string: <ul style="list-style-type: none"><li>Inactive (default).</li><li>Active.</li></ul>
bindInterfaces	Monitor group binding interfaces.	Sublist	N/A
trackedInterfaces	A set of track interfaces.	Sublist	N/A

## monitorgroup/monitorGroups/bindInterfaces

This table contains information about bindings Interfaces.

## XML structure

See the XML structure of `monitorgroup/monitorGroups`

## Table description

Item	Description
Feature name	monitorgroup
Table name	bindInterfaces
Table type	Multi-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
bindInterface	Monitor group binding interface.	Sublist	N/A

## monitorgroup/monitorGroups/bindInterfaces/ bindInterface

This table contains information about bindings Interface.

## XML structure

See the XML structure of `monitorgroup/monitorGroups`

## Table description

Item	Description
Feature name	monitorgroup
Table name	bindInterface
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ifName	Name of monitor group binding interface.	Index	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/1
downWeight	Down weight of monitor group binding interface.	N/A	Unsigned integer32. Value range: 1 to 1000. Default: 10.

## monitorgroup/monitorGroups/trackedInterfaces

This table contains information about track Interfaces.

## XML structure

See the XML structure of monitorgroup/monitorGroups

## Table description

Item	Description
Feature name	monitorgroup
Table name	trackedInterfaces
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ifName	Name of a track interface.	Index	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/1

## monitorgroup/monitorGroups/trackedInterfaces/ trackedInterface

This table contains information about track Interface.

# XML structure

See the XML structure of monitorgroup/monitorGroups

## Table description

Item	Description
Feature name	monitorgroup
Table name	trackedInterface
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ifName	Name of a track interface.	Index	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/1
downWeight	Down weight of monitor group binding interface.	N/A	Unsigned integer32. Value range: 1 to 1000. Default value is the sum of all the uplink interface weight.

批注 [s(1)]: 建议改为 to



# Contents

- nd ..... 1
  - nd/ndIfTables ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1

# nd

## nd/ndIfTables

This table contains ND configuration on interfaces.

### XML structure

```
<nd xmlns="http://www.gsta.com/netconf/gsta-nd">
  <ndIfTables>
    <ndIfTable>
      <ifName></ifName>
      <interAccessVlanEnabled></interAccessVlanEnabled>
      <externalAccessVlanEnabled></externalAccessVlanEnabled>
      <internalAccessVlanEnabled></internalAccessVlanEnabled>
    </ndIfTable>
  </ndIfTables>
</nd>
```

### Table description

Item	Description
Feature name	nd
Table name	ndIfTable
Table type	Multi-instance table
Row name	ndIfTable
Restrictions	This table supports interface types: Layer 3 Ethernet subinterface Layer 3 aggregate subinterface Layer 3 L3VE subinterface
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Interface name	Index	String Value range:1 to 47.	Only Layer 3 physical interfaces are supported. Some versions support interface name. For relevant information, see the XSD

Column name	Column description	Column type	Data type and restrictions	Remarks
				document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
interAccessVlanEnabled	Enable ND proxy between sub-interface VLANs	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	N/A
externalAccessVlanEnabled	Enable ND proxy between sub-interface VLANs	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	Not used
internalAccessVlanEnabled	Enable ND proxy in sub-interface VLANs	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	Not used

# Contents

- nd ..... 1
  - nd/ndIfTables ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1

# nd

## nd/ndIfTables

This table contains ND configuration on interfaces.

### XML structure

```
<nd xmlns="http://www.gsta.com/netconf/gsta-nd">
  <ndIfTables>
    <ndIfTable>
      <ifName></ifName>
      <interAccessVlanEnabled></interAccessVlanEnabled>
      <externalAccessVlanEnabled></externalAccessVlanEnabled>
      <internalAccessVlanEnabled></internalAccessVlanEnabled>
    </ndIfTable>
  </ndIfTables>
</nd>
```

### Table description

Item	Description
Feature name	nd
Table name	ndIfTable
Table type	Multi-instance table
Row name	ndIfTable
Restrictions	This table supports interface types: Layer 3 Ethernet subinterface Layer 3 aggregate subinterface Layer 3 L3VE subinterface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Interface name	Index	String Value range: 1 to 47.	Only Layer 3 physical interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see

Column name	Column description	Column type	Data type and restrictions	Remarks
				"Appendix" in Ifmgr NETCONF XML API Configuration Reference.
interAccessVlanEnabled	Enable ND proxy between sub-interface VLANs	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
externalAccessVlanEnabled	Enable ND proxy between sub-interface VLANs	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Not used
internalAccessVlanEnabled	Enable ND proxy in sub-interface VLANs	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Not used

# Contents

Gsta-route-policy.....	3
Gsta-route-policy/RTP.....	3
Gsta-route-policy/RTP/TunnelSelectors .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/	
MatchCondition .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/	
MatchCondition/ MatchDestPrefixFilters .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/	
TunnelSelectNode/MatchCondition/MatchDestPrefixFilters/ MatchDestPrefixFilter .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/	
MatchCondition/ MatchIPv4NextHops .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/	
MatchCondition/ MatchIPv4NextHops/ MatchIPv4NextHop .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/	
MatchCondition/MatchIPv6NextHops .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/	
MatchCondition/MatchIPv6NextHops/MatchIPv6NextHop .....	14
XML structure .....	14
Table description .....	14
Columns .....	15

Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/MatchCommunityFilters .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/MatchCondition/MatchCommunityFilters/MatchCommunityFilter .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/MatchRdFilters .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/MatchRdFilters /MatchRdFilter .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ applyAction .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ applyAction /ApplyTnIPolicys .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ applyAction /ApplyTnIPolicys/ApplyTnIPolicy .....	21
XML structure .....	21
Table description .....	21
Columns .....	21



# Gsta-route-policy

## Gsta-route-policy/RTP

### Gsta-route-policy/RTP/TunnelSelectors

This table contains route policy tunnel selector information.

#### XML structure

```
<gsta-route-policy>
  <rtp>
    <tunnelSelectors>
      <tunnelSelector>
        <name></name>
        <tunnelSelectorNodes>
          <tunnelSelectorNode>
            <nodeSequence></nodeSequence>
            <matchMode></matchMode>
            <matchCondition>
              <matchDestPrefixFilters>
                <matchDestPrefixFilter>
                  <prefixName></prefixName>
                </matchDestPrefixFilter>
              </matchDestPrefixFilters>
              <matchIPv4NextHops>
                <matchIPv4NextHop>
                  <matchType></matchType>
                  <prefixName></prefixName>
                  <aclNameOrNum></aclNameOrNum>
                </matchIPv4NextHop>
              </matchIPv4NextHops>
              <matchIPv6NextHops>
                <matchIPv6NextHop>
                  <ipv6PrefixName></ipv6PrefixName>
                </matchIPv6NextHop>
              </matchIPv6NextHops>
              <matchCommunityFilters>
                <matchCommunityFilter>
                  <wholeMatch></wholeMatch>
                  <cmntyNameOrNum></cmntyNameOrNum>
                </matchCommunityFilter>
              </matchCommunityFilters>
              <matchRdFilters>
                <matchRdFilter>
                  <rdIndex></rdIndex>
                </matchRdFilter >
              </matchRdFilters>
            </matchCondition>
            <applyAction>
              <applyTnlPolicys>
                <applyTnlPolicy>
                  <tnlPolicyName></tnlPolicyName>
                </applyTnlPolicy>
              </applyTnlPolicys>
            </applyAction>
          </tunnelSelectorNode>
        </tunnelSelectorNodes>
      </tunnelSelector>
    </tunnelSelectors>
  </rtp>
</gsta-route-policy>
```

```
</tunnelSelector>  
</tunnelSelectors>  
</rtp>  
</gsta-route-policy>
```

## Table description

Item	Description
Feature name	rtp
Table name	tunnelSelectors
Table type	Multi-instance table
Row name	tunnelSelector
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
tunnelSelector	Tunnel selector.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector

This table contains list of tunnel selectors

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	tunnelselector
Table type	Single-instance table

Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Name of a tunnel selector.	Index	String, case-sensitive. Length: 1 to 40 characters.	N/A
tunnelselectnodes	List of tunnel selector nodes.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes

This table contains list of tunnel selector nodes.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	TunnelSelectNodes
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
tunnelselectnode	Tunnel selector node.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode

This table contains tunnel selector node information.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	tunnelselectnode
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Name of a tunnel selector.	Index	String, case-sensitive. Length: 1 to 40 characters.	N/A
nodeSequence	Sequence number of a	Index	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Name of a tunnel selector. node.	Index	String, case-sensitive. Length: 1 to 40 characters.	N/A
matchMode	Matching mode of nodes.	type: rtpMatchMode; mandatory: true;	enumeration <ul style="list-style-type: none"> <li>Permit</li> <li>deny</li> </ul>	Perform create or replace operation, Mode can't be empty. Perform Merge operation to create a row, Mode can't be empty. Not support delete or remove operation.
matchCondition	Match type list.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition table.
applyAction	Set type list.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ applyAction table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition

This table contains match type list.

### XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	MatchCondition
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
matchDestPrefixFilters	Match IPv4 destination addresses by the prefix filter.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/tunnelselectnodes/tunnelselectnode/matchCondition/matchDestPrefixFilters table.
matchIPv4NextHops	Match IPv4 next hops by the prefix filter.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/tunnelselectnodes/tunnelselectnode/matchCondition/matchIPv4NextHops table.
matchIPv6NextHops	Match IPv6 destination addresses by the prefix filter.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/tunnelselectnodes/tunnelselectnode/matchCondition/matchIPv6NextHops table.
matchCommuni	Match	Subtable	N/A	For more

Column name	Column description	Column type	Data type and restrictions	Remarks
tyFilters	community attribute filters.			information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ tunnelselectnodes/ tunnelselectnode/ matchCondition/ matchCommunity Filters table.
matchRdFilters	Match RD filters.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ tunnelselectnodes/ tunnelselectnode/ matchCondition/ matchRdFilters table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/ MatchDestPrefixFilters

This table contains information of matching IPv4 destination addresses by the prefix filter..

### XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

### Table description

Item	Description
Feature name	rtp
Table name	matchDestPrefixFilters
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
matchDestPrefixFilter	Match IPv4 destination addresses by the prefix filter.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/TunnelSelectNode/MatchCondition/MatchDestPrefixFilters/ MatchDestPrefixFilter table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/TunnelSelectNode/MatchCondition/MatchDestPrefixFilters/ MatchDestPrefixFilter

This table contains information of matching IPv4 destination addresses by the prefix filter.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	MatchDestPrefixFilter
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Name of a tunnel selector.	Index	String, case-sensitive. Length: 1 to 40 characters.	N/A
nodeSequence	Sequence number of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
prefixName	Name of the specified prefix filter when IPv4 destination addresses are matched.	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/ MatchIPv4NextHops

This table contains information of matching IPv4 next hops by the prefix filter or ACL filter.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	MatchIPv4NextHops
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MatchIPv4NextHop	Match IPv4 next hops by the prefix filter.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/ MatchIPv4NextHops/ MatchIPv4NextHop table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/ MatchIPv4NextHops/ MatchIPv4NextHop

This table contains information of matching IPv4 next hops by the prefix filter or ACL filter.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	MatchIPv4NextHop
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Name of a tunnel selector.	Index	String, case-sensitive. Length: 1 to 40 characters.	N/A
nodeSequence	Sequence number of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
matchType	Match type. IPv4 next hops are matched with either the prefix or ACL.	N/A	enumeration <ul style="list-style-type: none"><li>matchNHopPF</li><li>matchNHopAcl</li></ul>	N/A
prefixName	Match IGP routes with the specified tag	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
aclNameOrNum	Name of the specified ACL when next hops are matched.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/MatchIPv6NextHops

This table contains information of matching IPv6 next hops by the IPv6 prefix filter.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	MatchIPv6NextHops
Table type	Single-instance table
Row name	N/A
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MatchIPv6NextHop	Match IPv6 destination addresses by the prefix filter.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelector/MatchCondition/MatchIPv6NextHops/MatchIPv6NextHop table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelector/MatchCondition/MatchIPv6NextHops/MatchIPv6NextHop

This table contains information of matching IPv6 next hops by the IPv6 prefix filter.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	MatchIPv6NextHop
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Name of a tunnel selector.	Index	String, case-sensitive. Length: 1 to 40 characters.	N/A
nodeSequence	Sequence number of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ipv6PrefixName	Name of the specified prefix filter when IPv6 next hops are matched.	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/MatchCommunityFilters

This table contains information of a matching community attribute filter.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	MatchCommunityFilters
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MatchCommunityFilter	Match a community	Subtable	N/A	For more information, see

Column name	Column description	Column type	Data type and restrictions	Remarks
	attribute filter.			the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/TunnelSelectNode/MatchCondition/MatchCommunityFilters / MatchCommunity Filter table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/TunnelSelectNode/MatchCondition/MatchCommunityFilters/MatchCommunityFilter

This table contains information of a matching community attribute filter.

### XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

### Table description

Item	Description
Feature name	rtp
Table name	MatchCommunityFilter
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Name of a tunnel selector.	Index	String, case-sensitive. Length: 1 to 40 characters.	N/A
nodeSequence	Sequence	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	number of a node.		Value range: 0 to 65535.	
wholeMatch	All the communities are matched. It is valid to only basic community attribute filters.	N/A	type boolean; default "false"	N/A
cmntyNameOrNum	Name or index of a community attribute filter.	Index	The ID of a basic community attribute filter is an integer ranging from 1 to 99; the ID of an advanced community attribute filter is an integer ranging from 100 to 199. The name of a community attribute filter is a string of 1 to 63 characters.	N/A

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/MatchRdFilters

This table contains information of matching RD filters.

### XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

### Table description

Item	Description
Feature name	rtp
Table name	MatchRdFilters
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
matchRdFilter	Match an RD filter.	Subtable	Unit32 1-65535	For more information, see the RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/MatchRdFilters /MatchRdFilter table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ MatchCondition/MatchRdFilters /MatchRdFilter

This table contains information of a matching RD filter.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	MatchRdFilter
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Name of a tunnel selector.	Index	String, case-sensitive. Length: 1 to 40 characters.	N/A
nodeSequence	Sequence number of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
rdIndex	Index of an RD filter.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ applyAction

This table contains information of setting type list.

## XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

## Table description

Item	Description
Feature name	rtp
Table name	applyAction
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
applyTnlPolicys	Set tunnel policies.	Subtable	N/A	For more information, see the RTP/TunnelSelect

Column name	Column description	Column type	Data type and restrictions	Remarks
				tors/TunnelSelector/ tunnelselectnodes/tunnelselectnode/ applyAction / applyTnlPolicys table.

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ applyAction /ApplyTnlPolicys

This table contains information of setting tunnel policies.

### XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

### Table description

Item	Description
Feature name	rtp
Table name	ApplyTnlPolicys
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApplyTnlPolicy	Name of a tunnel selector.	Subtable	N/A	For more information, see the RTP/TunnelSelectors/TunnelSelector/ tunnelselectnodes/tunnelselectnode/ applyAction / applyTnlPolicys table.

Column name	Column description	Column type	Data type and restrictions	Remarks
				e/ applyAction / applyTnlPolicys/ applyTnlPolicy table

## Gsta-route-policy/RTP/TunnelSelectors/TunnelSelector/TunnelSelectNodes/ TunnelSelectNode/ applyAction /ApplyTnlPolicys/ApplyTnlPolicy

This table contains information of setting a tunnel policy.

### XML structure

Please refer to the XML structure of RTP/TunnelSelectors.

### Table description

Item	Description
Feature name	rtp
Table name	ApplyTnlPolicy
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Name of a tunnel selector.	Index	String, case-sensitive. Length: 1 to 40 characters.	N/A
nodeSequence	Sequence number of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
tnlPolicyName	Name of a tunnel policy	N/A	String, case-sensitive. Length: 1 to 19 characters.	N/A

# Contents

- GTS .....1
  - GTS/Interfaces .....1
  - XML structure .....1
  - Table description .....1
  - Columns .....1

# GTS

## GTS/Interfaces

This table contains information about generic traffic shaping (GTS) policies.

### XML structure

```
<GTS>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Type></Type>
      <Value></Value>
      <BandwidthUnit></BandwidthUnit>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <QueueLength></QueueLength>
      <PIR></PIR>
    </Interface>
  </Interfaces>
</GTS>
```

### Table description

Item	Description
Feature name	GTS
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API

Column name	Column description	Column type	Data type and restrictions	Remarks
				Configuration Reference.
Type	Match type	Index	Enumeration : <ul style="list-style-type: none"> <li>1—Any.</li> <li>2—IPv4Acl.</li> <li>3—IPv6Acl.</li> <li>4—queue.</li> </ul>	N/A
Value	Match type value	Index	Unsigned integer.	<p>When <b>Type</b> is <b>1</b>, this column only can be configured as 0.</p> <p>When <b>Type</b> is <b>2</b>, the value is 2000~5999.</p> <p>When <b>Type</b> is <b>3</b>, the value is 2000~3999.</p> <p>When <b>Type</b> is <b>4</b>, the value is 0~7.</p>
BandwidthUnit	Bandwidth unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—kbps (default).</li> <li>3—percent.</li> </ul>	N/A
CIR	Committed information rate	N/A	Unsigned integer.	<p>Required.</p> <p>When <b>BandwidthUnit</b> is 2, the value range for this column depends on the device model.</p> <p>When <b>BandwidthUnit</b> is 3, the value range is 1 to 100.</p>
CBS	Committed burst size	N/A	Unsigned integer.	<p>When <b>BandwidthUnit</b> is 2, the value range for this column depends on the device model.</p> <p>When <b>BandwidthUnit</b> is 3, the value range is 50 to 2000.</p>
EBS	Excess burst size	N/A	Unsigned integer.	<p>If <b>CBS</b> or <b>PIR</b> is not configured, <b>EBS</b> cannot be configured.</p> <p>When <b>BandwidthUnit</b> is 2, the value range for this column depends on the device model.</p> <p>When <b>BandwidthUnit</b> is 3, the value range is 0 to 2000.</p>
PIR	Peak information rate	N/A	Unsigned integer.	<p>When <b>BandwidthUnit</b> is 2, the value range for this column depends on the device model.</p> <p>When <b>BandwidthUnit</b> is 3, the value range is 1 to 100.</p>
QueueLength	Queue length	N/A	Unsigned integer.	The value range for this column depends on the

Column name	Column description	Column type	Data type and restrictions	Remarks
				device model.

# Contents

GTS .....	1
GTS/Interfaces .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
GTS/IfCapabilities .....	3
XML structure .....	3
Table description .....	3
Columns .....	4



# GTS

## GTS/Interfaces

This table contains information about generic traffic shaping (GTS) policies.

### XML structure

```
<GTS>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Type></Type>
      <Value></Value>
      <BandwidthUnit></BandwidthUnit>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <QueueLength></QueueLength>
      <PassedPkts></PassedPkts>
      <DiscardedPkts></DiscardedPkts>
      <DelayedPkts></DelayedPkts>
      <PassedPBytes></PassedBytes>
      <DiscardedBytes></DiscardedBytes>
      <DelayedBytes></DelayedBytes>
      <QueueSize></QueueSize>
    </Interface>
  </Interfaces>
</GTS>
```

### Table description

Item	Description
Feature name	GTS
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Type	Match type	Index	Enumeration : <ul style="list-style-type: none"> <li>1—Any.</li> <li>2—IPv4Acl.</li> <li>3—IPv6Acl.</li> <li>4—queue.</li> </ul>	N/A
Value	Match type value	Index	Unsigned integer.	When <b>Type</b> is <b>1</b> , this column only can be configured as 0. When <b>Type</b> is <b>2</b> , the value is 2000~5999. When <b>Type</b> is <b>3</b> , the value is 2000~3999. When <b>Type</b> is <b>4</b> , the value is 0~7.
BandwidthUnit	Bandwidth Unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—kbps.</li> <li>3—percent.</li> </ul>	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
QueueLength	Queue length	N/A	Unsigned integer.	N/A
PassedPkts	Number of pass packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedPkts	Number of discard packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DelayedPkts	Number of delay packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
PassedBytes	Number of pass bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Number of discard bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DelayedBytes	Number of delay bytes	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to $2^{64} - 1$ .	
QueueSize	Queue size	N/A	Unsigned integer.	N/A

## GTS/IfCapabilities

This table contains generic traffic shaping (GTS) capabilities of interfaces.

### XML structure

```

<GTS>
  <IfCapabilities>
    <Capability>
      <IfIndex></IfIndex>
      <IfTokenPara></IfTokenPara>
      <CIRMin></CIRMin>
      <CIRMax></CIRMax>
      <CIRGranularity></CIRGranularity>
      <CBSMin></CBSMin>
      <CBSMax></CBSMax>
      <CBSGranularity></CBSGranularity>
      <EBSMin></EBSMin>
      <EBSMax></EBSMax>
      <EBSGranularity></EBSGranularity>
      <PIRMin></PIRMin>
      <PIRMax></PIRMax>
      <PIRGranularity></PIRGranularity>
      <QueueMin></QueueMin>
      <QueueMax></QueueMax>
      <QueueDefault></QueueDefault>
    </Capability>
  </IfCapabilities>
</GTS>

```

### Table description

Item	Description
Feature name	GTS
Table name	IfCapabilities
Table type	Multi-instance table
Row name	Capability
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
IfTokenPara	Token bucket capability	N/A	Each bit represents a type as follows: <ul style="list-style-type: none"> <li>• 1—CBS.</li> <li>• 2—EBS.</li> <li>• 4—PIR.</li> </ul>	N/A
CIRMin	Minimum CIR value in kbps	N/A	Unsigned integer.	N/A
CIRMax	Maximum CIR value in kbps	N/A	Unsigned integer.	N/A
CIRGranularity	Granularity of CIR in kbps	N/A	Unsigned integer.	N/A
CBSMin	Minimum CBS value in bytes	N/A	Unsigned integer.	N/A
CBSMax	Maximum CBS value in bytes	N/A	Unsigned integer.	N/A
CBSGranularity	Granularity of CBS in bytes	N/A	Unsigned integer.	N/A
EBSMin	Minimum EBS value in bytes	N/A	Unsigned integer.	N/A
EBSMax	Maximum EBS value in bytes	N/A	Unsigned integer.	N/A
EBSGranularity	Granularity of EBS in bytes	N/A	Unsigned integer.	N/A
PIRMin	Minimum PIR value in kbps	N/A	Unsigned integer.	N/A
PIRMax	Maximum PIR value in kbps	N/A	Unsigned integer.	N/A
PIRGranularity	Granularity of PIR in kbps	N/A	Unsigned integer.	N/A
QueueMin	Minimum queue length value	N/A	Unsigned integer.	N/A
QueueMax	Maximum queue length value	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
QueueDefault	Default queue length value	N/A	Unsigned integer.	N/A

# Contents

HardwareQueue .....	1
HardwareQueue/QueueMode .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
HardwareQueue/QueueParameter .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
HardwareQueue/QMProfiles .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
HardwareQueue/QMProfileQueue .....	4
XML structure .....	4
Table description .....	4
Columns .....	5

# HardwareQueue

## HardwareQueue/QueueMode

This table contains information about queue schedule mode on an interface.

### XML structure

```
<HardwareQueue>
  <QueueMode>
    <Queue>
      <IfIndex></IfIndex>
      <Mode></Mode>
    </Queue>
  </QueueMode>
</HardwareQueue>
```

### Table description

Item	Description
Feature name	HardwareQueue
Table name	QueueMode
Table type	Multi-instance table
Row name	Queue
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Mode	Queue schedule mode on an interface.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—SP.</li><li>• 2—Weight WRR.</li><li>• 3—Bytecount WRR.</li><li>• 4—Weight WFQ.</li><li>• 5—Bytecount WFQ.</li></ul>	The default priority trust mode on an interface varies by device.

# HardwareQueue/QueueParameter

This table contains information about schedule parameters for the queues on an interface.

## XML structure

```
<HardwareQueue>
  <QueueParameter>
    <Queue>
      <IfIndex></IfIndex>
      <QueueID></QueueID>
      <GroupID></GroupID>
      <Weight></Weight>
      <ByteCount></ByteCount>
      <MinBandwidthKbps></MinBandwidthKbps>
    </Queue>
  </QueueParameter>
</HardwareQueue>
```

## Table description

Item	Description
Feature name	HardwareQueue
Table name	QueueParameter
Table type	Multi-instance table
Row name	Queue
Restrictions	When queue schedule mode on an interface is SP, do not support this table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product.
QueueID	Queue ID	Index	Unsigned integer Value range: 0 to 15.	N/A
GroupID	Group ID	N/A	Unsigned integer	Value 0 indicates the queue is in group SP.
Weight	Queue weight	N/A	Unsigned integer	The value is valid only when the scheduling unit



Column name	Column description	Column type	Data type and restrictions	Remarks
				is weight.
ByteCount	Queue byte-count	N/A	Unsigned integer	The value is valid only when the scheduling unit is byte-count.
MinBandwidth Kbps	Value of minimum bandwidth	N/A	Unsigned integer	The value is valid only when the queue is a WFQ queue.

## HardwareQueue/QMProfiles

This table contains information about queue scheduling profile.

### XML structure

```

<HardwareQueue>
  <QMProfiles>
    <Qmprofile>
      <Name></Name>
      <Mode></Mode>
      <Type></Type>
    </Qmprofile>
  </QMProfiles>
</HardwareQueue>

```

### Table description

Item	Description
Feature name	HardwareQueue
Table name	QMProfiles
Table type	Multi-instance table
Row name	Qmprofile
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Queue scheduling profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Mode	Queue scheduling	N/A	Enumeration: • 0—Advanced.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	profile mode		<ul style="list-style-type: none"> <li>1—Basic.</li> </ul>	
Type	Queue scheduling profile type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Eight-queue.</li> <li>1—Four-queue.</li> </ul>	N/A

## HardwareQueue/QMProfileQueue

This table contains information about schedule parameters for the queues on a QMProfile.

### XML structure

```

<HardwareQueue>
  <QMProfileQueue>
    <Queue>
      <Name></Name>
      <QueueID></QueueID>
      <Mode></Mode>
      <GroupID></GroupID>
      <Unit></Unit>
      <Value></Value>
      <MinBandwidthKbps></MinBandwidthKbps>
      <MaxBandwidthKbps></MaxBandwidthKbps>
      <ServiceType></ServiceType>
    </Queue>
  </QMProfileQueue>
</HardwareQueue>

```

### Table description

Item	Description
Feature name	HardwareQueue
Table name	QMProfileQueue
Table type	Multi-instance table
Row name	Queue
Restrictions	When queue scheduling profile is not created, this table is not supported.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Queue scheduling profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
QueueID	Queue ID	Index	Unsigned integer Value range: 0 to 15.	N/A
Mode	Queue mode type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—SP.</li> <li>2—WRR.</li> <li>3—WFQ.</li> </ul>	When the operation is remove or delete want to set default value. If the item of <i>Mode</i> is change. The other column items will be default value.
GroupID	Group ID	N/A	Unsigned integer	When the Queue mode type is SP. The <i>GroupID</i> can't be set. When the operation is remove or delete want to set default value. the item of <i>Mode</i> must to be set.
Unit	Scheduling unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Weight.</li> <li>2—Bytecount.</li> </ul>	When the Queue mode type is SP. The <i>Scheduling Uint</i> can't be set. When the operation is remove or delete want to set default value. the item of <i>Mode</i> must to be set.
Value	Scheduling value	N/A	Unsigned integer	When the Queue mode type is SP. The <i>Scheduling Value</i> can't be set. When the operation is remove or delete want to set default value. the item of <i>Mode</i> must to be set.
MinBandwidth Kbps	Minimum bandwidth in kbps	N/A	Unsigned integer	The value of this column depends on the device model.
MaxBandwidth hKbps	Maximum bandwidth in kbps	N/A	Unsigned integer	The value of this column depends on the device model.
ServiceType	ServiceType	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—HSI.</li> <li>1—STB.</li> <li>2—VOIP</li> </ul>	N/A

# Contents

HardwareQueue .....	1
HardwareQueue/QueueMode .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
HardwareQueue/QueueParameter .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
HardwareQueue/QMPProfiles .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
HardwareQueue/QMPProfileQueue .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
HardwareQueue/DefaultQueueMode .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
HardwareQueue/DefaultQueueParameter .....	6
XML structure .....	6
Table description .....	7
Columns .....	7

# HardwareQueue

## HardwareQueue/QueueMode

This table contains information about queue schedule mode on an interface.

### XML structure

```
<HardwareQueue>
  <QueueMode>
    <Queue>
      <IfIndex></IfIndex>
      <Mode></Mode>
    </Queue>
  </QueueMode>
</HardwareQueue>
```

### Table description

Item	Description
Feature name	HardwareQueue
Table name	QueueMode
Table type	Multi-instance table
Row name	Queue
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product.
Mode	Queue schedule mode on an interface	N/A	Enumeration: <ul style="list-style-type: none"><li>1—SP.</li><li>2—Weight WRR.</li><li>3—Bytecount WRR.</li><li>4—Weight WFQ.</li><li>5—Bytecount WFQ.</li></ul>	The default priority trust mode on an interface varies by device

# HardwareQueue/QueueParameter

This table contains information about schedule parameters for the queues on an interface.

## XML structure

```
<HardwareQueue>
  <QueueParameter>
    <Queue>
      <IfIndex></IfIndex>
      <QueueID></QueueID>
      <GroupID></GroupID>
      <Weight></Weight>
      <ByteCount></ByteCount>
      <MinBandwidthKbps></MinBandwidthKbps>
    </Queue>
  </QueueParameter>
</HardwareQueue>
```

## Table description

Item	Description
Feature name	HardwareQueue
Table name	QueueParameter
Table type	Multi-instance table
Row name	Queue
Restrictions	When queue schedule mode on an interface is SP, do not support this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product.
QueueID	Queue ID	Index	Unsigned integer Value range: 0 to 15.	N/A
GroupID	Group ID.	N/A	Unsigned integer	Value 0 indicates the queue is in group SP.
Weight	Queue weight	N/A	Unsigned integer	N/A
ByteCount	Queue byte-count	N/A	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MinBandwidth Kbps	Value of minimum bandwidth	N/A	Unsigned integer	The value is valid only when the queue is a WFQ queue.

## HardwareQueue/QMProfiles

This table contains information about queue scheduling profile.

### XML structure

```

<HardwareQueue>
  <QMProfiles>
    <Qmprofile>
      <Name></Name>
      <Mode></Mode>
      <Type></Type>
    </Qmprofile>
  </QMProfiles>
</HardwareQueue>

```

### Table description

Item	Description
Feature name	HardwareQueue
Table name	QMProfiles
Table type	Multi-instance table
Row name	Qmprofile
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Queue scheduling profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Mode	Queue scheduling profile mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Advanced.</li> <li>1—Basic.</li> </ul>	N/A
Type	Queue scheduling profile Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Eight-queue.</li> <li>1—Four-queue.</li> </ul>	N/A

# HardwareQueue/QMProfileQueue

This table contains information about schedule parameters for the queues on a QMProfile.

## XML structure

```
<HardwareQueue>
  <QMProfileQueue>
    <Queue>
      <Name></Name>
      <QueueID></QueueID>
      <Mode></Mode>
      <GroupID></GroupID>
      <Unit></Unit>
      <Value></Value>
      <MinBandwidthKbps></MinBandwidthKbps>
      <MaxBandwidthKbps></MaxBandwidthKbps>
      <ServiceType></ServiceType>
    </Queue>
  </QMProfileQueue>
</HardwareQueue>
```

## Table description

Item	Description
Feature name	HardwareQueue
Table name	QMProfileQueue
Table type	Multi-instance table
Row name	Queue
Restrictions	When queue scheduling profile not creat, do not support this table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Queue scheduling profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
QueueID	Queue ID	Index	Unsigned integer Value range: 0 to 15.	N/A
Mode	Queue mode type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—SP.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—WRR.</li> <li>3—WFQ.</li> </ul>	
GroupID	Group ID	N/A	Unsigned integer	Value 0 indicates the queue is in group SP.
Unit	Scheduling unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Weight.</li> <li>2—Bytecount.</li> </ul>	N/A
Value	Scheduling value	N/A	Unsigned integer	N/A
MinBandwidth Kbps	Minimum bandwidth	N/A	Unsigned integer	N/A
MaxBandwidth hKbps	Maximum bandwidth	N/A	Unsigned integer	N/A
ServiceType	Service tpe	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—HSI.</li> <li>1—STB.</li> <li>2—VOIP</li> </ul>	N/A

## HardwareQueue/DefaultQueueMode

This table contains information about default capability and schedule queue mode for an interface.

### XML structure

```

<HardwareQueue>
  <DefaultQueueMode>
    <Queue>
      <IfType></IfType>
      <ScheduleMode></ScheduleMode>
      <ScheduleUnit></ScheduleUnit>
      <QueueNum></QueueNum>
      <BasicMode></BasicMode>
      <MaxBandWidth1></MaxBandWidth1>
      <MaxBandWidth2></MaxBandWidth2>
      <MaxBandWidth3></MaxBandWidth3>
      <MaxBandWidth4></MaxBandWidth4>
    </Queue>
  </DefaultQueueMode>
</HardwareQueue>

```

## Table description

Item	Description
Feature name	HardwareQueue
Table name	DefaultQueueMode
Table type	Multi-instance table
Row name	Queue
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfType	Interface type	index	Unsigned integer Value range: 0 to 255.	N/A
ScheduleMode	Schedule Mode	N/A	Unsigned integer	N/A
ScheduleUnit	Schedule Unit	N/A	Unsigned integer	N/A
QueueNum	Queue Number	N/A	Unsigned integer	Value is 0 when queue is sp.
BasicMode	Basic Mode	N/A	Unsigned interger	N/A
MaxBandWidth1	Gourp Max BandWidth	N/A	Unsigned interger	N/A
MaxBandWidth2	Gourp Max BandWidth	N/A	Unsigned interger	N/A
MaxBandWidth3	Gourp Max BandWidth	N/A	Unsigned interger	N/A
MaxBandWidth4	Gourp Max BandWidth	N/A	Unsigned interger	N/A

## HardwareQueue/DefaultQueueParameter

This table contains information about default queue parameter for an interface.

## XML structure

```
<HardwareQueue>
  <DefaultQueueParameter>
    <Queue>
      <IfType></IfType>
      <QueueID></QueueID>
      <SetMask></SetMask>
      <MinBandWidth></MinBandWidth>
```

```

    <QueueLength></QueueLength>
    <Group></Group>
    <ScheduleValue></ScheduleValue>
    <MaxBandWidth></MaxBandWidth>
    <ServiceType></ServiceType>
    <MinBandWidthPct></MinBandWidthPct>
  </Queue>
</DefaultQueueParameter>
</HardwareQueue>

```

## Table description

Item	Description
Feature name	HardwareQueue
Table name	DefaultQueueParameter
Table type	Multi-instance table
Row name	Queue
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfType	Interface type	Index	Unsigned integer Value range: 0 to 255.	N/A
QueueID	Queue ID	Index	Unsigned integer	N/A
SetMask	Set Mask	N/A	Unsigned integer	N/A
MinBandWidth	Min BandWidth	N/A	Unsigned integer	N/A
QueueLength	Queue length	N/A	Unsigned integer	N/A
Group	Group	N/A	Unsigned integer	N/A
ScheduleValue	Schedule Value	N/A	Unsigned integer	N/A
MaxBandWidth	Max BandWidth	N/A	Unsigned integer	N/A
ServiceType	Service Type	N/A	Unsigned integer	N/A
MinBandWidthPct	Min BandWidth percentage	N/A	Unsigned integer	N/A

# Contents

HQ .....1

    HQ.....1

# HQ

# HQ

Message	Explanation
Please enable WFQ queuing first. 请先使能WFQ队列调度模式。	Configure or modify WFQ should enable WFQ queuing first. 配置WFQ队列或修改WFQ队列参数需要在端口队列为WFQ调度模式下使用。
This queue scheduler mode is not enabled. 队列调度模式未使能。	When delete queue scheduler mode, the interface should already configure the scheduler mode. 删除队列调度模式时需要与当前接口的队列调度模式匹配。
Queue is not supported. 不支持该队列。	Queue is not supported. 不支持该队列。
The scheduling units must be the same. 队列调度权重的单位必须相同。	The scheduling units must be the same. 队列调度权重的单位必须相同。
Failed to apply the queue management profile. The minimum bandwidth can't exceed the interface bandwidth. 应用队列调度策略失败。最小保证带宽值不能超过接口带宽值。	Failed to apply the queue management profile. The minimum bandwidth can't exceed the interface bandwidth. 应用队列调度策略失败。最小保证带宽值不能超过接口带宽值。
The number of queue management profiles has reached the upper limit. 队列调度策略数量已达上限。	When create, the number of queue management profiles has reached the upper limit. 创建队列调度策略时队列调度策略数量已达上限。
The queue management profile doesn't exist. 队列调度策略不存在。	When apply, the queue management profile doesn't exist. 应用队列调度策略时策略不存在。
Another queue management profile has been applied. 已应用另一个队列调度策略。	Another queue management profile has been applied. 应用队列调度策略时该对象已应用其他策略。
The profile doesn't support WFQ and WRR queue types at the same time. 不支持WRR+WFQ的队列组合。	The profile doesn't support WFQ and WRR queue types at the same time. 队列调度策略存在非SP队列时需要检测WRR模式和WFQ模式冲突。
A queue schedule value in this queue management profile is out of range on the interface. 队列调度权重的值超出合法范围。	A queue schedule value in this queue management profile is out of range on the interface. 队列调度权重的值超出合法范围。
Maximum bandwidth can't be smaller than the minimum bandwidth. 最大限制带宽的值不能小于最小保证带宽的值。	Maximum bandwidth can't be smaller than the minimum bandwidth. 最大限制带宽的值不能小于最小保证带宽的值。
The profile name has been used by another queue management profile. 队列调度策略名称已存在。	When create, the profile name has been used by another queue management profile. 创建队列调度策略时名称已被占用。
Type of queue management profile is incorrect. 队列调度策略的类型无效。	Type of queue management profile is incorrect. 队列调度策略的类型无效。

<p>The operation conflicts with some existing configurations.</p> <p>该操作与已经存在的配置发生冲突。</p>	<p>The operation conflicts with some existing configurations such as GTS.</p> <p>配置队列调度策略和GTS冲突。</p>
<p>Can't delete the queue scheduling profile, because it has been applied.</p> <p>该调度策略不能被删除，因为已经被应用。</p>	<p>Can't delete the queue scheduling profile, because it has been applied.</p> <p>不能删除已经被应用的调度策略。</p>

# Contents

<b>IB</b> .....	1
IB/IbBackup/Table.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
IB/IbTrack/Table .....	2
XML structure.....	2
Table description.....	2
Columns.....	3
IB/IbBackupInfo/Table.....	3
XML structure.....	3
Table description.....	3
Columns.....	4

# IB

## IB/IbBackup/Table

This table contains interface backup configuration information.

### XML structure

```
<IB>
  <IbBackup>
    <Backup>
      <IfIndex></IfIndex>
      <BackupIfIndex></BackupIfIndex>
      <Priority></Priority>
    </Backup>
  </IbBackup>
</IB>
```

### Table description

Item	Description
Feature name	IB
Table name	IbBackup
Table type	Multi-instance table
Row name	Backup
Restrictions	<p>An interface can only be the backup of one interface.</p> <p>A primary interface cannot be configured as a backup interface at the same time.</p> <p>A main interface and its subinterfaces cannot be the backup of each other.</p> <p>The primary and backup interfaces cannot be members of a logical link. For example, they cannot be members of a Layer 3 aggregation group.</p>
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
BackupIfIndex	Interface index.	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Priority	I Priority of interface.	N/A	Unsigned integer Value range: 0 to 255. Default: 0.	N/A

## IB/IbTrack/Table

This table contains backup track configuration information.

## XML structure

```

<IB>
  <IbTrack>
    <Track>
      <IfIndex></IfIndex>
      <TrackNum></TrackNum>
    </Track>
  </IbTrack>
</IB>

```

## Table description

Item	Description
Feature name	IB
Table name	IbTrack
Table type	Multi-instance table
Row name	Track

Restrictions	<p>If you have configured the backup interface command on the primary interface, you cannot configure the backup track command on the primary or backup interface.</p> <p>If you have associated a backup interface with a track entry, you cannot configure the backup interface command on it or specify it as a backup interface by using the backup interface command.</p>
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
TrackNum	Track entry number	N/A	Unsigned integer. Value range: 1 to 1024.	N/A

## IB/IbBackupInfo/Table

This table contains primary interface configuration about backup.

## XML structure

```

<IB>
  <IbBackupInfo>
    <BackupInfo>
      <IfIndex></IfIndex>
      <UpperThreshold></UpperThreshold>
      <LowerThreshold></LowerThreshold>
      <UpDelay></UpDelay>
      <DownDelay></DownDelay>
      <FlowCheck></FlowCheck>
    </BackupInfo>
  </IbBackupInfo>
</IB>

```

## Table description

Item	Description
Feature name	IB

Table name	IbBackupInfo
Table type	Multi-instance table
Row name	BackupInfo
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
UpperThresh hold	Upper-threshold	N/A	Unsigned integer Value range: 1 to 99.	N/A
LowerThresh hold	Lower-threshold	N/A	Unsigned integer Value range: 1 to 99.	N/A
UpDelay	Up-delay	N/A	Unsigned integer Value range: 1 to 65535. Default: 5	Unit: seconds
DownDelay	Down-delay	N/A	Unsigned integer Value range: 1 to 65535. Default: 5	Unit: seconds
FlowCheck	Flow-check time	N/A	Unsigned integer Value range: 30 to 600. Default: 30	Unit: seconds

# Contents

<b>IB</b> .....	1
IB/IbBackup/Table.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
IB/IbTrack/Table .....	2
XML structure.....	2
Table description.....	3
Columns.....	3
IB/IbBackupInfo/Table.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
IB/IbBackupStatistics/Table.....	4
XML structure.....	5
Table description.....	5
Columns.....	5

# IB

## IB/IbBackup/Table

This table contains interface backup configuration information.

### XML structure

```
<IB>
  <IbBackup>
    <Backup>
      <IfIndex></IfIndex>
      <BackupIfIndex></BackupIfIndex>
      <Priority></Priority>
      <State></State>
    </Backup>
  </IbBackup>
</IB>
```

### Table description

Item	Description
Feature name	IB
Table name	IbBackup
Table type	Multi-instance table
Row name	Backup
Restrictions	<p>An interface can only be the backup of one interface.</p> <p>A primary interface cannot be configured as a backup interface at the same time.</p> <p>A main interface and its subinterfaces cannot be the backup of each other.</p> <p>The primary and backup interfaces cannot be members of a logical link. For example, they cannot be members of a Layer 3 aggregation group.</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
BackupIfIndex	Interface index.	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Priority	Priority of interface.	N/A	Unsigned integer Value range: 0 to 255.	N/A
State	State of the backup interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—INVALID.</li> <li>1—UP.</li> <li>2—DOWN.</li> <li>3—UP_DELAY.</li> <li>4—DOWN_DELAY.</li> <li>5—STANDBY.</li> </ul>	N/A

## IB/IbTrack/Table

This table contains backup track configuration information.

## XML structure

```

<IB>
  <IbTrack>
    <Track>
      <IfIndex></IfIndex>
      <TrackNum></TrackNum>
    </Track>
  </IbTrack>
</IB>

```

## Table description

Item	Description
Feature name	IB
Table name	IbTrack
Table type	Multi-instance table
Row name	Track
Restrictions	<p>If you have configured the backup interface command on the primary interface, you cannot configure the backup track command on the primary or backup interface.</p> <p>If you have associated a backup interface with a track entry, you cannot configure the backup interface command on it or specify it as a backup interface by using the backup interface command.</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
TrackNum	Track entry number	N/A	Unsigned integer. Value range: 1 to 1024.	N/A

## IB/IbBackupInfo/Table

This table contains primary interface configuration about backup.

## XML structure

```
<IB>
  <IbBackupInfo>
    <BackupInfo>
      <IfIndex></IfIndex>
      <UpperThreshold></UpperThreshold>
      <LowerThreshold></LowerThreshold>
      <UpDelay></UpDelay>
      <DownDelay></DownDelay>
      <FlowCheck></FlowCheck>
      <State></State>
```

```

    </BackupInfo>
  </IbBackupInfo>
</IB>

```

## Table description

Item	Description
Feature name	IB
Table name	IbBackupInfo
Table type	Multi-instance table
Row name	BackupInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
UpperThres hold	Upper-threshold	N/A	Unsigned integer Value range: 1 to 99.	N/A
LowerThres hold	Lower-threshold	N/A	Unsigned integer Value range: 1 to 99.	N/A
UpDelay	Up-delay	N/A	Unsigned integer Value range: 1 to 65535.	Unit: seconds
DownDelay	Down-delay	N/A	Unsigned integer Value range: 1 to 65535.	Unit: seconds
FlowCheck	Flow-check time	N/A	Unsigned integer Value range: 30 to 600.	Unit: seconds
State	State of the primary interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—INVALID.</li> <li>1—UP.</li> <li>2—DOWN.</li> <li>3—UP_DELAY.</li> <li>4—DOWN_DELAY.</li> </ul>	N/A

## IB/IbBackupStatistics/Table

This table contains statistics information about backup interface.



## XML structure

```
<IB>
  <IbBackupStatistics>
    <BackupStatistics>
      <IfIndex></IfIndex>
      <StatisticsInterval></StatisticsInterval>
      <Bandwidth></Bandwidth>
      <PrimaryTotalIn></PrimaryTotalIn>
      <PrimaryTotalOut></PrimaryTotalOut>
      <PrimaryIntervalIn></PrimaryIntervalIn>
      <PrimaryIntervalOut></PrimaryIntervalOut>
      <PrimaryUsedBandwidth></PrimaryUsedBandwidth>
      <TotalIn></TotalIn>
      <TotalOut></TotalOut>
      <TotalIntervalIn></TotalIntervalIn>
      <TotalIntervalOut></TotalIntervalOut>
      <TotalUsedBandwidth></TotalUsedBandwidth>
    </BackupStatistics>
  </IbBackupStatistics>
</IB>
```

## Table description

Item	Description
Feature name	IB
Table name	IbBackupStatistics
Table type	Multi-instance table
Row name	BackupStatistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
StatisticsInterval	Traffic polling interval	N/A	Unsigned integer.	Unit: seconds

Column name	Column description	Column type	Data type and restrictions	Remarks
Bandwidth	Expected bandwidth of the primary interface.	N/A	Unsigned integer.	Unit: bps
PrimaryTotalIn	Cumulative sum of incoming bytes on the primary interface at the most recent traffic polling.	N/A	Unsigned integer.	Unit: seconds
PrimaryTotalOut	Cumulative sum of outgoing bytes on the primary interface at the most recent traffic polling.	N/A	Unsigned integer.	Unit: seconds
PrimaryIntervalIn	Number of incoming bytes on the primary interface for the most recent polling interval.	N/A	Unsigned integer.	Unit: seconds
PrimaryIntervalOut	Number of outgoing bytes on the primary interface for the most recent polling interval.	N/A	Unsigned integer.	Unit: seconds
PrimaryUsedBandwidth	The primary interface's used bandwidth that was counted in load sharing computation.	N/A	Unsigned integer.	Unit: bps
TotalIn	Cumulative sum of incoming bytes on the load-shared primary and backup interfaces at the most recent traffic polling.	N/A	Unsigned integer.	Unit: seconds
TotalOut	Cumulative sum of outgoing bytes on the load-shared primary and backup interfaces at the most recent traffic polling.	N/A	Unsigned integer.	Unit: seconds
TotalIntervalIn	Number of incoming bytes on the load-shared primary and backup interfaces for the most recent polling interval.	N/A	Unsigned integer.	Unit: seconds

Column name	Column description	Column type	Data type and restrictions	Remarks
TotalIntervalOut	Number of outgoing bytes on the load-shared primary and backup interfaces for the most recent polling interval.	N/A	Unsigned integer.	Unit: seconds
TotalUsedBandwidth	Total used bandwidth (in bps) of the load-shared primary and backup interfaces for the most recent polling interval.	N/A	Unsigned integer.	Unit: bps

# Contents

Comware 7 IB NETCONF XML API Error Message Reference .....1

    IB/IbBackupInfo ..... 1

# Comware 7 IB NETCONF XML API Error Message Reference

## IB/IbBackupInfo

Message	Explanation
This configuration is supported only on the primary interface. 仅主接口上支持本配置。	The interface is a backup interface. 当前接口是备份接口。
Please configure a backup interface first. 请先为当前接口配置备份接口。	The interface is not a primary interface. 当前接口不是主接口。

# Contents

Ifmgr.....	1
Ifmgr/Interfaces .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Ifmgr/ClearAllIfStatistics .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
Ifmgr/SubInterfaces .....	2
XML structure.....	3
Table description.....	3
Columns.....	3
Ifmgr/LogicInterfaces .....	4
XML structure.....	4
Table description.....	4
Columns.....	4
Ifmgr/VirtualCableTest .....	5
XML structure.....	5
Responded XML structure.....	5
Table description.....	6
Columns.....	6
Responded Columns.....	6

# Ifmgr

## Ifmgr/Interfaces

This table contains interface action information.

### XML structure

```
<Ifmgr>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Clear></Clear>
      <Default></Default>
      <Loopback></Loopback>
    </Interface>
  </Interfaces>
</Ifmgr>
```

### Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.	Index	Unsigned integer.
Clear	Clears interface statistics.	N/A	This column must be empty.
Default	Restore default settings.	N/A	This column must be empty.

Column name	Column description	Column type	Data type and restrictions
Loopback	Interface loopback testing.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Internal</li> <li>2—External</li> </ul> Applicable to only Ethernet interfaces and AUX interfaces which loopback testing can be auto stopped.

## Ifmgr/ClearAllIfStatistics

This table is used to clear statistics on all interfaces.

### XML structure

```

<Ifmgr>
  <ClearAllIfStatistics>
    <Clear></Clear>
  </ClearAllIfStatistics>
</Ifmgr>

```

### Table description

Item	Description
Feature name	Ifmgr
Table name	ClearAllIfStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clears statistics on all interfaces.	N/A	This column must be empty.

## Ifmgr/SubInterfaces

This table is used to create or delete sub-interfaces.



## XML structure

```
<Ifmgr>
  <SubInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <SubNum></SubNum>
      <Remove></Remove>
    </Interface>
  </SubInterfaces>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	SubInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer	<ul style="list-style-type: none"><li>• Create: Interface index of parent interface.</li><li>• Delete: Interface index of the sub-interface. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.</li></ul>
SubNum	Sub-interface number.	N/A	Unsigned integer	<ul style="list-style-type: none"><li>• Applicable to only create a sub-interface</li><li>• This column must be specified when create a sub-interface.</li><li>• The range of SubNum is reference in table</li></ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				of InterfaceCapabilities which in Data API.
Remove	Delete specified sub-interface.	N/A	This column must be empty.	Applicable to only delete a sub-interface

## Ifmgr/LogicInterfaces

This table is used to create or delete logic interfaces.

### XML structure

```

<Ifmgr>
  <LogicInterfaces>
    <Interface>
      <IfTypeExt></IfTypeExt>
      <Number></Number>
      <Remove></Remove>
    </Interface>
  </LogicInterfaces>
</Ifmgr>

```

### Table description

Item	Description
Feature name	Ifmgr
Table name	LogicInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfTypeExt	The type of interface.	Index	Unsigned integer	<p>IfTypeExt is Reference in table of Ifmgr/Interfaces.which in Data API.</p> <p>The supported logic interface type as follow:</p> <ul style="list-style-type: none"> <li>16—IF_LOOPBACK_TYPE</li> <li>41—IF_VLAN_TYPE</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				PE <ul style="list-style-type: none"> <li>• 56—IF_BAGG_T TYPE</li> <li>• 67—IF_RAGG_T TYPE</li> <li>• 110— IF_RETH_TYPE</li> <li>• 114— IF_SSLVPNAC_T TYPE</li> </ul>
Number	Number of the logic interface.	Index	Unsigned integer	The range of Number is Reference in table of InterfaceCapabilities which in Data API.
Remove	Delete specified logic interface.	N/A	This column must be empty.	Applicable to only delete a logic interface.

## Ifmgr/VirtualCableTest

This table is used to test the cable connection of Ethernet interfaces and get the test results.

### XML structure

```

<Ifmgr>
  <VirtualCableTest>
    <Interface>
      <IfIndex></IfIndex>
    </Interface>
  </VirtualCableTest>
</Ifmgr>

```

### Responded XML structure

```

<Ifmgr>
  <VirtualCableTest>
    <Interface>
      <IfIndex></IfIndex>
      <CableStatus></CableStatus>
      <CableLen></CableLen>
      <Mismatch></Mismatch>
      <PairSkew></PairSkew>
      <PairSwap></PairSwap>
      <PairPolarity></PairPolarity>
      <InsertionLoss></InsertionLoss>
      <ReturnLoss></ReturnLoss>
      <NearEndCrosstalk></NearEndCrosstalk>
    </Interface>
  </VirtualCableTest>
</Ifmgr>

```

```

    </Interface>
  </VirtualCableTest>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	VirtualCableTest
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Layer 2 interfaces of FastEthernet, GigabitEthernet and Ten-GigabitEthernet.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## Responded Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	
<b>CableStatus</b>	Cable status of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0—The test failed.</b></li> <li><b>1—Normal, the cable is in good condition.</b></li> <li><b>2—Abnormal (open), an open circuit is detected.</b></li> <li><b>3—Abnormal (short), a short circuit is detected.</b></li> <li><b>4—Abnormal, the cable is abnormal.</b></li> </ul>	
<b>CableLen</b>	Cable length of an interface	N/A	Unsigned integer, in metres.	

Column name	Column description	Column type	Data type and restrictions	Remarks
<b>Mismatch</b>	Pair impedance mismatch information of an interface	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>• <b>0xffffffff</b>—Not support</li> <li>• <b>0</b>—Mismatch</li> <li>• Others—Match</li> </ul>	
<b>PairSkew</b>	Pair skew information of an interface	N/A	Unsigned integer, in ns. The value is 0xffffffff if not support.	
<b>PairSwap</b>	Pair swap information of an interface	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>• <b>0xffffffff</b>—Not support</li> <li>• <b>0</b>—Normal</li> <li>• Others—Swap</li> </ul>	
<b>PairPolarity</b>	Pair <b>polarity</b> information of an interface	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>• <b>0xffffffff</b>—Not support</li> <li>• <b>0</b>—Normal</li> <li>• Others—Swap</li> </ul>	
<b>InsertionLoss</b>	Insertion loss information of an interface	N/A	Unsigned integer, in db. The value is 0xffffffff if not support.	
<b>ReturnLoss</b>	Return loss information of an interface	N/A	Unsigned integer, in db. The value is 0xffffffff if not support.	
<b>NearEndCrosstalk</b>	Near-end crosstalk of an interface	N/A	Unsigned integer, in db. The value is 0xffffffff if not support.	

# Contents

Ifmgr.....	1
Ifmgr/Interfaces .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
For information about the string type, see "Ifmgr/ShutdownInterval .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
Appendix" .....	3
Ifmgr/TrafficStatistics/Interval .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
Ifmgr/EthInterfaces .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
For information about the string type, see "Ifmgr/ShutdownInterval .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
Appendix" .....	8
Ifmgr/StormConstrain/Interfaces .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
For information about the string type, see "Ifmgr/ShutdownInterval .....	11
XML structure .....	12
Table description .....	12
Columns .....	13
Appendix" .....	13
Ifmgr/StormConstrain/Interval .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
Ifmgr/PortIsolation/Groups .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
Ifmgr/PortIsolation/Interfaces .....	16
XML structure .....	17
Table description .....	17
Columns .....	17
For information about the string type, see "Ifmgr/ShutdownInterval .....	17
XML structure .....	18
Table description .....	18
Columns .....	19
Appendix" .....	19
Ifmgr/ReserveVlanInterface .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
Ifmgr/CellularChannel .....	20
XML structure .....	20
Table description .....	20
Columns .....	21

For information about the string type, see "Ifmgr/ShutdownInterval .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
Appendix" .....	22
Ifmgr/NewSubInterfaces .....	23
XML structure .....	23
Table description .....	23
Columns .....	23
Some versions support interface name. For relevant information, see the XSD document of your product. For	
information about the string type, see "Ifmgr/ShutdownInterval .....	24
XML structure .....	25
Table description .....	25
Columns .....	25
Appendix" .....	25
Ifmgr/ShutdownInterval .....	26
XML structure .....	26
Table description .....	26
Columns .....	26
<b>Appendix .....</b>	<b>26</b>

# Ifmgr

## Ifmgr/Interfaces

This table contains basic interface information.

### XML structure

```
<Ifmgr>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Description></Description>
      <AdminStatus></AdminStatus>
      <ConfigSpeed></ConfigSpeed>
      <ConfigDuplex></ConfigDuplex>
      <PortLayer></PortLayer>
      <LinkType></LinkType>
      <PVID></PVID>
      <MAC></MAC>
      <Loopback></Loopback>
      <MDI></MDI>
      <ConfigMTU></ConfigMTU>
      <ConfigBandwidth></ConfigBandwidth>
      <Interval></Interval>
      <ForceUP></ForceUP>
      <KeepAlive></KeepAlive>
      <KeepAliveRetry></KeepAliveRetry>
      <TrafficStatisticsEnable></TrafficStatisticsEnable>
      <SubIfRateStatisticsEnable></SubIfRateStatisticsEnable>
    </Interface>
  </Interfaces>
</Ifmgr>
```

### Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	<p>For information about the string type, see "<a href="#">Ifmgr/ShutDownInterval</a>"</p> <p>This table contains the shutdown recovery interval for ports.</p> <p><b>XML structure</b></p> <pre>&lt;Ifmgr&gt;  &lt;ShutDownInterval&gt;  &lt;Interva</pre>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<div> <div>  &gt;&lt;/Interval&gt; &lt;/ShutdownInterval&gt; &lt;/Ifmgr&gt; &gt; </div> <div> Table description </div> <div> <div> Item Featu Table Table Restri Suppo </div> <div> Columns </div> <div> <div> Column name Interval </div> </div> </div> <div> Appendix" </div> </div>
Description	Interface description	N/A	String. Length: 1 to 255 characters. Default: <i>interface-name</i> <b>Interface.</b>	N/A
AdminStatus	Interface administration status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Up (default).</li> <li>2—Down.</li> </ul>	N/A
ConfigSpeed	Configured speed of an interface.	N/A	Each bit represents a speed. As follows: <ul style="list-style-type: none"> <li>1—Auto</li> <li>2—10Mbps</li> </ul>	Examples: <ul style="list-style-type: none"> <li>32—Speed is 1000Mbps.</li> <li>37—Auto-ne</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• <b>4</b>—100Mbps</li> <li>• <b>8</b>—155Mbps</li> <li>• <b>16</b>—622Mbps</li> <li>• <b>32</b>—1Gbps</li> <li>• <b>64</b>—2Gbps</li> <li>• <b>128</b>—2.5Gbps</li> <li>• <b>256</b>—4Gbps</li> <li>• <b>512</b>—8Gbps</li> <li>• <b>1024</b>—10Gbps</li> <li>• <b>2048</b>—16Gbps</li> <li>• <b>4096</b>—20Gbps</li> <li>• <b>8192</b>—40Gbps</li> <li>• <b>16384</b>—100Gbps</li> <li>• <b>32768</b>—5Gbps</li> <li>• <b>65536</b>—25Gbps</li> <li>• <b>131072</b>—32Gbps</li> </ul>	gotiation mode, and negotiation values are 100Mbps and 1000Mbps.
ConfigDuplex	Configured duplex mode of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Full.</li> <li>• <b>2</b>—Half.</li> <li>• <b>3</b>—Auto.</li> </ul>	Applicable to only Ethernet interfaces.
PortLayer	Port layer of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Layer 2</li> <li>• <b>2</b>—Layer 3</li> </ul>	Applicable to Ethernet interfaces.
LinkType	VLAN type of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Access (default).</li> <li>• <b>2</b>—Trunk.</li> <li>• <b>3</b>—Hybrid.</li> </ul>	Applicable to only Layer 2 interfaces.
PVID	Port VLAN ID (PVID) of an interface	N/A	Unsigned integer. Value range: 1 to 4094.	Applicable to only Layer 2 interfaces.
MAC	MAC address of an interface	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
Loopback	Loopback test	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—No loopback</li> <li>• <b>1</b>—Internal</li> <li>• <b>2</b>—External</li> </ul>	Applicable to only interfaces of Ethernet and AUX.
MDI	MDI mode of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—MDI-II (straight-through cable)</li> <li>• <b>2</b>—MDI-X (crossover cable)</li> <li>• <b>3</b>—MDI-AUTO (auto-sensing)</li> </ul>	Applicable to only Layer 2 Ethernet interfaces.
ConfigMTU	Configured MTU of an interface	N/A	Unsigned integer.	Applicable to only Layer 3 interfaces.
ConfigBandwidth	Configured expected bandwidth of an	N/A	Unsigned integer. Value range: 1 to 400000000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	interface			
Interval	Sampling interval of an interface	N/A	Unsigned integer. Value range: 5 to 300, in seconds, in step of 5	N/A
ForceUP	Forcibly bring up an interface.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Applicable to only Ethernet and POS interfaces.
KeepAlive	KeepAlive value of an interface	N/A	Unsigned integer. Value range: 0 to 32767.	Applicable to interfaces that support only link layer protocols PPP, HDLC, and Frame Relay.
KeepAliveRetry	KeepAlive retry times of an interface	N/A	Unsigned integer. Value range: 1 to 255.	Applicable to interfaces that support only link layer protocols PPP, HDLC, and Frame Relay.
TrafficStatisticsEnable	Enable interface statistics collection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>	Applicable to only Layer 3 subinterfaces.
SubIfRateStatisticsEnable	Enable rate statistics collection for the subinterfaces of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>	Applicable to only main interface and POS channels.

## Ifmgr/TrafficStatistics/Interval

This table contains traffic sampling interval information of all interfaces.

### XML structure

```

<Ifmgr>
  <TrafficStatistics>
    <Interval>
      <Interval></Interval>
    </Interval>
  </TrafficStatistics>
</Ifmgr>

```

### Table description

Item	Description
Feature name	Ifmgr
Table name	TrafficStatistics

Item	Description
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Sampling interval of all interfaces, in seconds, in step of 5.	N/A	Unsigned integer. Value range: 5 to 300. It can configured only when Configurable" (Reference in table of TrafficStatistics/Interval which in Data API) value is true.

## Ifmgr/EthInterfaces

This table contains Ethernet interfaces information.

## XML structure

```

<Ifmgr>
  <EthInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Combo></Combo>
      <FlowControl></FlowControl>
      <AutoPowerDown></AutoPowerDown>
      <Jumboframe></Jumboframe>
      <BroadcastSuppression>
        <ConfigValue></ConfigValue>
        <Unit></Unit>
      </BroadcastSuppression>
      <MulticastSuppression>
        <ConfigValue></ConfigValue>
        <Unit></Unit>
        <Flag></Flag>
      </MulticastSuppression>
      <UnknownUnicastSuppression>
        <ConfigValue></ConfigValue>
        <Unit></Unit>
      </UnknownUnicastSuppression>
      <BPDUDrop></BPDUDrop>
    </Interface>
  </EthInterfaces>
</Ifmgr>

```

```

        <ConnectMode></ConnectMode>
    </Interface>
</EthInterfaces>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	EthInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	<p>For information about the string type, see "<a href="#">Ifmgr/ShutdownInterval</a>"</p> <p>This table contains the shutdown recovery interval for ports.</p> <p><b>XML structure</b></p>

Column name	Column description	Column type	Data type and restrictions	Remarks								
				<div>&lt;Ifmgr&gt;  &lt;ShutdownInterval&gt;  &lt;Interval&gt;&lt;/Interval&gt;  &lt;/ShutdownInterval&gt;  &lt;/Ifmgr&gt;</div> <div>Table description<div><table><tr><th>Item</th></tr><tr><td>Feature name</td></tr><tr><td>Table name</td></tr><tr><td>Table type</td></tr><tr><td>Restrictions</td></tr><tr><td>Support for</td></tr></table></div></div> <div>Columns<div><table><tr><th>Column name</th></tr><tr><td>Interval</td></tr></table></div></div> <div>Appendix II</div>	Item	Feature name	Table name	Table type	Restrictions	Support for	Column name	Interval
Item												
Feature name												
Table name												
Table type												
Restrictions												
Support for												
Column name												
Interval												
Combo	Combo mode of an interface	N/A	Enumeration: <ul style="list-style-type: none"><li>1—fiber mode</li><li>2—copper mode</li><li>3—auto mode</li></ul>									
FlowControl	Flow control information of an interface	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Enable flow control</li><li>2—Disable</li><li>3—Only enable flow control packet receiving</li></ul>	Applicable to only Physical interfaces.								
AutoPowerD	Port auto power	N/A	Boolean:	Applicable to only								

Column name	Column description	Column type	Data type and restrictions	Remarks
own	down		<ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Physical interfaces.
Jumboframe	Jumbo frame information of an interface	N/A	Unsigned integer, the value is 0 if jumbo frame is disabled on an interface.	
BroadcastSuppression	Broadcast suppression information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>• Value</li> <li>• Unit</li> </ul>	
ConfigValue	Config broadcast suppression value of an interface	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>• ratio: 0 to 100</li> <li>• pps: 0 to 1.4881 * the maximum interface rate.</li> <li>• kbps: 0 to the maximum interface rate</li> </ul>	
Unit	Broadcast suppression unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—ratio</li> <li>• 2—pps</li> <li>• 3—kbps</li> </ul>	
MulticastSuppression	Multicast suppression information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>• Value</li> <li>• Unit</li> </ul>	
ConfigValue	Config multicast suppression value of an interface	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>• ratio: 0 to 100</li> <li>• pps: 0 to 1.4881 * the maximum interface rate.</li> <li>• kbps: 0 to the maximum interface rate</li> </ul>	
Unit	Multicast suppression unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—ratio</li> <li>• 2—pps</li> <li>• 3—kbps</li> </ul>	
Flag	Multicast suppression flag	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—all</li> <li>• 2--unknown</li> </ul>	
UnknownUnicastSuppression	UnknownUnicast suppression information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>• Value</li> <li>• Unit</li> </ul>	
ConfigValue	Config unknownUnicast suppression value of an interface	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>• ratio: 0 to 100</li> <li>• pps: 0 to 1.4881 * the maximum interface rate.</li> <li>• kbps: 0 to the maximum interface rate</li> </ul>	
Unit	UnknownUnicast	N/A	Enumeration:	



Column name	Column description	Column type	Data type and restrictions	Remarks
	t suppression unit		<ul style="list-style-type: none"> <li>• 1—ratio</li> <li>• 2—pps</li> <li>• 3—kbps</li> </ul>	
BPDUDrop	Whether any type of IEEE BPDUs is drop on the port.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Applicable to only Layer 2 Physical interfaces.
EEE	Whether energy efficient ethernet is enable on the port.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Applicable to only Physical interfaces.
ConnectMode	Port connection mode of an interface.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Normal connection mode</li> <li>• 2—Extend connection mode</li> </ul>	Applicable to only Layer 2 10GE Physical interfaces.

## Ifmgr/StormConstrain/Interfaces

This table contains interface storm constrain information.

### XML structure

```

<Ifmgr>
  <StormConstrain>
    <Interfaces>
      <Interface>
        <IfIndex></IfIndex>
        <CtlMode></CtlMode>
        <Trap></Trap>
        <Log></Log>
        <Broadcast>
          <Upper></Upper>
          <Lower></Lower>
          <Unit></Unit>
        </Broadcast>
        <Multicast>
          <Upper></Upper>
          <Lower></Lower>
          <Unit></Unit>
        </Multicast>
        <UnknownUnicast>
          <Upper></Upper>
          <Lower></Lower>
          <Unit></Unit>
        </UnknownUnicast>
        <KnownUnicast>

```

```

    <Upper></Upper>
    <Lower></Lower>
    <Unit></Unit>
  </KnownUnicast>
</Interface>
</Interfaces>
</StormConstrain>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Layer 2 physical Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	For information about the string type, see "Ifmgr/ShutdownInter"

Column name	Column description	Column type	Data type and restrictions	Remarks						
				<div><div>val</div><div>This table contains the shutdown recovery interval for ports.</div><div>XML structure</div><div>&lt;lfrmgr&gt;  &lt;ShutdownInterval&gt;  &lt;Interval&gt;&lt;/Interval&gt;  &lt;/ShutdownInterval&gt;  &lt;/lfrmgr&gt;</div><div>Table description</div><div><table><tr><th>Item</th></tr><tr><td>Feature</td></tr><tr><td>Table</td></tr><tr><td>Table</td></tr><tr><td>Restriction</td></tr><tr><td>Support</td></tr></table></div></div>	Item	Feature	Table	Table	Restriction	Support
Item										
Feature										
Table										
Table										
Restriction										
Support										

Column name	Column description	Column type	Data type and restrictions	Remarks
				<div>Columns</div> <div>Column name</div> <div>Interval</div> <div>Appendix"</div>
CtlMode	Storm constrain protective action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—N/A</li> <li>1—Block</li> <li>2—Shutdown</li> </ul>	
Trap	Event trap switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	
Log	Event log switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	
Broadcast	Broadcast storm constrain information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>Upper</li> <li>Lower</li> <li>Unit</li> </ul>	The Upper value must be not less than the Lower value.
Upper	Broadcast upper threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Lower	Broadcast lower threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Unit	Broadcast threshold unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pps</li> <li>2—ratio</li> <li>3—kbps</li> </ul>	
Multicast	Multicast storm constrain information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>Upper</li> <li>Lower</li> <li>Unit</li> </ul>	The Upper value must be not less than the Lower value.

Column name	Column description	Column type	Data type and restrictions	Remarks
Upper	Multicast upper threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Lower	Multicast lower threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Unit	Multicast threshold unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pps</li> <li>2—ratio</li> <li>3—kbps</li> </ul>	
UnknownUnicast	Unknown-unicast storm constrain information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>Upper</li> <li>Lower</li> <li>Unit</li> </ul>	The Upper value must be not less than the Lower value.
Upper	Unknown-unicast upper threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Lower	Unknown-unicast lower threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Unit	Unknown-unicast unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pps</li> <li>2—ratio</li> <li>3—kbps</li> </ul>	
KnownUnicast	Known-unicast storm constrain information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>Upper</li> <li>Lower</li> <li>Unit</li> </ul>	The Upper value must be not less than the Lower value.
Upper	Known-unicast upper threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Lower	Known-unicast lower threshold	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the</li> </ul>	

Column name	Column description	Column type	Data type and restrictions	Remarks
	value		maximum interface rate <ul style="list-style-type: none"> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Unit	Known-unicast unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pps</li> <li>2—ratio</li> <li>3—kbps</li> </ul>	

## Ifmgr/StormConstrain/Interval

This table contains storm constrain traffic collection interval information.

### XML structure

```

<Ifmgr>
  <StormConstrain>
    <Interval>
      <Interval></Interval>
    </Interval>
  </StormConstrain>
</Ifmgr>

```

### Table description

Item	Description
Feature name	Ifmgr
Table name	Interval
Table type	Single-instance table
Row name	N/A
Restrictions	
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Traffic statistics collection interval for storm constrain, in seconds.	N/A	Unsigned integer. Value range: 1 to 300.

# Ifmgr/PortIsolation/Groups

This table contains port isolation groups information.

## XML structure

```
<Ifmgr>
  <PortIsolation>
    <Groups>
      <Group>
        <IsolatedGroupID></IsolatedGroupID>
      </Group>
    </Groups>
  </PortIsolation>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	Applicable to only Layer 2 interfaces of Ethernet and aggregation. The maximum group ID are in the MaxGroupNum column in the Ifmgr/PortIsolation/Capabilities table. If the maximum is 1: <ul style="list-style-type: none"><li>Isolation group 1 is created automatically after device started.</li><li>Isolation group 1 cannot be created or deleted.</li></ul>
Support for row creation and deletion	Yes If the maximum is not 1. <ul style="list-style-type: none"><li><b>Yes</b>—If the maximum group ID value is not 1.</li><li><b>No</b>—If the maximum group ID value is 1.</li></ul>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IsolatedGroupID	Isolation group ID.	Index	Unsigned integer.	

# Ifmgr/PortIsolation/Interfaces

This table contains interface isolation information.

## XML structure

```
<Ifmgr>
  <PortIsolation>
    <Interfaces>
      <Interface>
        <IfIndex></IfIndex>
        <IsolatedGroupID></IsolatedGroupID>
      </Interface>
    </Interfaces>
  </PortIsolation>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Layer 2 interfaces of Ethernet and Aggregation.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	For information about the string type, see "Ifmgr/ Shutdo



Column name	Column description	Column type	Data type and restrictions	Remarks
				<div><div>wnInterval</div><div>This table contains the shutdown recovery interval for ports.</div><div>XML structure</div><div>&lt;lfmgr&gt;  &lt;ShutdownInterval&gt;  &lt;Interval&gt;&lt;/Interval&gt;  &lt;/ShutdownInterval&gt; &lt;/lfmgr&gt;</div><div>Table description</div></div>

Item
Feature
Table
Table
Restriction
Support

Column name	Column description	Column type	Data type and restrictions	Remarks
				Columns
				Appendix"
IsolatedGroup ID	Port isolation group ID of an interface	N/A	Unsigned integer.	

## Ifmgr/ReserveVlanInterface

This table contains the reservation of VLAN interface resources.

### XML structure

```

<Ifmgr>
  <ReserveVlanInterface>
    <VlanInterface>
      <Type></Type>
      <VlanList></VlanList>
    </VlanInterface>
  </ReserveVlanInterface>
</Ifmgr>

```

### Table description

Item	Description
Feature name	Ifmgr
Table name	ReserveVlanInterface
Table type	Multi-instance table
Row name	VlanInterface
Restrictions	N/A
Support for row creation and deletion	NO

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Whether the reservation of VLAN interface resources is global or local.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Global.</li> <li>2—Local.</li> </ul>	The reservation of global VLAN interface resources or local VLAN interface resources.
VlanList	List of VLANs for the reservation of VLAN interface resources.	N/A	Number string.  It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20  The item is permitted to be incrementally edited. You can set the flag like "<VlanList base:incremental='true'>". If the value is true, the VLAN list can be added or removed. Otherwise, it is the final result.

## Ifmgr/CellularChannel

This table contains sub channel creating information of cellular controller.

## XML structure

```

<Ifmgr>
  <CellularChannel>
    <Interface>
      <IfIndex></IfIndex>
      <CreateMode></CreateMode>
      <ChannelNum></ChannelNum>
    </Interface>
  </CellularChannel>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	CellularChannel
Table type	Multi-instance table

Row name	Interface
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
-------------	--------------------	-------------	----------------------------	---------

IfIndex

Interface index.

Index

Unsigned integer

For information about the string type, see "Ifmgr/ShutdownInterval"

This table contains the shutdown recovery interval for ports.

XML structure

<Ifmgr>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ShutdownInterval>
				<Interval></Interval>
				</ShutdownInterval>
				</Ifmgr>
				>

## Table description

Item
Feature
Table
Table
Restriction
Support

## Columns

Column name
Interval

## Appendix"

Column name	Column description	Column type	Data type and restrictions	Remarks
CreateMode	The mode of creating sub channel.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—serial-set</li> <li>2—eth-channel</li> </ul>	N/A
ChannelNum	Sub channel number.	Index	Unsigned integer	N/A

## Ifmgr/NewSubInterfaces

This table contains creating information of sub-interfaces.

### XML structure

```

<Ifmgr>
  <NewSubInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <SubNum></SubNum>
    </Interface>
  </NewSubInterfaces>
</Ifmgr>

```

### Table description

Item	Description
Feature name	Ifmgr
Table name	NewSubInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer	Interface index of the main interface.

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>Some versions support interface name. For relevant information, see the XSD document of your product. For information about the string type, see "<a href="#">Ifmgr/ShutdownInterval</a>"</p> <p>This table contains the shutdown recovery interval for ports.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks								
				<div><h2>XML structure</h2><pre>&lt;Ifmgr&gt;  &lt;ShutdownInterval&gt;  &lt;Interval&gt;&lt;/Interval&gt;  &lt;/ShutdownInterval&gt;  &lt;/Ifmgr&gt;</pre></div> <div><h2>Table description</h2><table><tr><th>Item</th></tr><tr><td>Feature name</td></tr><tr><td>Table name</td></tr><tr><td>Table type</td></tr><tr><td>Restrictions</td></tr><tr><td>Support for</td></tr></table></div> <div><h2>Columns</h2><table><tr><th>Column name</th></tr><tr><td>Interval</td></tr></table></div> <div><h2>Appendix</h2><p>"</p></div>	Item	Feature name	Table name	Table type	Restrictions	Support for	Column name	Interval
Item												
Feature name												
Table name												
Table type												
Restrictions												
Support for												
Column name												
Interval												
SubNum	Sub-interface number.	Index	Unsigned integer	The range for SubNum is shown in table of InterfaceCapabilities in Ifmgr NETCONF XML API Data Reference.								



# Ifmgr/ShutdownInterval

This table contains the shutdown recovery interval for ports.

## XML structure

```
<Ifmgr>
  <ShutdownInterval>
    <Interval></Interval>
  </ShutdownInterval>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	ShutdownInterval
Table type	Single-instance table
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interval	Shutdown recovery interval in seconds	N/A	Unsigned integer. Value range: 0 to 300.	N/A

## Appendix

A string can contain multiple items that are separated by commas (,). An item can be in one of the following formats:

- *interface name*
- *interface range-name*
- *interface name A to interface name B*

When you use an item in the *interface name* format, follow these restrictions and guidelines:

- Spaces are not allowed between the interface type and interface number.  
Example:  
Correct: GigabitEthernet1/3/0/1  
Incorrect: GigabitEthernet 1/3/0/1
- If the interface name is the same as an existing interface range name, the system sends the request to interfaces in the interface range rather than the interface.  
Example:

If you have configured the **interface range name** *Ten-Giga1/2/0/1 interface GigabitEthernet1/3/0/1 to GigabitEthernet1/3/0/20* command and then use **Ten-Giga1/2/0/1** as an item, the system sends the request to interfaces in the interface range named **Ten-Giga1/2/0/1**.

- If the interface range name is the same as an existing interface index, the system sends the request to the interface rather than interfaces in the interface range.

Example:

If you have configured the **interface range name** *111 interface GigabitEthernet1/3/0/1 to GigabitEthernet1/3/0/20* command and then use *111* as an item, the system sends the request to the interface *GigabitEthernet1/2/0/2*.

Note: the index of **interface** *GigabitEthernet1/2/0/2* is 111.

When you use an item in the *interface range name* format, follow these restrictions and guidelines:

- If the interface range name is in the *interface name A, interface name B* format, the system sends the request to interface A and interface B rather than interfaces in the interface range.

Example:

After you configure the **interface range name** *Ten-Giga1/2/0/1, Ten-Giga1/2/0/2 interface GigabitEthernet1/3/0/1 to GigabitEthernet1/3/0/20* command and then use **Ten-Giga1/2/0/1, Ten-Giga1/2/0/2** as an item, the system sends the request to interfaces *Ten-GigabitEthernet 1/2/0/1* and *Ten-GigabitEthernet 1/2/0/2* rather than interfaces *GigabitEthernet 1/3/0/1* through *GigabitEthernet 1/3/0/20*.

- If the interface range name is in the *interface name A to interface name B* format, the system sends the request to interfaces interface A through interface B rather than interfaces in the interface range.

Example:

After you configure the **interface range name** *Ten-Giga1/2/0/1 to Ten-Giga1/2/0/2 interface GigabitEthernet1/3/0/1 to GigabitEthernet1/3/0/20* command and then use **Ten-Giga1/2/0/1 to Ten-Giga1/2/0/2** as an item, the system sends the request to interfaces *Ten-GigabitEthernet 1/2/0/1* through *Ten-GigabitEthernet 1/2/0/2* rather than interfaces *GigabitEthernet 1/3/0/1* through *GigabitEthernet 1/3/0/20*.

When you use an item in the *interface name A to interface name B* format, follow these restrictions and guidelines:

- The interfaces before and after the word **to** must be of the same type and reside on the same card and sub-card.
- If the interfaces are subinterfaces, they must also belong to the same main interface.
- The end interface number must be larger than the start interface number.

Example:

Incorrect:

*Ten2/0/1 to Ten3/0/2* The start and end interfaces reside on different cards.

*Ten2/0/1 to Ten2/1/2* The start and end interfaces reside on different sub-cards.

*Ten2/0/1 to Ten2/0/1:3* The start and end interfaces are of different types.

*Giga2/0/1 to Ten2/0/25* The start and end interfaces are of different types.

*Ten2/0/3:1 to Ten2/0/4:2* The start and end subinterfaces belong to different main interfaces.

*Ten2/0/3:4 to Ten2/0/3:1* The start interface number is larger than the end interface number.

Correct:

*Ten2/0/1 to Ten2/0/5*

*Ten2/0/1:1 to Ten2/0/1:100*



# Contents

Ifmgr.....	1
Ifmgr/Interfaces .....	1
XML structure .....	1
Table description.....	2
Columns.....	2
Ifmgr/TrafficStatistics/Interfaces .....	10
XML structure .....	10
Table description.....	11
Columns .....	11
Ifmgr/TrafficStatistics/Interval .....	12
XML structure .....	12
Table description.....	12
Columns .....	12
Ifmgr/Statistics.....	12
XML structure .....	12
Table description.....	13
Columns .....	13
Ifmgr/Ports.....	15
XML structure .....	15
Table description.....	15
Columns .....	15
Ifmgr/InterfaceCapabilities .....	15
XML structure .....	16
Table description.....	16
Columns .....	17
Ifmgr/TypeCapabilities .....	19
XML structure .....	19
Table description.....	20
Columns .....	20
Ifmgr/EthInterfaces .....	21
XML structure .....	21
Table description.....	21
Columns .....	22
Ifmgr/EthInterfaceCapabilities .....	24
XML structure .....	24
Table description.....	24
Columns .....	25
Ifmgr/StormConstrain/Interfaces .....	26
XML structure .....	26
Table description.....	27
Columns .....	27
Ifmgr/StormConstrain/Interval .....	30
XML structure .....	30
Table description.....	31
Columns .....	31
Ifmgr/PortIsolation/Groups .....	31
XML structure .....	31
Table description.....	31
Columns .....	32
Ifmgr/PortIsolation/Interfaces.....	32
XML structure .....	32
Table description.....	32
Columns .....	33
Ifmgr/PortIsolation/Capabilities .....	33
XML structure .....	33
Table description.....	33
Columns .....	34

Ifmgr/DeviceCapabilities .....	34
XML structure .....	34
Table description .....	34
Columns .....	34
Ifmgr/ReserveVlanInterface .....	35
XML structure .....	35
Table description .....	35
Columns .....	35
Ifmgr/SubChannel .....	36
XML structure .....	36
Table description .....	36
Columns .....	36
Ifmgr/CellularChannel .....	37
XML structure .....	37
Table description .....	37
Columns .....	38
Ifmgr/NewSubInterfaces .....	38
XML structure .....	38
Table description .....	38
Columns .....	39
Ifmgr/EthPortStatistics .....	39
XML structure .....	39
Table description .....	41
Columns .....	41
Ifmgr/IfHistoryTrafficStatistics .....	45
XML structure .....	45
Table description .....	46
Columns .....	46
Ifmgr/AllHistoryTrafficStatistics .....	47
XML structure .....	47
Table description .....	47
Columns .....	47
Ifmgr/ShutdownInterval .....	48
XML structure .....	48
Table description .....	48
Columns .....	48
Ifmgr/IfRateStatistics .....	48
XML structure .....	48
Table description .....	49
Columns .....	49

# Ifmgr

## Ifmgr/Interfaces

This table contains basic interface information.

### XML structure

```
<Ifmgr>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Name></Name>
      <AbbreviatedName></AbbreviatedName>
      <PortIndex></PortIndex>
      <ifTypeExt></ifTypeExt>
      <ifType></ifType>
      <Description></Description>
      <AdminStatus></AdminStatus>
      <OperStatus></OperStatus>
      <ConfigSpeed></ConfigSpeed>
      <ActualSpeed></ActualSpeed>
      <ConfigDuplex></ConfigDuplex>
      <ActualDuplex></ActualDuplex>
      <PortLayer></PortLayer>
      <LinkType></LinkType>
      <PVID></PVID>
      <InetAddressIPv4></InetAddressIPv4>
      <InetAddressIPv4Mask></InetAddressIPv4Mask>
      <PhysicalIndex></PhysicalIndex>
      <MAC></MAC>
      <ForwardingAttributes></ForwardingAttributes>
      <Loopback></Loopback>
      <MDI></MDI>
      <ConfigMTU></ConfigMTU>
      <ActualMTU></ActualMTU>
      <ConfigBandwidth></ConfigBandwidth>
      <ActualBandwidth></ActualBandwidth>
      <SubPort></SubPort>
      <Interval></Interval>
      <ForceUP></ForceUP>
      <Actual64Bandwidth></Actual64Bandwidth>
      <KeepAlive></KeepAlive>
      <KeepAliveRetry></KeepAliveRetry>
      <DefaultMac></DefaultMac>
      <LastChange></LastChange>
```

```

    <PhyLastChange></PhyLastChange>
    <TrafficStatisticsEnable></TrafficStatisticsEnable>
    <SubIfRateStatisticsEnable></SubIfRateStatisticsEnable>
  </Interface>
</Interfaces>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Name	Full name of an interface	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A
AbbreviatedName	Abbreviated name of an interface	N/A	String. Length: 2 to 47 characters. Example: GE2/0/2	N/A
PortIndex	Port index	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ifTypeExt	Interface extension type	N/A	Unsigned integer.	For more information, see <a href="#">Table 2</a> .
ifType	Interface type	N/A	Unsigned integer.	Additional values for ifType are assigned by the

Column name	Column description	Column type	Data type and restrictions	Remarks
				Internet Assigned Numbers Authority (IANA), through updating the syntax of the IANA ifType textual convention.
Description	Interface description	N/A	String. Length: 1 to 255 characters.	N/A
AdminStatus	Interface administration status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Administratively up.</li> <li>2—Administratively down.</li> </ul>	N/A
OperStatus	Interface operation status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—up.</li> <li>2—down.</li> <li>3—testing.</li> <li>4—unknown.</li> <li>5—dormant.</li> <li>6—notPresent.</li> <li>7—lowerLayerDown.</li> </ul>	For more information, see 0.
ConfigSpeed	Configured speed of an interface, in kbps	N/A	<ul style="list-style-type: none"> <li>Each bit represents a speed</li> <li>As follows:</li> <li>1—Auto</li> <li>2—10Mbps</li> <li>4—100Mbps</li> <li>8—155Mbps</li> <li>16—622Mbps</li> <li>32—1Gbps</li> <li>64—2Gbps</li> <li>128—2.5Gbps</li> <li>256—4Gbps</li> <li>512—8Gbps</li> <li>1024—10Gbps</li> <li>2048—16Gbps</li> <li>4096—20Gbps</li> <li>8192—40Gbps</li> <li>16384—100Gbps</li> <li>32768—5Gbps</li> <li>65536—25Gbps</li> <li>131072—32Gbps</li> </ul>	Examples: <ul style="list-style-type: none"> <li>32—Speed is 1000Mbps.</li> <li>37—Auto-negotiation mode, and negotiation values are 100Mbps and 1000Mbps.</li> </ul>
ActualSpeed	Actual speed of an interface, in kbps	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	Applicable to only Ethernet interfaces.
ConfigDuplex	Configured duplex mode of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Full.</li> <li>2—Half.</li> <li>3—Auto.</li> </ul>	Applicable to only Ethernet interfaces.
ActualDuplex	Actual duplex mode of an	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Full.</li> </ul>	Applicable to only Ethernet interfaces.



Column name	Column description	Column type	Data type and restrictions	Remarks
	interface		<ul style="list-style-type: none"> <li>• 2—Half.</li> <li>• 3—Auto.</li> </ul>	
PortLayer	Port layer of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Layer 2</li> <li>• 2—Layer 3</li> </ul>	N/A
LinkType	VLAN type of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Access.</li> <li>• 2—Trunk.</li> <li>• 3—Hybrid.</li> </ul>	Applicable to only Layer 2 interfaces.
PVID	Port VLAN ID (PVID) of an interface	N/A	Unsigned integer. Value range: 1 to 4094.	Applicable to only Layer 2 interfaces.
InetAddressIPv4	Primary IPv4 address of an interface	N/A	String, dotted decimal notation.	N/A
InetAddressIPv4Mask	Primary IPv4 address mask of an interface	N/A	String, dotted decimal notation.	N/A
PhysicalIndex	Entity index of an interface	N/A	Unsigned integer.	Applicable to only Physical interfaces.
MAC	MAC address of an interface	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A.
ForwardingAttributes	Forwarding attributes of an interface	N/A	Bit mask: <ul style="list-style-type: none"> <li>• 1: Broadcast</li> <li>• 2: Non-Broadcast Multi-Access</li> <li>• 4: Loopback</li> <li>• 8: P2P</li> <li>• 16: Multicast</li> <li>• 32: Network Management Interface</li> </ul>	Applicable to only Layer 3 interfaces.
Loopback	Loopback test	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—No loopback</li> <li>• 1—Internal</li> <li>• 2—External</li> </ul>	Applicable to only interfaces of Ethernet and AUX.
MDI	MDI mode of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—MDI-II (straight-through cable)</li> <li>• 2—MDI-X (crossover cable)</li> <li>• 3—MDI-AUTO (auto-sensing)</li> </ul>	Applicable to only Layer 2 Ethernet interfaces.
ConfigMTU	Configured MTU of an interface	N/A	Unsigned integer.	Applicable to only Layer 3 interfaces.
ActualMTU	Actual MTU of an interface	N/A	Unsigned integer.	Applicable to only Layer 3 interfaces.
ConfigBandwidth	Configured expected	N/A	Unsigned integer. Value range: 1 to 400000000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	bandwidth of an interface			
ActualBandwidth	Bandwidth of an interface	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	If the expected bandwidth has been configured, this field displays the configured expected bandwidth. Otherwise, this field displays the actual bandwidth.
SubPort	Whether the port is sub-interface.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Interval	Sampling interval of an interface	N/A	Unsigned integer. Value range: 5 to 300, in seconds, in step of 5	N/A
ForceUP	Forcibly bring up an interface.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Applicable to only Ethernet and POS interfaces.
Actual64Bandwidth	Bandwidth of an interface	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the expected bandwidth has been configured, this field displays the configured expected bandwidth. Otherwise, this field displays the actual bandwidth.
KeepAlive	KeepAlive value of an interface	N/A	Unsigned integer. Value range: 0 to 32767.	Applicable to interfaces that support only link layer protocols PPP, HDLC, and Frame Relay.
KeepAliveRetry	KeepAlive retry times of an interface	N/A	Unsigned integer. Value range: 1 to 255.	Applicable to interfaces that support only link layer protocols PPP, HDLC, and Frame Relay.
DefaultMac	Default MAC address of an interface	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
LastChange	From last state change time to now.	N/A	String.	N/A
PhyLastChange	From last physical state change time to now.	N/A	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TrafficStatisticsEnable	Enable interface statistics collection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>	Applicable to only Layer 3 subinterfaces.
SubInterfaceStatisticsEnable	Enable rate statistics collection for the subinterfaces of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul>	Applicable to only main interface and POS channels.

**Table 1 Interface operation status**

Value	Operation status	Remarks
1	up	When the administration status of an interface changes to up, the operation status of the interface changes to up if the interface is ready to transmit and receive network traffic.
2	down	<ul style="list-style-type: none"> <li>When the administration status of an interface changes to up, the operation status of the interface remains in the down status if a fault prevents it from going to the up status.</li> <li>When the administration status of an interface changes to down, the operation status of the interface changes to down.</li> </ul>
3	testing	No operation packets can be transmitted or received through the interface.
4	unknown	The operation status of the interface cannot be determined.
5	dormant	When the administration status of an interface changes to up, the operation status of the interface changes to dormant if the interface is waiting for external actions (such as a serial line waiting for an incoming connection).
6	notPresent	When the administration status of an interface changes to up, the operation status of an interface remains in the notPresent status if the interface has missing components (typically hardware).
7	lowerLayerDown	The lower-layer interfaces are down.

**Table 2 Interface extension types**

Value	Interface type	Description
0	IF_COMMON_TYPE	General interface.
1	IF_AM_TYPE	Analog modem interface.
2	IF_ASY_TYPE	Asynchronous serial port.
3	IF_IMA_TYPE	IMA interface.
4	IF_ATM_TYPE	ATM interface.
5	IF_AUX_TYPE	AUX interface.
6	IF_BRI_TYPE	ISDN BRI interface.
7	IF_BVI_TYPE	Bridge-group virtual interface.
8	IF_CONSOLE_TYPE	Console interface.
9	IF_CPOS_TYPE	CPOS interface.
10	IF_DIALER_TYPE	Dialer interface.

Value	Interface type	Description
11	IF_LOCAL_VA_TYPE	Local VA interface, bound to a physical interface.
12	IF_E1_TYPE	E1 interface.
13	IF_E3_TYPE	E3 interface.
14	IF_INETH_TYPE	Internal Ethernet interface.
15	IF_INLOOPBACK_TYPE	Internal loopback interface.
16	IF_LOOPBACK_TYPE	Loopback interface.
17	IF_ENCRYPT_TYPE	Encryption interface.
18	IF_L2ETHERNET_TYPE	Layer 2 FE interface.
19	IF_L2GE_TYPE	Layer 2 GE interface.
20	IF_L2VE_TYPE	Layer 2 VE interface.
21	IF_L2XGE_TYPE	Layer 2 10-GE interface.
22	IF_L3ETHERNET_TYPE	Layer 3 FE interface.
23	IF_L3GE_TYPE	Layer 3 GE interface.
24	IF_L3VE_TYPE	Layer 3 VE interface.
25	IF_L3XGE_TYPE	Layer 3 10-GE interface.
26	IF_ME_TYPE	Management Ethernet interface.
27	IF_MFR_TYPE	MFR interface.
28	IF_MGE_TYPE	Management GE interface.
29	IF_MPGROUP_TYPE	MP-group interface.
30	IF_NULL_TYPE	Null interface.
31	IF_POS_TYPE	POS interface.
32	IF_RPR_POS_TYPE	RPR POS physical interface.
33	IF_RPR_XGE_TYPE	RPR 10-GE physical interface.
34	IF_RPR_GE_TYPE	RPR GE physical interface.
35	IF_SERIAL_TYPE	Serial interface.
36	IF_SUBSCRIBER_LINE_TYPE	Subscriber line interface.
37	IF_T1_TYPE	T1 interface.
38	IF_T3_TYPE	T3 interface.
39	IF_TUNNEL_TYPE	Tunnel interface.
40	IF_GLOBAL_VA_TYPE	Global VA interface, bound to a global logical interface.
41	IF_VLAN_TYPE	VLAN interface.
42	IF_VT_TYPE	VT interface.
43	IF_RADIO_DOT11_TYPE	WLAN-Radio interface.
44	IF_WLAN_ESS_TYPE	WLAN ESS interface.
45	IF_WLAN_DBSS_TYPE	WLAN DBSS interface.
46	IF_WLAN_BSS_TYPE	WLAN BSS interface.

Value	Interface type	Description
47	IF_WLAN_ETH_TYPE	WLAN Ethernet interface.
48	IF_WLAN_TUN_TYPE	WLAN tunnel interface.
49	IF_OLT_TYPE	OLT interface.
50	IF_ONU_TYPE	ONU interface.
51	IF_MTUNNEL_TYPE	M-Tunnel interface.
52	IF_CELLULAR_TYPE	Cellular interface.
53	IF_INASY_TYPE	Internal asynchronous serial interface.
54	IF_L2RPR_TYPE	Layer 2 RPR logical interface.
55	IF_L3RPR_TYPE	Layer 3 RPR logical interface.
56	IF_BAGG_TYPE	Layer 2 aggregate interface.
57	IF_REGISTER_TUNNEL_TYPE	Register-Tunnel interface.
58	IF_LOOPFE_TYPE	Loopback FE interface.
59	IF_LOOPGE_TYPE	Loopback GE interface.
60	IF_LOOPXGE_TYPE	Loopback 10-GE interface.
61	IF_MIRRORFE_TYPE	Mirroring FE interface.
62	IF_MIRRORGE_TYPE	Mirroring GE interface.
63	IF_MIRRORXGE_TYPE	Mirroring 10-GE interface.
64	IF_IDSFE_TYPE	IDS FE interface.
65	IF_IDSGE_TYPE	IDS GE interface.
66	IF_IDSXGE_TYPE	IDS 10-GE interface.
67	IF_RAGG_TYPE	Layer 3 aggregate interface.
68	IF_L2FGE_TYPE	Layer 2 40-GE interface.
69	IF_L2HGE_TYPE	Layer 2 100-GE interface.
70	IF_L3FGE_TYPE	Layer 3 40-GE interface.
71	IF_L3HGE_TYPE	Layer 3 100-GE interface.
72	IF_LOOPFGE_TYPE	Loopback 40-GE interface.
73	IF_LOOPHGE_TYPE	Loopback 100-GE interface.
74	IF_MIRRORFGE_TYPE	Mirroring 40-GE interface.
75	IF_MIRRORHGE_TYPE	Mirroring 100-GE interface.
76	IF_IDSFGGE_TYPE	IDS 40-GE interface.
77	IF_IDSHGE_TYPE	IDS 100-GE interface.
78	IF_FC_TYPE	FC interface.
79	IF_VFC_TYPE	VFC interface.
80	IF_FCB_TYPE	FC bundle interface.
81	IF_EVI_LINK_TYPE	EVI-link interface.
82	IF_SCHANNEL_TYPE	S-channel interface.
83	IF_FCM_TYPE	FCM interface.

Value	Interface type	Description
84	IF_VPPP_TYPE	Virtual PPP interface.
85	IF_TRILL_REMOTE_TYPE	Remote TRILL interface.
86	IF_HDLCBUNDLE_TYPE	HDLC bundle interface.
87	IF_GSCHANNEL_TYPE	Aggregate S-channel interface.
88	IF_L2TGE_TYPE	Layer 2 20-GE interface.
89	IF_L3TGE_TYPE	Layer 3 20-GE interface.
90	IF_LOOPTGE_TYPE	Loopback 20-GE interface.
91	IF_MIRRORTGE_TYPE	Mirroring 20-GE interface.
92	IF_IDSTGE_TYPE	IDS 20-GE interface.
93	IF_AC_TYPE	AC interface.
94	IF_UPW_TYPE	U-PW interface.
95	IF_NPW_TYPE	N-PW interface.
96	IF_TUNNEL_BUNDLE_TYPE	Tunnel bundle interface.
97	IF_EFM_TYPE	EFM interface.
98	IF_MAPPED_TYPE	Mapped interface.
99	IF_CBGE_TYPE	CBGE interface.
100	IF_CBXGE_TYPE	CBXGE interface.
101	IF_CBFGE_TYPE	CBFGE interface.
102	IF_CBHGE_TYPE	CBHGE interface.
103	IF_PEX_TYPE	PEX interface.
104	IF_VE_L2VPN_TYPE	L2VPN virtual Ethernet interface
105	IF_VE_L3VPN_TYPE	L3VPN virtual Ethernet interface
106	IF_BLADE_TYPE	Blade interface
107	IF_BLAGG_TYPE	Blade aggregation interface
108	IF_ETHCHANNEL_TYPE	EtherChannel interface
109	IF_BETH_TYPE	Beth interface
110	IF_RETH_TYPE	Reth interface
111	IF_VSI_TYPE	VSI interface
112	IF_CEM_TYPE	CEM interface
113	IF_INCOMM_TYPE	INCOMM interface
114	IF_SVPNAC_TYPE	SVPN-AC interface
115	IF_LISP_TYPE	LISP interface
116	IF_L2RPRLOCAL_TYPE	Layer 2 RPR interface
117	IF_SCHANNEL_BUNDLE_TYPE	SCHANNEL BUNDLE interface
118	IF_WLAN_MESH_TYPE	WLAN Mesh interface
119	IF_WLAN_MESHLINK_TYPE	WLAN-MeshLink interface
120	IF_CMTUNNEL_TYPE	CMTunnel interface

Value	Interface type	Description
121	IF_L2SGE_TYPE	Layer 2 SGE interface
122	IF_L3SGE_TYPE	Layer 3 SGE interface
123	IF_L2WGE_TYPE	Layer 2 WGE interface
124	IF_L3WGE_TYPE	Layer 3 WGE interface
125	IF_LOOPWGE_TYPE	LOOP WGE interface
126	IF_MIRRORWGE_TYPE	MIRROR WGE interface
127	IF_IDSWGE_TYPE	IDS WGE interface
129	IF_LOOPSGE_TYPE	LOOP SGE interface
130	IF_MIRRORSGE_TYPE	MIRROR SGE interface
131	IF_WTU_ETH_TYPE	WTU ETH interface
132	IF_LOCAL_BAS_IF_TYPE	LOCAL BAS interface
133	IF_GLOBAL_BAS_IF_TYPE	GLOBAL BAS interface
134	IF_L2VGE_TYPE	Layer 2 VGE interface
135	IF_L3VGE_TYPE	Layer 3 VGE interface
136	IF_LOOPVGE_TYPE	LOOP VGE interface
137	IF_MIRRORVGE_TYPE	MIRROR VGE interface
138	IF_IDSVGE_TYPE	IDS VGE interface
139	IF_L2VMETH_TYPE	Layer 2 VMETH interface
140	IF_LORA_RADIO_TYPE	LORA RADIO interface
141	IF_DWDM_TYPE	DWDM interface
142	IF_IDSSGE_TYPE	IDS SGE interface
256	IF_MAX_TYPE	N/A

## Ifmgr/TrafficStatistics/Interfaces

This table contains interface traffic statistics during specific sampling periods.

### XML structure

```

<Ifmgr>
  <TrafficStatistics>
    <Interfaces>
      <Interface>
        <IfIndex></IfIndex>
        <Name></Name>
        <Interval></Interval>
        <InPkts></InPkts>
        <OutPkts></OutPkts>
        <InOctets></InOctets>
        <OutOctets></OutOctets>
      </Interface>
    </Interfaces>
  </TrafficStatistics>
</Ifmgr>

```

```

    <InBits></InBits>
    <OutBits></OutBits>
  </Interface>
</Interfaces>
</TrafficStatistics>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Name	Full name of an interface	N/A	String. Length: 2 to 47 characters.
Interval	Sampling interval of an interface, in seconds	N/A	Unsigned integer. Value range: 5 to 300.
InPkts	Number of inbound packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutPkts	Number of outbound packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InOctets	Number of inbound bytes during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutOctets	Number of outbound bytes during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InBits	Number of inbound bits during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutBits	Number of outbound bits during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .



# Ifmgr/TrafficStatistics/Interval

This table contains traffic sampling interval information of all interfaces.

## XML structure

```
<Ifmgr>
  <TrafficStatistics>
    <Interval>
      <Configurable></Configurable>
      <Interval></Interval>
    </Interval>
  </TrafficStatistics>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Interval
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Configurable	Whether the sampling interval for all interfaces can be configured.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>
Interval	Sampling interval of all interfaces, in seconds.	N/A	Unsigned integer. Value range: 5 to 300. It is valid only when "Configurable" above is true.

# Ifmgr/Statistics

This table contains interface statistics.

## XML structure

```
<Ifmgr>
  <Statistics>
    <Interface>
```

```

<IfIndex></IfIndex>
<Name></Name>
<AbbreviatedName></AbbreviatedName>
<InOctets></InOctets>
<InUcastPkts></InUcastPkts>
<InNUcastPkts></InNUcastPkts>
<InDiscards></InDiscards>
<InErrors></InErrors>
<InUnknownProtos></InUnknownProtos>
<InRate></InRate>
<OutOctets></OutOctets>
<OutUcastPkts></OutUcastPkts>
<OutNUcastPkts></OutNUcastPkts>
<OutDiscards></OutDiscards>
<OutErrors></OutErrors>
<OutRate></OutRate>
<LastClear></LastClear>
<InPktRate></InPktRate>
<OutPktRate></OutPktRate>
</Interface>
</Statistics>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Statistics
Table type	Multi-instance table
Row name	Interface
Restrictions	The statistics can be cleared.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Name	Full name of an interface.	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2
AbbreviatedNa	Abbreviated name of an	N/A	String.

Column name	Column description	Column type	Data type and restrictions
me	interface.		Length: 2 to 47 characters. Example: GE2/0/2
InOctets	Number of inbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InUcastPkts	Number of inbound unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InNUcastPkts	Number of inbound non-unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InDiscards	Number of discarded inbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InErrors	Number of errored inbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InUnknownProtos	Number of unsupported and unknown inbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InRate	Rate of inbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutOctets	Number of outbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutUcastPkts	Number of outbound unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNUcastPkts	Number of outbound non-unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutDiscards	Number of discarded outbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutErrors	Number of errored outbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutRate	Rate of outbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
LastClear	Local time when the statistics on an interface were cleared most recently.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.
InPktRate	Rate of inbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutPktRate	Rate of outbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .

# Ifmgr/Ports

This table contains port information, such as all physical Ethernet interfaces, Layer 2 aggregate interface, Layer 2 VE interface, Layer 2 RPR logical interface, WLAN ESS interface, WLAN BSS interface, WLAN DBSS interface, WLAN tunnel interface, S-channel interface, Aggregate S-channel interface and other logical interfaces which are not Layer 2 Ethernet subinterfaces.

## XML structure

```
<Ifmgr>
  <Ports>
    <Port>
      <PortIndex></PortIndex>
      <Name></Name>
      <IfIndex></IfIndex>
    </Port>
  </Ports>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Ports
Table type	Multi-instance table
Row name	Port
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PortIndex	Port index	Index	Unsigned integer.
Name	Full name of an interface	N/A	String. Length: 2 to 47 characters.
IfIndex	Interface index	N/A	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

# Ifmgr/InterfaceCapabilities

This table contains port capability information.

# XML structure

```
<Ifmgr>
  <InterfaceCapabilities>
    <Interface>
      <IfIndex></IfIndex>
      <Configurable></Configurable>
      <Shutdown></Shutdown>
      <Speed></Speed>
      <AutoSpeed></AutoSpeed>
      <Duplex></Duplex>
      <PortLayer></PortLayer>
      <Loopback></Loopback>
      <MDI></MDI>
      <Bandwidth></Bandwidth>
      <MinMTU></MinMTU>
      <MaxMTU></MaxMTU>
      <MinSubNum></MinSubNum>
      <MaxSubNum></MaxSubNum>
      <MaxCreateSubNum></MaxCreateSubNum>
      <ContextAllocType></ContextAllocType>
      <Removable></Removable>
      <Interval></Interval>
      <ForceUP></ForceUP>
      <LoopbackAutoStop></LoopbackAutoStop>
      <MAC></MAC>
      <TrafficStatisticsEnable></TrafficStatisticsEnable>
      <SubIfRateStatisticsEnable></SubIfRateStatisticsEnable>
      <IfName></IfName>
    </Interface>
  </InterfaceCapabilities>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	InterfaceCapabilities
Table type	Multi-instance table
Row name	Interface
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Configurable	Whether the interface is configurable.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
Shutdown	Whether the interface can be shutdown manually.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
Speed	Mode of speed which can be configured.	N/A	<ul style="list-style-type: none"> <li>• Each bit represents a speed.</li> <li>• As follows: <ul style="list-style-type: none"> <li>• 1—Auto</li> <li>• 2—10Mbps</li> <li>• 4—100Mbps</li> <li>• 8—155Mbps</li> <li>• 16—622Mbps</li> <li>• 32—1Gbps</li> <li>• 64—2Gbps</li> <li>• 128—2.5Gbps</li> <li>• 256—4Gbps</li> <li>• 512—8Gbps</li> <li>• 1024—10Gbps</li> <li>• 2048—16Gbps</li> <li>• 4096—20Gbps</li> <li>• 8192—40Gbps</li> <li>• 16384—100Gbps</li> <li>• 32768—5Gbps</li> <li>• 65536—25Gbps</li> <li>• 131072—32Gbps</li> </ul> </li> </ul>	Example: 38 —Speed 10Mbps, 100Mbps, and 1Gbps are configurable.
AutoSpeed	Modes of auto-negotiation speed which can be configured.	N/A	Each bit represents a speed. As follows: <ul style="list-style-type: none"> <li>• 1—10Mbps</li> <li>• 2—100Mbps</li> <li>• 4—1Gbps</li> </ul>	Example: 6—auto-negotiation speed 100Mbps and 1Gbps are configurable.
Duplex	Modes of duplex which can be configured.	N/A	Each bit represents a kind of duplex mode. As follows:	Applicable to only Ethernet interfaces. Example:

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1— Full</li> <li>2—Half</li> <li>4—Auto</li> </ul>	7—Duplex mode 'Full', 'Half' Auto 'Half' are configurable.
PortLayer	Whether the port layer can be changed.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Applicable to only Ethernet interfaces.
Loopback	Whether the loopback test can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Applicable to only Ethernet interfaces and AUX.
MDI	Types of MDI which can be configured.	N/A	Each bit represents a type of the line connected to the port. <ul style="list-style-type: none"> <li>1: <b>mdi</b> (straight-through cable)</li> <li>2: <b>mdix (crossover cable)</b></li> <li>4: <b>automdix (auto-sensing)</b></li> </ul>	Applicable to only Layer 2 Ethernet interfaces. Example: 7—'mdi', 'mdix' and 'automdix' are configurable.
Bandwidth	Whether the bandwidth can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
MinMTU	The minimum MTU which can be configured.	N/A	Unsigned integer.	Applicable to only Layer 3 interfaces.
MaxMTU	The maximum MTU which can be configured.	N/A	Unsigned integer.	Applicable to only Layer 3 interfaces.
MinSubNum	Minimum sub-interface number.	N/A	Unsigned integer.	N/A
MaxSubNum	Maximum sub-interface number.	N/A	Unsigned integer.	N/A
MaxCreateSubNum	The total numbers of sub-interface which can be created.	N/A	Unsigned integer.	N/A
ContextAllocType	The allocation type of an interface for CONTEXT.	N/A	Each bit represents an allocation type. As follows: <ul style="list-style-type: none"> <li>1—The allocation type is shared.</li> <li>2—The allocation type is exclusive.</li> </ul>	Example: 3—The allocation types can be both shared and exclusive.
Removable	Whether the interface can be deleted.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
Interval	Whether the	N/A	Boolean:	

Column name	Column description	Column type	Data type and restrictions	Remarks
	sampling interval can be configured.		<ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	
ForceUP	Whether port force up can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Applicable to only Ethernet and POS interfaces.
LoopbackAutoStop	Whether the loopback detection can be auto stop.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	
MAC	Whether MAC can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	
TrafficStatisticsEnable	Whether interface statistics collection for interface can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	
SubInterfaceStatisticsEnable	Whether interface rate statistics collection for the subinterface of interface can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A

## Ifmgr/TypeCapabilities

This table contains interface type capability information.

### XML structure

```

<Ifmgr>
  <TypeCapabilities>
    <Capability>
      <IfTypeExt></IfTypeExt>
      <MinNum></MinNum>
      <MaxNum></MaxNum>
      <MinSubNum></MinSubNum>
      <MaxSubNum></MaxSubNum>
      <MaxCreateNum></MaxCreateNum>
      <MaxCreateSubNum></MaxCreateSubNum>
    
```



```

        <MAC></MAC>
    </Capability>
</TypeCapabilities>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	TypeCapabilities
Table type	Multi-instance table
Row name	Capability
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfTypeExt	Interface Type.	Index	Unsigned integer.	Refer to ifTypeExt object in table of Interfaces.
MinNum	Minimum interface number.	N/A	Unsigned integer.	N/A
MaxNum	Maximum interface number.	N/A	Unsigned integer.	N/A
MinSubNum	Minimum sub-interface number.	N/A	Unsigned integer.	Refer to MinSubNum in table of InterfaceCapabilities.
MaxSubNum	Maximum sub-interface number.	N/A	Unsigned integer.	Refer to MaxSubNum in table of InterfaceCapabilities.
MaxCreateNum	Total interface numbers which can be created.	N/A	Unsigned integer.	N/A
MaxCreateSubNum	Total sub-interface numbers which can be created.	N/A	Unsigned integer.	Refer to MaxCreateSubNum in table of InterfaceCapabilities.
MAC	Check whether a MAC address can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# Ifmgr/EthInterfaces

This table contains Ethernet interface information.

## XML structure

```
<Ifmgr>
  <EthInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Combo></Combo>
      <FlowControl></FlowControl>
      <AutoPowerDown></AutoPowerDown>
      <Jumboframe></Jumboframe>
      <BroadcastSuppression>
        <ConfigValue></ConfigValue>
        <ActualValue></ActualValue>
        <Unit></Unit>
      </BroadcastSuppression>
      <MulticastSuppression>
        <ConfigValue></ConfigValue>
        <ActualValue></ActualValue>
        <Unit></Unit>
        <Flag></Flag>
      </MulticastSuppression>
      <UnknownUnicastSuppression>
        <ConfigValue></ConfigValue>
        <ActualValue></ActualValue>
        <Unit></Unit>
      </UnknownUnicastSuppression>
      <BPDUDrop></BPDUDrop>
      <EEE></EEE>
      <ConnectMode></ConnectMode>
      <IfName></IfName>
    </Interface>
  </EthInterfaces>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	EthInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Ethernet interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Combo	Combo mode of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—fiber mode</li> <li>2—copper mode</li> <li>3—auto mode</li> </ul>	Applicable to only Ethernet interfaces.
FlowControl	Flow control information of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Enable flow control</li> <li>2—Disable</li> <li>3—Only enable flow control packet receiving</li> </ul>	Applicable to only Physical interfaces.
AutoPowerDown	Port auto power down	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Applicable to only Physical interfaces.
Jumboframe	Jumbo frame information of an interface	N/A	Unsigned integer, the value is 0 if jumbo frame is disable on an interface.	
BroadcastSuppression	Broadcast suppression information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>Value</li> <li>Unit</li> </ul>	
ConfigValue	Configured broadcast suppression value of an interface	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>ratio: 0 to 100</li> <li>pps: 0 to 1.4881 * the maximum interface rate.</li> <li>kpps: 0 to the maximum interface rate</li> </ul>	
ActualValue	Actual broadcast suppression value of an interface	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>ratio: 0 to 100</li> <li>pps: 0 to 1.4881 * the maximum interface rate.</li> <li>kpps: 0 to the maximum interface rate</li> </ul>	
Unit	Broadcast suppression unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—ratio</li> <li>2—pps</li> <li>3—kpps</li> </ul>	

Column name	Column description	Column type	Data type and restrictions	Remarks
MulticastSuppression	Multicast suppression information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>Value</li> <li>Unit</li> </ul>	
ConfigValue	Configured multicast suppression value of an interface	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li><b>ratio: 0 to 100</b></li> <li>pps: 0 to 1.4881 * the maximum interface rate.</li> <li>kpbs: 0 to the maximum interface rate</li> </ul>	
ActualValue	Actual multicast suppression value of an interface	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li><b>ratio: 0 to 100</b></li> <li>pps: 0 to 1.4881 * the maximum interface rate.</li> <li>kpbs: 0 to the maximum interface rate</li> </ul>	
Unit	Multicast suppression unit	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1—ratio</b></li> <li>2—pps</li> <li><b>3—kpbs</b></li> </ul>	
Flag	Multicast suppression flag	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1—all</b></li> <li><b>2—unknown</b></li> </ul>	
UnknownUnicastSuppression	UnknownUnicast suppression information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>Value</li> <li>Unit</li> </ul>	
ConfigValue	Configured unknownUnicast suppression value of an interface	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li><b>ratio: 0 to 100</b></li> <li>pps: 0 to 1.4881 * the maximum interface rate.</li> <li>kpbs: 0 to the maximum interface rate</li> </ul>	
ActualValue	Actual unknownUnicast suppression value of an interface	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li><b>ratio: 0 to 100</b></li> <li>pps: 0 to 1.4881 * the maximum interface rate.</li> <li>kpbs: 0 to the maximum interface rate</li> </ul>	
Unit	UnknownUnicast suppression unit	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1—ratio</b></li> <li>2—pps</li> <li><b>3—kpbs</b></li> </ul>	
BPDUDrop	Whether any type of IEEE BPDUs is drop on the port.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Applicable to only Layer 2 Physical interfaces.

Column name	Column description	Column type	Data type and restrictions	Remarks
EEE	Whether energy efficient ethernet is enable on the port.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Applicable to only Physical interfaces.
ConnectMode	Port connection mode of an interface.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1—Normal connection mode</b></li> <li><b>2—Extend connection mode</b></li> </ul>	Applicable to only Layer 2 10GE interfaces.
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A

## Ifmgr/EthInterfaceCapabilities

This table contains ethernet port capability information.

### XML structure

```

<Ifmgr>
  <EthInterfaceCapabilities>
    <Interface>
      <IfIndex></IfIndex>
      <Combo></Combo>
      <StormConstrain></StormConstrain>
      <FlowControl></FlowControl>
      <AutoPowerDown></AutoPowerDown>
      <MinJumboframe></MinJumboframe>
      <MaxJumboframe></MaxJumboframe>
      <BPDUUDrop></BPDUUDrop>
      <EEE></EEE>
      <ConnectMode></ConnectMode>
      <IfName></IfName>
    </Interface>
  </EthInterfaceCapabilities>
</Ifmgr>

```

### Table description

Item	Description
Feature name	Ifmgr
Table name	EthInterfaceCapabilities
Table type	Multi-instance table

Item	Description
Row name	Interface
Restrictions	Applicable to only Ethernet interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Combo	Whether the fiber mode or copper mode can be activated.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	
StormConstrain	Whether storm constrain can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Applicable to only L2 Ethernet interfaces.
FlowControl	Whether flow control can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Applicable to only physical interfaces.
AutoPowerDown	Whether auto power down can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Applicable to only physical interfaces.
MinJumboframe	The minimum jumboframe which can be configured.	N/A	Unsigned integer.	Applicable to only physical interfaces.
MaxJumboframe	The maximum jumboframe which can be configured.	N/A	Unsigned integer.	Applicable to only physical interfaces.
BPDUDrop	Whether bpdu drop can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Applicable to only Layer 2 Physical interfaces.
EEE	Whether energy efficient ethernet can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Applicable to only Physical interfaces.

Column name	Column description	Column type	Data type and restrictions	Remarks
ConnectMode	Whether port connection mode can be configured.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Applicable to only Layer 2 10GE interfaces.
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A

## Ifmgr/StormConstrain/Interfaces

This table contains interface storm constrain information.

### XML structure

```

<Ifmgr>
  <StormConstrain>
    <Interfaces>
      <Interface>
        <IfIndex></IfIndex>
        <CtlMode></CtlMode>
        <Trap></Trap>
        <Log></Log>
        <Broadcast>
          <Upper></Upper>
          <Lower></Lower>
          <Unit></Unit>
          <Forward></Forward>
          <SwitchNum></SwitchNum>
        </Broadcast>
        <Multicast>
          <Upper></Upper>
          <Lower></Lower>
          <Unit></Unit>
          <Forward></Forward>
          <SwitchNum></SwitchNum>
        </Multicast>
        <UnknownUnicast>
          <Upper></Upper>
          <Lower></Lower>
          <Unit></Unit>
          <Forward></Forward>
          <SwitchNum></SwitchNum>
        </UnknownUnicast>
        <KnownUnicast>

```

```

    <Upper></Upper>
    <Lower></Lower>
    <Unit></Unit>
    <Forward></Forward>
    <SwitchNum></SwitchNum>
  </KnownUnicast>
  <IfName></IfName>
</Interface>
</Interfaces>
</StormConstrain>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Layer 2 physical Ethernet interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
CtlMode	Storm constrain protective action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—N/A</li> <li>1—Block</li> <li>2—Shutdown</li> </ul>	
Trap	Event trap switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	
Log	Event log switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> </ul>	



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>false</li> </ul>	
Broadcast	Broadcast storm constrain information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>Upper</li> <li>Lower</li> <li>Unit</li> <li>Forward</li> <li>SwitchNum</li> </ul>	
Upper	Broadcast upper threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Lower	Broadcast lower threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Unit	Broadcast threshold unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pps</li> <li>2—ratio</li> <li>3—kbps</li> </ul>	
Forward	Broadcast traffic forwarding status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Forwarding</li> <li>1—Block</li> <li>2—Shutdown</li> </ul>	
SwitchNum	Number of broadcast traffic forwarding state changes	N/A	Unsigned integer.	
Multicast	Multicast storm constrain information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>Upper</li> <li>Lower</li> <li>Unit</li> <li>Forward</li> <li>SwitchNum</li> </ul>	
Upper	Multicast upper threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Lower	Multicast lower threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum</li> </ul>	

Column name	Column description	Column type	Data type and restrictions	Remarks
			interface rate	
Unit	Multicast threshold unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—pps</li> <li>• 2—ratio</li> <li>• 3—kbps</li> </ul>	
Forward	Multicast traffic forwarding status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Forwarding</li> <li>• 1—Block</li> <li>• 2—Shutdown</li> </ul>	
SwitchNum	Number of multicast traffic forwarding state changes	N/A	Unsigned integer.	
UnknownUnicast	Unknown-unicast storm constrain information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>• Upper</li> <li>• Lower</li> <li>• Unit</li> <li>• Forward</li> <li>• SwitchNum</li> </ul>	
Upper	Unknown-unicast upper threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>• pps: 1 to 1.4881 * the maximum interface rate</li> <li>• ratio: 1 to 100</li> <li>• kbps: 1 to the maximum interface rate</li> </ul>	
Lower	Unknown-unicast lower threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>• pps: 1 to 1.4881 * the maximum interface rate</li> <li>• ratio: 1 to 100</li> <li>• kbps: 1 to the maximum interface rate</li> </ul>	
Unit	Unknown-unicast unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—pps</li> <li>• 2—ratio</li> <li>• 3—kbps</li> </ul>	
Forward	Unknown-unicast traffic forwarding status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Forwarding</li> <li>• 1—Block</li> <li>• 2—Shutdown</li> </ul>	
SwitchNum	Number of unknown-unicast traffic forwarding state changes	N/A	Unsigned integer.	
KnownUnicast	Known-unicast storm constrain information of an interface	N/A	Include: <ul style="list-style-type: none"> <li>• Upper</li> <li>• Lower</li> <li>• Unit</li> <li>• Forward</li> </ul>	

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>SwitchNum</li> </ul>	
Upper	Known-unicast upper threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Lower	Known-unicast lower threshold value	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>pps: 1 to 1.4881 * the maximum interface rate</li> <li>ratio: 1 to 100</li> <li>kbps: 1 to the maximum interface rate</li> </ul>	
Unit	Known-unicast unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pps</li> <li>2—ratio</li> <li>3—kbps</li> </ul>	
Forward	Known-unicast traffic forwarding status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Forwarding</li> <li>1—Block</li> <li>2—Shutdown</li> </ul>	
SwitchNum	Number of known-unicast traffic forwarding state changes	N/A	Unsigned integer.	
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A

## Ifmgr/StormConstrain/Interval

This table contains storm constrain traffic collection interval information.

### XML structure

```

<Ifmgr>
  <StormConstrain>
    <Interval>
      <Interval></Interval>
    </Interval>
  </StormConstrain>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Interval
Table type	Single-instance table
Row name	N/A
Restrictions	

## Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Traffic statistics collection interval for storm constrain on all interfaces, in seconds	N/A	Unsigned integer. Value range: 1 to 300.

## Ifmgr/PortIsolation/Groups

This table contains port isolation groups information.

## XML structure

```
<Ifmgr>
  <PortIsolation>
    <Groups>
      <Group>
        <IsolatedGroupID></IsolatedGroupID>
        <InterfaceList></InterfaceList>
        <IfName></IfName>
      </Group>
    </Groups>
  </PortIsolation>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	Applicable to only Layer 2 interfaces of Ethernet and aggregation.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IsolatedGroup ID	Isolation group ID.	Index	Unsigned integer.	
InterfaceList	Interface IfIndex list of an isolation group ID.	N/A	<p>Number string.</p> <p>It is a comma-separated list of IfIndex items. An item can be an individual IfIndex or an IfIndex range. Use a hyphen (-) to separate the start and end IfIndexes of a range.</p> <p>The string must not end with a comma or hyphen, or include any whitespace characters.</p>	<p>Examples: 1,2,3,5-8,10-20</p> <p>Example: 1,2,3,5-8,10-20.</p> <p>Available IfIndexes are in the IfIndex column in the Ifmgr/Interfaces table.</p>

## Ifmgr/PortIsolation/Interfaces

This table contains interface isolation information.

## XML structure

```

<Ifmgr>
  <PortIsolation>
    <Interfaces>
      <Interface>
        <IfIndex></IfIndex>
        <IsolatedGroupID></IsolatedGroupID>
      </Interface>
    </Interfaces>
  </PortIsolation>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only Layer 2 interfaces of Ethernet and aggregation.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IsolatedGroup ID	Port isolation group ID of an interface	N/A	Unsigned integer.	
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A

## Ifmgr/PortIsolation/Capabilities

This table contains port isolation groups capabilities on device.

## XML structure

```
<Ifmgr>
  <PortIsolation>
    <Capabilities>
      <MaxGroupNum></MaxGroupNum>
    </Capabilities>
  </PortIsolation>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	Capabilities
Table type	Single-instance table
Row name	N/A

Item	Description
Restrictions	

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxGroupNum	The maximum port isolation group number.	N/A	Unsigned integer.	

## Ifmgr/DeviceCapabilities

This table contains the capabilities of the interfaces on device.

## XML structure

```

<Ifmgr>
  <DeviceCapabilities>
    <HistoryTrafficStatistic></HistoryTrafficStatistic>
    <ManualNoLoopBack></ManualNoLoopBack>
    <DefaultShutdown></DefaultShutdown>
  </DeviceCapabilities>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	DeviceCapabilities
Table type	Single-instance table
Row name	N/A
Restrictions	

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HistoryTrafficStatistic	Whether you need to support the history traffic statistic	N/A	Boolean: <ul style="list-style-type: none"> <li>True</li> <li>false</li> </ul>	
ManualNoLoo	Whether you	N/A	Boolean:	

Column name	Column description	Column type	Data type and restrictions	Remarks
pBack	need to stop the loopback test on an interface manually		<ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	
DefaultShutDown	Whether an interface is shut down by default	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	

## Ifmgr/ReserveVlanInterface

This table contains the reservation of VLAN interface resources.

### XML structure

```

<Ifmgr>
  <ReserveVlanInterface>
    <VlanInterface>
      <Type></Type>
      <VlanList></VlanList>
    </VlanInterface>
  </ReserveVlanInterface>
</Ifmgr>

```

### Table description

Item	Description
Feature name	Ifmgr
Table name	ReserveVlanInterface
Table type	Multi-instance table
Row name	VlanInterface
Restrictions	N/A

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Whether the reservation of VLAN interface resources is global or local.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Global.</li> <li>2—Local</li> </ul>	The reservation of global VLAN interface resources or local VLAN interface resources.
VlanList	List of VLANs for the reservation of	N/A	Number string. It is a comma-separated list of	Example: 1,2,3,5-8,10-20



Column name	Column description	Column type	Data type and restrictions	Remarks
	VLAN interface resources.		VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	

## Ifmgr/SubChannel

This table contains the sub channel index information of interface.

## XML structure

```

<Ifmgr>
  <SubChannel>
    <Interface>
      <IfIndex></IfIndex>
      <CreateMode></CreateMode>
      <SubChannelIndex></SubChannelIndex>
    </Interface>
  </SubChannel>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	SubChannel
Table type	Multi-instance table
Row name	Interface
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
CreateMode	The mode of creating sub channel.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—serial-set</li> <li>2—eth-channel</li> </ul>	N/A
SubChannelIndex	The interface index of each subchannel.	Index	Unsigned integer	N/A

## Ifmgr/CellularChannel

This table contains sub channel creating information of cellular controller.

### XML structure

```

<Ifmgr>
  <CellularChannel>
    <Interface>
      <IfIndex></IfIndex>
      <CreateMode></CreateMode>
      <ChannelNum></ChannelNum>
    </Interface>
  </CellularChannel>
</Ifmgr>

```

### Table description

Item	Description
Feature name	Ifmgr
Table name	CellularChannel
Table type	Multi-instance table
Row name	Interface
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
CreateMode	The mode of creating sub channel.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—serial-set</li> <li>2—eth-channel</li> </ul>	N/A
ChannelNum	Sub channel number.	Index	Unsigned integer	N/A

## Ifmgr/NewSubInterfaces

This table contains creating information of sub-interfaces.

## XML structure

```

<Ifmgr>
  <NewSubInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <SubNum></SubNum>
      <IfName></IfName>
    </Interface>
  </NewSubInterfaces>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	NewSubInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer	Interface index of the main interface. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
SubNum	Sub-interface number.	Index	Unsigned integer	The range for SubNum is shown in the InterfaceCapabilities table.
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A

## Ifmgr/EthPortStatistics

This table contains interface statistics.

## XML structure

```

<Ifmgr>
  <EthPortStatistics>
    <Interface>
      <IfIndex></IfIndex>
      <Name></Name>
      <InBytes/>
      <InPkts/>
      <InUcastPkts/>
      <InBrdcastPkts/>
      <InMulticastPkts/>
      <InPauses/>
      <InNormalBytes/>
      <InNormalUnicastBytes/>
      <InNormalBrdcastBytes/>
      <InNormalMulticastBytes/>
      <InUnknownUnicastBytes/>
      <InNormalPkts/>
      <InNormalUnicastPkts/>
      <InNormalBrdcastPkts/>
  
```

<InNormalMulticastPkts/>  
<InUnknownUnicastPkts/>  
<InNormalPauses/>  
<InErrorPkts/>  
<InPktSpeed/>  
<InByteSpeed/>  
<InBrdcastPktSpeed/>  
<InMulticastPktSpeed/>  
<InRunts/>  
<InGiants/>  
<InThrottles/>  
<InErrCRCFrames/>  
<InErrFrames/>  
<InOverrunDropPkts/>  
<InAbortPkts/>  
<InIgnoreDropFrames/>  
<InParityErrFrames/>  
<InSpeedPeakBytes/>  
<InSpeedPeakTime/>  
<OutBytes/>  
<OutPkts/>  
<OutUcastPkts/>  
<OutBrdcastPkts/>  
<OutMulticastPkts/>  
<OutPauses/>  
<OutNormalBytes/>  
<OutNormalUnicastBytes/>  
<OutNormalBrdcastBytes/>  
<OutNormalMulticastBytes/>  
<OutUnknownUnicastBytes/>  
<OutNormalPkts/>  
<OutNormalUnicastPkts/>  
<OutNormalBrdcastPkts/>  
<OutNormalMulticastPkts/>  
<OutUnknownUnicastPkts/>  
<OutNormalPauses/>  
<OutErrorPkts/>  
<OutPktSpeed/>  
<OutByteSpeed/>  
<OutBrdcastPktSpeed/>  
<OutMulticastPktSpeed/>  
<OutUnderRunDropPkts/>  
<OutBuffFailDropPkts/>  
<OutAbortPkts/>  
<OutDeferedFrames/>  
<OutCollisionFrames/>  
<OutLateCollisionFrames/>  
<OutLostCarriers/>

```

    <OutNoCarriers/>
    <OutSpeedPeakBytes/>
    <OutSpeedPeakTime/>
  </Interface>
</EthPortStatistics>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	EthPortStatistics
Table type	Multi-instance table
Row name	Interface
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
InBytes	Number of inbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InPkts	Number of inbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InUcastPkts	Number of inbound unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InBrdcastPkts	Number of inbound broadcast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InMulticastPkts	Number of inbound multicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InPauses	Number of inbound pause frames on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InNormalBytes	Number of inbound normal bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InNormalUnicastBytes	Number of inbound normal unicast bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .

Column name	Column description	Column type	Data type and restrictions
InNormalBrdcastBytes	Number of inbound normal broadcast bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InNormalMulticastBytes	Number of inbound normal multicast bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InUnknownUnicastBytes	Number of inbound unknown unicast bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InNormalPkts	Number of inbound normal packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InNormalUnicastPkts	Number of inbound normal unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InNormalBrdcastPkts	Number of inbound normal broadcast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InNormalMulticastPkts	Number of inbound normal multicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InUnknownUnicastPkts	Number of inbound unknown unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InNormalPauses	The number of normal pauses received on the interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InErrorPkts	Number of error inbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InPktSpeed	Rate of inbound packages on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InByteSpeed	Rate of inbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InBrdcastPktSpeed	Rate of inbound broadcast packages on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InMulticastPktSpeed	Rate of inbound multicast packages on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InRuns	Number of inbound runs on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InGiants	Number of inbound giants on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InThrottles	Number of inbound frames that had a non-integer number of bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InErrCRCFrames	Total number of inbound frames that had a normal	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	length, but contained CRC errors.		Value range: 0 to $2^{64} - 1$ .
InErrFrames	Total number of inbound frames that contained CRC errors and a non-integer number of bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InOverrunDropPkts	Number of packets dropped because the input rate of the port exceeded the queuing capability.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InAbortPkts	Total number of illegal inbound packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InIgnoreDropFrames	Number of inbound frames dropped because the receiving buffer of the port ran low.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InParityErrFrames	Total number of frames with parity errors.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InSpeedPeakBytes	Peak rate of inbound traffic in Bps, and the time when the peak inbound traffic rate occurred.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
InSpeedPeakTime	Speed peak time of inbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutBytes	Number of outbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutPkts	Number of outbound packages on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutUcastPkts	Number of outbound unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutBrdcastPkts	Number of outbound broadcast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutMulticastPkts	Number of outbound multicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutPauses	Number of outbound pause frames on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNormalBytes	Number of outbound normal bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNormalUnicastBytes	Number of outbound normal unicast bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .



Column name	Column description	Column type	Data type and restrictions
OutNormalBrdcastBytes	Number of outbound normal broadcast bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNormalMulticastBytes	Number of outbound normal multicast bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutUnknownUnicastBytes	Number of outbound unknown unicast bytes on an interface. unsupported protocol.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNormalPkts	Number of outbound normal packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNormalUnicastPkts	Number of outbound normal unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNormalBrdcastPkts	Number of outbound normal broadcast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNormalMulticastPkts	Number of outbound normal multicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutUnknownUnicastPkts	Number of outbound unknown unicast packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNormalPauses	Number of outbound normal pause frames on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutErrorPkts	Number of error outbound packets on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutPktSpeed	Rate of outbound packages on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutByteSpeed	Rate of outbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutBrdcastPktSpeed	Rate of outbound broadcast packages on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutMulticastPktSpeed	Rate of outbound multicast packages on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutUnderRunDropPkts	Number of packets dropped because the output rate of the interface exceeded the output queuing capability.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutBuffFailDropPkts	Number of packets dropped because the transmitting buffer of the interface ran low.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .

Column name	Column description	Column type	Data type and restrictions
OutAbortPkts	Number of packets that failed to be transmitted, for example, because of Ethernet collisions.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutDeferedFrames	Number of frames that the interface deferred to transmit because of detected collisions.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutCollisionFrames	Number of frames that the interface stopped transmitting because Ethernet collisions were detected during transmission.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutLateCollisionFrames	Number of frames that the interface deferred to transmit after transmitting their first 512 bits because of detected collisions.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutLostCarriers	Number of carrier losses during transmission.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutNoCarriers	Number of times that the port failed to detect the carrier when attempting to send frames.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutSpeedPeakBytes	Peak rate of outbound traffic in Bps, and the time when the peak outbound traffic rate occurred.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
OutSpeedPeakTime	Speed peak time of outbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .

## Ifmgr/IfHistoryTrafficStatistics

This table contains history traffic statistics of the interface.

### XML structure

```

<Ifmgr>
  <IfHistoryTrafficStatistics>
    <TrafficStatistics>
      <IfIndex></IfIndex>
      <Interval></Interval>
      <TimeStamp></TimeStamp>
      <InOctets></InOctets>
      <OutOctets></OutOctets>
      <IfName></IfName>
    
```

```

    </TrafficStatistics>
  </IfHistoryTrafficStatistics>
</Ifmgr>

```

## Table description

Item	Description
Feature name	Ifmgr
Table name	IfHistoryTrafficStatistics
Table type	Multi-instance table
Row name	TrafficStatistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer	Interface index of the main interface. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Interval	Sampling interval of an interface	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Last 60 mins.</li> <li>1—Last 24 hours.</li> <li>2—Last 30 Days.</li> </ul>	N/A
TimeStamp	Local time when the device starts.	Index	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.
InOctets	Number of inbound bytes during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutOctets	Number of outbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	N/A

# Ifmgr/AllHistoryTrafficStatistics

This table contains history traffic statistics of all interfaces.

## XML structure

```
<Ifmgr>
  <AllHistoryTrafficStatistics>
    <TrafficStatistics>
      <Interval></Interval>
      <TimeStamp></TimeStamp>
      <InOctets></InOctets>
      <OutOctets></OutOctets>
    </TrafficStatistics>
  </AllHistoryTrafficStatistics>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	AllHistoryTrafficStatistics
Table type	Multi-instance table
Row name	TrafficStatistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interval	Sampling interval of all interface	Index	Enumeration: <ul style="list-style-type: none"><li>0—Last 60 mins.</li><li>1—Last 24 hours.</li><li>2—Last 30 Days.</li></ul>	N/A
TimeStamp	Local time when the device starts.	Index	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.
InOctets	Number of inbound bytes during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutOctets	Number of outbound bytes on an interface.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

# Ifmgr/ShutdownInterval

This table contains the shutdown recovery interval for ports.

## XML structure

```
<Ifmgr>
  <ShutdownInterval>
    <Interval></Interval>
  </ShutdownInterval>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	ShutdownInterval
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interval	Shutdown recovery interval in seconds	N/A	Unsigned integer. Value range: 0 to 300.	N/A

# Ifmgr/IfRateStatistics

This table contains interfaces rate information.

## XML structure

```
<Ifmgr>
  <IfRateStatistics>
    <Interface>
      <StartIfIndex></StartIfIndex>
      <ReqCount></ReqCount>
      <BufData></BufData>
    </Interface>
  </IfRateStatistics>
</Ifmgr>
```

## Table description

Item	Description
Feature name	Ifmgr
Table name	IfRateStatistics
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StartIfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmon NETCONF XML API Configuration Reference.
ReqCount	Requiring counts of interface	N/A	Unsigned integer.	This column contains count of interface every bulk we want to get. The default is 10. And the maximum is 46. If we specify the operation type is "get-bulk", it won't return anything when the reqcount is less than 10.
BufData	Data of rate statistics.	N/A	Binary	This column has three sections. The first is ifindex that the last one of previous bulk. The second is count of interface that every bulk we get really. The last is information of rate statistics, which containing the interface's

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>index, name, the package rate and the byte rate.</p> <p>StartIfIndex (UINT32) //Ifindex of the first interface in this bulk</p> <p>ActualCount (UINT32) //Counts that this bulk actually got</p> <p>BatchRate (N * 88) //Information of rate statistics, including N data blocks(BASE64 Coding)(N = ActualCount), and every data block includes</p> <p>//IfIndex (UINT32)</p> <p>//szIfName (48 UCHAR)</p> <p>//InSpeedPkt (UINT64)</p> <p>//InSpeedByte (UINT64)</p> <p>//OutSpeedPkt (UINT64)</p> <p>//OutSpeedByte (UINT64)</p>

Ifmgr .....	2
Ifmgr/Interfaces .....	2
Ifmgr/NewSubInterfaces.....	6
Ifmgr/EthInterfaces.....	8



# Ifmgr

## Ifmgr/Interfaces

Message	Explanation
The administrative state of management interface cannot be modified. 不能修改管理接口的接口管理状态。	暂未引用
Please set the link type of the port to access first. 请先把接口链路类型改成Access。	During merging operation for LinkType of interfaces table, set the link type of the port to access first. 在对接口信息表的 LinkType 字段进行 Merge 操作时, 需要先把接口链路类型改成 Access。
The VLAN doesn't support the operation. 该VLAN不支持当前操作。	During executing set operation for LinkType of interfaces table, the VLAN doesn't support the operation. 在对接口信息表的 LinkType 字段进行下发数据时, 该 VLAN 不支持当前操作。
Cannot change the link type of %s because this operation conflicts with the %s configuration. 不能更改%s的链路类型因为当前操作和%s配置冲突。	During executing set operation for LinkType of interfaces table, this operation cannot change the link type for the port because this operation conflicts with the port's configuration. 在对接口信息表的 LinkType 字段进行下发数据时, 不能更改该端口的链路类型因为当前操作和该端口配置冲突。
The VLAN does not exist. 该VLAN不存在。	During executing set operation for PVID of interfaces table, the VLAN doesn't exist. 在对接口信息表的 PVID 字段进行下发数据时, 该 VLAN 不存在。
This is not a hybrid port. 不是一个Hybrid端口。	During executing set operation for PVID of interfaces table, the link type of the port is not hybrid. 在对接口信息表的 PVID 字段进行下发数据时, 该端口类型不是一个 Hybrid 端口。
This is not a trunk port. 不是一个Trunk端口。	During executing set operation for PVID of interfaces table, the link type of the port is not trunk. 在对接口信息表的 PVID 字段进行下发数据时, 该端口类型不是一个 trunk 端口。
The specified duplex mode is not supported. 该接口不支持所指定的双工状态。	During executing set operation for cfgduplex of interfaces table, the specified duplex mode is not supported. 在对接口信息表的 cfgduplex 字段进行下发数据时, 该接

	口不支持所指定的双工状态。
<p>Duplex mode cannot be configured when loopback external or loopback internal command is configured.</p> <p>该接口正处于环回测试状态，不能修改双工模式。</p>	<p>During executing set operation for cfgduplex of interfaces table, the duplex mode cannot be configured when the loopback external or loopback internal command is configured.</p> <p>在对接口信息表的 <code>cfgduplex</code> 字段进行下发数据时，该接口正处于环回测试状态，不能修改双工模式。</p>
<p>You do not have the privilege to access %s.</p> <p>没有操作接口的权限。</p>	暂未引用
<p>The interface doesn't support the operation.</p> <p>该接口不支持此操作。</p>	<p>During executing set operation for cfgduplex of interfaces table, the interface doesn't support the operation.</p> <p>在对接口信息表某个字段进行下发数据时，该接口不支持此操作。</p>
<p>Configuration cannot be configured when loopback external or loopback internal command is configured.</p> <p>该接口正处于环回测试状态，不能修改配置。</p>	<p>During executing set operation for interfaces table, the configuration cannot be modified when the loopback external or loopback internal command is configured.</p> <p>在对接口信息表进行下发数据时，该接口因为正处于环回测试状态，导致不能修改配置。</p>
<p>Invalid speed value for port auto-negotiation.</p> <p>该接口不支持所指定的自协商速率。</p>	<p>During executing set operation for ConfigSpeed of interfaces table, the speed value for port auto-negotiation is invalid.</p> <p>在对接口信息表的 <code>ConfigSpeed</code> 字段进行下发数据时，该接口不支持所指定的自协商速率。</p>
<p>The MTU range is %u to %u.</p> <p>MTU取值范围为%u到%u。</p>	<p>During executing set operation for ConfigMTU of interfaces table, the MTU should be in the valid range.</p> <p>在对接口信息表的 <code>ConfigMTU</code> 字段进行下发数据时，MTU 应该被设置有效的取值范围。</p>
<p>The %s interface number range is %u to %u.</p> <p>%s接口的接口编号范围是%u到%u。</p>	<p>During executing set operation for IfIndex of interfaces table, the interface number should be in the valid range.</p> <p>在对接口信息表的 <code>IfIndex</code> 字段进行下发数据时，接口的接口编号应该被设置有效的取值范围。</p>
<p>Column SubNum cannot be included when you remove the interface.</p> <p>删除接口的时候不能带SubNum列。</p>	<p>During executing remove operation, the SubNum column cannot be included.</p> <p>在对执行删除接口时不能带 SubNum 列。</p>
<p>Allocated VLANs can not be set as port PVID.</p> <p>已经被分配的VLAN不能设置成端口PVID。</p>	<p>During executing set operation for PVID of interfaces, allocated VLANs can not be set as a PVID.</p> <p>在对接口信息表的 <code>PVID</code> 字段进行下发数据时，已经被分配的 VLAN 不能设置成端口 PVID。</p>
<p>The operation is not permitted because this port</p>	<p>During executing set operation for LinkType of</p>

<p>is shared with other contexts.</p> <p>操作不被允许，因为该端口已经被其它Context共享。</p>	<p>interfaces table, it is not permitted because this port is shared with other contexts.</p> <p>在对接口信息表的 LinkType 字段进行下发数据时，操作不被允许，因为该端口已经被其它 Context 共享。</p>
<p>Can't shut down the last active physical interface on a PEX for PEX links. Please shut down the PEX physical interface on the parent device that provides PEX connectivity for the PEX.</p> <p>不允许shutdown PEX设备上连接两个设备之间的最后一条active链路上的PEX口，如果需要改变链路topo，请shutdown父设备上的接口。</p>	<p>During executing set operation for ShutDown of interfaces table, it can't shut down the last active physical interface on a PEX for PEX links. Please shut down the PEX physical interface on the parent device that provides PEX connectivity for the PEX.</p> <p>在对接口信息表进行下发 shutdown 数据时，不允许 shutdown PEX 设备上连接两个设备之间的最后一条 active 链路上的 PEX 口，如果需要改变链路 topo，请 shutdown 父设备上的接口。</p>
<p>Operation not supported on the last active physical port bound to IRF port which connected to the master! Please shutdown the other end of the link.</p> <p>与连接到主设备的IRF端口绑定的最后一个有效物理端口不支持此操作！请shutdown对端接口。</p>	<p>During executing set operation for ShutDown of interfaces table, the operation is not supported on the last active physical port bound to the IRF port which connects to the master! Please shut down the other end of the link.</p> <p>在对接口信息表进行下发 shutdown 数据时，与连接到主设备的 IRF 端口绑定的最后一个有效物理端口不支持此操作！请 shutdown 对端接口。</p>
<p>Can not be configured with loopback external/internal command together.</p> <p>不能和loopback external/internal命令一起配置。</p>	<p>During executing set operation for ShutDown of interfaces table, it can not be configured with the loopback external/internal command together.</p> <p>在对接口信息表进行下发 shutdown 数据时,不能和 loopback external/internal 命令一起配置。</p>
<p>Can not be configured with port up-mode command together.</p> <p>不能和port up-mode命令一起配置。</p>	<p>During executing set operation for ShutDown of interfaces table, it can not be configured with the port up-mode command together.</p> <p>在对接口信息表进行下发 shutdown 数据时，不能和 port up-mode 命令一起配置。</p>
<p>Bind all interfaces in the same group to IRF ports or cancel the bindings on all of them.</p> <p>绑定或取消绑定同一个组的接口到IRF端口。</p>	<p>During executing set operation for ShutDown of interfaces table, all interfaces in the same group should be bound to IRF ports or the bindings on all of them should be cancelled.</p> <p>在对接口信息表进行下发 shutdown 数据时,同一个组的接口应该被绑定或取消绑定到 IRF 端口。</p>
<p>Bind all interfaces in the same group to PEX ports or cancel the bindings on all of them.</p> <p>绑定或取消绑定同一个组的接口到PEX端口。</p>	<p>During executing set operation for ShutDown of interfaces table, all interfaces in the same group should be bound to PEX ports or the bindings on all of them should be cancelled.</p> <p>在对接口信息表进行下发 shutdown 数据时,同一个组的接口应该被绑定或取消绑定到 PEX 端口。</p>

Bind all interfaces in the same group to IRF/PEX ports or cancel the bindings on all of them. 绑定或取消绑定同一个组的接口到IRF/PEX端口。	During executing set operation for ShutDown of interfaces table, all interfaces in the same group should be bound to IRF/PEX ports or the bindings on all of them should be cancelled. 在对接口信息表进行下发 shutdown 数据时,同一个组的接口应该被绑定或取消绑定到 IRF/PEX 端口。
The shutdown, port up-mode and loopback commands are exclusive with each other. Shutdown、loopback和up-mode命令相互互斥。	During executing merge operation for interfaces table, the shutdown, port up-mode and loopback commands are exclusive with each other. 在对接口信息表进行 Merge 操作时 Shutdown loopback 和 up-mode 命令不允许同时被设置。
LOOPBACK can not be specified when port is administratively down. 接口状态显示为Administratively DOWN时, 则不能进行内部和外部环回测试。	when the port is administratively down, LOOPBACK can not be specified. 当接口状态显示为 Administratively DOWN 时, 则不能进行内部和外部环回测试。
Port up-mode can not be specified when port is administratively down. 接口状态显示为Administratively DOWN时, 则不能配置port up-mode。	when the port is administratively down, port up-mode can not be specified. 当接口状态显示为 Administratively DOWN 时, 则不能配置 port up-mode。
The specified group doesn't exist. 指定的端口隔离组不存在。	During executing get operation for interfaces table, the specified group doesn't exist. 当对接口信息表进行获取数据时, 指定的端口隔离组不存在。
The arguments are incompletely configured. 配置的参数不完整。	During executing set operation for interfaces table, the arguments are incompletely configured. 当对接口进行设置参数时, 配置的参数不完整。
The interface has been allocated and can't change the link mode. 接口已经被分配, 不支持切换工作模式。	Due to the interface has been allocated, it can't change the link mode. 因为接口已经被分配, 不支持切换工作模式。
The value is out of the effective range. 参数值不在有效范围内。	During executing get operation for interfaces table, the value is out of the effective range. 当对接口信息表进行设置时, 参数的值不再有效范围内。
The value must be a multiple of 5. 配置值须是5的倍数。	During executing set operation for interfaces table, the value must be a multiple of 5. 当对接口信息表进行设置时, 参数的值须是 5 的倍数。
Invalid interface name. 接口名称格式错误。	During executing check operation for interfaces name, the interface name is invalid. 当在检查接口名称格式时出现了错误。
Insufficient system resources. 系统资源不足。	During adding or parsing operation, system resources are insufficient.

	当在进行添加或者解析操作时，出现系统资源不足。
%s is not a valid interface name. 包含无效的接口名称%s。	During executing set operation for interfaces name, the interface name is invalid. 当在设置接口名字时包含无效的格式。
The operation failed because the port is a member port of a Layer 2 aggregation group. 操作失败，该接口已经是二层聚合组成员端口。	During executing merge operation for Ethinterfaces table, the operation failed because the port is a member port of a Layer 2 aggregation group. 在对接口信息表进行 merge 操作时，操作失败，该接口已经是二层聚合组成员端口。
The operation failed because the port is joining or leaving a Layer 2 aggregation group. 操作失败，接口正在加入或退出聚合组。	During executing merge operation for Ethinterfaces table, the operation failed because the port is joining or leaving a Layer 2 aggregation group. 在对接口信息表进行 merge 操作时，操作失败，接口正在加入或退出聚合组。

## Ifmgr/NewSubInterfaces

Message	Explanation
The %s subinterface number range is %u to %u. %s接口可创建的子接口编号范围是%u到%u。	During executing get operation for SubNum of new subinterfaces table, the subinterface number should be in the valid range. 在对子接口信息表的 SubNum 进行获取操作时，接口可创建的子接口编号的有效范围。
Can not configure this parameter in async flow mode. 当接口工作在异步方式、流模式时不能配置本参数。	When the interface in async flow mode, can not configure this parameter. 当接口工作在异步方式、流模式时不能配置本参数。
Can not delete this interface. 该接口不能被删除。	During executing undo operation for new subinterfaces ,it can not be deleted. 在对子接口进行 undo 操作时，该接口不能被删除。
Failed to delete %s, for %s has member ports. 删除%s失败，因为%s有成员接口。	During executing undo operation for new subinterfaces, it will fail to be deleted because it has member ports. 在对子接口进行 undo 操作时，因为其有成员接口导致删除失败。
The virtual-template is being used and can't be deleted. 接口 virtual-template 正在使用，不能被删除。	During executing undo operation for new subinterfaces, the virtual-template can't be deleted because it is being used. 在对子接口进行 undo 操作时，因为接口 virtual-template 正在使用，不能被删除。
The interface in use cannot be deleted.	During executing undo operation for new

接口正在使用，不能被删除。	subinterfaces, the interface in use cannot be deleted. 在对子接口进行 undo 操作时，因为接口正在使用，不能被删除。
The interface cannot be created because the system is busy. 接口创建失败，因为系统忙。	During executing Create operation for new subinterfaces, it will fail to be created because the system is busy. 在对子接口进行创建操作时，因为系统忙，接口创建失败。
The start interface and the end interface must be of the same type. 'to'关键字前后的两个接口的类型必须一致。	During executing set operation for sub channel interface name, the start interface and the end interface must be of the same type. 在检查子通道接口名时，'to'关键字前后的两个接口的类型必须一致。
The start interface and the end interface must reside on the same card. 'to'关键字前后的两个接口的必须位于同一单板上。	During executing set operation for sub channel interface name, the start interface and the end interface must reside on the same card. 在检查子通道接口名时，'to'关键字前后的两个接口的必须位于同一单板上。
The interfaces beside 'to' must be two subinterfaces or two sub tunnel. 'to'关键字前后的两个接口必须同时为子接口或者为子通道接口。	During executing set operation for sub channel interface name, the interfaces beside 'to' must be two subinterfaces or two sub tunnels. 在检查子通道接口名时，'to'关键字前后的两个接口必须同时为子接口或者为子通道接口。
The start sub interface and the end sub interface must be on the same interface. 前后子接口必须在同一个接口上。	During executing set operation for sub interface, the start sub interface and the end sub interface must be on the same interface. 在对子接口进行设置操作时，前后两个子接口必须在同一个接口上。
The end interface number must be greater than the start interface number. 后面的接口编号必须大于前面的接口编号。	During executing set operation for sub interface, the end interface number must be greater than the start interface number. 在对子接口进行设置操作时，后面的接口编号必须大于前面的接口编号。
Can't create the sub interface because the main interface is in an aggregation group. 不能创建子接口因为主接口在一个聚合口成员。	During executing create operation for sub interface, it can't create the sub interface because the main interface is in an aggregation group. 在执行创建子接口操作时，不能创建子接口因为主接口在一个聚合口成员。
The interface already exists. 接口已存在。	During executing create operation for sub interface, the interface already exists. 在执行创建子接口操作时，接口已存在。
The interface is not a sub interface.	During executing create operation for sub interface,



该接口不是子接口。	the interface is not a sub interface. 在执行创建子接口操作时，该接口不是子接口。
The resource has been used. 资源已经在使用中。	暂未引用
The system does not support Reserve Vlan Interface. 系统不支持Reserve Vlan Interface。	暂未引用
Can not create this interface. 无法创建该接口。	During executing create operation for sub interface, this interface can not be created. 在执行创建子接口操作时，该接口无法被创建。

## Ifmgr/EthInterfaces

Message	Explanation
The link aggregation group doesn't exist. 指定的聚合组不存在。	During executing merge operation for Ethinterfaces table, The link aggregation group doesn't exist. 在对接口信息表进行 merge 操作时，指定的聚合组不存在。
%s has been assigned to another aggregation group. %s 已经加入其他聚合组。	During executing merge operation for Ethinterfaces table, the interfaces has been assigned to another aggregation group. 在对接口信息表进行 merge 操作时,该接口已经加入其他聚合组。
Can't assign %s to a link aggregation group because the interface has subinterfaces. %s 加入聚合组失败，因为该端口包含子接口。	During executing merge operation for Ethinterfaces table,can't assign it to a link aggregation group because the interface has subinterfaces. 在对接口信息表进行 merge 操作时，因为该端口包含子接口导致加入聚合组失败。
Can't assign the L2VPN-enabled interface %s to a link aggregation group. %s 加入聚合组失败，因为该端口使能了 L2VPN 业务。	During executing merge operation for Ethinterfaces table, can't assign the L2VPN-enabled interface to a link aggregation group. 在对接口信息表进行 merge 操作时，因为该端口使能了 L2VPN 业务导致加入聚合组失败。
Can't assign %s to a link aggregation group because the interface is enabled with port security, MAC authentication, or 802.1X authentication. %s 加入聚合组失败，因为该端口使能了端口安全、MAC 认证或者 802.1X 认证。	During executing merge operation for Ethinterfaces table, can't assign it to a link aggregation group because the interface is enabled with port security, MAC authentication, or 802.1X authentication. 在对接口信息表进行 merge 操作时，因为该端口使能了端口安全、MAC 认证或者 802.1X 认证导致加入聚合组失败。
Failed to create the link aggregation group.	During executing merge operation for Ethinterfaces

聚合组创建失败。	table, failed to create the link aggregation group. 在对接口信息表进行 merge 操作时, 聚合组创建失败。
Can't assign the sub interface %s to a link aggregation group. %s 加入聚合组失败, 因为该端口是子接口。	During executing merge operation for Ethinterfaces table, can't assign the sub interface to a link aggregation group. 在对接口信息表进行 merge 操作时, 因为该端口是子接口导致加入聚合组失败。
Failed to set the hash key mode, because the mode is not supported. 设置负载分担模式失败, 因为设备不支持指定的模式。	During executing merge operation for Ethinterfaces table, failed to set the hash key mode, because the mode is not supported. 在对接口信息表进行 merge 操作时, 因为设备不支持指定的模式导致设置负载分担模式失败。
The load-sharing mode of flexible can not be configured with others. 负载分担 flexible 模式不能和其他模式同时配置。	During executing merge operation for Ethinterfaces table, the load-sharing mode of flexible can not be configured with others. 在对接口信息表进行 merge 操作时, 负载分担 flexible 模式不能和其他模式同时配置。
The load-sharing mode of per-packet can not be configured with others. 负载分担 per-packet 模式不能和其他模式同时配置。	During executing merge operation for Ethinterfaces table, the load-sharing mode of per-packet can not be configured with others. 在对接口信息表进行 merge 操作时, 负载分担 per-packet 模式不能和其他模式同时配置。
Can't assign %s to a link aggregation group because the interface is shared by multiple contexts. %s 加入聚合组失败, 因为该端口已被多个 context 共享。	During executing merge operation for Ethinterfaces table, can't assign it to a link aggregation group because the interface is shared by multiple contexts. 在对接口信息表进行 merge 操作时, 端口加入聚合组失败, 因为该端口已被多个 context 共享。
Can't assign the port to the aggregation group because its attribute configurations are different than the aggregate interface. 接口上存在的属性类配置和聚合接口不同, 该接口不能加入聚合组。	During executing merge operation for Ethinterfaces table, can't assign the port to the aggregation group because its attribute configurations are different than the aggregate interface. 在对接口信息表进行 merge 操作时, 接口上存在的属性类配置和聚合接口不同, 该接口不能加入聚合组。
Please set the manual recovery mode for PFC deadlock detection first. 请先配置 PFC 死锁检测功能的恢复方式为手工恢复。	During executing merge operation for Ifrecover table, please set the manual recovery mode for PFC deadlock detection first. 在对接口信息表进行 merge 操作时, 请先配置 PFC 死锁检测功能的恢复方式为手工恢复。
Please specify the indexes and associated contents for the element 'LAGGMembers'. 对于 merge、create 操作, 不能对表 LAGGMembers 只下发索引列, 应同时指定索引列和非索引列。	During executing merge operation for Ethinterfaces table, please specify the indexes and associated contents for the element 'LAGGMembe'. 在对接口信息表进行 merge 操作时, 对于 merge、create 操作, 不能对表 LAGGMembers 只下发索引列, 应同时指定索引列和非索引列。



# Contents

Interface event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	1
Bandwidth event .....	3
XML structure for event subscription .....	3
XML structure for event report .....	4
Speed event .....	5
XML structure for event subscription .....	5
XML structure for event report .....	5

# Interface event

This event is used to report interface active/deactive or up/down information.

## XML structure for event subscription

```
<InterfaceEvent>
  <Interface>
    <Name></Name>
  </Interface>
</InterfaceEvent>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Ifmgr</stream>
    <filter type="subtree">
      <InterfaceEvent xmlns="http://www.h3c.com/netconf/event:1.0/Ifmgr:1.0">
        <Interface>
          <Name>Serial2/0/1</Name>
        </Interface>
      </InterfaceEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	Ifmgr
Event name	InterfaceEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Ifmgr:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Name	Interface name	String. Size: 1 to 47	No

## XML structure for event report

```
<InterfaceEvent>
  <Interface>
```

```

    <Name></Name>
    <Status></Status>
    <IfIndex></IfIndex>
    <Adminstatus></Adminstatus>
    <Operstatus></Operstatus>
    <Description></Description>
  </Interface>
</InterfaceEvent>

```

#### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <InterfaceEvent xmlns="http://www.h3c.com/netconf/event:1.0/Ifmgr:1.0">
    <Interface>
      <Name>Serial2/0/1</Name>
      <Status>IF_ACTIVE</Status>
      <IfIndex></IfIndex>
      <Description>The Interface GigabitEthernet2/0/1 occurred IF_ACTIVE event,the
administration status is Admin Up, operation status is OPER_UP.</Description>
      <Adminstatus >ADMIN_UP</Adminstatus>
      <Operstatus>OPER_UP</Operstatus>
    </Interface>
  </InterfaceEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Name	Interface name	String. Size: 1 to 47	No
Status	Interface status	Enumeration: IF_ACTIVE IF_DEACTIVE IF_PHY_UP IF_PHY_DOWN IF_LINK_UP IF_LINK_DOWN	No
Description	Ifmgr event description	String. Size: 1 to 255	No
IfIndex	Interface index	Unsigned integer.	No
AdminStatus	Administration status of an interface	Unsigned integer. • ADMIN_UP. • ADMIN_DOWN.	No
OperStatus	Operation status of an interface	Unsigned short. • OPER_UP.	No

Column name	Column description	Data type and restrictions	Support for extended queries
		<ul style="list-style-type: none"> <li>• OPER_DOWN.</li> <li>• OPER_TESTING.</li> <li>• OPER_UNKNOW.</li> <li>• OPER_DORMANT.</li> <li>• OPER_NOTPERSENT.</li> <li>• OPER_LOWERLAYERDOWN.</li> </ul>	

## Bandwidth event

This event is used to report bandwidth change information.

## XML structure for event subscription

```
<InterfaceBandWidthEvent>
  <InterfaceBandWidth>
    <Name></Name>
  </InterfaceBandWidth>
</InterfaceBandWidthEvent>
```

**Example:**

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Ifmgr</stream>
    <filter type="subtree">
      <InterfaceBandWidthEvent xmlns="http://www.h3c.com/netconf/event:1.0/Ifmgr:1.0">
        <InterfaceBandWidth>
          <Name>Serial2/0/1</Name>
        </InterfaceBandWidth>
      </InterfaceBandWidthEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	Ifmgr
Event name	BandwidthEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Ifmgr:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Name	Interface name	String. Size: 1 to 47	No

## XML structure for event report

```

<InterfaceBandWidthEvent>
  <InterfaceBandWidth>
    <IfIndex></IfIndex>
    <Name></Name>
    <CFGBandWidth></CFGBandWidth>
    <Description></Description>
  </InterfaceBandWidth>
</InterfaceBandWidthEvent>

```

### Example 1:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <InterfaceBandWidthEvent xmlns="http://www.h3c.com/netconf/event:1.0/Ifmgr:1.0">
    <InterfaceBandWidth>
      <IfIndex>274</IfIndex>
      <Name>GigabitEthernet2/0/1</Name>
      <CFGBandWidth>100000</CFGBandWidth>
      <Description> The interface GigabitEthernet2/2/7/2 's configured bandwidth is
        100000.</Description>
    </InterfaceBandWidth>
  </InterfaceBandWidthEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
IfIndex	Interface index	Unsigned integer.	No
Name	Interface name	String. Size: 1 to 47	No
BandWidth	Effective bandwidth value	Unsigned integer.	No
CFGBandWidth	Configured bandwidth value	Unsigned integer.	No
Description	Ifmgr event description	String. Size: 1 to 255	No

# Speed event

This event is used to report baud-rate or speed-rate change information.

## XML structure for event subscription

```
<InterfaceSpeedEvent>
  <InterfaceSpeed>
    <Name></Name>
  </InterfaceSpeed>
</InterfaceSpeedEvent>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Ifmgr</stream>
    <filter type="subtree">
      <InterfaceSpeedEvent xmlns="http://www.h3c.com/netconf/event:1.0/Ifmgr:1.0">
        <InterfaceSpeed>
          <Name>Serial2/0/1</Name>
        </InterfaceSpeed>
      </InterfaceSpeedEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	Ifmgr
Event name	SpeedEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Ifmgr:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Name	Interface name	String. Size: 1 to 47	No

## XML structure for event report

```
<InterfaceSpeedEvent>
  <InterfaceSpeed>
    <Name></Name>
    <BandWidth></BandWidth>
```

```

    <Description></Description>
  </InterfaceSpeed>
</InterfaceSpeedEvent>

```

#### Example 1:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <InterfaceSpeedEvent xmlns="http://www.h3c.com/netconf/event:1.0/Ifmgr:1.0">
    <InterfaceSpeed>
      <IfIndex>274</IfIndex>
      <Name>GigabitEthernet2/0/1</Name>
      <Bandwidth>5000</Bandwidth>
      <Description>The effective-bandwidth(baud-rate) of GigabitEthernet2/0/1 is
        50000.</Description>
    </InterfaceSpeed>
  </InterfaceSpeedEvent>
</notification>

```

#### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
IfIndex	Interface index	Unsigned integer.	No
Name	Interface name	String. Size: 1 to 47	No
EffecBandwidth	Effective bandwidth value	Unsigned integer.	No
Description	Ifmgr event description	String. Size: 1 to 255	No

# Contents

- Ifmon .....1
  - Ifmon/IfMonThresholdInterfaces .....1
    - XML structure .....1
    - Table description .....2
    - Columns .....2
- Appendix .....7



# Ifmon

## Ifmon/IfMonThresholdInterfaces

This table contains interface monitor threshold information.

### XML structure

```
<Ifmon>
  <IfMonThresholdInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <InputUsage>
        <HighThres></HighThres>
        <LowThres></LowThres>
      </InputUsage>
      <OutputUsage>
        <HighThres></HighThres>
        <LowThres></LowThres>
      </OutputUsage>
      <InputErrorAlarm>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
      </InputErrorAlarm>
      <OutputErrorAlarm>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
      </OutputErrorAlarm>
      <SdhError>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
      </SdhError>
      <SdhB1Error>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
      </SdhB1Error>
      <SdhB2Error>
        <HighThres></HighThres>
```

```

        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
    </SdhB2Error>
    <CRCErr>
        <Type></Type>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
    </CRCErr>
    <RxPauseFrame>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
    </RxPauseFrame>
    <TxPauseFrame>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
    </TxPauseFrame>
</Interface>
</IfMonThresholdInterfaces>
</Ifmon>

```

## Table description

Item	Description
Feature name	Ifmon
Table name	IfMonThresholdInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For information about the string type, see <a href="#">"Appendix"</a>
InputUsage	Threshold for the inbound	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	bandwidth usage		<ul style="list-style-type: none"> <li>LowThres</li> </ul>	
HighThres	Upper threshold for the inbound bandwidth usage	N/A	Unsigned integer. Value range: 1 to 100.	N/A
LowThres	Lower threshold for the inbound bandwidth usage	N/A	Unsigned integer. Value range: 1 to 100.	N/A
OutputUsage	Threshold for the outbound bandwidth usage	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> </ul>	N/A
HighThres	Upper threshold for the outbound bandwidth usage	N/A	Unsigned integer. Value range: 1 to 100.	N/A
LowThres	Lower threshold for the outbound bandwidth usage	N/A	Unsigned integer. Value range: 1 to 100.	N/A
InputErrorAlarm	Threshold for the number of inbound error packets	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of inbound error packets.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of inbound error packets.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of inbound error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the inbound bandwidth exceeds the upper threshold, the physical interface goes down	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
OutputErrorAlarm	Threshold for the number of outbound error packets.	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of outbound error packets.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LowThres	Lower threshold for the number of outbound error packets.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of outbound error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of outbound error packets exceeds the upper threshold, the physical interface goes down	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SdhError	Threshold for the number of SDH error packets.	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of SDH error packets.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of SDH error packets.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of SDH error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of SDH error packets exceeds the upper threshold, the physical interface goes down.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SdhB1Error	Threshold for the number of SDH B1 error packets.	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of SDH B1 error packets.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	SDH B1 error packets.			
Interval	Inspection interval for the number of SDH B1 error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of SDH B1 error packets exceeds the upper threshold, the physical interface goes down.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SdhB2Error	Threshold for the number of SDH B2 error packets	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of SDH B2 error packets.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of SDH B2 error packets.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of SDH B2 error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of SDH B2 error packets exceeds the upper threshold, the physical interface goes down.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
CRCErrorThres	Threshold for the CRC error packets.	N/A	Include: <ul style="list-style-type: none"> <li>Type</li> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
Type	Inspection type for the CRC error packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—absolute</li> <li>2—ratio</li> </ul>	N/A
HighThres	Upper threshold for the CRC error packets.	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>absolute: 1–4294967295</li> <li>ratio: 1 to 100</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LowThres	Low threshold for the CRC error packets.	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>absolute: 1–4294967295</li> <li>ratio: 1 to 100</li> </ul>	N/A
Interval	Inspection interval for the CRC error packets	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of CRC error packets exceeds the upper threshold, the physical interface goes down.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
RxPauseFrame	Threshold for the number of received pause frames.	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> </ul>	N/A
HighThres	Upper threshold for the number of received pause frames.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of received pause frames.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of received pause frames.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
TxPauseFrame	Threshold for the number of transmitted pause frames.	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> </ul>	N/A
HighThres	Upper threshold for the number of transmitted pause frames.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of transmitted pause frames.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of transmitted pause frames.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

# Appendix

A string can contain multiple items that are separated by commas (.). An item can be in one of the following formats:

- *interface name*
- *interface range-name*
- *interface name A to interface name B*

When you use an item in the *interface name* format, follow these restrictions and guidelines:

- Spaces are not allowed between the interface type and interface number.  
Example:  
Correct: GigabitEthernet1/3/0/1  
Incorrect: GigabitEthernet 1/3/0/1
- If the interface name is the same as an existing interface range name, the system sends the request to interfaces in the interface range rather than the interface.  
Example:  
If you have configured the **interface range name** *Ten-Giga1/2/0/1* **interface** *GigabitEthernet1/3/0/1 to GigabitEthernet1/3/0/20* command and then use **Ten-Giga1/2/0/1** as an item, the system sends the request to interfaces in the interface range named **Ten-Giga1/2/0/1**.

When you use an item in the *interface range name* format, follow these restrictions and guidelines:

- If the interface range name is in the *interface name A,interface name B* format, the system sends the request to interface A and interface B rather than interfaces in the interface range.  
Example:  
After you configure the **interface range name** *Ten-Giga1/2/0/1,Ten-Giga1/2/0/2* **interface** *GigabitEthernet1/3/0/1 to GigabitEthernet1/3/0/20* command and then use **Ten-Giga1/2/0/1,Ten-Giga1/2/0/2** as an item, the system sends the request to interfaces Ten-GigabitEthernet 1/2/0/1 and Ten-GigabitEthernet 1/2/0/2 rather than interfaces GigabitEthernet 1/3/0/1 through GigabitEthernet 1/3/0/20.
- If the interface range name is in the *interface name A to interface name B* format, the system sends the request to interfaces interface A through interface B rather than interfaces in the interface range.  
Example:  
After you configure the **interface range name** *Ten-Giga1/2/0/1 to Ten-Giga1/2/0/2* **interface** *GigabitEthernet1/3/0/1 to GigabitEthernet1/3/0/20* command and then use **Ten-Giga1/2/0/1 to Ten-Giga1/2/0/2** as an item, the system sends the request to interfaces Ten-GigabitEthernet 1/2/0/1 through Ten-GigabitEthernet 1/2/0/2 rather than interfaces GigabitEthernet 1/3/0/1 through GigabitEthernet 1/3/0/20.

When you use an item in the *interface name A to interface name B* format, follow these restrictions and guidelines:

- The interfaces before and after the word **to** must be of the same type and reside on the same card and sub-card.
- If the interfaces are subinterfaces, they must also belong to the same main interface.
- The end interface number must be larger than the start interface number.

Example:

Incorrect:

Ten2/0/1 to Ten3/0/2    The start and end interfaces reside on different cards.

Ten2/0/1 to Ten2/1/2 The start and end interfaces reside on different sub-cards.

Ten2/0/1 to Ten2/0/1:3 The start and end interfaces are of different types.

Giga2/0/1 to Ten2/0/25 The start and end interfaces are of different types.

Ten2/0/3:1 to Ten2/0/4:2 The start and end subinterfaces belong to different main interfaces.

Ten2/0/3:4 to Ten2/0/3:1 The start interface number is larger than the end interface number.

Correct:

Ten2/0/1 to Ten2/0/5

Ten2/0/1:1 to Ten2/0/1:100



# Contents

Ifmon .....	1
Ifmon/IfMonStatisticsInterfaces .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Ifmon/IfMonThresholdInterfaces .....	2
XML structure .....	3
Table description .....	4
Columns .....	4
Ifmon/IfMonPmStatisticsInterfaces .....	9
XML structure .....	9
Table description .....	9
Columns .....	10

# Ifmon

## Ifmon/IfMonStatisticsInterfaces

This table contains basic interface monitor statistics information.

### XML structure

```
<Ifmon>
  <IfMonStatisticsInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <InputUsageStatistics></InputUsageStatistics>
      <OutputUsageStatistics></OutputUsageStatistics>
      <InputErrorAlarmStatistics></InputErrorAlarmStatistics>
      <OutputErrorAlarmStatistics></OutputErrorAlarmStatistics>
      <SdhErrorStatistics></SdhErrorStatistics>
      <SdhB1ErrorStatistics></SdhB1ErrorStatistics>
      <SdhB2ErrorStatistics></SdhB2ErrorStatistics>
      <CRCErrorsStatistics></CRCErrorsStatistics>
      <RxPauseFrameStatistics></RxPauseFrameStatistics>
      <TxPauseFrameStatistics></TxPauseFrameStatistics>
    </Interface>
  </IfMonStatisticsInterfaces>
</Ifmon>
```

### Table description

Item	Description
Feature name	ifmon
Table name	IfMonStatisticsInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				information about IfIndex, see "Appendix" in Ifmon NETCONF XML API Configuration Reference.
InputUsageStatistics	Statistics about the inbound bandwidth usage.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
OutputUsageStatistics	Statistics about the outbound bandwidth usage.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
InputErrorAlarmStatistics	Statistics about the number of inbound error packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutputErrorAlarmStatistics	Statistics about the number of outbound error packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
SdhErrorStatistics	Statistics about the number of SDH error packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
SdhB1ErrorStatistics	Statistics about the number of SDH B1 error packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
SdhB2ErrorStatistics	Statistics about the number of SDH B2 error packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
CRCErrorsStatistics	Statistics about the number of CRC error packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RxPauseFrameStatistics	Statistics about the number of received pause frames.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
TxPauseFrameStatistics	Statistics about the number of transmitted pause frames	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## Ifmon/IfMonThresholdInterfaces

This table contains interface monitor threshold information.

# XML structure

```
<Ifmon>
  <IfMonThresholdInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <InputUsage>
        <HighThres></HighThres>
        <LowThres></LowThres>
      </InputUsage>
      <OutputUsage>
        <HighThres></HighThres>
        <LowThres></LowThres>
      </OutputUsage>
      <InputErrorAlarm>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
      </InputErrorAlarm>
      <OutputErrorAlarm>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
      </OutputErrorAlarm>
      <SdhError>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
      </SdhError>
      <SdhB1Error>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
      </SdhB1Error>
      <SdhB2Error>
        <HighThres></HighThres>
        <LowThres></LowThres>
        <Interval></Interval>
        <EnableShutdown></EnableShutdown>
      </SdhB2Error>
      <CRCErrors>
        <Type></Type>
        <HighThres></HighThres>
        <LowThres></LowThres>
```

```

    <Interval></Interval>
    <EnableShutdown></EnableShutdown>
</CRCErrors>
<RxPauseFrame>
    <HighThres></HighThres>
    <LowThres></LowThres>
    <Interval></Interval>
</RxPauseFrame>
<TxPauseFrame>
    <HighThres></HighThres>
    <LowThres></LowThres>
    <Interval></Interval>
</TxPauseFrame>
</Interface>
</IfMonThresholdInterfaces>
</Ifmon>

```

## Table description

Item	Description
Feature name	Ifmon
Table name	IfMonThresholdInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmon NETCONF XML API Configuration Reference.
InputUsage	Threshold for the inbound bandwidth usage	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
HighThres	Upper threshold for the inbound bandwidth usage	N/A	Unsigned integer. Value range: 1 to 100.	N/A
LowThres	Lower threshold for the inbound bandwidth usage	N/A	Unsigned integer. Value range: 1 to 100.	N/A
OutputUsage	Threshold for the outbound bandwidth usage.	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> </ul>	N/A
HighThres	Upper threshold for the outbound bandwidth usage	N/A	Unsigned integer. Value range: 1 to 100.	N/A
LowThres	Lower threshold for the outbound bandwidth usage	N/A	Unsigned integer. Value range: 1 to 100.	N/A
InputErrorAlarm	Threshold for the number of inbound error packets	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of inbound error packets.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of inbound error packets.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of inbound error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the inbound bandwidth exceeds the upper threshold, the physical interface goes down	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
OutputErrorAlarm	Threshold for the number of outbound error packets.	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of outbound error packets.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LowThres	Lower threshold for the number of outbound error packets.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of outbound error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of outbound error packets exceeds the upper threshold, the physical interface goes down	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SdhError	Threshold for the number of SDH error packets.	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of SDH error packets.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of SDH error packets.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of SDH error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of SDH error packets exceeds the upper threshold, the physical interface goes down.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SdhB1Error	Threshold for the number of SDH B1 error packets.	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of SDH B1 error packets.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	SDH B1 error packets.			
Interval	Inspection interval for the number of SDH B1 error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of SDH B1 error packets exceeds the upper threshold, the physical interface goes down.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SdhB2Error	Threshold for the number of SDH B2 error packets	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
HighThres	Upper threshold for the number of SDH B2 error packets.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of SDH B2 error packets.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of SDH B2 error packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of SDH B2 error packets exceeds the upper threshold, the physical interface goes down.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
CRCErrorThres	Threshold for the CRC error packets.	N/A	Include: <ul style="list-style-type: none"> <li>Type</li> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> <li>EnableShutdown</li> </ul>	N/A
Type	Inspection type for the CRC error packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—absolute</li> <li>2—ratio</li> </ul>	N/A
HighThres	Upper threshold for the CRC error packets.	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>absolute: 1–4294967295</li> <li>ratio: 1 to 100</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
LowThres	Low threshold for the CRC error packets.	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>absolute: 1–4294967295</li> <li>ratio: 1 to 100</li> </ul>	N/A
Interval	Inspection interval for the CRC error packets	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
EnableShutdown	When the number of CRC error packets exceeds the upper threshold, the physical interface goes down.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
RxPauseFrame	Threshold for the number of received pause frames	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> </ul>	N/A
HighThres	Upper threshold for the number of received pause frames.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of received pause frames.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of received pause frames.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
TxPauseFrame	Threshold for the number of transmitted pause frames	N/A	Include: <ul style="list-style-type: none"> <li>HighThres</li> <li>LowThres</li> <li>Interval</li> </ul>	N/A
HighThres	Upper threshold for the number of transmitted pause frames.	N/A	Unsigned integer.	N/A
LowThres	Lower threshold for the number of transmitted pause frames.	N/A	Unsigned integer.	N/A
Interval	Inspection interval for the number of transmitted pause frames.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

# Ifmon/IfMonPmStatisticsInterfaces

This table contains interface performance management statistics.

## XML structure

```
<Ifmon>
  <IfMonPmStatisticsInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <TaskName></TaskName>
      <DataIndex></DataIndex>
      <IfName></IfName>
      <Timestamp></Timestamp>
      <InSpeedBit>
        <ValidFlag></ValidFlag>
        <PeakValue></PeakValue>
        <PeakTimestamp></PeakTimestamp>
        <ValleyValue></ValleyValue>
        <ValleyTimestamp></ValleyTimestamp>
        <AverageValue></AverageValue>
      </InSpeedBit>
      <OutSpeedBit>
        <ValidFlag></ValidFlag>
        <PeakValue></PeakValue>
        <PeakTimestamp></PeakTimestamp>
        <ValleyValue></ValleyValue>
        <ValleyTimestamp></ValleyTimestamp>
        <AverageValue></AverageValue>
      </OutSpeedBit>
    </Interface>
  </IfMonPmStatisticsInterfaces>
</Ifmon>
```

## Table description

Item	Description
Feature name	Ifmon
Table name	IfMonPmStatisticsInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmon NETCONF XML API Configuration Reference.
TaskName	Statistical task name of an interface	Index	String. Length: 1 to 31 characters.	N/A
DataIndex	Statistical data index	Index	Unsigned integer. Value range: 0 to 16.	0 means the real-time data in the current unexpired statistics interval. 1 means the data in the latest complete statistics interval, and so on. 16 means the data in the earliest complete statistics interval.
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters.	N/A
Timestamp	Statistical timestamp	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
InSpeedBit	Rate of inbound bits on an interface	N/A	Include: <ul style="list-style-type: none"> <li>ValidFlag</li> <li>PeakValue</li> <li>PeakTimestamp</li> <li>ValleyValue</li> <li>ValleyTimestamp</li> <li>AverageValue</li> </ul>	N/A
ValidFlag	Valid identification of the statistical task of InSpeedBit	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—No statistics.</li> <li>1—Valid.</li> </ul>	N/A
PeakValue	Peak value of each sample interval in the	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	statistical interval of InSpeedBit			
PeakTimestamp	Peak time of each sample interval in the statistical interval of InSpeedBit	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
ValleyValue	Valley value of each sample interval in the statistical interval of InSpeedBit	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ValleyTimestamp	Valley time of each sample interval in the statistical interval of InSpeedBit	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
AverageValue	Average value of each sample interval in the statistical interval of InSpeedBit	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutSpeedBit	Rate of outbound bits on an interface	N/A	Include: <ul style="list-style-type: none"> <li>ValidFlag</li> <li>PeakValue</li> <li>PeakTimestamp</li> <li>ValleyValue</li> <li>ValleyTimestamp</li> <li>AverageValue</li> </ul>	N/A
ValidFlag	Valid identification of the statistical task of OutSpeedBit	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—No statistics.</li> <li>1—Valid.</li> </ul>	N/A
PeakValue	Peak value of each sample interval in the statistical interval of OutSpeedBit	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
PeakTimestamp	Peak time of each sample interval in the statistical interval of OutSpeedBit	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
ValleyValue	Valley value of each sample interval in the statistical interval of OutSpeedBit	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ValleyTimestamp	Valley time of each sample interval in the statistical interval	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	of OutSpeedBit			
AverageValue	Average value of each sample interval in the statistical interval of OutSpeedBit	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

文档密级根据需求自行修改

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Ifmon ..... 2

    Ifmon/IfMonThresholdInterfaces ..... 2

# Ifmon

## Ifmon/IfMonThresholdInterfaces

Message	Explanation
<p>This interface does not support the operation.</p> <p>该接口不支持本操作。</p>	<p>During executing remove or delete operation for Ifmonthresholdinterfaces table, the interface does not support the operation.</p> <p>在对 Ifmonthresholdinterfaces 接口信息表进行删除操作时，该接口不支持本操作。</p>
<p>Please specify the type, high-threshold, and low-threshold parameters at same time.</p> <p>请同时指定 CRC 错误报文告警参数中的类型、上限阈值和下限阈值。</p>	<p>During executing set operation for Ifmonthresholdinterfaces table, Please specify the type, high-threshold, and low-threshold parameters at same time.</p> <p>在对 Ifmonthresholdinterfaces 接口信息表进行设置操作时，请同时指定 CRC 错误报文告警参数中的类型、上限阈值和下限阈值。</p>
<p>Please specify the type, high-threshold, low-threshold, and interval parameters at same time.</p> <p>请同时指定 CRC 错误报文告警参数中的类型、上限阈值、下限阈值和时间间隔。</p>	<p>During executing set operation for Ifmonthresholdinterfaces table, please handle type, high-threshold, low-threshold, and interval at same time Please specify the type, high-threshold, low-threshold, and interval parameters at same time.</p> <p>在对 Ifmonthresholdinterfaces 接口信息表进行设置操作时，请同时指定 CRC 错误报文告警参数中的类型、上限阈值、下限阈值和时间间隔。</p>
<p>The high trap threshold must be greater than or equal to the low trap threshold.</p> <p>上限阈值必须大于或等于下限阈值。</p>	<p>During executing set operation for Ifmonthresholdinterfaces table, The high trap threshold must be greater than or equal to the low trap threshold.</p> <p>在对 Ifmonthresholdinterfaces 接口信息表进行设置操作时，上限阈值必须大于或等于下限阈值。</p>
<p>When you configure the CRC thresholds in percent, the threshold values cannot be greater than 100%.</p> <p>以百分比形式配置 CRC 错误报文告警阈值时，阈值不应当大于 100%。</p>	<p>During executing set operation for Ifmonthresholdinterfaces table, the threshold values cannot be greater than 100% When you configure the CRC thresholds in percent.</p> <p>在对 Ifmonthresholdinterfaces 接口信息表进行设置操作时，以百分比形式配置 CRC 错误报文告警阈值时，阈值不应当大于 100%。</p>
<p>There is no configure, please input configure</p>	<p>During executing set operation for</p>

parameters.

不存在 CRC 错误报文告警参数，请同时指定类型、上限阈值、下限阈值和时间间隔。

Ifmonthresholdinterfaces table, please input configure parameters when there is no configure.

在对 Ifmonthresholdinterfaces 接口信息表进行设置操作时，当不存在 CRC 错误报文告警参数时请同时指定类型、上限阈值、下限阈值和时间间隔。



# Contents

- IfmonStatisticsEvent event ..... 1
  - XML structure for event subscription ..... 1
  - XML structure for event report ..... 2

# IfmonStatisticsEvent event

This event is used to report interface statistics information.

## XML structure for event subscription

```
<IfmonStatisticsEvent>
  <Interface>
    <IfIndex></IfIndex>
    <TaskName></TaskName>
  </Interface>
</IfmonStatisticsEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>Ifmon</stream>
    <filter type="subtree">
      <IfmonStatisticsEvent xmlns="http://www.h3c.com/netconf/event:1.0/Ifmon:1.0">
        <Interface>
          <IfIndex>271</IfIndex>
          <TaskName>task1</TaskName>
        </Interface>
      </IfmonStatisticsEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	Ifmon
Event name	IfmonStatisticsEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/Ifmon:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
IfIndex	Interface index	Unsigned integer	No
TaskName	Statistical task name of an interface	String. Length: 1 to 31 characters.	No

# XML structure for event report

```
<IfmonStatisticsEvent>
  <Interface>
    <IfIndex></IfIndex>
    <TaskName></TaskName>
    <Measure>
      <MeasureName></MeasureName>
      <PeakValue></PeakValue>
      <PeakTimestamp></PeakTimestamp>
      <ValleyValue></ValleyValue>
      <ValleyTimestamp></ValleyTimestamp>
      <AverageValue></AverageValue>
    </Measure>
  </Interface>
</IfmonStatisticsEvent>
```

## Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2018-11-19T09:10:51</eventTime>
  <IfmonStatisticsEvent xmlns="http://www.h3c.com/netconf/event:1.0/Ifmon:1.0">
    <Interface>
      <IfIndex>271</IfIndex>
      <TaskName>task1</TaskName>
      <Measure>
        <MeasureName>InSpeedBit</MeasureName>
        <PeakValue>1000</PeakValue>
        <PeakTimestamp>2018-11-19T18:20:00</PeakTimestamp>
        <ValleyValue>600</ValleyValue>
        <ValleyTimestamp>2018-11-19T18:25:00</ValleyTimestamp>
        <AverageValue>700</AverageValue>
        <MeasureName>OutSpeedBit</MeasureName>
        <PeakValue>1000</PeakValue>
        <PeakTimestamp>2018-11-19T18:20:00</PeakTimestamp>
        <ValleyValue>600</ValleyValue>
        <ValleyTimestamp>2018-11-19T18:25:00</ValleyTimestamp>
        <AverageValue>700</AverageValue>
      </Measure>
    </Interface>
  </IfmonStatisticsEvent>
</notification>
```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
IfIndex	Interface index	Unsigned integer.	No
TaskName	Statistical task name of an interface	String. Length: 1 to 31 characters.	No
MeasureName	Statistical measure name of an interface	String. Length: 1 to 63 characters.	No
PeakValue	Peak value of each sample interval in the statistical interval	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	No
PeakTimestamp	Peak time of each sample interval in the statistical interval of measure	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	No
ValleyValue	Valley value of each sample interval in the statistical interval of measure	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	No
ValleyTimestamp	Valley time of each sample interval in the statistical interval of measure	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	No
AverageValue	Average Value of each sample interval in the statistical interval of measure	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	No

# Contents

IGMP.....	1
IGMP/Interfaces .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
IGMP/HostInterfaces .....	2
XML structure.....	2
Table description.....	2
Columns.....	2

# IGMP

## IGMP/Interfaces

This table contains IGMP interface information.

### XML structure

```
<IGMP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enabled></Enabled>
      <Version></Version>
    </Interface>
  </Interfaces>
</IGMP>
```

### Table description

Item	Description
Feature name	IGMP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	IGMP enable status.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>	N/A
Version	IGMP version.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—IGMP version 1.</li> <li><b>2</b>—IGMP version 2 (default).</li> <li><b>3</b>—IGMP version 3.</li> </ul>	N/A

## IGMP/HostInterfaces

This table contains IGMP host interface information.

### XML structure

```

<IGMP>
  <HostInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enabled></Enabled>
    </Interface>
  </HostInterfaces>
</IGMP>

```

### Table description

Item	Description
Feature name	IGMP
Table name	HostInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see

Column name	Column description	Column type	Data type and restrictions	Remarks
				"Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enabled	IGMP enable status.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>	N/A



# Contents

IGMP .....	1
IGMP/Interfaces .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IGMP/Groups .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
IGMP/SrcList .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
IGMP/HostInterfaces .....	4
XML structure .....	4
Table description .....	4
Columns .....	5

# IGMP

## IGMP/Interfaces

This table contains IGMP interface information.

### XML structure

```
<IGMP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enabled></Enabled>
      <Version></Version>
    </Interface>
  </Interfaces>
</IGMP>
```

### Table description

Item	Description
Feature name	IGMP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	IGMP enable status.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
Version	IGMP version.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—IGMP version 1.</li> <li><b>2</b>—IGMP version 2.</li> <li><b>3</b>—IGMP version 3.</li> </ul>	N/A

## IGMP/Groups

This table contains IGMP group information.

## XML structure

```

<IGMP>
  <Groups>
    <Group>
      <IfIndex></IfIndex>
      <GroupAddr></GroupAddr>
      <Uptime></Uptime>
      <Expires></Expires>
    </Group>
  </Groups>
</IGMP>

```

## Table description

Item	Description
Feature name	IGMP
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of

Column name	Column description	Column type	Data type and restrictions	Remarks
				your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
GroupAddr	IPv4 multicast address.	Index	String, dotted decimal notation.	Example: 224.1.1.1.
Uptime	Length of time since the multicast group was reported.	N/A	Unsigned integer (in seconds).	N/A
Expires	Remaining time of the multicast group.	N/A	Unsigned integer (in seconds).	N/A

## IGMP/SrcList

This table contains source information of IGMP groups.

### XML structure

```

<IGMP>
  <SrcList>
    <Src>
      <IfIndex></IfIndex>
      <GroupAddr></GroupAddr>
      <SourceAddr></SourceAddr>
      <Uptime></Uptime>
      <Expires></Expires>
    </Src>
  </SrcList>
</IGMP>

```

### Table description

Item	Description
Feature name	IGMP
Table name	SrcList
Table type	Multi-instance table
Row name	Src
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
GroupAddr	IPv4 multicast address.	Index	String, dotted decimal notation.	Example: 224.1.1.1.
SourceAddr	IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Uptime	Length of time since the multicast source was reported.	N/A	Unsigned integer (in seconds).	N/A
Expires	Remaining time of the multicast source.	N/A	Unsigned integer (in seconds).	N/A

## IGMP/HostInterfaces

This table contains IGMP host interface information.

### XML structure

```
<IGMP>
  <HostInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enabled></Enabled>
    </Interface>
  </HostInterfaces>
</IGMP>
```

### Table description

Item	Description
Feature name	IGMP
Table name	HostInterfaces
Table type	Multi-instance table
Row name	Interface

Item	Description
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enabled	IGMP enable status.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

# Contents

IGMP .....	2
IGMP/Interfaces .....	2
IGMP/Groups .....	2
IGMP/SrcList .....	2
IGMP/HostInterfaces .....	2

# IGMP

## IGMP/Interfaces

Message	Explanation
IGMP is not configured. IGMP尚未配置。	During executing set operation, IGMP is not configured. 对该表进行配置时，IGMP 还未配置。
IGMP is not ready. IGMP尚未就绪。	During executing set operation, IGMP is not complete startup. 对该表进行配置时，IGMP还未完全启动。

## IGMP/Groups

Message	Explanation
IGMP is not configured. IGMP尚未配置。	During executing set operation, IGMP is not configured. 对该表进行配置时，IGMP 还未配置。
IGMP is not ready. IGMP尚未就绪。	During executing set operation, IGMP is not complete startup. 对该表进行配置时，IGMP还未完全启动。

## IGMP/SrcList

Message	Explanation
IGMP is not configured. IGMP尚未配置。	During executing set operation, IGMP is not configured. 对该表进行配置时，IGMP 还未配置。
IGMP is not ready. IGMP尚未就绪。	During executing set operation, IGMP is not complete startup. 对该表进行配置时，IGMP还未完全启动。

## IGMP/HostInterfaces

Message	Explanation
IGMP is not configured. IGMP尚未配置。	During executing set operation, IGMP is not configured. 对该表进行配置时，IGMP 还未配置。
IGMP is not ready. IGMP尚未就绪。	During executing set operation, IGMP is not complete startup. 对该表进行配置时，IGMP还未完全启动。



# Contents

IGMPSnooping .....	1
IGMPSnooping/Configuration .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IGMPSnooping/VLANs .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
IGMPSnooping/VSI's .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
IGMPSnooping/FastLeavePorts .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
IGMPSnooping/GroupLimitPorts .....	6
XML structure .....	6
Table description .....	7
Columns .....	7

# IGMPSnooping

## IGMPSnooping/Configuration

This table contains global IGMP snooping information.

### XML structure

```
<IGMPSnooping>
  <Configuration>
    <Enabled></Enabled>
  </Configuration>
</IGMPSnooping>
```

### Table description

Item	Description
Feature name	IGMPSnooping
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
Enabled	Set IGMP snooping state globally.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>disable</b>(default)</li><li>• <b>enable</b></li></ul>

## IGMPSnooping/VLANs

This table contains the IGMP snooping information for VLANs.

### XML structure

```
<IGMPSnooping>
  <VLANs>
    <VLAN>
      <VLANID></VLANID>
    </VLAN>
  </VLANs>
</IGMPSnooping>
```

```

    <Enabled></Enabled>
    <Version></Version>
    <DropUnknown></DropUnknown>
    <Querier></Querier>
    <QueryInterval></QueryInterval>
    <GeneralQuerySourceAddr></GeneralQuerySourceAddr>
    <SpecialQuerySourceAddr></SpecialQuerySourceAddr>
    <ReportSourceAddr></ReportSourceAddr>
    <LeaveSourceAddr></LeaveSourceAddr>
    <Proxy></Proxy>
    <QuerierElection></QuerierElection>
  </VLAN>
</VLANs>
</IGMPSnooping>

```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	VLANs
Table type	Multi-instance table
Row name	VLAN
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID.	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Enabled	Set IGMP snooping state for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
Version	Specify the IGMP snooping version for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>2</b>(default)</li> <li><b>3</b></li> </ul>	N/A
DropUnknown	Set IGMP snooping dropping unknown for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
Querier	Set IGMP snooping querier for specified	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	VLAN.			
QueryInterval	Specify IGMP snooping general query interval for specified VLAN.	N/A	Unsigned integer. Value range: 2 to 31744.	N/A
GeneralQuerySourceAddr	Specify the source IP address of IGMP general queries for specified VLAN.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
SpecialQuerySourceAddr	Specify the source IP address for IGMP group-specific queries for specified VLAN.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ReportSourceAddr	Specify the source IP address of IGMP reports for the specified VLAN.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LeaveSourceAddr	Specify the source IP address for IGMP leave messages for the specified VLAN.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Proxy	Enable IGMP snooping proxy for the specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b>(default)</li> <li>• <b>enable</b></li> </ul>	N/A
QuerierElection	Enable IGMP snooping querier election for the specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b>(default)</li> <li>• <b>enable</b></li> </ul>	N/A

## IGMPSnooping/VSI

This table contains the IGMP snooping information for VSIs.

### XML structure

```

<IGMPSnooping>
  <VSIs>
    <VSI>
      <VsiName></VsiName>
      <Enabled></Enabled>
      <Version></Version>
      <DropUnknown></DropUnknown>
    </VSI>
  </VSIs>
</IGMPSnooping>

```

```

<Querier></Querier>
<QueryInterval></QueryInterval>
<GeneralQuerySourceAddr></GeneralQuerySourceAddr>
<SpecialQuerySourceAddr></SpecialQuerySourceAddr>
<ReportSourceAddr></ReportSourceAddr>
<LeaveSourceAddr></LeaveSourceAddr>
<Proxy></Proxy>
<QuerierElection></QuerierElection>
</VSI>
</VSIs>
</IGMPSnooping>

```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	VSIs
Table type	Multi-instance table
Row name	VSI
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name.	Index	String. Length: 1 to 31 characters.	N/A
Enabled	Enable IGMP snooping for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
Version	Specify the IGMP snooping version for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>2</b>(default)</li> <li><b>3</b></li> </ul>	N/A
DropUnknown	Enable IGMP snooping dropping unknown multicast data for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
Querier	Enable the IGMP snooping querier for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
QueryInterval	Set the IGMP	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	snooping general query interval for the specified VSI.		Value range: 2 to 31744.	
GeneralQuerySourceAddr	Specify the source IP address of IGMP general queries for the specified VSI.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
SpecialQuerySourceAddr	Specify the source IP address for IGMP group-specific queries for the specified VSI.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ReportSourceAddr	Specify the source IP address of IGMP reports for the specified VSI.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LeaveSourceAddr	Specify the source IP address for IGMP leave messages for the specified VSI.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Proxy	Enable IGMP snooping proxy for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b>(default)</li> <li>• <b>enable</b></li> </ul>	N/A
QuerierElection	Enable IGMP snooping querier election for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b>(default)</li> <li>• <b>enable</b></li> </ul>	N/A

## IGMPSnooping/FastLeavePorts

This table contains the IGMP snooping fast leave information on ports.

### XML structure

```

<IGMPSnooping>
  <FastLeavePorts>
    <Interface>
      <IfIndex></IfIndex>
      <FastLeaveVlanList></FastLeaveVlanList>
    </Interface>
  </FastLeavePorts>
</IGMPSnooping>

```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	FastLeavePorts
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
FastLeaveVlanList	Set IGMP snooping fast leave for VLANs on a port.	N/A	VLAN list.	Example: 1,2,3,5-8,10-20.

## IGMPSnooping/GroupLimitPorts

This table contains the IGMP snooping group limit information on ports.

## XML structure

```
<IGMPSnooping>
  <GroupLimitPorts>
    <Interface>
      <IfIndex></IfIndex>
      <Limit></Limit>
      <GroupLimitVlanList ></GroupLimitVlanList>
    </Interface>
  </GroupLimitPorts>
</IGMPSnooping>
```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	GroupLimitPorts
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Limit	Sets the maximum number of multicast groups that a port can join.	Index	Unsigned integer. Value range: 0 to 4294967295.	N/A
GroupLimitVlanList	Set IGMP snooping group limit for VLANs on a port.	N/A	VLAN list.	You must specify VLANs when the operation is merge, create or replace. You can't specify VLANs when the operation is delete or remove.  Example: 1,2,3,5-8,10-20.



# Contents

IGMPSnooping .....	1
IGMPSnooping/Configuration .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IGMPSnooping/VLANs .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
IGMPSnooping/VSI s .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
IGMPSnooping/FastLeavePorts .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
IGMPSnooping/GroupLimitPorts .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
IGMPSnooping/IPv4Layer2MulticastGroups .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
IGMPSnooping/VsiIPv4Layer2MulticastGroups .....	9
XML structure .....	9
Table description .....	10
Columns .....	10

# IGMPSnooping

## IGMPSnooping/Configuration

This table contains global IGMP snooping information.

### XML structure

```
<IGMPSnooping>
  <Configuration>
    <Enabled></Enabled>
  </Configuration>
</IGMPSnooping>
```

### Table description

Item	Description
Feature name	IGMPSnooping
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Enabled	Set IGMP snooping state globally.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>enable</b></li><li>• <b>disable</b></li></ul>

## IGMPSnooping/VLANs

This table contains the IGMP snooping information for VLANs.

### XML structure

```
<IGMPSnooping>
  <VLANs>
    <VLAN>
      <VLANID></VLANID>
      <Enabled></Enabled>
    </VLAN>
  </VLANs>
</IGMPSnooping>
```

```

<Version></Version>
<DropUnknown></DropUnknown>
<Querier></Querier>
<QueryInterval></QueryInterval>
<GeneralQuerySourceAddr></GeneralQuerySourceAddr>
<SpecialQuerySourceAddr></SpecialQuerySourceAddr>
<ReportSourceAddr></ReportSourceAddr>
<LeaveSourceAddr></LeaveSourceAddr>
<Proxy></Proxy>
<QuerierElection></QuerierElection>
</VLAN>
</VLANs>
</IGMPSnooping>

```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	VLANs
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID.	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Enabled	Set IGMP snooping state for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>enable</b></li> <li><b>disable</b></li> </ul>	N/A
Version	Specify the IGMP snooping version for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>2</b></li> <li><b>3</b></li> </ul>	N/A
DropUnknown	Set IGMP snooping dropping unknown for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>enable</b></li> <li><b>disable</b></li> </ul>	N/A
Querier	Set IGMP snooping querier for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>enable</b></li> <li><b>disable</b></li> </ul>	N/A
QueryInterval	Specify IGMP snooping general	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	query interval for specified VLAN.		Value range: 2 to 31744.	
GeneralQuerySourceAddr	Specify the source IP address of IGMP general queries for specified VLAN.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
SpecialQuerySourceAddr	Specify the source IP address for IGMP group-specific queries for specified VLAN.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ReportSourceAddr	Specify the source IP address of IGMP reports for the specified VLAN.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LeaveSourceAddr	Specify the source IP address for IGMP leave messages for the specified VLAN.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Proxy	Enable IGMP snooping proxy for the specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b></li> <li>• <b>enable</b></li> </ul>	N/A
QuerierElection	Enable IGMP snooping querier election for the specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b></li> <li>• <b>enable</b></li> </ul>	N/A

## IGMPSnooping/VSI

This table contains the IGMP snooping information for VSIs.

### XML structure

```

<IGMPSnooping>
  <VSIs>
    <VSI>
      <VsiName></VsiName>
      <Enabled></Enabled>
      <Version></Version>
      <DropUnknown></DropUnknown>
      <Querier></Querier>
      <QueryInterval></QueryInterval>
      <GeneralQuerySourceAddr></GeneralQuerySourceAddr>
    </VSI>
  </VSIs>
</IGMPSnooping>

```

```

<SpecialQuerySourceAddr></SpecialQuerySourceAddr>
<ReportSourceAddr></ReportSourceAddr>
<LeaveSourceAddr></LeaveSourceAddr>
<Proxy></Proxy>
<QuerierElection></QuerierElection>
</VSI>
</VSIs>
</IGMPSnooping>

```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	VSIs
Table type	Multi-instance table
Row name	VSI
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name.	Index	String. Length: 1 to 31 characters.	N/A
Enabled	Enable IGMP snooping for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b></li> <li><b>enable</b></li> </ul>	N/A
Version	Specify the IGMP snooping version for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>2</b></li> <li><b>3</b></li> </ul>	N/A
DropUnknown	Enable IGMP snooping dropping unknown multicast data for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b></li> <li><b>enable</b></li> </ul>	N/A
Querier	Enable IGMP snooping querier for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b></li> <li><b>enable</b></li> </ul>	N/A
QueryInterval	Set the IGMP snooping general query interval for the specified VSI.	N/A	Unsigned integer. Value range: 2 to 31744.	N/A
GeneralQuer	Specify the	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
ySourceAddr	source IP address of IGMP general queries for the specified VSI.			
SpecialQuery SourceAddr	Specify the source IP address for IGMP group-specific queries for the specified VSI.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ReportSource Addr	Specify the source IP address of IGMP reports for the specified VSI.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LeaveSource Addr	Specify the source IP address for IGMP leave messages for the specified VSI.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Proxy	Enable IGMP snooping proxy for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b></li> <li>• <b>enable</b></li> </ul>	N/A
QuerierElecti on	Enable IGMP snooping querier election for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b></li> <li>• <b>enable</b></li> </ul>	N/A

## IGMPSnooping/FastLeavePorts

This table contains the IGMP snooping fast leave information on ports.

### XML structure

```

<IGMPSnooping>
  <FastLeavePorts>
    <Interface>
      <IfIndex></IfIndex>
      <FastLeaveVlanList></FastLeaveVlanList>
    </Interface>
  </FastLeavePorts>
</IGMPSnooping>

```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	FastLeavePorts
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
FastLeaveVlanList	Set IGMP snooping fast leave for VLANs on a port.	N/A	VLAN list.	Example: 1,2,3,5-8,10-20.

## IGMPSnooping/GroupLimitPorts

This table contains the IGMP snooping group limit information on ports.

## XML structure

```
<IGMPSnooping>
  <GroupLimitPorts>
    <Interface>
      <IfIndex></IfIndex>
      <Limit></Limit>
      <GroupLimitVlanList></GroupLimitVlanList>
    </Interface>
  </GroupLimitPorts>
</IGMPSnooping>
```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	GroupLimitPorts
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Limit	Sets the maximum number of multicast groups that a port can join.	Index	Unsigned integer. Value range: 0 to 4294967295.	N/A
GroupLimitVlanList	Set IGMP snooping group limit for VLANs on a port.	N/A	VLAN list.	Example: 1,2,3,5-8,10-20.

## IGMPSnooping/IPv4Layer2MulticastGroups

This table contains information about Layer 2 IP multicast groups for VLANs.

## XML structure

```
<IGMPSnooping>
  <IPv4Layer2MulticastGroups>
    <VLAN>
      <VLANID></VLANID>
      <GroupAddr></GroupAddr>
      <SourceAddr></SourceAddr>
      <IfIndex></IfIndex>
      <PortAttribute></PortAttribute>
    </VLAN>
```



```

    </IPv4Layer2MulticastGroups>
  </IGMPSnooping>

```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	IPv4Layer2MulticastGroups
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID.	Index	Unsigned integer. Value range: 1 to 4094.	N/A
GroupAddr	IPv4 multicast address .	Index	String, dotted decimal notation.	N/A
SourceAddr	IPv4 address.	Index	String, dotted decimal notation.	N/A
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

Column name	Column description	Column type	Data type and restrictions	Remarks
PortAttribute	Port attribute.	N/A	<p>Each bit represents a port attribute.</p> <p>Values:</p> <ul style="list-style-type: none"> <li>1—Learned from IGMP packets.</li> <li>2—Learned from IGMP packets with Exclude filter mode.</li> <li>4—Configured statically.</li> <li>8—Learned from PIM packets.</li> <li>16—Obtained from the kernel.</li> <li>32—Learned from (*, *) entries.</li> <li>64—Learned from (*, G) entries.</li> <li>128—Processed successfully.</li> <li>256—Failed to being processed.</li> <li>512—TRILL port that floods multicast data after the topology changes in VLAN.</li> </ul>	<p>Examples:</p> <ul style="list-style-type: none"> <li>129—means a port learned from IGMP packets and processed successfully.</li> <li>136—means a port learned from PIM packets and processed successfully.</li> </ul>

## IGMPSnooping/VsiIPv4Layer2MulticastGroups

This table contains information about Layer 2 IP multicast groups for VSIs.

### XML structure

```

<IGMPSnooping>
  <VsiIPv4Layer2MulticastGroups>
    <VSI>
      <VsiName></VsiName>
      <GroupAddr></GroupAddr>
      <SourceAddr></SourceAddr>
      <LinkID></LinkID>
      <PortAttribute></PortAttribute>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
    </VSI>
  </VsiIPv4Layer2MulticastGroups>
</IGMPSnooping>

```

## Table description

Item	Description
Feature name	IGMPSnooping
Table name	VsiIPv4Layer2MulticastGroups
Table type	Multi-instance table
Row name	VSI
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name.	Index	String. Length: 1 to 31 characters.	N/A
GroupAddr	IPv4 multicast address.	Index	String, dotted decimal notation.	N/A
SourceAddr	IPv4 address.	Index	String, dotted decimal notation.	N/A
LinkID	Link ID.	Index	Unsigned integer.	N/A
PortAttribute	Port attribute.	N/A	<p>Each bit represents a port attribute.</p> <p>Values:</p> <ul style="list-style-type: none"> <li>1—Learned from IGMP packets.</li> <li>2—Learned from IGMP packets with Exclude filter mode.</li> <li>8—Learned from PIM packets.</li> <li>16—Obtained from the kernel.</li> <li>32—Learned from (*, *) entries.</li> <li>64—Learned from (*, G) entries.</li> <li>128—Processed successfully.</li> <li>256—Failed to being processed.</li> <li>512—Multicast tunnel interface for a multicast-mode VXLAN.</li> <li>1024—Learned from EVPN BGP route.</li> <li>2048—Port in Exclude filter-mode and learned from EVPN BGP route.</li> </ul>	<p>Examples:</p> <ul style="list-style-type: none"> <li>129—means a port learned from IGMP packets and processed successfully.</li> <li>1152—means a port learned from EVPN BGP route and processed successfully.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
SrvID	Ethernet service instance ID.	N/A	Unsigned integer. Value range: 0 to 4096.	The value is 0 if the interface is not a Layer 2 Ethernet interface.

# Contents

IGMPSnooping .....	2
IGMPSnooping/Configuration .....	2
IGMPSnooping/VLANs.....	2
IGMPSnooping/VSI.....	3
IGMPSnooping/FastLeavePorts .....	3
IGMPSnooping/GroupLimitPorts .....	4
IGMPSnooping/IPv4Layer2MulticastGroups .....	4
IGMPSnooping/ VSIIPv4Layer2MulticastGroups.....	4

# IGMPSnooping

## IGMPSnooping/Configuration

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。
IGMP snooping is disabling globally. 全局IGMP snooping正在去使能。	During executing set operation to enable global IGMP snooping, IGMP snooping is disabling globally. 使能全局IGMP snooping时，全局IGMP snooping正在去使能。

## IGMPSnooping/VLANs

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。
IGMP snooping drop-unknown is enabled globally. 全局IGMP snooping已配置drop-unknown。	During executing set operation to enable drop-unknown for this VLAN, IGMP snooping drop-unknown is enabled globally. 使能VLAN内drop-unknown时，全局drop-unknown已经使能。
IGMP snooping is disabled on the VLAN. VLAN未使能IGMP snooping。	During executing set operation for this VLAN, IGMP snooping is disabled on the VLAN. 对该VLAN进行设置时，VLAN未使能IGMP snooping。
IGMP snooping is disabled globally. 全局IGMP snooping未使能。	During executing set operation for this VLAN, IGMP snooping is disabled globally. 对该VLAN进行设置时，全局IGMP snooping未使能。
Invalid source address of general queries. 通用查询报文源IP地址错误。	During executing set operation for GeneralQuerySourceAddr of this VLAN, the value of GeneralQuerySourceAddr is invalid. 对该VLAN内GeneralQuerySourceAddr进行设置时，GeneralQuerySourceAddr值错误。
Invalid source address of group-specific queries. 特定组查询报文源IP地址错误。	During executing set operation for SpecialQuerySourceAddr of this VLAN, the value of SpecialQuerySourceAddr is invalid. 对该VLAN内SpecialQuerySourceAddr进行设置时，SpecialQuerySourceAddr值错误。
Invalid source address of reports. Report报文源IP地址错误。	During executing set operation for ReportSourceAddr of this VLAN, the value of ReportSourceAddr is invalid. 对该VLAN内ReportSourceAddr进行设置时，ReportSourceAddr值错误。
Invalid source address of leave messages. Leave报文源IP地址错误。	During executing set operation for LeaveSourceAddr of this VLAN, the value of LeaveSourceAddr is invalid. 对该VLAN内LeaveSourceAddr进行设置时，LeaveSourceAddr值错误。

# IGMPSnooping/VSI

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation,daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。
IGMP snooping drop-unknown is enabled globally. 全局IGMP snooping已配置drop-unknown。	During executing set operation to enable drop-unknown for this VSI, IGMP snooping drop-unknown is enabled globally. 使能VSI内drop-unknown时，全局drop-unknown已经使能。
IGMP snooping is disabled on the VSI. VSI未使能IGMP snooping。	During executing set operation for thisVSI, IGMP snooping is disabled on theVSI. 对该VSI进行设置时，VSI未使能IGMP snooping。
IGMP snooping is disabled globally. 全局IGMP snooping未使能。	During executing set operation for thisVSI, IGMP snooping is disabled globally. 对该VSI进行设置时，全局IGMP snooping未使能。
Invalid source address of general queries. 通用查询报文源IP地址错误。	During executing set operation for GeneralQuerySourceAddr of this VSI, the value of GeneralQuerySourceAddr is invalid. 对该VSI内GeneralQuerySourceAddr进行设置时，GeneralQuerySourceAddr值错误。
Invalid source address of group-specific queries. 特定组查询报文源IP地址错误。	During executing set operation for SpecialQuerySourceAddr of this VSI, the value of SpecialQuerySourceAddr is invalid. 对该VSI内SpecialQuerySourceAddr进行设置时，SpecialQuerySourceAddr值错误。
Invalid source address of reports. Report报文源IP地址错误。	During executing set operation for ReportSourceAddr of this VSI, the value of ReportSourceAddr is invalid. 对该VSI内ReportSourceAddr进行设置时，ReportSourceAddr值错误。
Invalid source address of leave messages. Leave报文源IP地址错误。	During executing set operation for LeaveSourceAddr of this VSI, the value of LeaveSourceAddr is invalid. 对该VSI内LeaveSourceAddr进行设置时，LeaveSourceAddr值错误。

# IGMPSnooping/FastLeavePorts

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get或者set操作时，守护进程收到了错误的消息类型。
IGMP snooping is disabled globally. 全局IGMP snooping未使能。	During executing set operation, IGMP snooping is disabled globally. 对该表进行配置时，全局 IGMP snooping 未使能。

# IGMPSnooping/GroupLimitPorts

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。
IGMP snooping is disabled globally. 全局IGMP snooping未使能。	During executing set operation, IGMP snooping is disabled globally. 对该表进行配置时，全局 IGMP snooping 未使能。
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	GroupLimitVLANList can't be removed alone, and should be removed together with Limit. GroupLimitVLANList不能单独删除，需要和Limit一起删除。

# IGMPSnooping/IPv4Layer2MulticastGroups

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。

# IGMPSnooping/ VSIIPv4Layer2MulticastGroups

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。



# Contents

Comware 7 IKE NETCONF XML API Error Message Reference .....	1
IKEv1/GlobalConfiguration .....	1
IKEv1/Profiles .....	1
IKEv1/Ipv4AddressPreSharedKeys .....	2
IKEv1/Ipv6AddressPreSharedKeys .....	2
IKEv1/Ipv4AddressGroup .....	2

# Comware 7 IKE NETCONF XML API Error Message Reference

## IKEv1/GlobalConfiguration

Message	Explanation
This device not support the configuration. 该设备不支持该项配置。	This device doesn't support the configuration.. 设备不支持该配置项。

## IKEv1/Profiles

Message	Explanation
Domain name must not include /\   "" : * ? < > @, and must not be d, d, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, if-unknown. 域名不允许包含 /\   "" : * ? < > @, 也不允许为 d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, if-unknown。	Specifies the ISP domain used for requesting authorization attributes. The domain name cannot contain a forward slash (/), backslash (\), vertical bar ( ), quotation mark ("), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).The name cannot be d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown. 申请授权属性时使用的ISP域名, 域名不能包括 “/”、“\”、“ ”、“”、“.”、“*”、“?”、“<”、“>”以及“@”字符, 且不能为字符串“d”、“de”、“def”、“defa”、“defau”、“default”、“default”、“i”、“if”、“if-”、“if-u”、“if-un”、“if-unk”、“if-unkn”、“if-unkno”、“if-unknow”和“if-unknown”。
User name must not include \ / : * ? < > @, and must not be a, al, all. 用户名不允许包含 \,  , /, :, *, ?, <, >, @, 也不允许为a, al, all。	Specifies the username used for requesting authorization attributes. The username cannot contain a forward slash (/), backslash (\), vertical bar ( ), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).The username cannot be a, al, or all. 申请授权属性时使用的用户名, 用户名不允许包含 \,  , /, :, *, ?, <, >, @, 用户名也不允许为a, al, all。
The number of keychains in the profile exceeds the limit. 指定profile下的Keychain个数超出上限。	You can specify a maximum of six IKE keychains for an IKE profile. 一个IKE profile中最多可以指定六个IKE keychain。
The number of certificate domains in the profile exceeds the limit. 指定profile下的证书所属PKI域的个数超出上限。	You can specify a maximum of six PKI domains for an IKE profile. 一个IKE profile中最多可以引用六个PKI域。
Invalid username. 无效的用户名。	Specifies the username for client authentication. The username cannot contain a forward slash (/), backslash (\), vertical bar ( ), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).The username cannot be a, al, or all. 配置客户端认证的用户名, 用户名不允许包含 \,  , /, :, *, ?, <, >, @, 用户名也不允许为a, al, all。
Invalid password. 无效的密码。	Specifies the password for client authentication. Its plaintext form is a case-sensitive string of 1 to 63 characters. Its encrypted form

is a case-sensitive string of 1 to 110 characters.

配置客户端认证的密码，明文密码为1~63个字符的字符串；密文密码为1~110个字符的字符串。

## IKEv1/ Ipv4AddressPreSharedKeys

Message	Explanation
A pre-shared key is already configured for this address. 该地址的预共享密钥已存在。	The pre-shared key is already configured for this address and cannot be configured again. 该地址的预共享密钥已存在时，不能再次下发。
A pre-shared key is already configured for this host. 该主机的预共享密钥已存在。	The pre-shared key is already configured for this host and cannot be configured again. 该主机的预共享密钥已存在时，不能再次下发。

## IKEv1/ Ipv6AddressPreSharedKeys

Message	Explanation
A pre-shared key is already configured for this address. 该地址的预共享密钥已存在。	The pre-shared key is already configured for this address and cannot be configured again. 该地址的预共享密钥已存在时，不能再次下发。
A pre-shared key is already configured for this host. 该主机的预共享密钥已存在。	The pre-shared key is already configured for this host and cannot be configured again. 该主机的预共享密钥已存在时，不能再次下发。

## IKEv1/Ipv4AddressGroup

Message	Explanation
Start IP address can't be higher than end IP address. 起始IP地址不能大于结束IP地址。	End-ipv4-address of an IKE IPv4 address group can't be lower than start-ipv4-address. 配置IKE IPv4地址池时，起始IP地址不能大于结束IP地址。
Number of IP addresses in the group exceeded the limit. 该地址池的地址数目超过最大值。	An IKE IPv4 address pool can contain a maximum of 8192 IPv4 addresses. 每个地址池中包括的IPv4地址的最大数目为8192。
The address group overlaps with an existing address group. 该地址池与已存在地址池重叠。	Address groups cannot overlap with each other. 地址池的地址范围不能相互重叠。
Configuration items don't meet the requirements. 不符合配置要求。	The start-ipv4-address and end-ipv4-address must be specified together. 起始地址和结束地址必须同时下发。
Invalid IPv4 mask. 无效的IPv4掩码。	Must specify correct IPv4 address mask or correct length of IPv4 address mask. 必须下发正确的掩码或掩码长度。

# Contents

IKEv1 .....	1
IKEv1/ ResetSAs .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IKEv1/ClearGlobalStatistics .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
IKEv1/ClearTunnelsStatistics .....	2
XML structure .....	2
Table description .....	2
Columns .....	3

# IKEv1

## IKEv1/ ResetSAs

This table is used to reset IKE SAs.

### XML structure

```
<IKEv1>
  <ResetSAs>
    <Reset>
      <ID></ID>
    </Reset>
  </ResetSAs>
</IKEv1>
```

### Table description

Item	Description
Feature name	IKEv1
Table name	ResetSAs
Table type	Multi-instance table
Row name	Reset
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Connect-ID of IKE SA	Index	Integer When ID is zero it means reset all the IKE SA	N/A

## IKEv1/ClearGlobalStatistics

This table is used to clear Globalstatistics.

### XML structure

```
<IKEv1>
```

```

    <ClearGlobalStatistics>
      <Clear/>
    </ClearGlobalStatistics>
  </IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	ClearGlobalStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear IKE GlobalStatistics	N/A	Must be empty	N/A

## IKEv1/ClearTunnelsStatistics

This table is used to clear Tunnel Statistics.

## XML structure

```

<IKEv1>
  <ClearTunnelsStatistics>
    <Clear>
      <TunnelID></TunnelID>
    </Clear>
  </ClearTunnelsStatistics>
</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	ClearTunnelsStatistics
Table type	Multi-instance table

Row name	Clear
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	IKE tunnel ID	Index	Unsigned integer. Value range: 0 to $2^{32}-1$	N/A

# Contents

IKEv1 .....	1
IKEv1/GlobalConfiguration .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
IKEv1/Profiles .....	3
XML structure .....	3
Table description .....	5
Columns .....	5
IKEv1/MatchRemotepv4Address .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
IKEv1/MatchRemotepv6Address .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
IKEv1/ MatchRemotepv4Range .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
IKEv1/ MatchRemotepv6Range .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
IKEv1/Proposals .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
IKEv1/Keychains .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
IKEv1/HostPreSharedKeys .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
IKEv1/ Ipv4AddressPreSharedKeys .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
IKEv1/ Ipv6AddressPreSharedKeys .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
IKEv1/Ipv4AddressGroup .....	19
XML structure .....	19
Table description .....	20
Columns .....	20



# IKEv1

## IKEv1/GlobalConfiguration

This table is used to configure IKE global configuration.

### XML structure

```
<IKEv1>
  <GlobalConfiguration>
    <DPD>
      <Mode></Mode>
      <Interval></Interval>
      <Retry></Retry>
    </DPD>
    <Keepalive>
      <Interval></Interval>
      <Timeout></Timeout>
    </Keepalive>
    <SignIDfromCert></SignIDfromCert>
    <InvalidSPIRecovery></InvalidSPIRecovery>
    <NatKeepaliveInterval></NatKeepaliveInterval>
    <IKESACountLimit>
      <EstablishLimit></EstablishLimit>
      <NegotiateLimit></NegotiateLimit>
    </IKESACountLimit>
    <LocalID>
      <Type></Type>
      <IpAddress></IpAddress>
      <Value></Value>
    </LocalID>
    <LoggingNegotiation></LoggingNegotiation>
    <CompatibleSm4></CompatibleSm4>
  </GlobalConfiguration>
</IKEv1>
```

### Table description

Item	Description
Feature name	IKEv1
Table name	GlobalConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None

Item	Description
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DPD	Dead Peer Detection(DPD) parameters	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Interval</li> <li>Retry</li> </ul>	N/A
Mode	The mode of DPD	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—On-demand,</li> <li>2—Periodic</li> </ul>	N/A
Interval	Interval time of triggering DPD	N/A	Unsigned integer: Value range:1 to 300, in seconds.	N/A
Retry	The DPD retry interval	N/A	Unsigned integer: Value range:1 to 60, in seconds. Default value is 5.	N/A
Keepalive	Global keepalive configuration	Data structure	Members include: <ul style="list-style-type: none"> <li>Interval</li> <li>Timeout</li> </ul>	N/A
Interval	Keepalive Interval	N/A	Unsigned integer: Value range:20 to 28800, in seconds.	N/A
Timeout	Keepalive Timeout	N/A	Unsigned integer: Value range:20 to 28800, in seconds.	N/A
SignIDfrom Cert	Digital signature authentication , If enable get the identity of the local end from the certificate	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul> Default value is false.	N/A
InvalidSPIRecovery	If enable Re-establish an IKE SA upon an invalid-SPI event	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul> Default value is false.	N/A
NatKeepaliveInterval	NAT keepalive Interval	N/A	Unsigned integer: Value range:5 to 300, in seconds. Default value is 20	N/A
IKESACountLimit	Limit the number of IKE SA established and in	Data structure	Members include: <ul style="list-style-type: none"> <li>EstablishLimit</li> <li>NegotiateLimit</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	negotiation			
EstablishLimit	Limit the maximum number of established SAs	N/A	Unsigned integer: Value range:1 to 99999	N/A
NegotiateLimit	Limit the maximum number of negotiation SAs	N/A	Unsigned integer: Value range:1 to 99999	N/A
LocalID	The identity of the local end	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>IpAddress</li> <li>Value</li> </ul>	N/A
Type	The type of the identity	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ipv4Address,</li> <li>2—Ipv6Address</li> <li>3—FQDN</li> <li>4—User-FQDN</li> <li>5—DN</li> </ul>	N/A
IpAddress	The value of address when the identity is IP address	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the type of the identity.
Value	The value when the identity isn't IP address	N/A	String: Length:0 to 255 characters Case sensitive.	If the type is FQDN, it's FQDN name; if the type is User-FQDN, it's User-FQDN name; if the type is DN, it's none.
LoggingNegotiation	Logging for IKE event negotiation	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A
CompatibleSm4	Backward compatibility for the sm4-cbc algorithm	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A

## IKEv1/Profiles

This table is used to configure IKE profiles.

### XML structure

```
<IKEv1>
  <Profiles>
    <Profile>
```

```

<Name></Name>
<Priority></Priority>
<Mode></Mode>
<ProposalList>
  <ProposalItem></ProposalItem>
</ProposalList>
<KeychainList>
  <KeychainItem></KeychainItem>
</KeychainList>
<CertificateDomainList>
  <DomainItem></DomainItem>
</CertificateDomainList>
<CertACPList>
  <CertACPIItem></CertACPIItem>
</CertACPList>
<MatchRemoteFQDNList>
  <FQDNItem></FQDNItem>
</MatchRemoteFQDNList>
<MatchRemoteUserFQDNList>
  <UserFQDNItem></UserFQDNItem>
</MatchRemoteUserFQDNList>
  <LocalID>
    <Type></Type>
    <IpAddress></IpAddress>
    <Value></Value>
  </LocalID>
<MatchLocalAddr>
  <AddressType></AddressType>
  <IpAddress></IpAddress>
  <VRF></VRF>
  <Interface></Interface>
</MatchLocalAddr>
<DPD>
  <Mode></Mode>
  <Interval></Interval>
  <Retry></Retry>
</DPD>
<InsideVRF></InsideVRF>
<ClientXauth></ClientXauth>
<AAAAAuthorization>
  <Domain></Domain>
  <UserName></UserName>
</AAAAAuthorization>
<SASoftDuration></SASoftDuration>
<ClientXauthUser>
  <User></User>
  <PasswordType></PasswordType>
  <Password></Password>

```

```

    </ClientXauthUser>
    <MatchRemoteDomainList>
        <DomainItem></DomainItem>
    </MatchRemoteDomainList>
</Profile>
</Profiles>
</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	Profiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
Priority	The priority of IKE profile	N/A	Unsigned integer: Value range:1 to 65535 Default value is 100.	N/A
Mode	The phase 1 negotiation mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Main</li> <li>2—Aggressive</li> <li>3—GM-main</li> </ul> Default value is 1	N/A
ProposalList	Reference an IKE proposal for the IKE profile	Data structure	Members include: <ul style="list-style-type: none"> <li>ProposalItem</li> </ul>	N/A
ProposalItem	IKE proposal number	N/A	Unsigned integer: Value range:1 to 65535	Contains up to 6 in ProposalItem ProposalList.
KeychainList	Reference an IKE keychain for the IKE profile	Data structure	Members include: <ul style="list-style-type: none"> <li>KeychainItem</li> </ul>	N/A
KeychainItem	IKE keychain name	N/A	String: Length:1 to 63 characters	Case insensitive. Contains up to 6 in KeychainItem

Column name	Column description	Column type	Data type and restrictions	Remarks
				KeychainList.
CertificateDomainList	Reference a PKI domain for the IKE profile	Data structure	Members include: <ul style="list-style-type: none"> <li>DomainItem</li> </ul>	N/A
DomainItem	PKI domain name	N/A	String: Length:1 to 31 characters Case insensitive.	Contains up to 6 KeychainItem in KeychainList.
CertACPList	Reference a PKI certificate access control policy for the IKE profile	Data structure	Members include: <ul style="list-style-type: none"> <li>CertACPIItem</li> </ul>	N/A
CertACPIItem	The Name of PKI certificate access control policy	N/A	String: Length:1 to 31 characters Case insensitive.	Contains unrestricted CertACPIItem in CertACPList.
MatchRemoteFQDNList	Configure a rule of match the peer FQDN information for the IKE profile	Data structure	Members include: <ul style="list-style-type: none"> <li>FQDNItem</li> </ul>	N/A
FQDNItem	The peer FQDN name	N/A	String: Length:1 to 255 characters Case sensitive.	Contains unrestricted FQDNItem in MatchRemoteFQDNList.Incremental support
MatchRemoteUserFQDNList	Configure a rule of match the peer User FQDN information for the IKE profile	Data structure	Members include: <ul style="list-style-type: none"> <li>UserFQDNItem</li> </ul>	N/A
UserFQDNItem	The peer user FQDN name	N/A	String: Length:1 to 255 characters Case sensitive.	Contains unrestricted UserFQDNItem in MatchRemoteUserFQDNList.Incremental support
LocalID	The identity of the local end	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>IpAddress</li> <li>Value</li> </ul>	N/A
Type	The type of the identity	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ipv4Address,</li> <li>2—Ipv6Address</li> <li>3—FQDN</li> <li>4—User-FQDN</li> <li>5—DN</li> </ul>	N/A
IpAddress	The value of address when the identity is	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the

Column name	Column description	Column type	Data type and restrictions	Remarks
	IP address			type of the identity.
Value	The value when the identity isn't IP address	N/A	String: Length:0 to 255 characters Case sensitive.	If the type is FQDN, it's FQDN name; if the type is User-FQDN, it's User-FQDN name; if the type is DN, it's none.
MatchLocalAddr	Match the local address	Data structure	Members include: <ul style="list-style-type: none"> <li>• AddressType</li> <li>• IpAddress</li> <li>• VRF</li> <li>• Interface</li> </ul>	N/A
AddressType	The type of IP address	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Ipv4Address,</li> <li>• 2—Ipv6Address</li> <li>• 3—Interface</li> </ul>	N/A
IpAddress	The value of address	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the AddressType
VRF	The VPN instance	N/A	String: Length:1 to 31 characters Case sensitive.	VRF can only coexist with IpAddress.
Interface	The name of interface	N/A	String Case insensitive.	Interface can't coexist with IpAddress.
DPD	Dead Peer Detection(DPD) parameters	Data structure	Members include: <ul style="list-style-type: none"> <li>• Mode</li> <li>• Interval</li> <li>• Retry</li> </ul>	N/A
Mode	The mode of DPD	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—On-demand,</li> <li>• 2—Periodic</li> </ul>	N/A
Interval	Interval time of triggering DPD	N/A	Unsigned integer: Value range:1 to 300, in seconds.	N/A
Retry	The DPD retry interval	N/A	Unsigned integer: Value range:1 to 60, in seconds. Default value is 5.	N/A
InsideVRF	The inside VPN instance	N/A	String: Length:1 to 31 characters Case sensitive.	N/A
ClientXauth	Whether the client authentication is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false (default)</li> </ul>	N/A
AAAAuthorization	AAA authentication	N/A	Members include: <ul style="list-style-type: none"> <li>• Domain</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>UserName</li> </ul>	
Domain	ISP domain name	N/A	String: case-insensitive. Length:1 to 255 characters.	Domain name must not include / \   " : * ? < > @, and must not be d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknown, if-unknown.  Domain must be configured when the instance does not exist.
UserName	Username	N/A	String: case-sensitive. Length:1 to 55 characters.	User name must not include \ / : * ? < > @, and must not be a, al, all.
SASoftDuration	IKEv1 SA life time	N/A	Unsigned integer. Value range: 10 to 36000.	N/A
ClientXauth User	Client authentication user information	N/A	Members include: <ul style="list-style-type: none"> <li>User.</li> <li>Password.</li> <li>PasswordType.</li> </ul>	N/A
User	Username	N/A	String: case-insensitive. Length: 1 to 55 characters.	The username cannot contain a forward slash (/), backslash (\), vertical bar ( ), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).  The username cannot be <b>a</b> , <b>al</b> , or <b>all</b> .
PasswordType	Type of the user password	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Simple.</li> <li>2—Cipher.</li> </ul>	N/A
Password	User password	N/A	Plaintext string: 1 to 63 characters. Ciphertext string: 1 to 110 characters.	N/A
MatchRemoteDomainList	Peer FQDN domain information for IKE profile matching	Data structure	Members include: DomainItem.	N/A
DomainItem	Peer FQDN domain	N/A	String: case sensitive. Length:1 to 255 characters.	.Incremental support



# IKEv1/MatchRemoteIpv4Address

This table is used to operate the rule about how to match remote identity when it's IPv4 address.

## XML structure

```
<IKEv1>
  <MatchRemoteIpv4Address>
    <RemoteID>
      <Profile></Profile>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
      <VRF></VRF>
    </RemoteID>
  </MatchRemoteIpv4Address>
</IKEv1>
```

## Table description

Item	Description
Feature name	IKEv1
Table name	MatchRemoteIpv4Address
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None
Support for row creation and deletion	YES

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
Ipv4Addresses	The value of IPv4 address	Index	Ipv4Address	N/A
Ipv4Mask	The mask of IPv4 address	Index	Ipv4Address mask	N/A
VRF	The vpn instance which the address is belonged to.	Index	String: Length:0 to 31 characters Case sensitive.	It's a public network when VRF is a null string.

# IKEv1/MatchRemoteIpv6Address

This table is used to operate the rule about how to match remote identity when it's IPv6 address.

## XML structure

```
<IKEv1>
  <MatchRemoteIpv6Address>
    <RemoteID>
      <Profile></Profile>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <VRF></VRF>
    </RemoteID>
  </MatchRemoteIpv6Address>
</IKEv1>
```

## Table description

Item	Description
Feature name	IKEv1
Table name	MatchRemoteIpv6Address
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None
Support for row creation and deletion	YES

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
Ipv6Addresses	The value of IPv6 address	Index	Ipv6Address	N/A
Ipv6PrefixLength	The prefix length of IPv6 address	Index	Unsigned integer: Value range:0 to 128, in seconds.	N/A
VRF	The vpn instance which the address is belonged to.	Index	String: Length:0 to 31 characters Case sensitive.	It's a public network when VRF is a null string.

# IKEv1/ MatchRemoteIpv4Range

This table is used to operate the rule about how to match remote identity when it's IPv4 address range.

## XML structure

```
<IKEv1>
  <MatchRemoteIpv4Range>
    <RemoteID>
      <Profile></Profile>
      <BeginIpv4Address></BeginIpv4Address>
      <EndIpv4Address></EndIpv4Address>
      <VRF></VRF>
    </RemoteID>
  </MatchRemoteIpv4Range>
</IKEv1>
```

## Table description

Item	Description
Feature name	IKEv1
Table name	MatchRemoteIpv4Range
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
BeginIpv4Address	Start IPv4 Address	Index	Ipv4Address	N/A
EndIpv4Address	End IPv4 Address	Index	Ipv4Address	N/A
VRF	The vpn instance which the address is belonged to.	Index	String: Length:0 to 31 characters Case sensitive.	It's a public network when VRF is a null string.

# IKEv1/ MatchRemoteIpv6Range

This table is used to operate the rule about how to match remote identity when it's IPv6 range.

## XML structure

```
<IKEv1>
  <MatchRemoteIpv6Range>
    <RemoteID>
      <Profile></Profile>
      <BeginIpv6Address></BeginIpv6Address>
      <EndIpv6Address></EndIpv6Address>
      <VRF></VRF>
    </RemoteID>
  </MatchRemoteIpv6Range>
</IKEv1>
```

## Table description

Item	Description
Feature name	IKEv1
Table name	MatchRemoteIpv6Range
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
BeginIpv6Address	Start IPv6 Address	Index	Ipv6Address	N/A
EndIpv6Address	End IPv6 Address	Index	Ipv6Address	N/A
VRF	The vpn instance which the address is belonged to.	Index	String: Length:0 to 31 characters Case sensitive.	It's a public network when VRF is a null string.

# IKEv1/Proposals

This table is used to configure IKE proposals.

## XML structure

```
<IKEv1>
  <Proposals>
    <Proposal>
      <Priority></Priority>
      <AuthorityMethod></AuthorityMethod>
      <AuthorityAlg></AuthorityAlg>
      <EncryptionAlg></EncryptionAlg>
      <DHID></DHID>
      <SADuration></SADuration>
      <Description></Description>
    </Proposal>
  </Proposals>
</IKEv1>
```

## Table description

Item	Description
Feature name	IKEv1
Table name	Proposal
Table type	Multi-instance table
Row name	Proposal
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Priority	priority	Index	Unsigned integer. Value range: 1 to 65535.	N/A
AuthorityMethod	Authentication method Id	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Pre-Shared-Key</li><li>2—RSA-Signature</li><li>3—DSA-Signature</li><li>4—RSA-DE-digital</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			envelope <ul style="list-style-type: none"> <li>5—SM2-DE-digital envelope</li> </ul> Default value is 1	
AuthorityAlg	Authentication algorithm Id	N/A	Unsigned integer	See table IKECapabilities for supported Authentication algorithm
EncryptionAlg	Encryption algorithm Id	N/A	Unsigned integer	See table IKECapabilities for supported Encryption algorithm
DHID	Diffie-Hellman group ID	N/A	Unsigned integer	See table IKECapabilities for supported Diffie-Hellman group
SADuration	IKEv1 SA life time	N/A	Unsigned integer. Value range: 60 to 604800. in seconds. Default value is 86400	N/A
Description	Description of proposal	N/A	String: Length:1 to 80 characters Case sensitive	

## IKEv1/Keychains

This table is used to configure IKE keychain.

### XML structure

```

<IKEv1>
  <Keychains>
    <Keychain>
      <Name></Name>
      <Priority></Priority>
      <KeychainVRF></KeychainVRF>
      <MatchLocalAddr>
        <AddressType></AddressType>
        <IpAddress></IpAddress>
        <VRF></VRF>
        <Interface></Interface>
      </MatchLocalAddr>
    </Keychain>
  </Keychains>
</IKEv1>

```

```

    </Keychains>
  </IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	Keychains
Table type	Multi-instance table
Row name	Keychain
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of IKE keychain	Index	String: Length:1 to 63 characters Case insensitive	N/A
Priority	The priority of IKE keychain	N/A	Unsigned integer: • Value range:1 to 65535. Default value is 100	N/A
KeychainVRF	The VPN instance of keychain belongs to	N/A	String: Length:1 to 31 characters Case sensitive	N/A
MatchLocalAddr	Match the local address	Data structure	Members include: • AddressType • IpAddress • VRF • Interface	N/A
AddressType	The type of IP address	N/A	Enumeration: • 1—Ipv4Address, • 2—Ipv6Address • 3—Interface	N/A
IpAddress	The value of address	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the AddressType
VRF	The VPN instance	N/A	String: Length:1 to 31 characters Case sensitive.	VRF can only coexist with IpAddress.
Interface	The name of interface	N/A	String Case insensitive.	Interface can't coexist with IpAddress.

# IKEv1/HostPreSharedKeys

This table is used to configure the host pre-shared key for IKE keychain.

## XML structure

```
<IKEv1>
  <HostPreSharedKeys>
    <PreSharedKey>
      <Keychain></Keychain>
      <Host></Host>
      <KeyType></KeyType>
      <Key></Key>
    </PreSharedKey>
  </HostPreSharedKeys>
</IKEv1>
```

## Table description

Item	Description
Feature name	IKEv1
Table name	HostPreSharedKeys
Table type	Multi-instance table
Row name	PreSharedKey
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Keychain	Name of IKE keychain	Index	String: Length:1 to 63 characters Case insensitive	N/A
Host	Host name	Index	String: Length:1 to 255 characters Case sensitive	N/A
KeyType	The type of pre-shared key	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Simple,</li><li>2—Cipher</li></ul>	N/A
Key	The value of pre-shared	N/A	According to the type of decision in length.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	key		Plaintext key string Length:1 to 128 characters Or Ciphertext key string Length:1 to 201 characters	

## IKEv1/ Ipv4AddressPreSharedKeys

This table is used to configure the IPv4 address pre-shared key for IKE keychain.

### XML structure

```

<IKEv1>
  <Ipv4AddressPreSharedKeys>
    <PreSharedKey>
      <Keychain></Keychain>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
      <KeyType></KeyType>
      <Key></Key>
    </PreSharedKey>
  </Ipv4AddressPreSharedKeys>
</IKEv1>

```

### Table description

Item	Description
Feature name	IKEv1
Table name	Ipv4AddressPreSharedKeys
Table type	Multi-instance table
Row name	PreSharedKey
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Keychain	Name of IKE	Index	String:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	keychain		Length:1 to 63 characters Case insensitive	
Ipv4Addresses	The value of IPv4 address	Index	Ipv4Address	N/A
Ipv4Mask	The mask of IPv4 address	N/A	Ipv4Address Mask	N/A
KeyType	The type of pre-shared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Simple,</li> <li>2—Cipher</li> </ul>	N/A
Key	The value of pre-shared key	N/A	According to the type of decision in length. Plaintext key string Length:1 to 128 characters Or Ciphertext key string Length:1 to 201 characters	N/A

## IKEv1/ Ipv6AddressPreSharedKeys

This table is used to configure the IPv6 address pre-shared key for IKE keychain.

### XML structure

```

<IKEv1>
  <Ipv6AddressPreSharedKeys>
    <PreSharedKey>
      <Keychain></Keychain>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <KeyType></KeyType>
      <Key></Key>
    </PreSharedKey>
  </Ipv6AddressPreSharedKeys>
</IKEv1>

```

### Table description

Item	Description
Feature name	IKEv1
Table name	Ipv6AddressPreSharedKeys
Table type	Multi-instance table

Item	Description
Row name	PreSharedKey
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Keychain	Name of IKE keychain	Index	String: Length:1 to 63 characters Case insensitive	N/A
Ipv6Addresses	The value of IPv6 address	Index	Ipv6Address	N/A
Ipv6PrefixLength	The prefix length of IPv6 address	N/A	Unsigned integer: Value range:0 to 128, in seconds.	N/A
KeyType	The type of pre-shared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Simple,</li> <li>2—Cipher</li> </ul>	N/A
Key	The value of pre-shared key	N/A	According to the type of decision in length. Plaintext key string Length:1 to 128 characters Or Ciphertext key string Length:1 to 201 characters	N/A

## IKEv1/Ipv4AddressGroup

This table is used to configure an IKE IPv4 address pool for assigning IPv4 addresses to remote peers.

## XML structure

```

<IKEv1>
  <Ipv4AddressGroup>
    <AddressGroup>
      <GroupName></GroupName>
      <StartIPAddr></StartIPAddr>
      <EndIPAddr></EndIPAddr>
      <IPv4Mask></IPv4Mask>
    </AddressGroup>
  </Ipv4AddressGroup>

```

</IKEv1>

## Table description

Item	Description
Feature name	IKEv1
Table name	Ipv4AddressGroup
Table type	Multi-instance table
Row name	AddressGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the IPv4 address group	Index	String: case-insensitive. Length:1 to 63 characters.	N/A
StartIPAddr	Start IPv4 address of the group	N/A	IPv4: String, dotted decimal notation.	StartIPAddr can not be higher than EndIPAddr. StartIPAddr and EndIPAddr must be configured together when the instance does not exist.
EndIPAddr	End IPv4 address of the group	N/A	IPv4: String, dotted decimal notation.	N/A
IPv4Mask	Mask of the IPv4 address	N/A	IPv4: String, dotted decimal notation.	N/A

# Contents

IKEv1 .....	1
IKEv1/GlobalConfiguration .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
IKEv1/Profiles .....	3
XML structure .....	3
Table description .....	5
Columns .....	5
IKEv1/MatchRemotepv4Address .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
IKEv1/MatchRemotepv6Address .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
IKEv1/ MatchRemotepv4Range .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
IKEv1/ MatchRemotepv6Range .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
IKEv1/Proposals .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
IKEv1/Keychains .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
IKEv1/HostPreSharedKeys .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
IKEv1/ Ipv4AddressPreSharedKeys .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
IKEv1/ Ipv6AddressPreSharedKeys .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
IKEv1/DefaultProposal .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
IKEv1/IKESAs .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
IKEv1/GlobalStatistics .....	23
XML structure .....	23
Table description .....	24
Columns .....	24

IKEv1/TunnelsStatistics.....	27
XML structure.....	27
Table description.....	28
Columns.....	28
IKEv1/IKECapabilities.....	30
XML structure.....	30
Table description.....	30
Columns.....	30
IKEv1/Ipv4AddressGroup .....	31
XML structure.....	31
Table description.....	31
Columns.....	32

# IKEv1

## IKEv1/GlobalConfiguration

This table displays IKE global configuration information.

### XML structure

```
<IKEv1>
  <GlobalConfiguration>
    <DPD>
      <Mode></Mode>
      <Interval></Interval>
      <Retry></Retry>
    </DPD>
    <Keepalive>
      <Interval></Interval>
      <Timeout></Timeout>
    </Keepalive>
    <SignIDfromCert></SignIDfromCert>
    <InvalidSPIRecovery></InvalidSPIRecovery>
    <NatKeepaliveInterval></NatKeepaliveInterval>
    <IKESACountLimit>
      <EstablishLimit></EstablishLimit>
      <NegotiateLimit></NegotiateLimit>
    </IKESACountLimit>
    <LocalID>
      <Type></Type>
      <IpAddress></IpAddress>
      <Value></Value>
    </LocalID>
    <LoggingNegotiation></LoggingNegotiation>
    <CompatibleSm4></CompatibleSm4>
  </GlobalConfiguration>
</IKEv1>
```

### Table description

Item	Description
Feature name	IKEv1
Table name	GlobalConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DPD	Dead Peer Detection(DPD) parameters	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Interval</li> <li>Retry</li> </ul>	N/A
Mode	The mode of DPD	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—On-demand,</li> <li>2—Periodic</li> </ul>	N/A
Interval	Interval time of triggering DPD	N/A	Unsigned integer: Value range:1 to 300, in seconds.	N/A
Retry	The DPD retry interval	N/A	Unsigned integer: Value range:1 to 60, in seconds. Default value is 5.	N/A
Keepalive	Global keepalive configuration	Data structure	Members include: <ul style="list-style-type: none"> <li>Interval</li> <li>Timeout</li> </ul>	N/A
Interval	Keepalive Interval	N/A	Unsigned integer: Value range:20 to 28800, in seconds.	N/A
Timeout	Keepalive Timeout	N/A	Unsigned integer: Value range:20 to 28800, in seconds.	N/A
SignIDfrom Cert	Digital signature authentication , If enable get the identity of the local end from the certificate	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul> Default value is false.	N/A
InvalidSPIRecovery	If enable Re-establish an IKE SA upon an invalid-SPI event	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul> Default value is false.	N/A
NatKeepaliveInterval	NAT keepalive Interval	N/A	Unsigned integer: Value range:5 to 300, in seconds. Default value is 20	N/A
IKESACountLimit	Limit the number of IKE SA in established and in negotiation	Data structure	Members include: <ul style="list-style-type: none"> <li>EstablishLimit</li> <li>NegotiateLimit</li> </ul>	N/A
EstablishLimit	Limit the maximum number of	N/A	Unsigned integer: Value range:1 to 99999	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	established SAs			
NegotiateLimit	Limit the maximum number of negotiation SAs	N/A	Unsigned integer: Value range:1 to 99999	N/A
LocalID	The identity of the local end	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>IpAddress</li> <li>Value</li> </ul>	N/A
Type	The type of the identity	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ipv4Address,</li> <li>2—Ipv6Address</li> <li>3—FQDN</li> <li>4—User-FQDN</li> <li>5—DN</li> </ul>	N/A
IpAddress	The value of address when the identity is IP address	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the type of the identity.
Value	The value when the identity isn't IP address	N/A	String: Length:0 to 255 characters Case sensitive.	If the type is FQDN, it's FQDN name; if the type is User-FQDN, it's User-FQDN name; if the type is DN, it's none.
LoggingNegotiation	Logging for IKE event negotiation	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
CompatibleSm4	Backward compatibility for the sm4-cbc algorithm	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A

## IKEv1/Profiles

This table displays IKE profiles information.

### XML structure

```

<IKEv1>
  <Profiles>
    <Profile>
      <Name></Name>
      <Priority></Priority>
      <Mode></Mode>
      <ProposalList>

```

```

    <ProposalItem></ProposalItem>
</ProposalList>
<KeychainList>
    <KeychainItem></KeychainItem>
</KeychainList>
<CertificateDomainList>
    <DomainItem></DomainItem>
</CertificateDomainList>
<CertACPList>
    <CertACPItem></CertACPItem>
</CertACPList>
<MatchRemoteFQDNList>
    <FQDNItem></FQDNItem>
</MatchRemoteFQDNList>
<MatchRemoteUserFQDNList>
    <UserFQDNItem></UserFQDNItem>
</MatchRemoteUserFQDNList>
    <LocalID>
    <Type></Type>
    <IpAddress></IpAddress>
    <Value></Value>
</LocalID>
<MatchLocalAddr>
    <AddressType></AddressType>
    <IpAddress></IpAddress>
    <VRF></VRF>
    <Interface></Interface>
</MatchLocalAddr>
<DPD>
    <Mode></Mode>
    <Interval></Interval>
    <Retry></Retry>
</DPD>
<InsideVRF></InsideVRF>
<ClientXauth></ClientXauth>
<AAAAAuthorization>
    <Domain></Domain>
    <UserName></UserName>
</AAAAAuthorization>
<SASoftDuration></SASoftDuration>
<ClientXauthUser>
    <User></User>
    <PasswordType></PasswordType>
    <Password></Password>
</ClientXauthUser>
<MatchRemoteDomainList>
    <DomainItem></DomainItem>
</MatchRemoteDomainList>

```

```

    </Profile>
  </Profiles>
</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	Profiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
Priority	The priority of IKE profile	N/A	Unsigned integer: Value range:1 to 65535 Default value is 100.	N/A
Mode	The phase 1 negotiation mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Main</li> <li>2—Aggressive</li> <li>3—GM-main</li> </ul> Default value is 1	N/A
ProposalList	Reference an IKE proposal for the IKE profile	Data structure	Members include: <ul style="list-style-type: none"> <li>ProposalItem</li> </ul>	N/A
ProposalItem	IKE proposal number	N/A	Unsigned integer: Value range:1 to 65535	Contains up to 6 ProposalItem in ProposalList.
KeychainList	Reference an IKE keychain for the IKE profile	Data structure	Members include: <ul style="list-style-type: none"> <li>KeychainItem</li> </ul>	N/A
KeychainItem	IKE keychain name	N/A	String: Length:1 to 63 characters Case insensitive.	Contains up to 6 KeychainItem in KeychainList.
CertificateDomainList	Reference a PKI domain for the IKE profile	Data structure	Members include: <ul style="list-style-type: none"> <li>DomainItem</li> </ul>	N/A
DomainItem	PKI domain	N/A	String:	Contains up to 6

Column name	Column description	Column type	Data type and restrictions	Remarks
	name		Length:1 to 31 characters Case insensitive.	KeychainItem in KeychainList.
CertACPLis t	Reference a PKI certificate access control policy for the IKE profile	Data structure	Members include: • CertACPIItem	N/A
CertACPIte m	The Name of PKI certificate access control policy	N/A	String: Length:1 to 31 characters Case insensitive.	Contains unrestricted CertACPIItem in CertACPLis.
MatchRemo teFQDNList	Configure a rule of match the peer FQDN information for the IKE profile	Data structure	Members include: • FQDNItem	N/A
FQDNItem	The peer FQDN name	N/A	String: Length:1 to 255 characters Case sensitive.	Contains unrestricted FQDNItem in MatchRemoteFQDNList.
MatchRemo teUserFQD NList	Configure a rule of match the peer User FQDN information for the IKE profile	Data structure	Members include: • UserFQDNItem	N/A
UserFQDNI tem	The peer user FQDN name	N/A	String: Length:1 to 255 characters Case sensitive.	Contains unrestricted UserFQDNItem in MatchRemoteUserFQDNList.
LocalID	The identity of the local end	Data structure	Members include: • Type • IpAddress • Value	N/A
Type	The type of the identity	N/A	Enumeration: • 1—Ipv4Address, • 2—Ipv6Address • 3—FQDN • 4—User-FQDN • 5—DN	N/A
IpAddress	The value of address when the identity is IP address	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the type of the identity.
Value	The value when the identity isn't IP address	N/A	String: Length:0 to 255 characters Case sensitive.	If the type is FQDN, it's FQDN name; if the type is User-FQDN, it's User-FQDN name; if the type is DN, it's none.

Column name	Column description	Column type	Data type and restrictions	Remarks
MatchLocal Addr	Match the local address	Data structure	Members include: <ul style="list-style-type: none"> <li>• AddressType</li> <li>• IpAddress</li> <li>• VRF</li> <li>• Interface</li> </ul>	N/A
AddressType	The type of IP address	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Ipv4Address,</li> <li>• 2—Ipv6Address</li> <li>• 3—Interface</li> </ul>	N/A
IpAddress	The value of address	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the AddressType
VRF	The VPN instance	N/A	String: Length:1 to 31 characters Case sensitive.	VRF can only coexist with IpAddress.
Interface	The name of interface	N/A	String Case insensitive.	Interface can't coexist with IpAddress.
DPD	Dead Peer Detection(DPD) parameters	Data structure	Members include: <ul style="list-style-type: none"> <li>• Mode</li> <li>• Interval</li> <li>• Retry</li> </ul>	N/A
Mode	The mode of DPD	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—On-demand,</li> <li>• 2—Periodic</li> </ul>	N/A
Interval	Interval time of triggering DPD	N/A	Unsigned integer: Value range:1 to 300, in seconds.	N/A
Retry	The DPD retry interval	N/A	Unsigned integer: Value range:1 to 60, in seconds. Default value is 5.	N/A
InsideVRF	The inside VPN instance	N/A	String: Length:1 to 31 characters Case sensitive.	N/A
ClientXauth	Whether the client authentication is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	N/A
AAAAAuthorization	AAA authentication	N/A	Members include: <ul style="list-style-type: none"> <li>• Domain</li> <li>• UserName</li> </ul>	N/A
Domain	ISP domain name	N/A	String: case-insensitive. Length:1 to 255 characters.	N/A
UserName	Username	N/A	String: case-sensitive. Length:1 to 55 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SASoftDuration	IKEv1 SA life time	N/A	Unsigned integer. Value range: 10 to 36000.	N/A
ClientXauth User	Client authentication user information	N/A	Members include: <ul style="list-style-type: none"> <li>User.</li> <li>Password.</li> <li>PasswrodType.</li> </ul>	N/A
User	Username	N/A	String: case-insensitive. Length: 1 to 55 characters.	N/A
PasswordType	Type of the user password	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Simple,</li> <li>2—Cipher</li> </ul>	N/A
Password	User password	N/A	Plaintext string: 1 to 63 characters. Ciphertext string: 1 to 110 characters.	N/A
MatchRemoteDomainList	Peer FQDN domain information for IKE profile matching	Data structure	Members include: DomainItem.	N/A
DomainItem	Peer FQDN domain	N/A	String: case sensitive. Length: 1 to 255 characters.	N/A

## IKEv1/MatchRemoteIpv4Address

This table displays match remote identity IPv4 address information

### XML structure

```

<IKEv1>
  <MatchRemoteIpv4Address>
    <RemoteID>
      <Profile></Profile>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
      <VRF></VRF>
    </RemoteID>
  </MatchRemoteIpv4Address>
</IKEv1>

```

### Table description

Item	Description
Feature name	IKEv1

Item	Description
Table name	MatchRemotelpv4Address
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
Ipv4Addresses	The value of IPv4 address	Index	Ipv4Address	N/A
Ipv4Mask	The mask of IPv4 address	Index	Ipv4Address mask	N/A
VRF	The vpn instance which the address is belonged to.	Index	String: Length:0 to 31 characters Case sensitive.	It's a public network when VRF is a null string.

## IKEv1/MatchRemoteIpv6Address

This table displays match remote identity IPv6 address information

## XML structure

```

<IKEv1>
  <MatchRemoteIpv6Address>
    <RemoteID>
      <Profile></Profile>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <VRF></VRF>
    </RemoteID>
  </MatchRemoteIpv6Address>
</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	MatchRemotelpv6Address

Item	Description
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
Ipv6Addresses	The value of IPv6 address	Index	Ipv6Address	N/A
Ipv6PrefixLength	The prefix length of IPv6 address	Index	Unsigned integer: Value range:0 to 128, in seconds.	N/A
VRF	The vpn instance which the address is belonged to.	Index	String: Length:0 to 31 characters Case sensitive.	It's a public network when VRF is a null string.

## IKEv1/ MatchRemoteIpv4Range

This table displays match remote identity IPv4 range information

## XML structure

```

<IKEv1>
  <MatchRemoteIpv4Range>
    <RemoteID>
      <Profile></Profile>
      <BeginIpv4Address></BeginIpv4Address>
      <EndIpv4Address></EndIpv4Address>
      <VRF></VRF>
    </RemoteID>
  </MatchRemoteIpv4Range>
</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	MatchRemoteIpv4Range



Item	Description
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
BeginIpv4Address	Start IPv4 Address	Index	Ipv4Address	N/A
EndIpv4Address	End IPv4 Address	Index	Ipv4Address	N/A
VRF	The vpn instance which the address is belonged to.	Index	String: Length:0 to 31 characters Case sensitive.	It's a public network when VRF is a null string.

## IKEv1/ MatchRemoteIpv6Range

This table displays match remote identity IPv6 range information

## XML structure

```

<IKEv1>
  <MatchRemoteIpv6Range>
    <RemoteID>
      <Profile></Profile>
      <BeginIpv6Address></BeginIpv6Address>
      <EndIpv6Address></EndIpv6Address>
      <VRF></VRF>
    </RemoteID>
  </MatchRemoteIpv6Range>
</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	MatchRemoteIpv6Range
Table type	Multi-instance table

Item	Description
Row name	RemoteID
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKE profile	Index	String: Length:1 to 63 characters Case insensitive	N/A
BeginIpv6Address	Start IPv6 Address	Index	Ipv6Address	N/A
EndIpv6Address	End IPv6 Address	Index	Ipv6Address	N/A
VRF	The vpn instance which the address is belonged to.	Index	String: Length:0 to 31 characters Case sensitive.	It's a public network when VRF is a null string.

## IKEv1/Proposals

This table displays IKE proposals information

## XML structure

```

<IKEv1>
  <Proposals>
    <Proposal>
      <Priority></Priority>
      <AuthorityMethod></AuthorityMethod>
      <AuthorityAlg></AuthorityAlg>
      <EncryptionAlg></EncryptionAlg>
      <DHID></DHID>
      <SADuration></SADuration>
      <Description></Description>
    </Proposal>
  </Proposals>
</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	Proposals
Table type	Multi-instance table
Row name	Proposal
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Priority	priority	Index	Unsigned integer. Value range: 1 to 65535.	N/A
AuthorityMethod	Authentication method Id	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Pre-Shared-Key</li> <li>2—RSA-Signature</li> <li>3—DSA-Signature</li> <li>4—RSA-DE-digital envelope</li> <li>5—SM2-DE-digital envelope</li> </ul> Default value is 1	N/A
AuthorityAlg	Authentication algorithm Id	N/A	Unsigned integer.	See table IKECapabilities for supported Authentication algorithm.
EncryptionAlg	Encryption algorithm Id	N/A	Unsigned integer.	See table IKECapabilities for supported Encryption algorithm
DHID	Diffie-Hellman group ID	N/A	Unsigned integer.	See table IKECapabilities for supported Diffie-Hellman group
SADuration	IKEv1 SA life time	N/A	Unsigned integer. Value range: 60 to 604800. in seconds. Default value is 86400	N/A
Description	Description of proposal	N/A	String: Length:1 to 80 characters Case sensitive	

# IKEv1/Keychains

This table displays IKE keychains information

## XML structure

```
<IKEv1>
  <Keychains>
    <Keychain>
      <Name></Name>
      <Priority></Priority>
      <KeychainVRF></KeychainVRF>
      <MatchLocalAddr>
        <AddressType></AddressType>
        <IpAddress></IpAddress>
        <VRF></VRF>
        <Interface></Interface>
      </MatchLocalAddr>
    </Keychain>
  </Keychains>
</IKEv1>
```

## Table description

Item	Description
Feature name	IKEv1
Table name	Keychains
Table type	Multi-instance table
Row name	Keychain
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of IKE keychain	Index	String: Length:1 to 63 characters Case insensitive	N/A
Priority	The priority of IKE keychain	N/A	Unsigned integer: Value range:1 to 65535. Default value is 100	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
KeychainVRF	The VPN instance of keychain belongs to	N/A	String: Length:1 to 31 characters Case sensitive	N/A
MatchLocalAddr	Match the local address	Data structure	Members include: <ul style="list-style-type: none"> <li>• AddressType</li> <li>• IpAddress</li> <li>• VRF</li> <li>• Interface</li> </ul>	N/A
AddressType	The type of IP address	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Ipv4Address,</li> <li>• 2—Ipv6Address</li> <li>• 3—Interface</li> </ul>	N/A
IpAddress	The value of address	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the AddressType
VRF	The VPN instance	N/A	String: Length:1 to 31 characters Case sensitive.	VRF can only coexist with IpAddress.
Interface	The name of interface	N/A	String Case insensitive.	Interface can't coexist with IpAddress.

## IKEv1/HostPreSharedKeys

This table displays host pre-shared-keys information for IKE keychain

### XML structure

```

<IKEv1>
  <HostPreSharedKeys>
    <PreSharedKey>
      <Keychain></Keychain>
      <Host></Host>
    </PreSharedKey>
  </HostPreSharedKeys>
</IKEv1>

```

### Table description

Item	Description
Feature name	IKEv1
Table name	HostPreSharedKeys

Item	Description
Table type	Multi-instance table
Row name	PreSharedKey
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Keychain	Name of IKE keychain	Index	String: Length:1 to 63 characters Case insensitive	N/A
Host	Host name	Index	String: Length:1 to 255 characters Case sensitive	N/A

## IKEv1/ Ipv4AddressPreSharedKeys

This table displays IPv4 address presharedkeys information for IKE keychain

## XML structure

```

<IKEv1>
  <Ipv4AddressPreSharedKeys>
    <PreSharedKey>
      <Keychain></Keychain>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
    </PreSharedKey>
  </Ipv4AddressPreSharedKeys>
</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	Ipv4AddressPreSharedKeys
Table type	Multi-instance table
Row name	PreSharedKey
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Keychain	Name of IKE keychain	Index	String: Length:1 to 63 characters Case insensitive	N/A
Ipv4Addresses	The value of IPv4 address	Index	Ipv4Address	N/A
Ipv4Mask	The mask of IPv4 address	N/A	Ipv4Address Mask	N/A

## IKEv1/ Ipv6AddressPreSharedKeys

This table displays IPv6 address presharedkeys information for IKE keychain

## XML structure

```
<IKEv1>
  <Ipv6AddressPreSharedKeys>
    <PreSharedKey>
      <Keychain></Keychain>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
    </PreSharedKey>
  </Ipv6AddressPreSharedKeys>
</IKEv1>
```

## Table description

Item	Description
Feature name	IKEv1
Table name	Ipv6AddressPreSharedKeys
Table type	Multi-instance table
Row name	PreSharedKey
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Keychain	Name of IKE keychain	Index	String: Length:1 to 63 characters Case insensitive	N/A
Ipv6Addresses	The value of Ipv6 address	Index	Ipv6Address	N/A
Ipv6PrefixLength	The prefix length of Ipv6 address	N/A	Unsigned integer: Value range:0 to 128, in seconds.	N/A

## IKEv1/DefaultProposal

This table displays default IKE proposal information.

## XML structure

```
<IKEv1>
  <DefaultProposal>
    <AuthorityMethod></AuthorityMethod>
    <AuthorityAlg></AuthorityAlg>
    <EncryptionAlg></EncryptionAlg>
    <DHID></DHID>
    <SADuration></SADuration>
  </DefaultProposal>
</IKEv1>
```

## Table description

Item	Description
Feature name	IKEv1
Table name	DefaultProposal
Table type	Single-instance table
Row name	None
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthorityMethod	Authentication method Id for the IKE Proposal	N/A	Unsigned integer.	N/A
AuthorityAlg	Authentication algorithm Id for the IKE Proposal	N/A	Unsigned integer.	See table IKECapabilities for supported Authentication algorithm
EncryptionAlg	Encryption algorithm Id for the IKE Proposal	N/A	Unsigned integer.	See table IKECapabilities for supported Encryption algorithm
DHID	Diffie-Hellman group ID	N/A	Unsigned integer.	See table IKECapabilities for supported Diffie-Hellman group
SADuration	IKEv1 SA life time	N/A	Unsigned integer. Value range: 60 to 604800. in seconds.	N/A

## IKEv1/IKESAs

This table displays IKE SA information.

## XML structure

```

<IKEv1>
  <IKESAs>
    <IKESA>
      <ConnectionID></ConnectionID>
      <OutsideVRF></OutsideVRF>
      <InsideVRF></InsideVRF>
      <Profile></Profile>
      <Initiator></Initiator>
      <LocalID>
        <Type></Type>
        <IpAddress></IpAddress>
        <Value></Value>
      </LocalID>
      <RemoteID>

```

```

    <Type></Type>

    <IpAddress></IpAddress>

    <Value></Value>

</RemoteID>

<RemoteIpAddress></RemoteIpAddress>

<LocalIpAddress></LocalIpAddress>

<AuthorityMethod></AuthorityMethod>

<AuthorityAlg></AuthorityAlg>

<EncryptionAlg></EncryptionAlg>

<DHID></DHID>

<ExchangeMode></ExchangeMode>

<IsNATTraversal></IsNATTraversal>

<SADuration></SADuration>

<RemainingSADuration></RemainingSADuration>

<Flag></Flag>

<DOI></DOI>

</IKESA>

</IKESAs>

</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	IKESAs
Table type	Multi-instance table
Row name	IKESA
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ConnectionID	ConnectionID of IKE SA	Index	Unsigned integer.	N/A
OutsideVRF	Outbound VRF	N/A	String: Length:1 to 31 characters Case sensitive	N/A
InsideVRF	Inbound VRF	N/A	String: Length:1 to 31 characters	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Case sensitive	
Profile	Name of IKE profile	N/A	String: Length:1 to 63 characters Case insensitive	N/A
Initiator	If Local gateway be the initiator	Data structure	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—initiator.</li> <li><b>false</b>—response.</li> </ul>	N/A
LocalID	The identity of the local end	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>IpAddress</li> <li>Value</li> </ul>	N/A
Type	The type of the local identity	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ipv4Address,</li> <li>2—Ipv6Address</li> <li>3—FQDN</li> <li>4—User-FQDN</li> <li>5—DN</li> </ul>	N/A
IpAddress	The value of address when the local identity is IP address	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the type of the identity.
Value	The value when the local identity isn't IP address	N/A	String: Length:0 to 255 characters Case sensitive.	If the type is FQDN, it's FQDN name; if the type is User-FQDN, it's User-FQDN name; if the type is DN, it's none.
RemoteID	The identity of the peer end	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>IpAddress</li> <li>Value</li> </ul>	N/A
Type	The type of the peer identity	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ipv4Address,</li> <li>2—Ipv6Address</li> <li>3—FQDN</li> <li>4—User-FQDN</li> <li>5—DN</li> </ul>	N/A
IpAddress	The value of address when the peer identity is IP address	N/A	Ipv4Address or Ipv6 Address	The value is whether IPv4 address or IPv6 address lies on the type of the identity.
Value	The value when the peer identity isn't IP address	N/A	String: Length:0 to 255 characters Case sensitive.	If the type is FQDN, it's FQDN name; if the type is User-FQDN, it's User-FQDN name; if the type is DN, it's none.
RemoteIpA	IP address of	N/A	Ipv4Address or Ipv6 Address	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
address	peer gateway			
LocalIpAddress	IP address of local gateway	N/A	Ipv4Address or Ipv6 Address	N/A
AuthorityMethod	The value when the identity isn't IP address	N/A	String: Length:0 to 255 characters Case sensitive.	If the type is FQDN, it's FQDN name; if the type is User-FQDN, it's User-FQDN name; if the type is DN, it's none.
AuthorityAlg	Authentication algorithm Id	N/A	Unsigned integer. Authentication algorithm Id	See table IKECapabilities for supported Authentication algorithm
EncryptionAlg	Encryption algorithm Id	N/A	Unsigned integer. Encryption algorithm Id	See table IKECapabilities for supported Encryption algorithm
DHID	Diffie-Hellman group ID	N/A	Unsigned integer.. Diffie-Hellman group ID	See table IKECapabilities for supported Diffie-Hellman group
ExchangeMode	Negotiation mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Main.</li> <li>2—Aggressive</li> </ul>	N/A
IsNATTraversal	UDP encapsulation used for NAT traversal	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Need traversal.</li> <li>false—non-essential.</li> </ul>	N/A
SADuration	IKE SA lifetime	N/A	Unsigned integer. Value range: 60 to 604800. in seconds.	N/A
RemainingSADuration	Remaining IKE SA lifetime	N/A	Unsigned integer. Value range: 60 to 604800. in seconds.	N/A
Flag	Flag of SA	N/A	Unsigned integer.	0x00000001 RD (READY), which means the SA has been established 0x00000002 ST (STAYALIVE), which means this end is the initiator of the tunnel negotiation. 0x00000004 RL (REPLACED), which means the SA has been replaced by a new one and will be deleted later. 0x00000008 FD (FADING), which means the SA is in

Column name	Column description	Column type	Data type and restrictions	Remarks
				use, but it is about to expire and will be deleted soon. 0x80000000 <b>Unknown</b> , which means The SA status is Unknown.
DOI	Domain of interpretation which SA belong	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPsec.</li> <li>2—GDOI</li> </ul>	N/A

## IKEv1/GlobalStatistics

This table displays IKE global statistics information.

### XML structure

```

<IKEv1>
  <GlobalStatistics>
    <ActiveTunnels></ActiveTunnels>
    <InitTunnels></InitTunnels>
    <InitTunnelFails></InitTunnelFails>
    <RespTunnels></RespTunnels>
    <RespTunnelFails></RespTunnelFails>
    <InOctets></InOctets>
    <OutOctets></OutOctets>
    <InPkts></InPkts>
    <OutPkts></OutPkts>
    <InP2Exchanges></InP2Exchanges>
    <OutP2Exchanges></OutP2Exchanges>
    <InP2ExchangeRejects></InP2ExchangeRejects>
    <OutP2ExchangeRejects></OutP2ExchangeRejects>
    <InP2SADelRequests></InP2SADelRequests>
    <OutP2SADelRequests></OutP2SADelRequests>
    <InNotifys></InNotifys>
    <OutNotifys></OutNotifys>
    <InDropPkts></InDropPkts>
    <OutDropPkts></OutDropPkts>
    <DropPktsDetails>
      <AuthFails></AuthFails>

```

```

<NoSAFails></NoSAFails>

<InvalidCookieFails></InvalidCookieFails>

<AttrNotSuppFails></AttrNotSuppFails>

<NoProposalChosenFails></NoProposalChosenFails>

<UnsuppExchTypeFails></UnsuppExchTypeFails>

<InvalidIDFails></InvalidIDFails>

<InvalidPropFails></InvalidPropFails>

<CertTypeUnsuppFails></CertTypeUnsuppFails>

<InvalidCertAuthFails></InvalidCertAuthFails>

<InvalidSignFails></InvalidSignFails>

<CertUnavailableFails></CertUnavailableFails>

</DropPktsDetails>

</GlobalStatistics>

</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	GlobalStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ActiveTunnels	Number of active tunnel in the first stage	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
InitTunnels	Number of as the initiator for the successful establishment of IKE tunnel	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
InitTunnelFails	Number of as the initiator did not successfully established IKE tunnel	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
RespTunnel	Number of as	N/A	Unsigned integer.	

Column name	Column description	Column type	Data type and restrictions	Remarks
s	a response to successful establishment of IKE tunnel		Value range: 0 to $2^{32}-1$ .	N/A
RespTunnel Fails	Number of as the response did not successfully established IKE tunnel	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
InOctets	Number of the recived Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutOctets	Number of the sent Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InPkts	Number of recived packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutPkts	Number of sent packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InP2Exchanges	Number of recived exchanges in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutP2Exchanges	Number of sent exchanges in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InP2ExchangeRejects	Number of dropped recived exchanges in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutP2ExchangeRejects	Number of dropped sent exchanges in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InP2SADelRequests	Number of recived request of SA in the second stage	Data structure	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutP2SADelRequests	Number of recived request of SA in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InNotifys	Number of recived notify news	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
OutNotifys	Number of sent notify news	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$	N/A
InDropPkts	Number of dropped received packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutDropPkts	Number of dropped sent packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
DropPktsDetails	Number of dropped packets due to authentication failure	Data structure	Members include: <ul style="list-style-type: none"> <li>AuthFails</li> <li>NoSAFails</li> <li>InvalidCookieFails</li> <li>AttrNotSuppFails</li> <li>NoProposalChosenFails</li> <li>UnsuppExchTypeFails</li> <li>InvalidIDFails</li> <li>InvalidPropFails</li> <li>CertTypeUnsuppFails</li> <li>InvalidCertAuthFails</li> <li>InvalidSignFails</li> <li>CertUnavailableFails</li> </ul>	N/A
AuthFails	The reason for the failure of building IKE tunnel	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
NoSAFails	Number of lack of available IKE SA in the negotiate process	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
InvalidCookieFails	Number of dropped packets due to Invalid cookie	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
AttrNotSuppFails	Number of dropped packets due to Nonsupport transform load attribute	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
NoProposalChosenFails	Number of dropped packets due to Without the option proposal	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
UnsuppExchTypeFails	Number of dropped packets due to Nonsupport exchange type	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
InvalidIDFails	Number of dropped packets due to Invalid ID load	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
InvalidPropFails	Number of dropped packets due to Invalid proposal	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
CertTypeUnsuppFails	Number of dropped packets due to Nonsupport certificate type	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
InvalidCertAuthFails	Number of dropped packets due to Invalid CA	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
InvalidSignFails	Number of dropped packets due to Invalid signature	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
CertUnavailableFails	Number of dropped packets due to cannot obtain certificate	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

## IKEv1/TunnelsStatistics

This table displays IKE tunnel statistics information.

### XML structure

```
<IKEv1>
  <TunnelsStatistics>
```

```

<Statistics>

  <TunnelID></TunnelID>

  <InOctets></InOctets>

  <OutOctets></OutOctets>

  <InPkts></InPkts>

  <OutPkts></OutPkts>

  <InP2Exchanges></InP2Exchanges>

  <OutP2Exchanges></OutP2Exchanges>

  <InP2ExchangeRejects></InP2ExchangeRejects>

  <OutP2ExchangeRejects></OutP2ExchangeRejects>

  <InP2SADelRequests></InP2SADelRequests>

  <OutP2SADelRequests></OutP2SADelRequests>

  <InP1SADelRequests></InP1SADelRequests>

  <OutP1SADelRequests></OutP1SADelRequests>

  <InNotifys></InNotifys>

  <OutNotifys></OutNotifys>

  <InDropPkts></InDropPkts>

  <OutDropPkts></OutDropPkts>

</Statistics>

</TunnelsStatistics>

</IKEv1>

```

## Table description

Item	Description
Feature name	IKEv1
Table name	TunnelsStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	IKE tunnel ID	Index	Unsigned integer. Value range: 0 to $2^{32}-1$	N/A
InOctets	Number of the recived Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
OutOctets	Number of the sent Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InPkts	Number of received packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutPkts	Number of sent packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InP2Exchanges	Number of received exchanges in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutP2Exchanges	Number of sent exchanges in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InP2ExchangeRejects	Number of dropped received exchanges in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutP2ExchangeRejects	Number of dropped sent exchanges in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InP2SADelRequests	Number of received request of SA in the second stage	Data structure	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutP2SADelRequests	Number of received request of SA in the second stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InP1SADelRequests	Number of received request of SA in the first stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutP1SADelRequests	Number of sent request of SA in the first stage	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
InNotifys	Number of received notify news	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$	N/A
OutNotifys	Number of sent notify news	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
InDropPkts	Number of dropped received packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A
OutDropPkts	Number of dropped sent packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$	N/A

## IKEv1/IKECapabilities

This table displays all the algorithm capabilities that the IKE module support.

### XML structure

```

<IKEv1>
  <IKECapabilities>
    <IKECapability>
      <AlgID></AlgID>
      <AlgName></AlgName>
      <AlgType></AlgType>
    </IKECapability>
  </IKECapabilities>
</IKEv1>

```

### Table description

Item	Description
Feature name	IKEv1
Table name	IKECapabilities
Table type	Multi-instance table
Row name	IKECapability
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgID	IKEv1 supports	Index	Positive Integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	algorithm ID			
AlgName	IKEv1 supports algorithm name	N/A	String. Length: 1 to 255 characters. Case insensitive	N/A
AlgType	Type of algorithm	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Diffie-Hellman group</li> <li>2—Encryption algorithm</li> <li>3—Authentication algorithm</li> </ul>	N/A

## IKEv1/Ipv4AddressGroup

This table displays IKE IPv4 address pool information.

### XML structure

```

<IKEv1>
  <Ipv4AddressGroup>
    <AddressGroup>
      <GroupName></GroupName>
      <StartIPAddr></StartIPAddr>
      <EndIPAddr></EndIPAddr>
      <IPv4Mask></IPv4Mask>
    </AddressGroup>
  </Ipv4AddressGroup>
</IKEv1>

```

### Table description

Item	Description
Feature name	IKEv1
Table name	Ipv4AddressGroup
Table type	Multi-instance table
Row name	AddressGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Name of the IPv4 address group	Index	String: case-insensitive. Length:1 to 63 characters.
StartIPAddr	Start IPv4 address of the group	N/A	IPv4: String, dotted decimal notation.
EndIPAddr	End IPv4 address of the group	N/A	IPv4: String, dotted decimal notation.
IPv4Mask	Mask of the IPv4 address	N/A	IPv4: String, dotted decimal notation.

# Contents

IKEv2 .....	1
IKEv2/GlobalConf .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IKEv2/Profiles .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
IKEv2/MatchRemotepv4Address .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
IKEv2/MatchRemotepv6Address .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
IKEv2/MatchRemotepv4Range .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
IKEv2/MatchRemotepv6Range .....	7
XML structure .....	8
Table description .....	8
Columns .....	8
IKEv2/ProfileMatchRemotePeer .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
IKEv2/ProfileMatchLocalIpAddress .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
IKEv2/ProfileMatchLocalInterfaces .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
IKEv2/Policies .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
IKEv2/PolicyMatchLocalIpAddress .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
IKEv2/PolicyMatchLocalInterfaces .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
IKEv2/Proposals .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
IKEv2/Keychains .....	16
XML structure .....	16
Table description .....	17
Columns .....	17

# IKEv2

## IKEv2/GlobalConf

This table is used to configure IKEv2 global settings.

### XML structure

```
<IKEv2>
  <GlobalConf>
    <DPD>
      <Mode></Mode>
      <Interval></Interval>
      <Retry></Retry>
    </DPD>
    <CookieChallenge></CookieChallenge>
    <NatKeepaliveInterval></NatKeepaliveInterval>
  </GlobalConf>
</IKEv2>
```

### Table description

Item	Description
Feature name	IKEv2
Table name	GlobalConf
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DPD	Global Dead Peer Detection (DPD) settings	Data structure	Members include: <ul style="list-style-type: none"><li>Mode</li><li>Interval</li><li>Retry</li></ul>	N/A
Mode	Operating mode of DPD	N/A	Enumeration: <ul style="list-style-type: none"><li>1—On-demand</li><li>2—Periodic</li></ul>	N/A
Interval	Time interval for triggering	N/A	Unsigned integer: Value range: 10 to 3600, in	Interval should not be smaller than Retry in



Column name	Column description	Column type	Data type and restrictions	Remarks
	DPD		seconds.	on-demand mode.
Retry	DPD retry interval	N/A	Unsigned integer: Value range: 2 to 60, in seconds. Default value is 5.	N/A
CookieChallenge	Number of half-open IKE SAs that triggers cookie challenging	N/A	Unsigned integer: Value range: 0 to 1000, or 65535. Default value is 65535.	If the value is 65535, cookie challenging feature disabled.
NatKeepaliveInterval	NAT keepalive interval	N/A	Unsigned integer: Value range: 5 to 3600, in seconds. Default value is 10.	N/A

## IKEv2/Profiles

This table is used to configure IKEv2 profiles.

## XML structure

```

<IKEv2>
  <Profiles>
    <Profile>
      <Name></Name>
      <Priority></Priority>
      <LocalAuthMethod></LocalAuthMethod>
      <RemoteAuthMethodList>
        <RemoteAuthMethodItem></RemoteAuthMethodItem>
      </RemoteAuthMethodList>
      <ConfigExchangeList>
        <ConfigExchangeItem></ConfigExchangeItem>
      </ConfigExchangeList>
      <Keychain></Keychain>
      <SADuration></SADuration>
      <NatKeepaliveInterval></NatKeepaliveInterval>
      <InsideVRF></InsideVRF>
      <DPD>
        <Mode></Mode>
        <Interval></Interval>
        <Retry></Retry>
      </DPD>
      <MatchVRF>
        <MatchVrfType></MatchVrfType>
        <VRFName></VRFName>
      </MatchVRF>
    </Profile>
  </Profiles>
</IKEv2>

```

```

<AAAAuthorization>
  <Domain></Domain>
  <UserName></UserName>
</AAAAuthorization>
</Profile>
</Profiles>
</IKEv2>

```

## Table description

Item	Description
Feature name	IKEv2
Table name	Profiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Priority	Priority of the IKEv2 profile	N/A	Unsigned integer. Value range: 1 to 65535 Default value is 100.	N/A
LocalAuthMethod	Local identity authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Preshared key</li> <li>2—DSA signature</li> <li>3—RSA signature</li> <li>4—ECDSA signature</li> </ul>	N/A
RemoteAuthMethodList	Remote identity authentication method list	Data structure	Members include: <ul style="list-style-type: none"> <li>RemoteAuthMethodItem</li> </ul>	N/A
RemoteAuthMethodItem	Remote identity authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Preshared key</li> <li>2—DSA signature</li> <li>3—RSA signature</li> <li>4—ECDSA signature</li> </ul>	N/A
ConfigExchangeList	Configuration exchange feature	Data structure	Members include: <ul style="list-style-type: none"> <li>ConfigExchangeItem</li> </ul>	N/A
ConfigExchangeItem	Configuration exchange	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Request</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	setting		<ul style="list-style-type: none"> <li>2—Set accept</li> <li>3—Set send</li> </ul>	
Keychain	IKE keychain used for the IKEv2 profile	N/A	String. Length: 1 to 63 characters.	N/A
SADuration	IKEv2 SA lifetime	N/A	Unsigned integer. Value range: 120 to 86400, in seconds. Default value is 86400.	N/A
NatKeepaliveInterval	NAT keepalive interval for the IKEv2 profile	N/A	Unsigned integer. Value range: 5 to 3600, in seconds.	N/A
InsideVRF	Inside VPN instance	N/A	String, case sensitive. Length: 1 to 31 characters.	N/A
DPD	Dead Peer Detection (DPD) settings	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Interval</li> <li>Retry</li> </ul>	N/A
Mode	Operating mode of DPD	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—On-demand</li> <li>2—Periodic</li> </ul>	N/A
Interval	Time interval for triggering DPD	N/A	Unsigned integer. Value range: 10 to 3600, in seconds.	Interval should not be smaller than Retry in on-demand mode.
Retry	DPD retry interval	N/A	Unsigned integer. Value range: 2 to 60, in seconds. Default value is 5.	N/A
MatchVRF	VPN instance for the IKEv2 profile	Data structure	Members include: <ul style="list-style-type: none"> <li>MatchVrfType</li> <li>VRFName</li> </ul>	N/A
MatchVrfType	Network type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Any.</li> <li>2—Specific VPN instance.</li> </ul>	N/A
VRFName	VPN instance name	N/A	String, case sensitive. Length: 1 to 31 characters.	N/A
AAAAuthorization	AAA authorization	N/A	Members include: <ul style="list-style-type: none"> <li>Domain</li> <li>UserName</li> </ul>	N/A
Domain	ISP domain used for requesting authorization attributes	N/A	String, case-insensitive. Length: 1 to 255 characters.	Domain name must not contain / \   " : * ? < > @, and must not be d, de, def, defa, defau, default, default, default, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow,

Column name	Column description	Column type	Data type and restrictions	Remarks
				if-unknown.
UserName	Username used for requesting authorization attributes	N/A	String, case-sensitive. Length: 1 to 55 characters.	User name must not contain \   / : * ? < > @, and must not be a, al, all.

## IKEv2/MatchRemoteIpv4Address

This table is used to specify remote identity information (IPv4 address) for IKEv2 profile matching.

### XML structure

```

<IKEv2>
  <MatchRemoteIpv4Address>
    <RemoteID>
      <Profile></Profile>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
    </RemoteID>
  </MatchRemoteIpv4Address>
</IKEv2>

```

### Table description

Item	Description
Feature name	IKEv2
Table name	MatchRemoteIpv4Address
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None
Support for row creation and deletion	YES

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive Length: 1 to 63 characters.	N/A
Ipv4Address	IPv4 address used as the remote identity	Index	String, dotted decimal notation.	Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4Mask	Mask of the IPv4 address	Index	Mask: String, dotted decimal notation.	Mask example: 255.255.0.0.

## IKEv2/MatchRemoteIpv6Address

This table is used to specify remote identity information (IPv6 address) for IKEv2 profile matching.

### XML structure

```

<IKEv2>
  <MatchRemoteIpv6Address>
    <RemoteID>
      <Profile></Profile>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
    </RemoteID>
  </MatchRemoteIpv6Address>
</IKEv2>

```

### Table description

Item	Description
Feature name	IKEv2
Table name	MatchRemoteIpv6Address
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None
Support for row creation and deletion	YES

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Ipv6Address	IPv6 address used as the remote identity	Index	Hexadecimal string, colon-separated.	Example: 1:2:3:4:5:6:7:8.
Ipv6PrefixLength	The prefix length of IPv6 address	Index	Unsigned integer. Value range: 0 to 128.	N/A

# IKEv2/MatchRemoteIpv4Range

This table is used to specify remote identity information (IPv4 address range) for IKEv2 profile matching.

## XML structure

```
<IKEv2>
  <MatchRemoteIpv4Range>
    <RemoteID>
      <Profile></Profile>
      <BeginIpv4Address></BeginIpv4Address>
      <EndIpv4Address></EndIpv4Address>
    </RemoteID>
  </MatchRemoteIpv4Range>
</IKEv2>
```

## Table description

Item	Description
Feature name	IKEv2
Table name	MatchRemoteIpv4Range
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
BeginIpv4Address	Start IPv4 address	Index	String, dotted decimal notation.	Example: 1.1.1.1.
EndIpv4Address	End IPv4 address	Index	String, dotted decimal notation.	Example: 1.1.1.2. The end address must be higher than the start address.

# IKEv2/MatchRemoteIpv6Range

This table is used to specify remote identity information (IPv6 address range) for IKEv2 profile matching.

## XML structure

```
<IKEv2>
  <MatchRemoteIpv6Range>
    <RemoteID>
      <Profile></Profile>
      <BeginIpv6Address></BeginIpv6Address>
      <EndIpv6Address></EndIpv6Address>
    </RemoteID>
  </MatchRemoteIpv6Range>
</IKEv2>
```

## Table description

Item	Description
Feature name	IKEv2
Table name	MatchRemoteIpv6Range
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
BeginIpv6Address	Start IPv6 address	Index	Hexadecimal string, colon-separated.	Example: 1:2:3:4:5:6:7:8.
EndIpv6Address	End IPv6 address	Index	Hexadecimal string, colon-separated.	Example: 1:2:3:4:5:6:7:9. The end address must be higher than the start address.

## IKEv2/ProfileMatchRemotePeer

This table is used to specify remote identity information (FQDN, email address, or key ID of the peer) for IKEv2 profile matching.

## XML structure

```
<IKEv2>
  <ProfileMatchRemotePeer>
```

```

    <MatchRemotePeer>
      <Profile></Profile>
      <PeerType></PeerType>
      <PeerName></PeerName>
    </MatchRemotePeer>
  </ProfileMatchRemotePeer>
</IKEv2>

```

## Table description

Item	Description
Feature name	IKEv2
Table name	ProfileMatchRemotePeer
Table type	Multi-instance table
Row name	MatchRemotePeer
Restrictions	None
Support for row creation and deletion	YES

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKEv2 profile	Index	String, case insensitive. Length:1 to 63 characters.	N/A
PeerType	peer Type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—fqdn</li> <li>2—email</li> <li>3—key-id</li> </ul>	N/A
PeerName	peer ID for IKEv2 profile	Index	String: Length:1 to 255 characters.	N/A

## IKEv2/ProfileMatchLocalIpAddress

This table is used to specify a local IP address to which an IKEv2 profile can be applied.

## XML structure

```

<IKEv2>
  <ProfileMatchLocalIpAddress>
    <MatchLocalIpAddress>
      <Profile></Profile>
      <IPType></IPType>
      <Address></Address>
    </MatchLocalIpAddress>
  </ProfileMatchLocalIpAddress>

```



</IKEv2>

## Table description

Item	Description
Feature name	IKEv2
Table name	ProfileMatchLocalIpAddress
Table type	Multi-instance table
Row name	MatchLocalIpAddress
Restrictions	None
Support for row creation and deletion	YES

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IPType	IP address type	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4 address</li><li>• 2—IPv6 address</li></ul>	N/A
Address	IP address of a local interface	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.

## IKEv2/ProfileMatchLocalInterfaces

This table is used to specify a local interface to which an IKEv2 profile can be applied.

## XML structure

```
<IKEv2>
  <ProfileMatchLocalInterfaces>
    <MatchLocalInterface>
      <Profile></Profile>
      <IfIndex></IfIndex>
    </MatchLocalInterface>
  </ProfileMatchLocalInterfaces>
</IKEv2>
```

## Table description

Item	Description
Feature name	IKEv2
Table name	ProfileMatchLocalInterfaces
Table type	Multi-instance table
Row name	MatchLocalInterface
Restrictions	None
Support for row creation and deletion	YES

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IfIndex	Interface index	Index	Unsigned integer.	N/A

## IKEv2/Policies

This table is used to configure IKEv2 policies.

## XML structure

```
<IKEv2>
  <Policies>
    <Policy>
      <Name></Name>
      <Priority></Priority>
      <ProposalList>
        <ProposalItem></ProposalItem>
      </ProposalList>
      <MatchVRF>
        <MatchVRFTYPE></MatchVRFTYPE>
        <VRFName></VRFName>
      </MatchVRF>
    </Policy>
  </Policies>
</IKEv2>
```

## Table description

Item	Description
Feature name	IKEv2
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	YES

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IKEv2 policy	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Priority	Priority for the IKEv2 policy	N/A	Unsigned integer. Value range: 1 to 65535 Default value is 100.	N/A
ProposalList	IKEv2 proposal list for the IKEv2 policy	Data structure	Members include: <ul style="list-style-type: none"><li>ProposalItem</li></ul>	N/A
ProposalItem	IKEv2 proposal	Data structure	String. Length: 1 to 63 characters.	N/A
MatchVRF	VPN instance for IKEv2 policy matching	Data structure	Members include: <ul style="list-style-type: none"><li>MatchVrfType</li><li>VRFName</li></ul>	N/A
MatchVrfType	Network type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Any.</li><li>2—Specific VPN instance.</li></ul>	N/A
VRFName	VPN instance name	N/A	String, case sensitive. Length: 1 to 31 characters.	N/A

## IKEv2/PolicyMatchLocalIpAddress

This table is used to specify the local IPv4 or IPv6 address used for IKEv2 policy matching.

## XML structure

```
<IKEv2>
  <PolicyMatchLocalIpAddress>
    <MatchLocalIpAddress>
```

```

    <Policy></Policy>
    <IPType></IPType>
    <IpAddress></IpAddress>
  </MatchLocalIpAddress>
</PolicyMatchLocalIpAddress>
</IKEv2>

```

## Table description

Item	Description
Feature name	IKEv2
Table name	PolicyMatchLocalIpAddress
Table type	Multi-instance table
Row name	MatchLocalIpAddress
Restrictions	None
Support for row creation and deletion	YES

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	Name of the IKEv2 Policy	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IPType	IP address type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 address</li> <li>2—IPv6 address</li> </ul>	N/A
IpAddress	IP address of a local interface	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.

## IKEv2/PolicyMatchLocalInterfaces

This table is used to specify the local interface used for IKEv2 policy matching.

## XML structure

```

<IKEv2>
  <PolicyMatchLocalInterfaces>
    <MatchLocalInterface>
      <Policy></Policy>
      <IfIndex></IfIndex>
    </MatchLocalInterface>
  </PolicyMatchLocalInterfaces>

```

</IKEv2>

## Table description

Item	Description
Feature name	IKEv2
Table name	PolicyMatchLocalInterfaces
Table type	Multi-instance table
Row name	MatchLocalInterface
Restrictions	None
Support for row creation and deletion	YES

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	Name of the IKEv2 policy	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IfIndex	Interface index	Index	Unsigned integer	N/A

## IKEv2/Proposals

This table is used to configure IKEv2 proposals.

## XML structure

```
<IKEv2>
  <Proposals>
    <Proposal>
      <Name></Name>
      <IntegrityList>
        <IntegrityItem></IntegrityItem>
      </IntegrityList>
      <EncryptionList>
        <EncryptionItem></EncryptionItem>
      </EncryptionList>
      <DhList>
        <DhItem></DhItem>
      </DhList>
      <PrfAlgList>
        <PrfAlgItem></PrfAlgItem>
      </PrfAlgList>
    </Proposal>
  </Proposals>
</IKEv2>
```

</IKEv2>

## Table description

Item	Description
Feature name	IKEv2
Table name	Proposal
Table type	Multi-instance table
Row name	Proposal
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Proposal name	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IntegrityList	Integrity protection algorithm list for the IKEv2 proposal.	Data structure	Members include: <ul style="list-style-type: none"><li>IntegrityItem</li></ul>	N/A
IntegrityItem	Integrity protection algorithms	N/A	Unsigned integer	See the IKEv2Capabilities table in Comware V7 IKEv2 NETCONF XML API Data Reference for supported authentication algorithms.
EncryptionList	Encryption algorithm list for the IKEv2 proposal	Data structure	Members include: <ul style="list-style-type: none"><li>EncryptionItem</li></ul>	N/A
EncryptionItem	Encryption algorithms	N/A	Unsigned integer	See the IKEv2Capabilities table in Comware V7 IKEv2 NETCONF XML API Data Reference for supported encryption algorithms.
DhList	DH groups list for the IKEv2 proposal	Data structure	Members include: <ul style="list-style-type: none"><li>DhItem</li></ul>	N/A
DhItem	DH groups	N/A	Unsigned integer	See the IKEv2Capabilities table in Comware

Column name	Column description	Column type	Data type and restrictions	Remarks
				V7 IKEv2 NETCONF XML API Data Reference for supported DH groups.
PrfAlgList	PRF algorithm list for the IKEv2 proposal	Data structure	Members include: <ul style="list-style-type: none"> <li>PrfAlgItem</li> </ul>	N/A
PrfAlgItem	PRF algorithms	N/A	Unsigned integer	See the IKEv2Capabilities table in Comware V7 IKEv2 NETCONF XML API Data Reference for supported PRF algorithms.

## IKEv2/Keychains

This table is used to configure IKEv2 keychains.

### XML structure

```

<IKEv2>
  <Keychains>
    <Keychain>
      <Name></Name>
      <Peer></Peer>
      <HostName></HostName>
      <Identity>
        <IdentityType></IdentityType>
        <StringValue></StringValue>
        <LocalIpAddress></LocalIpAddress>
      </Identity>
      <Address>
        <AddressType></AddressType>
        <IpAddress></IpAddress>
        <Ipv4Mask></Ipv4Mask>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Address>
      <PreSharedKeyLocal>
        <KeyType></KeyType>
        <Key></Key>
      </PreSharedKeyLocal>
      <PreSharedKeyRemote>
        <KeyType></KeyType>
        <Key></Key>
      </PreSharedKeyRemote>
    </Keychain>
  </Keychains>
</IKEv2>

```

```

</PreSharedKeyRemote>
<PreSharedKeySymmetric>
  <KeyType></KeyType>
  <Key></Key>
</PreSharedKeySymmetric>
</Keychain>
</Keychains>
</IKEv2>

```

## Table description

Item	Description
Feature name	IKEv2
Table name	Keychains
Table type	Multi-instance table
Row name	Keychain
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IKEv2 keychain	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Peer	Name of an IKEv2 peer	Index	String. Length: 1 to 63 characters.	N/A
HostName	Host name for the IKEv2 peer	N/A	String. Length: 1 to 253 characters.	N/A
Identity	ID of the IKEv2 peer	Data structure	Members include: <ul style="list-style-type: none"> <li>• IdentityType</li> <li>• StringValue</li> <li>• LocalIpAddress</li> <li>• KeyId</li> </ul>	N/A
IdentityType	Identity type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Ipv4Address</li> <li>• 2—Ipv6Address</li> <li>• 3—email</li> <li>• 4—fqdn</li> <li>• 5—key-id</li> </ul>	N/A
StringValue	Identity string	N/A	String. Length: 1 to 255 characters.	N/A
LocalIpAddress	IPv4 or IPv6 address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string,	IPv4 example: 1.1.1.1. IPv6 example:



Column name	Column description	Column type	Data type and restrictions	Remarks
			colon-separated.	1:2:3:4:5:6:7:8.
Address	IP address of the IKEv2 peer	Data structure	Members include: <ul style="list-style-type: none"> <li>AddressType</li> <li>IpAddress</li> <li>Ipv4Mask</li> <li>Ipv6PrefixLength</li> </ul>	N/A
AddressType	IP address type	Data structure	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 address</li> <li>2—IPv6 address</li> </ul>	N/A
IpAddress	IPv4 or IPv6 address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
Ipv4Mask	Mask of the IPv4 address	N/A	Mask: String, dotted decimal notation.	Mask example: 255.255.0.0.
Ipv6PrefixLength	Prefix length of the IPv6 address	N/A	Unsigned integer. Value range: 0 to 128.	N/A
PreSharedKeyLocal	Preshared key for certificate signing	Data structure	Members include: <ul style="list-style-type: none"> <li>KeyType</li> <li>Key</li> </ul>	PreSharedKeyLocal and PreSharedKeySymmetric cannot both be configured.
KeyType	Type of the preshared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Plaintext</li> <li>2—Ciphertext</li> </ul>	N/A
Key	Value of the preshared key	N/A	String. Length: 1 to 128 characters in plain text or 1 to 201 characters in cipher text.	N/A
PreSharedKeyRemote	Preshared key for certificate authentication	Data structure	Members include: <ul style="list-style-type: none"> <li>KeyType</li> <li>Key</li> </ul>	PreSharedKeyRemote and PreSharedKeySymmetric cannot both be configured.
KeyType	Type of the preshared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Plaintext</li> <li>2—Ciphertext</li> </ul>	N/A
Key	Value of the preshared key	N/A	String. Length: 1 to 128 characters in plain text or 1 to 201 characters in cipher text.	N/A
PreSharedKeySymmetric	Symmetric preshared key for certificate signing	Data structure	Members include: <ul style="list-style-type: none"> <li>KeyType</li> <li>Key</li> </ul>	PreSharedKeySymmetric cannot be configured together with PreSharedKeyLocal or PreSharedKeyRemote.
KeyType	Type of the symmetric preshared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Plaintext</li> <li>2—Ciphertext</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Key	Value of the symmetric preshared key	N/A	String. Length: 1 to 128 characters in plain text or 1 to 201 characters in cipher text.	N/A

# Contents

IKEv2 .....	1
IKEv2/GlobalConf .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IKEv2/Profiles .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
IKEv2/MatchRemotepv4Address .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
IKEv2/MatchRemotepv6Address .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
IKEv2/MatchRemotepv4Range .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
IKEv2/MatchRemotepv6Range .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
IKEv2/ProfileMatchRemotePeer .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
IKEv2/ProfileMatchLocalIpAddress .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
IKEv2/ProfileMatchLocalInterfaces .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
IKEv2/Policies .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
IKEv2/PolicyMatchLocalIpAddress .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
IKEv2/PolicyMatchLocalInterfaces .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
IKEv2/Proposals .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
IKEv2/Keychains .....	15
XML structure .....	15
Table description .....	16
Columns .....	16

IKEv2/IKEv2Capabilities .....	18
XML structure .....	18
Table description .....	18
Columns .....	19

# IKEv2

## IKEv2/GlobalConf

This table contains IKEv2 global configuration information.

### XML structure

```
<IKEv2>
  <GlobalConf>
    <DPD>
      <Mode></Mode>
      <Interval></Interval>
      <Retry></Retry>
    </DPD>
    <CookieChallenge></CookieChallenge>
    <NatKeepaliveInterval></NatKeepaliveInterval>
  </GlobalConf>
</IKEv2>
```

### Table description

Item	Description
Feature name	IKEv2
Table name	GlobalConf
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DPD	Global Dead Peer Detection (DPD) settings	Data structure	Members include: <ul style="list-style-type: none"><li>• Mode</li><li>• Interval</li><li>• Retry</li></ul>	N/A
Mode	Operating mode of DPD	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—On-demand</li><li>• 2—Periodic</li></ul>	N/A
Interval	Time interval for triggering DPD	N/A	Unsigned integer: Value range: 10 to 3600, in seconds.	Interval should not be smaller than Retry in on-demand mode.

Column name	Column description	Column type	Data type and restrictions	Remarks
Retry	DPD retry interval	N/A	Unsigned integer: Value range: 2 to 60, in seconds.	N/A
CookieChallenge	Number of half-open IKE SAs that triggers cookie challenging	N/A	Unsigned integer: Value range: 0 to 1000, or 65535.	If the value is 65535, cookie challenging feature disabled.
NatKeepaliveInterval	NAT keepalive interval	N/A	Unsigned integer: Value range: 5 to 3600, in seconds.	N/A

## IKEv2/Profiles

This table contains IKEv2 profiles information.

### XML structure

```

<IKEv2>
  <Profiles>
    <Profile>
      <Name></Name>
      <Priority></Priority>
      <LocalAuthMethod></LocalAuthMethod>
      <RemoteAuthMethodList>
        <RemoteAuthMethodItem></RemoteAuthMethodItem>
      </RemoteAuthMethodList>
      <ConfigExchangeList>
        <ConfigExchangeItem></ConfigExchangeItem>
      </ConfigExchangeList>
      <Keychain></Keychain>
      <SADuration></SADuration>
      <NatKeepaliveInterval></NatKeepaliveInterval>
      <InsideVRF></InsideVRF>
      <DPD>
        <Mode></Mode>
        <Interval></Interval>
        <Retry></Retry>
      </DPD>
      <MatchVRF>
        <MatchVrfType></MatchVrfType>
        <VRFName></VRFName>
      </MatchVRF>
      <AAAAAuthorization>
        <Domain></Domain>
        <UserName></UserName>
    </Profile>
  </Profiles>
</IKEv2>

```

```

    </AAAAuthorization>
  </Profile>
</Profiles>
</IKEv2>

```

## Table description

Item	Description
Feature name	IKEv2
Table name	Profiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Priority	Priority of the IKEv2 profile	N/A	Unsigned integer. Value range: 1 to 65535	N/A
LocalAuthMethod	Local identity authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Preshared key</li> <li>2—DSA signature</li> <li>3—RSA signature</li> <li>4—ECDSA signature</li> </ul>	N/A
RemoteAuthMethodList	Remote identity authentication method list	Data structure	Members include: <ul style="list-style-type: none"> <li>RemoteAuthMethodItem</li> </ul>	N/A
RemoteAuthMethodItem	Remote identity authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Preshared key</li> <li>2—DSA signature</li> <li>3—RSA signature</li> <li>4—ECDSA signature</li> </ul>	N/A
ConfigExchangeList	Configuration exchange feature	Data structure	Members include: <ul style="list-style-type: none"> <li>ConfigExchangeItem</li> </ul>	N/A
ConfigExchangeItem	Configuration exchange setting	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Request</li> <li>2—Set accept</li> <li>3—Set send</li> </ul>	N/A
Keychain	IKE keychain used for the IKEv2 profile	N/A	String. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SADuration	IKEv2 SA lifetime	N/A	Unsigned integer. Value range: 120 to 86400, in seconds.	N/A
NatKeepaliveInterval	NAT keepalive interval for the IKEv2 profile	N/A	Unsigned integer. Value range: 5 to 3600, in seconds.	N/A
InsideVRF	Inside VPN instance	N/A	String, case sensitive. Length: 1 to 31 characters.	N/A
DPD	Dead Peer Detection (DPD) settings	Data structure	Members include: <ul style="list-style-type: none"> <li>• Mode</li> <li>• Interval</li> <li>• Retry</li> </ul>	N/A
Mode	Operating mode of DPD	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—On-demand</li> <li>• 2—Periodic</li> </ul>	N/A
Interval	Time interval for triggering DPD	N/A	Unsigned integer. Value range: 10 to 3600, in seconds.	Interval should not be smaller than Retry in on-demand mode.
Retry	DPD retry interval	N/A	Unsigned integer. Value range: 2 to 60, in seconds.	N/A
MatchVRF	VPN instance for the IKEv2 profile	Data structure	Members include: <ul style="list-style-type: none"> <li>• MatchVrfType</li> <li>• VRFName</li> </ul>	N/A
MatchVrfType	Network type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Any.</li> <li>• 2—Specific VPN instance.</li> </ul>	N/A
VRFName	VPN instance name	N/A	String, case sensitive. Length: 1 to 31 characters.	N/A
AAAAAuthorization	AAA authorization	N/A	Members include: <ul style="list-style-type: none"> <li>• Domain</li> <li>• UserName</li> </ul>	N/A
Domain	ISP domain used for requesting authorization attributes	N/A	String, case-insensitive. Length: 1 to 255 characters.	Domain name must not contain / \   " : * ? < > @, and must not be d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknown, if-unknown.
UserName	Username used for requesting authorization attributes	N/A	String, case-sensitive. Length: 1 to 55 characters.	User name must not contain \   / : * ? < > @, and must not be a, al, all.



# IKEv2/MatchRemoteIpv4Address

This table contains match remote identity information (IPv4 address) of IKEv2 profiles.

## XML structure

```
<IKEv2>
  <MatchRemoteIpv4Address>
    <RemoteID>
      <Profile></Profile>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
    </RemoteID>
  </MatchRemoteIpv4Address>
</IKEv2>
```

## Table description

Item	Description
Feature name	IKEv2
Table name	MatchRemoteIpv4Address
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	IPv4 address used as the remote identity	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4Mask	Mask of the IPv4 address	Index	Mask: String, dotted decimal notation.	Mask example: 255.255.0.0.

# IKEv2/MatchRemoteIpv6Address

This table contains match remote identity information (IPv6 address) of IKEv2 profiles.

## XML structure

```
<IKEv2>
```

```

<MatchRemoteIpv6Address>
  <RemoteID>
    <Profile></Profile>
    <Ipv6Address></Ipv6Address>
    <Ipv6PrefixLength></Ipv6PrefixLength>
  </RemoteID>
</MatchRemoteIpv6Address>
</IKEv2>

```

## Table description

Item	Description
Feature name	IKEv2
Table name	MatchRemoteIpv6Address
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Ipv6Address	IPv6 address used as the remote identity	Index	Hexadecimal string, colon-separated.	Example: 1:2:3:4:5:6:7:8.
Ipv6PrefixLength	The prefix length of IPv6 address	Index	Unsigned integer. Value range: 0 to 128.	N/A

## IKEv2/MatchRemoteIpv4Range

This table contains match remote identity information (IPv4 address range) of IKEv2 profiles.

## XML structure

```

<IKEv2>
  <MatchRemoteIpv4Range>
    <RemoteID>
      <Profile></Profile>
      <BeginIpv4Address></BeginIpv4Address>
      <EndIpv4Address></EndIpv4Address>
    </RemoteID>
  </MatchRemoteIpv4Range>
</IKEv2>

```

## Table description

Item	Description
Feature name	IKEv2
Table name	MatchRemoteIpv4Range
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
BeginIpv4Address	Start IPv4 address	Index	String, dotted decimal notation.	Example: 1.1.1.1.
EndIpv4Address	End IPv4 address	Index	String, dotted decimal notation.	Example: 1.1.1.2. The end address must be higher than the start address.

## IKEv2/MatchRemoteIpv6Range

This table contains match remote identity information (IPv6 address range) of IKEv2 profiles.

## XML structure

```
<IKEv2>
  <MatchRemoteIpv6Range>
    <RemoteID>
      <Profile></Profile>
      <BeginIpv6Address></BeginIpv6Address>
      <EndIpv6Address></EndIpv6Address>
    </RemoteID>
  </MatchRemoteIpv6Range>
</IKEv2>
```

## Table description

Item	Description
Feature name	IKEv2
Table name	MatchRemoteIpv6Range

Item	Description
Table type	Multi-instance table
Row name	RemoteID
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
BeginIpv6Address	Start IPv6 address	Index	Hexadecimal string, colon-separated.	Example: 1:2:3:4:5:6:7:8.
EndIpv6Address	End IPv6 address	Index	Hexadecimal string, colon-separated.	Example: 1:2:3:4:5:6:7:9. The end address must be higher than the start address.

## IKEv2/ProfileMatchRemotePeer

This table contains match remote identity information (FQDN, email address, or key ID of the peer) of IKEv2 profiles.

## XML structure

```

<IKEv2>
  <ProfileMatchRemotePeer>
    <MatchRemotePeer>
      <Profile></Profile>
      <PeerType></PeerType>
      <PeerName></PeerName>
    </MatchRemotePeer>
  </ProfileMatchRemotePeer>
</IKEv2>

```

## Table description

Item	Description
Feature name	IKEv2
Table name	ProfileMatchRemotePeer
Table type	Multi-instance table
Row name	MatchRemotePeer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of IKEv2 profile	Index	String, case insensitive. Length:1 to 63 characters.	N/A
PeerType	peer Type	Index	Enumeration: <ul style="list-style-type: none"><li>1—fqdn</li><li>2—email</li><li>3—key-id</li></ul>	N/A
PeerName	peer ID for IKEv2 profile	Index	String: Length:1 to 255 characters.	N/A

## IKEv2/ProfileMatchLocalIpAddress

This table contains match local IP address information of IKEv2 profiles.

## XML structure

```
<IKEv2>
  <ProfileMatchLocalIpAddress>
    <MatchLocalIpAddress>
      <Profile></Profile>
      <IPType></IPType>
      <Address></Address>
    </MatchLocalIpAddress>
  </ProfileMatchLocalIpAddress>
</IKEv2>
```

## Table description

Item	Description
Feature name	IKEv2
Table name	ProfileMatchLocalIpAddress
Table type	Multi-instance table
Row name	MatchLocalIpAddress
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IPType	IP address type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 address</li> <li>2—IPv6 address</li> </ul>	N/A
Address	IP address of a local interface	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.

## IKEv2/ProfileMatchLocalInterfaces

This table displays match local interfaces information of IKEv2 profiles.

### XML structure

```

<IKEv2>
  <ProfileMatchLocalInterfaces>
    <MatchLocalInterface>
      <Profile></Profile>
      <IfIndex></IfIndex>
    </MatchLocalInterface>
  </ProfileMatchLocalInterfaces>
</IKEv2>

```

### Table description

Item	Description
Feature name	IKEv2
Table name	ProfileMatchLocalInterfaces
Table type	Multi-instance table
Row name	MatchLocalInterface
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Profile	Name of the IKEv2 profile	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IfIndex	Interface index	Index	Unsigned integer.	N/A

# IKEv2/Policies

This table contains IKEv2 policy information.

## XML structure

```
<IKEv2>
  <Policies>
    <Policy>
      <Name></Name>
      <Priority></Priority>
      <ProposalList>
        <ProposalItem></ProposalItem>
      </ProposalList>
      <MatchVRF>
        <MatchVRFTYPE></MatchVRFTYPE>
        <VRFName></VRFName>
      </MatchVRF>
    </Policy>
  </Policies>
</IKEv2>
```

## Table description

Item	Description
Feature name	IKEv2
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IKEv2 policy	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Priority	Priority for the IKEv2 policy	N/A	Unsigned integer. Value range: 1 to 65535	N/A
ProposalList	IKEv2 proposal list for the IKEv2 policy	Data structure	Members include: <ul style="list-style-type: none"><li>ProposalItem</li></ul>	N/A
ProposalItem	IKEv2 proposal	Data structure	String. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MatchVRF	VPN instance for IKEv2 policy matching	Data structure	Members include: <ul style="list-style-type: none"> <li>MatchVrfType</li> <li>VRFName</li> </ul>	N/A
MatchVrfType	Network type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Public.</li> <li>1—Any.</li> <li>2—Specific VPN instance.</li> </ul>	N/A
VRFName	VPN instance name	N/A	String, case sensitive. Length: 1 to 31 characters.	N/A

## IKEv2/PolicyMatchLocalIpAddress

This table contains match local IP address information of IKEv2 policies.

### XML structure

```

<IKEv2>
  <PolicyMatchLocalIpAddress>
    <MatchLocalIpAddress>
      <Policy></Policy>
      <IPType></IPType>
      <IpAddress></IpAddress>
    </MatchLocalIpAddress>
  </PolicyMatchLocalIpAddress>
</IKEv2>

```

### Table description

Item	Description
Feature name	IKEv2
Table name	PolicyMatchLocalIpAddress
Table type	Multi-instance table
Row name	MatchLocalIpAddress
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	Name of the IKEv2 Policy	Index	String, case insensitive. Length: 1 to 63 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
IPType	IP address type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 address</li> <li>2—IPv6 address</li> </ul>	N/A
IpAddress	IP address of a local interface	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.

## IKEv2/PolicyMatchLocalInterfaces

This table displays match local interface information of IKEv2 policies.

### XML structure

```

<IKEv2>
  <PolicyMatchLocalInterfaces>
    <MatchLocalInterface>
      <Policy></Policy>
      <IfIndex></IfIndex>
    </MatchLocalInterface>
  </PolicyMatchLocalInterfaces>
</IKEv2>

```

### Table description

Item	Description
Feature name	IKEv2
Table name	PolicyMatchLocalInterfaces
Table type	Multi-instance table
Row name	MatchLocalInterface
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	Name of the IKEv2 policy	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IfIndex	Interface index	Index	Unsigned integer	N/A

# IKEv2/Proposals

This table contains IKEv2 proposals information.

## XML structure

```
<IKEv2>
  <Proposals>
    <Proposal>
      <Name></Name>
      <IntegrityList>
        <IntegrityItem></IntegrityItem>
      </IntegrityList>
      <EncryptionList>
        <EncryptionItem></EncryptionItem>
      </EncryptionList>
      <DhList>
        <DhItem></DhItem>
      </DhList>
      <PrfAlgList>
        <PrfAlgItem></PrfAlgItem>
      </PrfAlgList>
    </Proposal>
  </Proposals>
</IKEv2>
```

## Table description

Item	Description
Feature name	IKEv2
Table name	Proposal
Table type	Multi-instance table
Row name	Proposal
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Proposal name	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IntegrityList	Integrity protection algorithm list for the IKEv2 proposal.	Data structure	Members include: <ul style="list-style-type: none"><li>IntegrityItem</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IntegrityItem	Integrity protection algorithms	N/A	Unsigned integer	See IKEv2Capabilities table for supported authentication algorithms.
EncryptionList	Encryption algorithm list for the IKEv2 proposal	Data structure	Members include: <ul style="list-style-type: none"> <li>EncryptionItem</li> </ul>	N/A
EncryptionItem	Encryption algorithms	N/A	Unsigned integer	See IKEv2Capabilities table for supported encryption algorithms.
DhList	DH groups list for the IKEv2 proposal	Data structure	Members include: <ul style="list-style-type: none"> <li>DhItem</li> </ul>	N/A
DhItem	DH groups	N/A	Unsigned integer	See IKEv2Capabilities table for supported DH groups.
PrfAlgList	PRF algorithm list for the IKEv2 proposal	Data structure	Members include: <ul style="list-style-type: none"> <li>PrfAlgItem</li> </ul>	N/A
PrfAlgItem	PRF algorithms	N/A	Unsigned integer	See IKEv2Capabilities table for supported PRF algorithms.

## IKEv2/Keychains

This table contains IKE keychains information.

### XML structure

```

<IKEv2>
  <Keychains>
    <Keychain>
      <Name></Name>
      <Peer></Peer>
      <HostName></HostName>
      <Identity>
        <IdentityType></IdentityType>
        <StringValue></StringValue>
        <LocalIpAddress></LocalIpAddress>
      </Identity>
      <Address>
        <AddressType></AddressType>

```

```

    <IpAddress></IpAddress>
    <Ipv4Mask></Ipv4Mask>
    <Ipv6PrefixLength></Ipv6PrefixLength>
  </Address>
  <PreSharedKeyLocal>
    <KeyType></KeyType>
    <Key></Key>
  </PreSharedKeyLocal>
  <PreSharedKeyRemote>
    <KeyType></KeyType>
    <Key></Key>
  </PreSharedKeyRemote>
  <PreSharedKeySymmetric>
    <KeyType></KeyType>
    <Key></Key>
  </PreSharedKeySymmetric>
</Keychain>
</Keychains>
</IKEv2>

```

## Table description

Item	Description
Feature name	IKEv2
Table name	Keychains
Table type	Multi-instance table
Row name	Keychain
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IKEv2 keychain	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
Peer	Name of an IKEv2 peer	Index	String. Length: 1 to 63 characters.	N/A
HostName	Host name for the IKEv2 peer	N/A	String. Length: 1 to 253 characters.	N/A
Identity	ID of the IKEv2 peer	Data structure	Members include: <ul style="list-style-type: none"> <li>IdentityType</li> <li>StringValue</li> <li>LocalIpAddress</li> <li>KeyId</li> </ul>	N/A
IdentityTyp	Identity type	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
e			<ul style="list-style-type: none"> <li>1—Ipv4Address</li> <li>2—Ipv6Address</li> <li>3—email</li> <li>4—fqdn</li> <li>5—key-id</li> </ul>	
StringValue	Identity string	N/A	String. Length: 1 to 255 characters.	N/A
LocalIpAddress	IPv4 or IPv6 address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
Address	IP address of the IKEv2 peer	Data structure	Members include: <ul style="list-style-type: none"> <li>AddressType</li> <li>IpAddress</li> <li>Ipv4Mask</li> <li>Ipv6PrefixLength</li> </ul>	N/A
AddressType	IP address type	Data structure	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 address</li> <li>2—IPv6 address</li> </ul>	N/A
IpAddress	IPv4 or IPv6 address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
Ipv4Mask	Mask of the IPv4 address	N/A	Mask: String, dotted decimal notation.	Mask example: 255.255.0.0.
Ipv6PrefixLength	Prefix length of the IPv6 address	N/A	Unsigned integer. Value range: 0 to 128.	N/A
PreSharedKeyLocal	Preshared key for certificate signing	Data structure	Members include: <ul style="list-style-type: none"> <li>KeyType</li> <li>Key</li> </ul>	PreSharedKeyLocal and PreSharedKeySymmetric cannot both be configured.
KeyType	Type of the preshared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Plaintext</li> <li>2—Ciphertext</li> </ul>	N/A
Key	Value of the preshared key	N/A	String. Length: 1 to 128 characters in plain text or 1 to 201 characters in cipher text.	N/A
PreSharedKeyRemote	Preshared key for certificate authentication	Data structure	Members include: <ul style="list-style-type: none"> <li>KeyType</li> <li>Key</li> </ul>	PreSharedKeyRemote and PreSharedKeySymmetric cannot both be configured.
KeyType	Type of the preshared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Plaintext</li> <li>2—Ciphertext</li> </ul>	N/A
Key	Value of the	N/A	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	preshared key		Length: 1 to 128 characters in plain text or 1 to 201 characters in cipher text.	
PreSharedKeySymmetric	Symmetric preshared key for certificate signing	Data structure	Members include: <ul style="list-style-type: none"> <li>KeyType</li> <li>Key</li> </ul>	PreSharedKeySymmetric cannot be configured together with PreSharedKeyLocal or PreSharedKeyRemote.
KeyType	Type of the symmetric preshared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Plaintext</li> <li>2—Ciphertext</li> </ul>	N/A
Key	Value of the symmetric preshared key	N/A	String. Length: 1 to 128 characters in plain text or 1 to 201 characters in cipher text.	N/A

## IKEv2/IKEv2Capabilities

This table contains information about the algorithms supported by IKEv2.

### XML structure

```

<IKEv2>
  <IKEv2Capabilities>
    <IKEv2Capability>
      <AlgID></AlgID>
      <AlgName></AlgName>
      <AlgType></AlgType>
    </IKEv2Capability>
  </IKEv2Capabilities>
</IKEv2>

```

### Table description

Item	Description
Feature name	IKEv2
Table name	IKEv2Capabilities
Table type	Multi-instance table
Row name	IKEv2Capability
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgType	Algorithm type	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—Diffie-Hellman group</li><li>• <b>2</b>—Encryption algorithm</li><li>• <b>3</b>—Authentication algorithm</li></ul>	N/A
AlgID	Algorithm ID	Index	Unsigned integer.	N/A
AlgName	Algorithm name	N/A	String, case insensitive. Length: 1 to 255 characters.	N/A

# Contents

IKEv2 .....	1
IKEv2/GlobalConf .....	1
IKEv2/Profiles .....	1
IKEv2/Policies .....	1
IKEv2/Keychains .....	2



# IKEv2

## IKEv2/GlobalConf

Message	Explanation
CookieChallenge is invalid. CookieChallenge无效。	CookieChallenge is invalid. Please check the CookieChallenge value. CookieChallenge无效。请检查CookieChallenge。
Interval should not be smaller than Retry in on-demand mode. On-demand模式下，Interval不能小于Retry。	The Interval value should not be smaller than the Retry value in on-demand mode. Please check column values of DPD group. On-demand模式下，Interval不能小于Retry。请检查DPD组各列的值。

## IKEv2/Profiles

Message	Explanation
Domain name must not contain /\ ":*?<>@, and must not be d, de, def, defa, defau, defaul, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, if-unknown. 域名不允许包含 /\ ":*?<>@, 也不允许为 d, de, def, defa, defau, defaul, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, if-unknown。	Domain name must not contain /\ ":*?<>@, and must not be d, de, def, defa, defau, defaul, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, if-unknown. Please check the domain name. 域名不允许包含 /\ ":*?<>@, 也不允许为 d, de, def, defa, defau, defaul, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, if-unknown。请检查域名。
Username must not contain \/:*?<>@, and must not be a, al, all. 用户名不允许包含 \/,  , /, :, *, ?, <, >, @, 也不允许为a, al, all。	Username must not contain \/:*?<>@, and must not be a, al, all. Please check the user name. 用户名不允许包含 \/,  , /, :, *, ?, <, >, @, 也不允许为a, al, all。请检查用户名。
Interval should not be smaller than Retry in on-demand mode. On-demand模式下，Interval不能小于Retry。	The Interval value should not be smaller than the Retry value in on-demand mode. Please check column values of DPD group. On-demand模式下，Interval不能小于Retry。请检查DPD组各列的值。

## IKEv2/Policies

Message	Explanation
VRF name does not match the type. VRF名与其类型不匹配。	VRF name does not match the type. Please check the name and type of the VRF. VRF名与其类型不匹配。请检查VRF名与其类型。

# IKEv2/Keychains

Message	Explanation
Cannot contain an IPv4 mask when the IP address type is IPv6. 地址类型为IPv6时不能含有IPv4掩码标签。	Cannot contain an IPv4 mask tag when the IP address type is IPv6. 地址类型为IPv6时不能含有IPv4掩码标签。
Cannot contain an IPv6 prefix length when the IP address type is IPv4. 地址类型为IPv4时不能含有IPv6掩码标签。	Cannot contain an IPv6 prefix length tag when the IP address type is IPv4. 地址类型为IPv4时不能含有IPv6掩码标签。
PreSharedKeySymmetric cannot coexist with PreSharedKeyLocal or PreSharedKeyRemote. PSK的KEY类型Symmetric不能与Local或Remote同时存在。	PreSharedKeySymmetric cannot coexist with PreSharedKeyLocal or PreSharedKeyRemote. PSK的KEY类型Symmetric不能与Local或Remote同时存在。
LocalIpAddress cannot coexist with StringValue. 地址类型与其他字符串类型不能同时存在。	LocalIpAddress cannot coexist with StringValue. IP地址类型与其他字符串类型不能同时存在。
Invalid ciphertext key string. PSK密文输入不合法。	The ciphertext key string is invalid. PSK密文输入不合法。

# Contents

- IP6FW .....1
  - IP6FW/IP6FWLastHopHold.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# IP6FW

## IP6FW/IP6FWLastHopHold

This table contains IPv6 last hop holding information.

### XML structure

```
<IP6FW>
  <IP6FWLastHopHold>
    <LastHopHoldIPv6>
      <IfIndex></IfIndex>
      <Mode></Mode>
    </LastHopHoldIPv6>
  </IP6FWLastHopHold>
</IP6FW>
```

### Table description

Item	Description
Feature name	IP6FW
Table name	IP6FWLastHopHold
Table type	Multi-instance table
Row name	LastHopHoldIPv6
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Mode	Enabling status of the last hop holding feature	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>• <b>1</b>—Enabled.</li> <li>• <b>2</b>—Disabled.</li> </ul>	N/A

# Contents

IP6FW .....	1
IP6FW/IP6FWSpecification .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IP6FW/IP6FWLastHopHold .....	1
XML structure .....	2
Table description .....	2
Columns .....	2

# IP6FW

## IP6FW/IP6FWSpecification

This table contains IPv6 forwarding support information.

### XML structure

```
<IP6FW>
  <IP6FWSpecification>
    <SupportLastHopIPv6></SupportLastHopIPv6>
  </IP6FWSpecification>
</IP6FW>
```

### Table description

Item	Description
Feature name	IP6FW
Table name	IP6FWSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportLastHopIPv6	Enable IPv6 last hop backup	N/A	Enumeration: <ul style="list-style-type: none"><li>false.</li><li>true.</li></ul>	N/A

## IP6FW/IP6FWLastHopHold

This table contains IPv6 last hop holding information.

## XML structure

```
<IP6FW>
  <IP6FWLastHopHold>
    <LastHopHoldIPv6>
      <IfIndex></IfIndex>
      <Mode></Mode>
    </LastHopHoldIPv6>
  </IP6FWLastHopHold>
</IP6FW>
```

## Table description

Item	Description
Feature name	IP6FW
Table name	IP6FWLastHopHold
Table type	Multi-instance table
Row name	LastHopHoldIPv6
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Mode	Enabling status of the IPv6 last hop holding feature	N/A	Unsigned integer: <ul style="list-style-type: none"><li>• 1—Enabled.</li><li>• 2—Disabled.</li></ul>	N/A



# Contents

IPCIM .....	1
IPCIM/IpSourceBindingInterface .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
IPCIM/IpVerifySource .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
IPCIM/IpVerifyExcludeVlan .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# IPCIM

## IPCIM/IpSourceBindingInterface

This table contains Ip Source Binding table information.

### XML structure

```
<IPCIM>
  <IpSourceBindingInterface>
    <SourceBinding>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
      <VLANID></VLANID>
    </SourceBinding>
  </IpSourceBindingInterface>
</IPCIM>
```

### Table description

Item	Description
Feature name	IPCIM
Table name	IpSourceBindingInterface
Table type	Multi-instance table
Row name	SourceBinding
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 3 Ethernet interface/subinterface VLAN interface
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	IfIndex ID	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Ipv4Address	IPv4 address.	Index	String, dotted decimal notation.	0.0.0.0 means do not specify IPv4 address. Either Ipv4Address or MacAddress must be specified.
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0. 00-00-00-00-00-00 means do not specify MAC address. Either Ipv4Address or MacAddress must be specified.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 0 to 4094.	0 means do not specify VLAN ID.

## IPCIM/IpVerifySource

This table contains Ip Verify Source table information.

## XML structure

```

<IPCIM>
  <IpVerifySource>
    <VerifySource>
      <IfIndex></IfIndex>
      <VerifyIpAddress></VerifyIpAddress>
      <VerifyMacAddress></VerifyMacAddress>
    </VerifySource>
  </IpVerifySource>
</IPCIM>

```

## Table description

Item	Description
Feature name	IPCIM

Table name	IpVerifySource
Table type	Multi-instance table
Row name	VerifySource
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 3 Ethernet interface/subinterface VLAN interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	IfIndex ID	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
VerifyIpAddress	Whether filter incoming packets by source IPv4 addresses or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
VerifyMacAddress	Whether filter incoming packets by source MAC addresses or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## IP CIM/IpVerifyExcludeVlan

This table contains information about VLANs excluded from IP verification.

## XML structure

```

<IPCIM>
  <IpVerifyExcludeVlans>
    <ExcludeVlan>
      <StartVlan></StartVlan>
      <EndVlan></EndVlan>
      <Status></Status>
    </ExcludeVlan>
  </IpVerifyExcludeVlans>
</IPCIM>

```

## Table description

Item	Description
Feature name	IPCIM
Table name	IpVerifyExcludeVlans
Table type	Multi-instance table
Row name	ExcludeVlan
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StartVlan	Start VLAN ID of an excluded VLAN range	Index	Unsigned integer. Value range: 1 to 4094.	N/A
EndVlan	End VLAN ID of an excluded VLAN range	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Status	Status of an excluded VLAN range	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Active.</li><li>2—Inactive.</li></ul>	Read only.

# Contents

IPCIM .....	1
IPCIM/IpSourceBindingInterface .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPCIM/IpVerifySource .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
IPCIM/IpVerifyExcludeVlan .....	3
XML structure .....	3
Table description .....	3
Columns .....	3

# IPCIM

## IPCIM/IpSourceBindingInterface

This table contains Ip Source Binding table information.

### XML structure

```
<IPCIM>
  <IpSourceBindingInterface>
    <SourceBinding>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
      <MacAddress></MacAddress>
      <VLANID></VLANID>
    </SourceBinding>
  </IpSourceBindingInterface>
</IPCIM>
```

### Table description

Item	Description
Feature name	IPCIM
Table name	IpSourceBindingInterface
Table type	Multi-instance table
Row name	SourceBinding
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 3 Ethernet interface/subinterface VLAN interface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	IfIndex ID	Index	Unsigned integer.	N/A
Ipv4Address	IPv4 address.	Index	String, dotted decimal notation.	0.0.0.0 means do not specify IPv4 address.
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0. 00-00-00-00-00-00 means do not specify MAC address.

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 0 to 4094.	0 means do not specify VLAN ID.

## IPCIM/IpVerifySource

This table contains Ip Verify Source table information.

### XML structure

```

<IPCIM>
  <IpVerifySource>
    <VerifySource>
      <IfIndex></IfIndex>
      <VerifyIpAddress></VerifyIpAddress>
      <VerifyMacAddress></VerifyMacAddress>
    </VerifySource>
  </IpVerifySource>
</IPCIM>

```

### Table description

Item	Description
Feature name	IPCIM
Table name	IpVerifySource
Table type	Multi-instance table
Row name	VerifySource
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 3 Ethernet interface/subinterface VLAN interface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	IfIndex ID	Index	Unsigned integer.	N/A
VerifyIpAddress	Whether filter incoming packets by source IPv4 addresses or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
VerifyMacAddress	Whether filter incoming packets by source MAC addresses or not.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## IPCIM/IpVerifyExcludeVlan

This table contains information about VLANs excluded from IP verification.

## XML structure

```

<IPCIM>
  <IpVerifyExcludeVlans>
    <ExcludeVlan>
      <StartVlan></StartVlan>
      <EndVlan></EndVlan>
      <Status></Status>
    </ExcludeVlan>
  </IpVerifyExcludeVlans>
</IPCIM>

```

## Table description

Item	Description
Feature name	IPCIM
Table name	IpVerifyExcludeVlans
Table type	Multi-instance table
Row name	ExcludeVlan
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StartVlan	Start VLAN ID of an excluded VLAN range	Index	Unsigned integer. Value range: 1 to 4094.	N/A
EndVlan	End VLAN ID of an excluded VLAN range	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Status	Status of an excluded VLAN range	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Inactive.</li> </ul>	Read only.

# Contents

IPCIM .....2

    IPCIM/IpsourceBindingInterface .....2

    IPCIM/ IpVerifyExcludeVlan .....2

# IP CIM

## IP CIM/IpsourceBindingInterface

Message	Explanation
Invalid IP address. 非法的IP地址。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。
IP address and MAC address are invalid. 非法的IP地址和MAC地址。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。
Invalid MAC address. 非法的MAC地址。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。

## IP CIM/ IpVerifyExcludeVlan

Message	Explanation
The start VLAN ID is greater than the end VLAN ID. 配置IP Source Guard免过滤条件中的VLAN范围的End VLAN不能小于Start VLAN。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。
The status is read-only. 配置IP Source Guard免过滤条件中的Status只可读不可写。	The status is read-only. 配置IP Source Guard免过滤条件中的Status只可读不可写。
The specified VLAN range overlaps with other excluded VLAN ranges. 配置IP Source Guard免过滤条件的VLAN范围重叠。	The specified VLAN range overlaps with other excluded VLAN ranges. 配置IP Source Guard免过滤条件的VLAN范围配置区域重叠。

# Contents

IPFW .....	1
IPFW/IPFWLoadSharing .....	1
XML structure .....	1
Table description .....	2
Columns for B64 .....	2
Columns for B70 .....	3
IPFW/IPFWLastHopHold .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
IPFW/IPFWSetService .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
IPFW/IPFWLastHopBackupSwitch .....	7
XML structure .....	8
Table description .....	8
Columns .....	8
IPFW/IPFWTcpMss .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
IPFW/IPFWDFSet .....	9
XML structure .....	10
Table description .....	10
Columns .....	10
IPFW/IPFWSymmetric .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
IPFW/IPFWFwdPolicy .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
IPFW/IPFWSetStatistic .....	12
XML structure .....	12
Table description .....	13
Columns .....	13

# IPFW

## IPFW/IPFWLoadSharing

This table contains load sharing information.

### XML structure

#### B64 表格式

```
<IPFW>
  <IPFWLoadSharing>
    <LoadSharing>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Type></Type>
      <AlgorithmNum></AlgorithmNum>
      <DestIp></DestIp>
      <SrcIp></SrcIp>
      <IpPro></IpPro>
      <DestPort></DestPort>
      <SrcPort></SrcPort>
      <IngressPort></IngressPort>
    </LoadSharing>
  </IPFWLoadSharing>
</IPFW>
```

#### B70 表格式

```
<IPFW>
  <IPFWLoadSharing>
    <LoadSharing>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Type></Type>
      </DeviceNode>
      <AlgorithmNum></AlgorithmNum>
      <Seed></Seed>
      <Shift></Shift>
      <DestIp></DestIp>
      <SrcIp></SrcIp>
      <IpPro></IpPro>
      <DestPort></DestPort>
```

```

        <SrcPort></SrcPort>
        <IngressPort></IngressPort>
        <TunnelOuter></TunnelOuter>
        <TunnelInner></TunnelInner>
        <TunnelAll></TunnelAll>
    </LoadSharing>
</IPFWLoadSharing>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWLoadSharing
Table type	Multi-instance table
Row name	LoadSharing
Restrictions	None
Support for row creation and deletion	No

## Columns for B64

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Chassis ID	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	N/A	Unsigned integer. Value range: 0 to 7.	N/A
Type	Method for obtaining the IPv4 address	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PACKET.</li> <li>2—FLOW.</li> <li>3—ALGORITHM</li> </ul>	N/A
AlgorithmNum	Load sharing algorithm	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 7.	
DestIp	Load sharing based on destination IP address	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
SrcIp	Load sharing based on source IP address	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
IpPro	Load sharing based on IP protocol	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DestPort	Load sharing based on destination port	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
SrcPort	Load sharing based on destination port	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
IngressPort	Load sharing based on ingress port	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

## Columns for B70

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Chassis ID	Index	Unsigned integer. Value range: 0 to 65535.	Global configuration if equals to 65535
Slot	Slot ID	Index	Unsigned integer. Value range: 0 to 65535.	Global configuration if equals to 65535
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	Value range is 0 to 7
Type	Method for obtaining the	Index	Enumeration:	0:Restore default

Column name	Column description	Column type	Data type and restrictions	Remarks
	IPv4 address		<ul style="list-style-type: none"> <li>• <b>0</b>—DEFAULT.</li> <li>• <b>1</b>—PACKET.</li> <li>• <b>2</b>—FLOW.</li> <li>• <b>3</b>—ALGORITHM</li> <li>• <b>4</b>—TUNNEL</li> </ul>	configuration. 1: Configuration type only 2: Can only be configured DestIp , SrcIp , IpPro , DestPort, SrcPort, IngressPort ; 3: Can only be configured AlgorithmNum, Seed, Shift 4: Can only be configured Tunnelmode
AlgorithmNum	Load sharing algorithm	N/A	Unsigned integer. Value range: 0 to 7.	Default value 4294967295, Note: it shows default value If AlgorithmNum equals to 0,
Seed	The start hash value for the load-sharing algorithm	N/A	Unsigned integer.	Default value is set by user
Shift	The offset value for the load-sharing calculation result	N/A	Unsigned integer.	Default value is set by user
DestIp	Load sharing based on destination IP address	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
SrcIp	Load sharing based on source IP address	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
IpPro	Load sharing based on IP protocol	N/A	Boolean:	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	
DestPort	Load sharing based on destination port	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
SrcPort	Load sharing based on destination port	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
IngressPort	Load sharing based on ingress port	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
Tunnleouter	Load sharing based on Tunnel outer	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
TunnelInner	Load sharing based on Tunnel Inner	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
TunnelAll	Load sharing based on Tunnel All	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

## IPFW/IPFWLastHopHold

This table contains last hop holding information.

## XML structure

```

<IPFW>
  <IPFWLastHopHold>
    <LastHopHold>
      <IfIndex></IfIndex>
      <Mode></Mode>
    </LastHopHold>
  </IPFWLastHopHold>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWLastHopHold
Table type	Multi-instance table
Row name	LastHopHold
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Mode	Enabling status of the last hop holding feature	N/A	Unsigned integer: <ul style="list-style-type: none"><li>• 1—Enabled.</li><li>• 2—Disabled.</li></ul>	N/A

## IPFW/IPFWSetService

This table contains IP service information.

## XML structure

```
<IPFW>
  <IPFWSetService>
```

```

    <DscpEnable></DscpEnable>
    <VpnPeerIdEnable></VpnPeerIdEnable>
    <MplsExpEnable></MplsExpEnable>
  </IPFWSetService>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWSetService
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DscpEnable	Enabling status of the DSCP service	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
VpnPeerIdEnable	Enabling status of the VPN peer ID service	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
MplsExpEnable	Enabling status of the MPLS EXP service	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## IPFW/IPFWLastHopBackupSwitch

This table contains IP last hop backup information.

## XML structure

```
<IPFW>
  <IPFWLastHopBackupSwitch>
    <BackupEnable></BackupEnable>
  </IPFWLastHopBackupSwitch>
</IPFW>
```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWLastHopBackupSwitch
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BackupEnable	Enable last-hop Backup	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Enable.</li><li>2—Disable.</li></ul>	N/A

## IPFW/IPFWTcpMss

This table contains interface TCP MSS information.

## XML structure

```
<IPFW>
  <IPFWTcpMss>
    <TcpMss>
      <IfIndex></IfIndex>
      <Num></Num>
    </TcpMss>
  </IPFWTcpMss>
</IPFW>
```

```

    </TcpMss>
  </IPFWTcpMss>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWTcpMss
Table type	Multi-instance table
Row name	TcpMss
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	interface index	Index	Unsigned integer.	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Num	TCP max segment size	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## IPFW/IPFWDFSet

This table contains packet DF bit information.

## XML structure

```
<IPFW>
  <IPFWDFSet>
    <IPDFBit></IPDFBit>
  </IPFWDFSet>
</IPFW>
```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWDFSet
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPDFBit	Setting of the DF bit	N/A	Enumeration: <ul style="list-style-type: none"><li>0—DISABLE.</li><li>1—SET.</li><li>2—CLEAR.</li></ul>	N/A

## IPFW/IPFWSymmetric

This table contains IP symmetric forwarding.

## XML structure

```
<IPFW>
  <IPFWSymmetric>
    <Symmetric>
      <SymmetricMode></SymmetricMode>
    </Symmetric>
  </IPFWSymmetric>
</IPFW>
```

```

    </Symmetric>
  </IPFWSymmetric>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWSymmetric
Table type	Multi-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Symmetric	Enabling status of the symmetric forwarding	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## IPFW/IPFWFwdPolicy

This table contains the forwarding policy information.

## XML structure

```

<IPFW>
  <IPFWFwdPolicy>
    <FwdPolicy></FwdPolicy>
  </IPFWFwdPolicy>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWFwdPolicy
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
FwdPolicy	Set the current forwarding policy	N/A	Unsigned integer Value range: 1 to 4. <ul style="list-style-type: none"><li>• <b>1</b>—Per-flow forwarding policy.</li><li>• <b>2</b>—Per-packet forwarding policy.</li><li>• <b>3</b>—Three-tuple-based per-flow forwarding policy.</li><li>• <b>4</b>—Enhanced per-flow forwarding policy.</li></ul>

## IPFW/IPFWSetStatistic

This table contains interface-specific IPv4 and IPv6 statistic collection configuration.

## XML structure

```
<IPFW>
  <IPFWSetStatistic>
    <SetStatistic>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <Direct></Direct>
    </SetStatistic>
  </IPFWSetStatistic>
</IPFW>
```



```

    </IPFWSetStatistic>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWSetStatistic
Table type	Multi-instance table
Row name	SetStatistic
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enable	Enabling status of the statistics collection	N/A	Unsigned integer <ul style="list-style-type: none"> <li>1—Enabled</li> <li>2—Disabled</li> </ul>	N/A
Direct	Traffic direction	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound</li> <li>1—Outbound</li> <li>2—Both</li> </ul>	N/A

# Contents

IPFW .....	1
IPFW/IPFWLoadSharing .....	1
XML structure .....	1
Table description .....	2
Columns for B64 .....	2
Columns for B70 .....	3
IPFW/IPFWSpecification .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
IPFW/IPFWLastHopHold .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
IPFW/IPFWSetService .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
IPFW/IPFWLastHopBackupSwitch .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
IPFW/IPFWTcpMss .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
IPFW/IPFWDFSet .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
IPFW/IPFWSymmetric .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
IPFW/IPFWFwdPolicy .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
IPFW/IPFWFwdPolicySpecification .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
IPFW/IPFWDFSpecification .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
IPFW/IPFWSetStatistic .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
IPFW/IPStatistic .....	17
XML structure .....	17
Table description .....	18
Columns .....	18

# IPFW

## IPFW/IPFWLoadSharing

This table contains load sharing information.

### XML structure

#### B64 表格式

```
<IPFW>
  <IPFWLoadSharing>
    <LoadSharing>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Type></Type>
      <AlgorithmNum></AlgorithmNum>
      <DestIp></DestIp>
      <SrcIp></SrcIp>
      <IpPro></IpPro>
      <DestPort></DestPort>
      <SrcPort></SrcPort>
      <IngressPort></IngressPort>
    </LoadSharing>
  </IPFWLoadSharing>
</IPFW>
```

#### B70 表格式

```
<IPFW>
  <IPFWLoadSharing>
    <LoadSharing>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Type></Type>
      </DeviceNode>
      <AlgorithmNum></AlgorithmNum>
      <Seed></Seed>
      <Shift></Shift>
      <DestIp></DestIp>
      <SrcIp></SrcIp>
      <IpPro></IpPro>
      <DestPort></DestPort>
```

```

    <SrcPort></SrcPort>
    <IngressPort></IngressPort>
    <TunnelOuter></TunnelOuter>
    <TunnelInner></TunnelInner>
    <TunnelAll></TunnelAll>
  </LoadSharing>
</IPFWLoadSharing>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWLoadSharing
Table type	Multi-instance table
Row name	LoadSharing
Restrictions	None

## Columns for B64

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Chassis ID	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	N/A	Unsigned integer. Value range: 0 to 7.	N/A
Type	Method for obtaining the IPv4 address	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PACKET.</li> <li>2—FLOW.</li> <li>3—ALGORITHM</li> </ul>	N/A
AlgorithmNum	Load sharing algorithm	N/A	Unsigned integer. Value range: 0 to 7.	N/A
DestIp	Load sharing	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	based on destination IP address		<ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	
SrcIp	Load sharing based on source IP address	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
IpPro	Load sharing based on IP protocol	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
DestPort	Load sharing based on destination port.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
SrcPort	Load sharing based on destination port	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
IngressPort	Load sharing based on ingress port	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

## Columns for B70

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Chassis ID	Index	Unsigned integer. Value range: 0 to 65535.	Global configuration if equals to 65535
Slot	Slot ID	Index	Unsigned integer. Value range: 0 to 65535.	Global configuration if equals to 65535
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	Value range is 0 to 7
Type	IP-forwarding Load-sharing mode	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—DEFAULT</li> <li>• <b>1</b>—PACKET.</li> <li>• <b>2</b>—FLOW.</li> <li>• <b>3</b>—ALGORITHM</li> </ul>	0:Restore default configuration. 1:Configuration type only 2:Can only be configured DestIp , SrcIp , IpPro ,

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>4—TUNNEL</li> </ul>	DestPort, SrcPort, IngressPort ;  3: Can only be configured AlgorithmNum, Seed, Shift  4: Can only be configured Tunnlemode
AlgorithmNum	Load sharing algorithm	N/A	Unsigned integer. Value range: 0 to 7.	Default value 4294967295
Seed	The start hash value for the load-sharing algorithm	N/A	Unsigned integer.	Default value is set by user
Shift	The offset value for the load-sharing calculation result	N/A	Unsigned integer.	Default value is set by user
DestIp	Load sharing based on destination IP address	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
SrcIp	Load sharing based on source IP address	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
IpPro	Load sharing based on IP protocol	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
DestPort	Load sharing based on destination port.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
SrcPort	Load sharing based on destination port	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IngressPort	Load sharing based on ingress port	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
Tunnleouter	Load sharing based on tunnel outer	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
TunnelInner	Load sharing based on tunnel inner	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
TunnelAll	Load sharing based on tunnel all	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## IPFW/IPFWSpecification

This table contains load-sharing support information.

### XML structure

```

<IPFW>
  <IPFWSpecification>
    <LoadSharingSupportFlow></LoadSharingSupportFlow>
    <LoadSharingSuportPacket></LoadSharingSuportPacket>
    <LoadSharingSuportSwitch></LoadSharingSuportSwitch>
    <LoadSharingSuportDestIp></LoadSharingSuportDestIp>
    <LoadSharingSuportSrcIp></LoadSharingSuportSrcIp>
    <LoadSharingSuportIpPro></LoadSharingSuportIpPro>
    <LoadSharingSuportDestPort></LoadSharingSuportDestPort>
    <LoadSharingSuportSrcPort></LoadSharingSuportSrcPort>
    <LoadSharingSuportIngressPort></LoadSharingSuportIngressPort>
    <SupportLastHop></SupportLastHop>
    <SupportLastHopBackup></SupportLastHopBackup>
  </IPFWSpecification>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LoadSharingSupportFlow	Support load sharing based on flow.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
LoadSharingSupportPacket	Support load sharing based on packet.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
LoadSharingSupportSwitch	Support load sharing based on switch.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
LoadSharingSupportDestIp	Support load sharing based on destination IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
LoadSharingSupportSrcIp	Support load sharing based on source IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
LoadSharingSupportIpPro	Support load sharing based on IP protocol.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
LoadSharingSupportDestPort	Support load sharing based on destination port.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
LoadSharingSupportSrcPort	Support load sharing based on source port.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
LoadSharingSupportIngressPort	Support load sharing based on ingress port.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SupportLastHop	Support last hop.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SupportLastHopBackup	Support last hop backup.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## IPFW/IPFWLastHopHold

This table contains last hop holding information.

## XML structure

```

<IPFW>
  <IPFWLastHopHold>
    <LastHopHold>
      <IfIndex></IfIndex>
      <Mode></Mode>
    </LastHopHold>
  </IPFWLastHopHold>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWLastHopHold
Table type	Multi-instance table
Row name	LastHopHold

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Mode	Enabling status of the last hop holding feature	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>1—Enabled.</li> <li>2—Disabled.</li> </ul>	N/A

## IPFW/IPFWSetService

This table contains IP service information.

## XML structure

```

<IPFW>
  <IPFWSetService>
    <DscpEnable></DscpEnable>
    <VpnPeerIdEnable></VpnPeerIdEnable>
    <MplsExpEnable></MplsExpEnable>
  </IPFWSetService>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW

Item	Description
Table name	IPFWSetService
Table type	Multi-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DscpEnable	Enabling status of the DSCP service	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
VpnPeerIdEnable	Enabling status of the VPN peer ID service	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
MplsExpEnable	Enabling status of the MPLS EXP service	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## IPFW/IPFWLastHopBackupSwitch

This table contains IP last hop backup information.

## XML structure

```

<IPFW>
  <IPFWLastHopBackupSwitch>
    <BackupEnable></BackupEnable>
  </IPFWLastHopBackupSwitch>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW

Item	Description
Table name	IPFWLastHopBackupSwitch
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BackupEnable	Enable last hop backup	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Enable.</li> <li>2—Disable.</li> </ul>	N/A

## IPFW/IPFWTcpMss

This table contains interface TCP MSS information.

## XML structure

```

<IPFW>
  <IPFWTcpMss>
    <TcpMss>
      <IfIndex></IfIndex>
      <Num></Num>
    </TcpMss>
  </IPFWTcpMss>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWTcpMss
Table type	Multi-instance table
Row name	TcpMss

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
lflIndex	interface index	Index	Unsigned integer.	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about lflIndex, see “Appendix” in <i>lflmgr NETCONF XML API Configuration Reference</i> .
Num	TCP max segment size	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## IPFW/IPFWDFSet

This table contains packet DF bit information.

## XML structure

```

<IPFW>
  <IPFWDFSet>
    <IPDFBit></IPDFBit>
  </IPFWDFSet>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWDFSet

Item	Description
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPDFBit	Setting of the DF bit	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—DISABLE.</li> <li>1—SET.</li> <li>2—CLEAR.</li> </ul>	N/A

## IPFW/IPFWSymmetric

This table contains IP symmetric forwarding.

## XML structure

```

<IPFW>
  <IPFWSymmetric>
    <Symmetric>
      <SymmetricMode></SymmetricMode>
    </Symmetric>
  </IPFWSymmetric>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWSymmetric
Table type	Multi-instance table
Row name	None
Restrictions	None

Item	Description
Item	Description

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Symmetric	Enabling status of the symmetric forwarding	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## IPFW/IPFWFwdPolicy

This table contains the forwarding policy information.

## XML structure

```

<IPFW>
  <IPFWFwdPolicy>
    <FwdPolicy></FwdPolicy>
  </IPFWFwdPolicy>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWFwdPolicy
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
FwdPolicy	Get the current forwarding policy	N/A	Unsigned integer Value range: 1 to 4. <ul style="list-style-type: none"><li>1—Per-flow forwarding policy.</li><li>2—Per-packet forwarding policy.</li><li>3—Three-tuple-based per-flow forwarding policy.</li><li>4—Enhanced per-flow forwarding policy.</li></ul>

## IPFW/IPFWFwdPolicySpecification

This table contains specification information.

## XML structure

```
<IPFW>
  <IPFWFwdPolicySpecification>
    <SupportPolicyMode></SupportPolicyMode>
    <SupportThreeTuple></SupportThreeTuple>
    <SupportEnhance></SupportEnhance>
  </IPFWFwdPolicySpecification>
</IPFW>
```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWFwdPolicySpecification
Table type	Single-instance table
Row name	None
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions
SupportPolicyMode	Whether the policy mode switchover is supported	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>
SupportThreTuple	Whether the three-tuple-based per-flow forwarding mode is supported	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>
SupportEnhance	Whether the enhanced per-flow forwarding mode is supported	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>

## IPFW/IPFWDFS Specification

This table contains DF specification information.

## XML structure

```
<IPFW>
  <IPFWDFSSpecification>
    <SupportIPDF></SupportIPDF>
  </IPFWDFSSpecification>
</IPFW>
```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWDFSSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SupportIPDF	Whether the IPDF is supported	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>

## IPFW/IPFWSetStatistic

This table contains interface-specific IPv4 and IPv6 statistic collection configuration.

## XML structure

```
<IPFW>
  <IPFWSetStatistic>
    <SetStatistic>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <Direct></Direct>
    </SetStatistic>
  </IPFWSetStatistic>
</IPFW>
```

## Table description

Item	Description
Feature name	IPFW
Table name	IPFWSetStatistic
Table type	Multi-instance table
Row name	SetStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enable	Enabling status of the statistics collection	N/A	Unsigned integer <ul style="list-style-type: none"> <li>1—Enabled</li> <li>2—Disabled</li> </ul>	N/A
Direct	Traffic direction	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound</li> <li>1—Outbound</li> <li>2—Both</li> </ul>	N/A

## IPFW/IPStatistic

This table shows statistics information about IPv4 and IPv6 packets.

## XML structure

```

<IPFW>
  <IPStatistic>
    <Statistic>
      <IfIndex></IfIndex>
      <Type></Type>
      <InPackets></InPackets>
      <InBytes></InBytes>
      <OutPackets></OutPackets>
      <OutBytes></OutBytes>
    </Statistic>
  </IPStatistic>
</IPFW>

```

## Table description

Item	Description
Feature name	IPFW
Table name	IPStatistic
Table type	Multi-instance table
Row name	Statistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Type	IP version	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
InPackets	Received packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	$2^{64} - 1$ : InPackets is not supported
InBytes	Received bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	$2^{64} - 1$ : InBytes is not supported
OutPackets	Sent packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	$2^{64} - 1$ : OutPackets is not supported
OutBytes	Sent bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	$2^{64} - 1$ : OutBytes is not supported



# Contents

IPFW .....1

    IPFW/IPFWSetStatistic ..... 1

# IPFW

## IPFW/IPFWSetStatistic

Message	Explanation
The current interface does not support this operation. 当前接口下不支持该操作。	It does not support configuring statistics collection for IPv4 and IPv6 packets on current interface. 当前接口下不支持配置 IPv4 和 IPv6 报文统计信息功能。
This device does not customize configuring statistics collection for IPv4 and IPv6 packets. 本设备没有定制配置IPv4和IPv6报文统计功能。	This device does not customize configuring statistics collection for IPv4 and IPv6 packets. 本设备没有定制配置IPv4和IPv6报文统计功能。
This device does not customize configuring statistics collection for IPv4 and IPv6 packets on inbound. 本设备没有定制配置入方向上IPv4和IPv6报文统计功能。	This device does not customize configuring statistics collection for IPv4 and IPv6 packets on inbound. 本设备没有定制配置入方向上 IPv4 和 IPv6 报文统计功能。
This device does not customize configuring statistics collection for IPv4 and IPv6 packets on outbound. 本设备没有定制配置出方向上IPv4和IPv6报文统计功能。	This device does not customize configuring statistics collection for IP and IPv6 packets on outbound. 本设备没有定制配置出方向上 IPv4 和 IPv6 报文统计功能。
This device does not customize configuring statistics collection for IPv4 and IPv6 packets on both bound. 本设备没有定制配置入出双方向上IPv4和IPv6报文统计功能。	This device does not customize configuring statistics collection for IPv4 and IPv6 packets on both bound. 本设备没有定制配置入出双方向上 IPv4 和 IPv6 报文统计功能。
Not enough resources to complete the operation. 资源不足。	Not enough resources to complete the operation. 资源不足。

# Contents

IPoE .....	1
IPoE/IPoEv4ResetAccessUser .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPoE/IPoEv6ResetAccessUser .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
IPoE/IPoEExportWhiteList .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
IPoE/IPoEImportWhiteList .....	3
XML structure .....	3
Table description .....	4
Columns .....	4



# IPoE

## IPoE/IPoEv4ResetAccessUser

This table contains resetting the IPoEv4 access user.

### XML structure

```
<IPoE>
  <IPoEv4ResetAccessUser>
    <ResetAccessUser>
      <Interface></Interface>
      <IPv4Address></IPv4Address>
    </ResetAccessUser>
  </IPoEv4ResetAccessUser>
</IPoE>
```

### Table description

Item	Description
Feature name	IPoE
Table name	IPoEv4ResetAccessUser
Table type	Multi-instance table
Row name	ResetAccessUser
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPv4Address	IPv4 address.	Index	String, dotted decimal notation.	N/A

# IPoE/IPoEv6ResetAccessUser

This table contains resetting the IPoEv6 access user.

## XML structure

```
<IPoE>
  <IPoEv6ResetAccessUser>
    <ResetAccessUser>
      <Interface></Interface>
      <IPv6Address></IPv6Address>
    </ResetAccessUser>
  </IPoEv6ResetAccessUser>
</IPoE>
```

## Table description

Item	Description
Feature name	IPoE
Table name	IPoEv6ResetAccessUser
Table type	Multi-instance table
Row name	ResetAccessUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A

# IPoE/IPoEExportWhiteList

This table contains exporting the IPoE whitelist.

## XML structure

```
<IPoE>
  <IPoEExportWhiteList>
    <ExportWhiteList>
      <IPType></IPType>
      <Url></Url>
    </ExportWhiteList>
  </IPoEExportWhiteList>
</IPoE>
```

## Table description

Item	Description
Feature name	IPoE
Table name	IPoEExportWhiteList
Table type	Multi-instance table
Row name	ExportWhiteList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPType	IP type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4.</li><li>• 2—IPv6.</li></ul>	N/A
Url	Name of the destination .csv file to which the whitelist is exported to.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The export path depends on the Web service frame. Select the filename on the webpage.

## IPoE/IPoEImportWhiteList

This table contains importing the IPoE whitelist.

## XML structure

```
<IPoE>
  <IPoEImportWhiteList>
    <ImportWhiteList>
      <IPType></IPType>
      <Url></Url>
```

```

    </ImportWhiteList>
  </IPoEImportWhiteList>
</IPoE>

```

## Table description

Item	Description
Feature name	IPoE
Table name	IPoEImportWhiteList
Table type	Multi-instance table
Row name	ImportWhiteList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPType	IP type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
Url	Name of the destination .csv file from which the whitelist is imported.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The import path depends on the Web service frame. Select the filename on the webpage.

# Contents

IPoE .....	1
IPoE/IFConfig .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPoE/IPoEAccessLog .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
IPoE/IPoEv4WhiteList .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
IPoE/IPoEv6WhiteList .....	4
XML structure .....	4
Table description .....	5
Columns .....	5

# IPoE

## IPoE/IFConfig

This table contains the information about using IPoE interface config.

### XML structure

```
<IPoE>
  <IFConfig>
    <Config>
      <IPType></IPType>
      <Interface></Interface>
      <IPoEMode></IPoEMode>
      <Unclassified></Unclassified>
      <WhiteList></WhiteList>
    </Config>
  </IFConfig>
</IPoE>
```

### Table description

Item	Description
Feature name	IPoE
Table name	IFConfig
Table type	Multi-instance table
Row name	Config
Restrictions	Layer 3 aggregate interface/subinterface view Layer 3 Ethernet interface/subinterface view L3VE interface/subinterface view VEth interface/subinterface view
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPType	IP type.	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPoEMode	IPoE mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—L2-Connected.</li> <li>2—Routed.</li> </ul>	N/A
Unclassified	Unknown source packet triggers the generation of an IPoE session..	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
WhiteList	Enable whitelist.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## IPoE/IPoEAccessLog

This table contains the information about using IPoE access log.

### XML structure

```

<IPoE>
  <IPoEAccessLog>
    <AccessLog>
      <IPType></IPType>
      <AbnormalLogout></AbnormalLogout>
      <NormalLogout></NormalLogout>
      <FailedLogin></FailedLogin>
      <SuccessfulLogin></SuccessfulLogin>
    </AccessLog>
  </IPoEAccessLog>
</IPoE>

```

### Table description

Item	Description
Feature name	IPoE
Table name	IPoEAccessLog
Table type	Multi-instance table

Row name	AccessLog
Restrictions	SystemView
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPType	IP type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
AbnormalLogout	Abnormal logout.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
NormalLogout	Normal logout.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
FailedLogin	Failed login.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
SuccessfulLogin	Successful login.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## IPoE/IPoEv4WhiteList

This table contains the information about using IPoEv4 whitelist.

## XML structure

```

<IPoE>
  <IPoEv4WhiteList>
    <WhiteList>
      <Interface></Interface>
      <IPv4Address></IPv4Address>
      <IPv4Mask></IPv4Mask>
      <DomainName></DomainName>
      <Description></Description>
    </WhiteList>
  </IPoEv4WhiteList>
</IPoE>

```



## Table description

Item	Description
Feature name	IPoE
Table name	IPoEv4WhiteList
Table type	Multi-instance table
Row name	WhiteList
Restrictions	Layer 3 aggregate interface/subinterface view Layer 3 Ethernet interface/subinterface view L3VE interface/subinterface view VEth interface/subinterface view
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPv4Addresses	IPv4 address.	Index	String, dotted decimal notation.	N/A
IPv4Mask	IPv4 mask.	Index	Unsigned integer 1 to 32.	Currently fixed to value 32
DomainName	Domain name of the CHAP mode.	N/A	String. Length: 1 to 255 characters.	N/A
Description	Static description.	N/A	String. Length: 1 to 31 characters.	N/A

## IPoE/IPoEv6WhiteList

This table contains the information about using the IPoEv6 whitelist.

## XML structure

```
<IPoE>
  <IPoEv6WhiteList>
    <WhiteList>
```

```

    <Interface></Interface>
    <IPv6Address></IPv6Address>
    <IPv6Mask></IPv6Mask>
    <DomainName></DomainName>
    <Description></Description>
  </WhiteList>
</IPoEv6WhiteList>
</IPoE>

```

## Table description

Item	Description
Feature name	IPoE
Table name	IPoEv6WhiteList
Table type	Multi-instance table
Row name	WhiteList
Restrictions	Layer 3 aggregate interface/subinterface view Layer 3 Ethernet interface/subinterface view L3VE interface/subinterface view VEth interface/subinterface view
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPv6Addresses	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A
IPv6Mask	IPv6 mask.	Index	Unsigned integer 1 to 128.	Currently fixed to value 128
DomainName	Domain name of the CHAP mode.	N/A	String. Length: 1 to 255 characters.	N/A
Description	Static description.	N/A	String. Length: 1 to 31 characters.	N/A



# Contents

IPoE .....	1
IPoE/IPoESessionTotalStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPoE/IPoEWebSessionTotalStatistics .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
IPoE/IPoESubnetLeaseTotalStatistics .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
IPoE/IPoElfleaseTotalStatistics .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
IPoE/IPoESessionStatistics .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
IPoE/IPoEv4ShowWhiteList .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
IPoE/IPoEv6ShowWhiteList .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
IPoE/IFConfig .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
IPoE/IPoEAccessLog .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
IPoE/IPoEv4WhiteList .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
IPoE/IPoEv6WhiteList .....	14
XML structure .....	14
Table description .....	15
Columns .....	15

# IPoE

## IPoE/IPoESessionTotalStatistics

This table contains IPoE total session statistics accessed by bind authentication method.

### XML structure

```
<IPoE>
  <IPoESessionTotalStatistics>
    <SessionTotalStatistics>
      <IpType></IpType>
      <TotalNum></TotalNum>
      <InitNum></InitNum>
      <AuthingNum></AuthingNum>
      <AuthfailNum></AuthfailNum>
      <AuthpassNum></AuthpassNum>
      <AssignIPNum></AssignIPNum>
      <OnlineNum></OnlineNum>
      <BackupNum></BackupNum>
    </SessionTotalStatistics>
  </IPoESessionTotalStatistics>
</IPoE>
```

### Table description

Item	Description
Feature name	IPoE
Table name	IPoESessionTotalStatistics
Table type	Multi-instance table
Row name	SessionTotalStatistics
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpType	Protocol type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4</li><li>• 1—IPv6</li></ul>	IPv4 or IPv6
TotalNum	Total number of users.	N/A	Unsigned integer.	N/A
InitNum	Number of users who initiated	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	sessions.			
AuthingNum	Number of users being authenticated.	N/A	Unsigned integer.	N/A
AuthfailNum	Number of users who failed authentication.	N/A	Unsigned integer.	N/A
AuthpassNum	Number of users who passed authentication.	N/A	Unsigned integer.	N/A
AssignIPNum	Number of users who have IP addresses.	N/A	Unsigned integer.	N/A
OnlineNum	Number of online users.	N/A	Unsigned integer.	N/A
BackupNum	Number of users whose information was backed up.	N/A	Unsigned integer.	N/A

## IPoE/IPoEWebSessionTotalStatistics

This table contains IPoE total session statistics accessed by web authentication method.

### XML structure

```

<IPoE>
  <IPoEWebSessionTotalStatistics>
    <WebSessionTotalStatistics>
      <IpType></IpType>
      <AuthPhase></AuthPhase>
      <TotalNum></TotalNum>
      <InitNum></InitNum>
      <AuthingNum></AuthingNum>
      <AuthfailNum></AuthfailNum>
      <AuthpassNum></AuthpassNum>
      <AssignIPNum></AssignIPNum>
      <OnlineNum></OnlineNum>
      <BackupNum></BackupNum>
    </WebSessionTotalStatistics>
  </IPoEWebSessionTotalStatistics>
</IPoE>

```

### Table description

Item	Description
Feature name	IPoE

Table name	IPoEWebSessionTotalStatistics
Table type	Multi-instance table
Row name	WebSessionTotalStatistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpType	Protocol type.	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—IPv4</li> <li>• 1—IPv6</li> </ul>	IPv4 or IPv6
AuthPhase	Authentication phase.	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—Web preauth</li> <li>• 2—Web</li> </ul>	Web preauth or Web
TotalNum	Total number of users.	N/A	Unsigned integer.	N/A
InitNum	Number of users who initiated sessions.	N/A	Unsigned integer.	N/A
AuthingNum	Number of users being authenticated.	N/A	Unsigned integer.	N/A
AuthfailNum	Number of users who failed authentication.	N/A	Unsigned integer.	N/A
AuthpassNum	Number of users who passed authentication.	N/A	Unsigned integer.	N/A
AssignIPNum	Number of users who have IP addresses.	N/A	Unsigned integer.	N/A
OnlineNum	Number of online users.	N/A	Unsigned integer.	N/A
BackupNum	Number of users whose information was backed up.	N/A	Unsigned integer.	N/A

## IPoE/IPoESubnetLeaseTotalStatistics

This table contains IPoE subnet-leased total user statistics.

## XML structure

```

<IPoE>
  <IPoESubnetLeaseTotalStatistics>
    <SubnetLeaseTotalStatistics>

```

```

<IpType></IpType>
<TotalNum></TotalNum>
<InitNum></InitNum>
<AuthingNum></AuthingNum>
<AuthfailNum></AuthfailNum>
<AuthpassNum></AuthpassNum>
<AssignIPNum></AssignIPNum>
<OnlineNum></OnlineNum>
<BackupNum></BackupNum>
</SubnetLeaseTotalStatistics>
</IPoESubnetLeaseTotalStatistics>
</IPoE>

```

## Table description

Item	Description
Feature name	IPoE
Table name	IPoESubnetLeaseTotalStatistics
Table type	Multi-instance table
Row name	SubnetLeaseTotalStatistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpType	Protocol type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4</li> <li>1—IPv6</li> </ul>	IPv4 or IPv6
TotalNum	Total number of subnet-leased users.	N/A	Unsigned integer.	N/A
InitNum	Number of subnet-leased users who initiated sessions.	N/A	Unsigned integer.	N/A
AuthingNum	Number of subnet-leased users being authenticated.	N/A	Unsigned integer.	N/A
AuthfailNum	Number of subnet-leased users who failed authentication.	N/A	Unsigned integer.	N/A
AuthpassNum	Number of subnet-leased users who passed authentication.	N/A	Unsigned integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
AssignIPNum	Number of subnet-leased users who have IP addresses.	N/A	Unsigned integer.	N/A
OnlineNum	Number of online subnet-leased users.	N/A	Unsigned integer.	N/A
BackupNum	Number of subnet-leased users whose information was backed up.	N/A	Unsigned integer.	N/A

## IPoE/IPoEIfleaseTotalStatistics

This table contains IPoE interface-leased total user statistics.

### XML structure

```

<IPoE>
  <IPoEIfleaseTotalStatistics>
    <IfleaseTotalStatistics>
      <IpType></IpType>
      <TotalNum></TotalNum>
      <InitNum></InitNum>
      <AuthingNum></AuthingNum>
      <AuthfailNum></AuthfailNum>
      <AuthpassNum></AuthpassNum>
      <AssignIPNum></AssignIPNum>
      <OnlineNum></OnlineNum>
      <BackupNum></BackupNum>
    </IfleaseTotalStatistics>
  </IPoEIfleaseTotalStatistics>
</IPoE>

```

### Table description

Item	Description
Feature name	IPoE
Table name	IPoEIfleaseTotalStatistics
Table type	Multi-instance table
Row name	IfleaseTotalStatistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpType	Protocol type	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4</li><li>• 1—IPv6</li></ul>	IPv4 or IPv6
TotalNum	Total number of interface-leased users.	N/A	Unsigned integer.	N/A
InitNum	Number of interface-leased users who initiated sessions.	N/A	Unsigned integer.	N/A
AuthingNum	Number of interface-leased users being authenticated.	N/A	Unsigned integer.	N/A
AuthfailNum	Number of interface-leased users who failed authentication.	N/A	Unsigned integer.	N/A
AuthpassNum	Number of interface-leased users who passed authentication.	N/A	Unsigned integer.	N/A
AssignIPNum	Number of interface-leased users who have IP addresses.	N/A	Unsigned integer.	N/A
OnlineNum	Number of online interface-leased users.	N/A	Unsigned integer.	N/A
BackupNum	Number of interface-leased users whose information was backed up.	N/A	Unsigned integer.	N/A

## IPoE/IPoESessionStatistics

This table contains IPoE session statistics accessed by bind authentication method.

## XML structure

```
<IPoE>
  <IPoESessionStatistics>
    <SessionStatistics>
      <IPType></IPType>
      <Interface></Interface>
      <TotalNum></TotalNum>
```

```

    <InitNum></InitNum>
    <AuthingNum></AuthingNum>
    <AuthfailNum></AuthfailNum>
    <AuthpassNum></AuthpassNum>
    <AssignIPNum></AssignIPNum>
    <OnlineNum></OnlineNum>
  </SessionStatistics>
</IPoESessionStatistics>
</IPoE>

```

## Table description

Item	Description
Feature name	IPoE
Table name	IPoESessionStatistics
Table type	Multi-instance table
Row name	SessionStatistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPType	Protocol type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4</li> <li>2—IPv6</li> </ul>	IPv4 or IPv6
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
TotalNum	Total number of users.	N/A	Unsigned integer.	N/A
InitNum	Number of users who initiated sessions.	N/A	Unsigned integer.	N/A
AuthingNum	Number of users being authenticated.	N/A	Unsigned integer.	N/A
AuthfailNum	Number of users who failed authentication.	N/A	Unsigned integer.	N/A
AuthpassNum	Number of users who passed	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	authentication.			
AssignIPNum	Number of users who have IP addresses.	N/A	Unsigned integer.	N/A
OnlineNum	Number of online users.	N/A	Unsigned integer.	N/A

## IPoE/IPoEv4ShowWhiteList

This table contains displaying the IPv4 IPoE whitelist.

### XML structure

```

<IPoE>
  <IPoEv4ShowWhiteList>
    <ShowWhiteList>
      <Interface></Interface>
      <IPv4Address></IPv4Address>
      <Mask></Mask>
      <MACAddress></MACAddress>
      <ServiceVLAN></ServiceVLAN>
      <CustomerVLAN></CustomerVLAN>
      <LoginTime></LoginTime>
      <OnlineTime></OnlineTime>
      <Description></Description>
    </ShowWhiteList>
  </IPoEv4ShowWhiteList>
</IPoE>

```

### Table description

Item	Description
Feature name	IPoE
Table name	IPoEv4ShowWhiteList
Table type	Multi-instance table
Row name	ShowWhiteList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPv4Address	IPv4 address.	Index	String, dotted decimal notation.	N/A
Mask	Mask.	Index	Unsigned integer 1 to 32	Currently fixed to value 32
MACAddress	MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
ServiceVLAN	Service provider VLAN.	N/A	Unsigned short.	N/A
CustomerVLAN	Customer VLAN.	N/A	Unsigned short.	N/A
LoginTime	User login time.	N/A	DateTime.	Example: YYYY-MM-DDT hh:mm:ss This function is not supported in data plane mode.
OnlineTime	User online duration.	N/A	String. Length: 1 to 8 characters.	Example: hh:mm:ss 00:00:06
Description	Description for the user.	N/A	String. Length: 1 to 31 characters.	This function is not supported in data plane mode.

## IPoE/IPoEv6ShowWhiteList

This table contains displaying the IPv6 IPoE whitelist.

## XML structure

```

<IPoE>
  <IPoEv6ShowWhiteList>
    <ShowWhiteList>
      <Interface></Interface>
    
```

```

    <IPv6Address></IPv6Address>
    <Mask></Mask>
    <MACAddress></MACAddress>
    <ServiceVLAN></ServiceVLAN>
    <CustomerVLAN></CustomerVLAN>
    <LoginTime></LoginTime>
    <OnlineTime></OnlineTime>
    <Description></Description>
  </ShowWhiteList>
</IPoEv6ShowWhiteList>
</IPoE>

```

## Table description

Item	Description
Feature name	IPoE
Table name	IPoEv6ShowWhiteList
Table type	Multi-instance table
Row name	ShowWhiteList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A
Mask	Mask.	Index	Unsigned integer 1 to 128	Currently fixed to value 128
MACAddress	MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
ServiceVLAN	Service provider VLAN.	N/A	Unsigned short.	N/A
CustomerVLAN	Customer VLAN.	N/A	Unsigned short.	N/A
LoginTime	User online duration.	N/A	DateTime.	Example: YYYY-MM-DDT

Column name	Column description	Column type	Data type and restrictions	Remarks
				hh:mm:ss This function is not supported in data plane mode.
OnlineTime	User online time.	N/A	String. Length: 1 to 8 characters.	Example: hh:mm:ss 00:00:06
Description	Description for the user.	N/A	String. Length: 1 to 31 characters.	N/A

## IPoE/IFConfig

This table contains the information about using IPoE interface config.

### XML structure

```

<IPoE>
  <IFConfig>
    <Config>
      <IPType></IPType>
      <Interface></Interface>
      <IPoEMode></IPoEMode>
      <Unclassified></Unclassified>
      <WhiteList></WhiteList>
    </Config>
  </IFConfig>
</IPoE>

```

### Table description

Item	Description
Feature name	IPoE
Table name	IFConfig
Table type	Multi-instance table
Row name	Config
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPType	IP type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPoEMode	IPoE mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—L2-Connected.</li> <li>2—Routed.</li> </ul>	N/A
Unclassified	Unknown source packet triggers the generation of an IPoE session..	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
WhiteList	Enable whitelist.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## IPoE/IPoEAccessLog

This table contains the information about using IPoE access log.

### XML structure

```

<IPoE>
  <IPoEAccessLog>
    <AccessLog>
      <IPType></IPType>
      <AbnormalLogout></AbnormalLogout>
      <NormalLogout></NormalLogout>
      <FailedLogin></FailedLogin>
      <SuccessfulLogin></SuccessfulLogin>
    </AccessLog>
  </IPoEAccessLog>
</IPoE>

```

### Table description

Item	Description
Feature name	IPoE



Table name	IPoEAccessLog
Table type	Multi-instance table
Row name	AccessLog
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPType	IP type.	Index	Enumeration: • 1—IPv4. • 2—IPv6.	N/A
AbnormalLogout	Abnormal logout.	N/A	Enumeration: • 0—Disable. • 1—Enable.	N/A
NormalLogout	Normal logout.	N/A	Enumeration: • 0—Disable. • 1—Enable.	N/A
FailedLogin	Failed login.	N/A	Enumeration: • 0—Disable. • 1—Enable.	N/A
SuccessfulLogin	Successful login.	N/A	Enumeration: • 0—Disable. • 1—Enable.	N/A

## IPoE/IPoEv4WhiteList

This table contains the information about using IPoEv4 whitelist.

## XML structure

```

<IPoE>
  <IPoEv4WhiteList>
    <WhiteList>
      <Interface></Interface>
      <IPv4Address></IPv4Address>
      <IPv4Mask></IPv4Mask>
      <DomainName></DomainName>
      <Description></Description>
    </WhiteList>
  </IPoEv4WhiteList>
</IPoE>

```

## Table description

Item	Description
Feature name	IPoE
Table name	IPoEv4WhiteList
Table type	Multi-instance table
Row name	WhiteList
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPv4Address	IPv4 address.	Index	String, dotted decimal notation.	N/A
IPv4Mask	IPv4 mask.	Index	Unsigned integer 1 to 32.	Currently fixed to value 32
DomainName	Domain name of the CHAP mode.	N/A	String. Length: 1 to 255 characters.	N/A
Description	Static description.	N/A	String. Length: 1 to 31 characters.	N/A

## IPoE/IPoEv6WhiteList

This table contains the information about using the IPoEv6 whitelist.

## XML structure

```
<IPoE>
  <IPoEv6WhiteList>
    <WhiteList>
      <Interface></Interface>
      <IPv6Address></IPv6Address>
      <IPv6Mask></IPv6Mask>
```

```

    <DomainName></DomainName>
    <Description></Description>
  </WhiteList>
</IPoEv6WhiteList>
</IPoE>

```

## Table description

Item	Description
Feature name	IPoE
Table name	IPoEv6WhiteList
Table type	Multi-instance table
Row name	WhiteList
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interface	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPv6Addresses	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A
IPv6Mask	IPv6 mask.	Index	Unsigned integer 1 to 128.	Currently fixed to value 128
DomainName	Domain name of the CHAP mode.	N/A	String. Length: 1 to 255 characters.	N/A
Description	Static description.	N/A	String. Length: 1 to 31 characters.	N/A

# Contents

IPReputation .....	1
IPReputation/Status.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
IPReputation/ExceptionIP .....	1
XML structure.....	2
Table description.....	2
Columns.....	2
IPReputation/AttackCategory.....	2
XML structure.....	2
Table description.....	3
Columns.....	3

# IPReputation

## IPReputation/Status

This table contains IP reputation status information.

### XML structure

```
<IPReputation>
  <Status>
    <ServiceEnable></ServiceEnable>
    <StatisticsEnable></StatisticsEnable>
  </Status>
</IPReputation>
```

### Table description

Item	Description
Feature name	IPReputation
Table name	Status
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceEnable	Enabling status of the IP reputation feature	Index	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A
StatisticsEnable	Enabling status of the statistic collection feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

## IPReputation/ExceptionIP

This table contains IP address exception information.

## XML structure

```
<IPReputation>
  <ExceptionIP>
    <IP>
      <IPAddress></IPAddress>
      <AddressType></AddressType>
    </IP>
  </ExceptionIP>
</IPReputation>
```

## Table description

Item	Description
Feature name	IPReputation
Table name	ExceptionIP
Table type	Multi-instance table
Row name	IP
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPAddress	IP address exception	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Length: 1 to 46 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
AddressType	IP version	N/A	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>	N/A

## IPReputation/AttackCategory

This table contains attack category information.

## XML structure

```
<IPReputation>
  <AttackCategory>
    <AttackConfig>
      <AttackID></AttackID>
```

```

    <AttackName></AttackName>
    <Action></Action>
    <Logging></Logging>
  </AttackConfig>
</AttackCategory>
</IPReputation>

```

## Table description

Item	Description
Feature name	IPReputation
Table name	AttackCategory
Table type	Multi-instance table
Row name	AttackConfig
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AttackID	ID of the attack category	Index	Unassigned integer. Value range: 0 to 65535.	N/A
AttackName	Name of the attack category	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Action	Action for the attack category	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Permit.</li> <li><b>2</b>—Deny.</li> </ul>	N/A
Logging	Enabling status of the logging feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

# Contents

IPReputation .....	1
IPReputation/Status .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPReputation/ExceptionIP .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
IPReputation/AttackCategory .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
IPReputation/IPStatistics .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
IPReputation/IPReputationQuery .....	4
XML structure .....	4
Table description .....	5
Columns .....	5



# IPReputation

## IPReputation/Status

This table contains IP reputation status information.

### XML structure

```
<IPReputation>
  <Status>
    <ServiceEnable></ServiceEnable>
    <StatisticsEnable></StatisticsEnable>
  </Status>
</IPReputation>
```

### Table description

Item	Description
Feature name	IPReputation
Table name	Status
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceEnable	Enabling status of the IP reputation feature	Index	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A
StatisticsEnable	Enabling status of the statistics collection function	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

## IPReputation/ExceptionIP

This table contains IP address exception information.

## XML structure

```
<IPReputation>
  <ExceptionIP>
    <IP>
      <IPAddress></IPAddress>
      <AddressType></AddressType>
    </IP>
  </ExceptionIP>
</IPReputation>
```

## Table description

Item	Description
Feature name	IPReputation
Table name	ExceptionIP
Table type	Multi-instance table
Row name	IP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPAddress	IP address exception	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Length: 1 to 46 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
AddressType	IP version	N/A	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>	N/A

## IPReputation/AttackCategory

This table contains attack category information.

## XML structure

```
<IPReputation>
  <AttackCategory>
    <AttackConfig>
      <AttackID></AttackID>
      <AttackName></AttackName>
```

```

    <Action></Action>
    <Logging></Logging>
  </AttackConfig>
</AttackCategory>
</IPReputation>

```

## Table description

Item	Description
Feature name	IPReputation
Table name	AttackCategory
Table type	Multi-instance table
Row name	AttackConfig
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AttackID	ID of the attack category	Index	Unassigned integer. Value range: 0 to 65535.	N/A
AttackName	Name of the attack category	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Action	Action for the attack category	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Permit.</li> <li>2—Deny.</li> </ul>	N/A
Logging	Enabling status of the logging feature	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A

## IPReputation/IPStatistics

This table contains IP reputation statistics information.

## XML structure

```

<IPReputation>
  <IPStatistics>
    <IPStatistic>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Count></Count>
      <IPJsonCount></IPJsonCount>
    </IPStatistic>
  </IPStatistics>
</IPReputation>

```

```

    </IPStatistic>
  </IPStatistics>
</IPReputation>

```

## Table description

Item	Description
Feature name	IPReputation
Table name	IPStatistics
Table type	Multi-instance table
Row name	IPStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Chassis ID	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the interface	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Count	Number of IP addresses with top ranking statistics	Index	Unsigned integer. Value range: 10 to 100.	N/A
IPJsonCount	Json values of the top ranking statistics	N/A	String, case-insensitive. Length: 1 to 65535 characters.	N/A

## IPReputation/IPReputationQuery

This table contains IP reputation query information.

## XML structure

```

<IPReputation>
  <IPReputationQuery>
    <IPQuery>
      <IPAddress></IPAddress>
      <AttackID></AttackID>
      <AttackName></AttackName>
      <AddressType></AddressType>
      <Action></Action>
    </IPQuery>
  </IPReputationQuery>
</IPReputation>

```

```

    <Logging></Logging>
    <Direction></Direction>
    <HitCount></HitCount>
  </IPQuery>
</IPReputationQuery>
</IPReputation>

```

## Table description

Item	Description
Feature name	IPReputation
Table name	IPReputationQuery
Table type	Multi-instance table
Row name	IPQuery
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPAddress	IP address to be queried	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Length: 1 to 46 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
AttackID	ID of the attack category	Index	Unassigned integer. Value range: 0 to 65535.	N/A
AttackName	Name of the attack category	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
AddressType	IP version	N/A	Enumeration: • 1—IPv4. • 2—IPv6.	N/A
Action	Action for the attack category	N/A	Enumeration: • 1—Permit. • 2—Deny.	N/A
Logging	Enabling status of the logging feature	N/A	Boolean: • true—Enabled. • false—Disabled.	N/A
Direction	Direction of the IP attack	N/A	Enumeration: • 1—Source to destination. • 2—Destination to source. • 3—Both.	N/A
HitCount	Total hit count of an IP address	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

# Contents

IPS.....	1
IPS/ImportSnortSignatures.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
IPS/SignatureManualUpgrade .....	1
XML structure.....	2
Table description.....	2
Columns.....	2
IPS/SignatureAutoUpgradeNow .....	2
XML structure.....	2
Table description.....	3
Columns.....	3
IPS/SignatureRollback .....	3
XML structure.....	3
Table description.....	3
Columns.....	4
IPS/UnloadSnortSignatures.....	4
XML structure.....	4
Table description.....	4
Columns.....	4

# IPS

## IPS/ImportSnortSignatures

This table contains information about importing IPS rules in the snort format.

### XML structure

```
<IPS>
  <ImportSnortSignatures>
    <URL></URL>
    <Location></Location>
  </ImportSnortSignatures>
</IPS>
```

### Table description

Item	Description
Feature name	IPS
Table name	ImportSnortSignatures
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
URL	URL of the imported signature file.	N/A	String, case-insensitive When the file is remote, Length: 1 to 255 characters. When the file is local, Length: 1 to 127 characters.	URL
Location	Location of the file.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Local</li><li>• 1—remote</li></ul>	If Location is set to 0, the device deletes the snort file after the snort file import is complete.

## IPS/SignatureManualUpgrade

This table contains information about IPS signature manual upgrade.

## XML structure

```
<IPS>
  <SignatureManualUpgrade>
    <URL></URL>
    <Location></Location>
  </SignatureManualUpgrade>
</IPS>
```

## Table description

Item	Description
Feature name	IPS
Table name	SignatureManualUpgrade
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
URL	URL of the upgrade signature file.	N/A	String, case-insensitive For a remote file, Length: 1 to 255 characters. For a local file, Length: 1 to 127 characters.	URL
Location	Location of the file.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Local</li><li>• 1—remote</li></ul>	If Location is set to 0, the device deletes the signature file when the signature library update is completed.

## IPS/SignatureAutoUpgradeNow

This table contains information about immediate IPS signature auto upgrading.

## XML structure

```
<IPS>
  <SignatureAutoUpgradeNow>
    <AutoUpgradeNow></AutoUpgradeNow>
  </SignatureAutoUpgradeNow>
</IPS>
```



## Table description

Item	Description
Feature name	IPS
Table name	SignatureAutoUpgradeNow
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoUpgradeNow	Immediate auto upgrade	N/A	This column must be empty.	N/A

## IPS/SignatureRollback

This table contains information about IPS signatures rollback.

## XML structure

```
<IPS>
  <SignatureRollback>
    <Rollback></Rollback>
  </SignatureRollback>
</IPS>
```

## Table description

Item	Description
Feature name	IPS
Table name	SignatureRollback
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Rollback	Rollback to a specific version	N/A	Boolean: <ul style="list-style-type: none"><li>• true: Rollback to last version</li><li>• false: Rollback to the original version</li></ul>	N/A

## IPS/UnloadSnortSignatures

This table contains information about removing IPS user-defined rules.

### XML structure

```
<IPS>
  <UnloadSnortSignatures>
    <Unload></Unload>
  </UnloadSnortSignatures>
</IPS>
```

### Table description

Item	Description
Feature name	IPS
Table name	UnloadSnortSignatures
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Unload	Remove user-defined rule	N/A	This column must be empty	N/A

# Contents

IPS.....	1
IPS/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
IPS/PolicyOnProfile .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
IPS/PolicyExceptionSigs .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
IPS/SignatureAutoUpgrade .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
IPS/ActionDefaultParameters .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
IPS/UpdateLoggingDaily .....	7
XML structure .....	7
Table description .....	7
Columns .....	7

# IPS

## IPS/Policies

This table contains IPS policy information.

### XML structure

```
<IPS>
  <Policies>
    <Policy>
      <Name></Name>
      <FilterDirection></FilterDirection>
      <FilterSeverity></FilterSeverity>
      <FilterAction></FilterAction>
      <ProtectionList>
        <ProtectionId></ProtectionId>
        <SubProtectionId></SubProtectionId>
      </ProtectionList>
      <CategoryList>
        <CategoryId></CategoryId>
        <SubCategoryId></SubCategoryId>
      </CategoryList>
      <Action></Action>
      <Logging></Logging>
      <Capture></Capture>
    </Policy>
  </Policies>
</IPS>
```

### Table description

Item	Description
Feature name	IPS
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IPS policy	Index	String, case-insensitive. Length: 1 to 63 characters.	The value cannot be <b>default</b>
FilterDirection	Traffic direction to which the IPS signature applies	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Client to server.</li> <li>1—Server to client.</li> <li>2—Both.</li> </ul>	N/A
FilterSeverity	Severity level of the IPS signature	N/A	Unsigned integer <ul style="list-style-type: none"> <li>1—Low.</li> <li>2—Medium.</li> <li>4—High.</li> <li>8—Critical.</li> </ul>	To specify multiple severity levels, set the value to the sum of the severity level IDs. For example, set the value to 3 to specify severity levels low (1) and medium (2.).
FilterAction	Default action of the IPS signature	N/A	Unsigned integer <ul style="list-style-type: none"> <li>1—Block.</li> <li>2—Drop.</li> <li>4—Permit.</li> <li>8—Reset.</li> </ul>	To specify multiple actions, set the value to the sum of the action IDs. For example, set the value to 3 to specify actions block (1) and drop (2).
ProtectionList	List of protected targets	Data structure	Members include: <ul style="list-style-type: none"> <li>ProtectionId.</li> <li>SubProtectionId.</li> </ul>	N/A
ProtectionId	ID of the protected target	N/A	Unsigned integer.	A protected target list can contain an unlimited number of protected targets obtained from the IPS signature file.
SubProtectionId	ID of the protected subtarget	N/A	Unsigned integer.	A protected target list can contain an unlimited number of subtargets.
CategoryList	List of attack categories	Data structure	Members include: <ul style="list-style-type: none"> <li>CategoryId.</li> <li>SubCategoryId.</li> </ul>	N/A
CategoryId	ID of the attack category	N/A	Unsigned integer.	An attack category list can contain an unlimited number of attack categories.
SubCategoryId	ID of the Subcategory	N/A	Unsigned integer.	An attack category can contain an unlimited number of subcategories obtained from the IPS signature file.
Action	Action applied to matching packets.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Block.</li> <li>1—Drop.</li> <li>2—Permit.</li> <li>3—Reset.</li> <li>4—Redirect.</li> <li>5—Default.</li> </ul>	N/A
Logging	Whether or not to	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	log the matching packets		<ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	
Capture	Whether or not to capture the matching packets	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A

## IPS/PolicyOnProfile

This table contains information about the IPS policy applied to a DPI application profile.

### XML structure

```

<IPS>
  <PolicyOnProfile>
    <profile>
      <ProfileName></ProfileName>
      <PolicyName></PolicyName>
    </profile>
  </PolicyOnProfile>
</IPS>

```

### Table description

Item	Description
Feature name	IPS
Table name	PolicyOnProfile
Table type	Multi-instance table
Row name	profile
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the DPI application profile	Index	String, case-insensitive. Length: 1 to 100 characters.	N/A
PolicyName	Name of the IPS policy applied to the DPI application profile	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

# IPS/PolicyExceptionSigs

This table contains information about exception signatures in an IPS policy..

## XML structure

```
<IPS>
  <PolicyExceptionSigs>
    <PolicyExceptionSig>
      <PolicyName></PolicyName>
      <Userdefined></Userdefined>
      <SigID></SigID>
      <Enabled></Enabled>
      <Action></Action>
      <Logging></Logging>
      <Capture></Capture>
    </PolicyExceptionSig>
  </PolicyExceptionSigs>
</IPS>
```

## Table description

Item	Description
Feature name	IPS
Table name	PolicyExceptionSigs
Table type	Multi-instance table
Row name	PolicyExceptionSig
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the IPS policy	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Userdefined	Whether or not the IPS signature is user defined	Index	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
SigID	ID of the IPS signature	Index	Unsigned integer. Value range: 1 to 4294967295.	The value is obtained from the IPS signature file.
Enabled	Whether or not the IPS signature is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>false.</li> </ul>	
Action	Action to take on packets matching the IPS signature	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Block.</li> <li>1—Drop.</li> <li>2—Permit.</li> <li>3—Reset.</li> <li>4—Redirect.</li> <li>5—Default.</li> </ul>	N/A
Logging	Whether or not to log the matching packets	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
Capture	Whether or not to capture the matching packets	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A

## IPS/SignatureAutoUpgrade

This table contains IPS signature library auto update settings.

### XML structure

```

<IPS>
  <SignatureAutoUpgrade>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrade>
</IPS>

```

### Table description

Item	Description
Feature name	IPS
Table name	SignatureAutoUpgrade
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Whether or not IPS signature library auto update is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false (default).</li></ul>	N/A
StartTime	Time when IPS signature library auto update starts	N/A	Time Format: HH:MM:SS	By default, IPS signature library auto update starts at 02:00:00 every day.
Type	Whether IPS signature library auto update occurs on a daily or a weekly basis	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Weekly.</li><li>1—Daily.</li></ul>	By default, IPS signature library auto update occurs on a daily basis.
Day	Days of the week on which IPS signature library auto update occurs	N/A	Unsigned integer. Value range: 0 to 6.	This column is displayed only <b>Type</b> is set to 0.

## IPS/ActionDefaultParameters

This table contains IPS action parameter settings.

## XML structure

```
<IPS>
  <ActionDefaultParameters>
    <ActionDefaultParameter>
      <Action></Action>
      <ParameterName></ParameterName>
    </ActionDefaultParameter>
  </ActionDefaultParameters>
</IPS>
```

## Table description

Item	Description
Feature name	IPS
Table name	ActionDefaultParameters
Table type	Multi-instance table
Row name	ActionDefaultParameter
Restrictions	None

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Action	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Block.</li> <li>2—Capture.</li> <li>3—Logging.</li> <li>4—Redirect.</li> <li>5—Mail.</li> </ul>	N/A
ParameterName	Parameter name	N/A	String, case-insensitive. Length: 1 to 63 characters.	The IPS action parameters are defined in the DIM module.

## IPS/UpdateLoggingDaily

This table contains daily sending settings for IPS signature library update logging.

## XML structure

```

<IPS>
  <UpdateLoggingDaily>
    <StartTime></StartTime>
  </UpdateLoggingDaily>
</IPS>

```

## Table description

Item	Description
Feature name	IPS
Table name	UpdateLoggingDaily
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StartTime	Time to send IPS	N/A	Time	By default, IPS sends fastlog at 02:00:00

Column name	Column description	Column type	Data type and restrictions	Remarks
	fastlog every day		Format: HH:MM:SS	every day.

# Contents

IPS.....	1
IPS/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
IPS/PolicyOnProfile .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
IPS/ProtectionList .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
IPS/CategoryList .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
IPS/PolicyExceptionSigs .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
IPS/Signatures .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
IPS/SignatureFileInfos .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
IPS/SignatureAutoUpgrade .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
IPS/SignatureUpgradePercentage .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
IPS/ActionDefaultParameters .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
IPS/SignaturePages .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
IPS/UserSignatureAnalyselInfos .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
IPS/UpdateLoggingDaily .....	17
XML structure .....	17
Table description .....	18
Columns .....	18

# IPS

## IPS/Policies

This table contains IPS policy information.

### XML structure

```
<IPS>
  <Policies>
    <Policy>
      <Name></Name>
      <FilterDirection></FilterDirection>
      <FilterSeverity></FilterSeverity>
      <FilterAction></FilterAction>
      <ProtectionList>
        <ProtectionId></ProtectionId>
        <SubProtectionId></SubProtectionId>
      </ProtectionList>
      <CategoryList>
        <CategoryId></CategoryId>
        <SubCategoryId></SubCategoryId>
      </CategoryList>
      <Action></Action>
      <Logging></Logging>
      <Capture></Capture>
    </Policy>
  </Policies>
</IPS>
```

### Table description

Item	Description
Feature name	IPS
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IPS policy	Index	String, case-insensitive. Length: 1 to 63 characters.	The value cannot be <b>default</b> .
FilterDirection	Traffic direction to which the IPS signature applies	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Client to server.</li> <li>• 1—Server to client.</li> <li>• 2—Both.</li> </ul>	N/A
FilterSeverity	Severity level of the IPS signature	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>• 1—Low.</li> <li>• 2—Medium.</li> <li>• 4—High.</li> <li>• 8—Critical.</li> </ul>	To specify multiple severity levels, set the value to the sum of the severity level IDs. For example, set the value to 3 to specify severity levels low (1) and medium (2).
FilterAction	Default action of the IPS signature	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>• 1—Block.</li> <li>• 2—Drop.</li> <li>• 4—Permit.</li> <li>• 8—Reset.</li> </ul>	To specify multiple actions, set the value to the sum of the action IDs. For example, set the value to 3 to specify actions block (1) and drop (2).
ProtectionList	List of protected targets	Data structure	Members include: <ul style="list-style-type: none"> <li>• ProtectionId.</li> <li>• SubProtectionId.</li> </ul>	N/A
ProtectionId	ID of the protected target	N/A	Unsigned integer.	A protected target list can contain an unlimited number of protected targets obtained from the IPS signature file.
SubProtectionId	ID of the protected subtarget	N/A	Unsigned integer.	A protected target list can contain an unlimited number of subtargets.
CategoryList	List of attack categories	Data structure	Members include: <ul style="list-style-type: none"> <li>• CategoryId.</li> <li>• SubCategoryId.</li> </ul>	N/A
CategoryId	ID of the attack category	N/A	Unsigned integer.	An attack category list can contain an unlimited number of attack categories.
SubCategoryId	ID of the attack subcategory	N/A	Unsigned integer.	An attack category can contain an unlimited number of subcategories obtained from the IPS signature file.
Action	Action applied to	N/A	Enumeration:	N/A

	matching packets.		<ul style="list-style-type: none"> <li>• 0—Block.</li> <li>• 1—Drop.</li> <li>• 2—Permit.</li> <li>• 3—Reset.</li> <li>• 4—Redirect.</li> <li>• 5—Default.</li> </ul>	
Logging	Whether or not to log the matching packets	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	N/A
Capture	Whether or not to capture the matching packets	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	N/A

## IPS/PolicyOnProfile

This table contains information about the IPS policy applied to a DPI application profile.

### XML structure

```

<IPS>
  <PolicyOnProfile>
    <profile>
      <ProfileName></ProfileName>
      <PolicyName></PolicyName>
    </profile>
  </PolicyOnProfile>
</IPS>

```

### Table description

Item	Description
Feature name	IPS
Table name	PolicyOnProfile
Table type	Multi-instance table
Row name	profile
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the DPI application profile	Index	String, case-insensitive. Length: 1 to 100 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the IPS policy applied to the DPI application profile	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## IPS/ProtectionList

This table contains protected target information obtained from the IPS signature file.

## XML structure

```

<IPS>
  <ProtectionList>
    <Protection>
      <ID></ID>
      <ProtectionName></ProtectionName>
      <SubProtectionList>
        <SubProtectionId></SubProtectionId>
        <SubProtectionName></SubProtectionName>
      </SubProtectionList>
    </Protection>
  </ProtectionList>
</IPS>

```

## Table description

Item	Description
Feature name	IPS
Table name	ProtectionList
Table type	Multi-instance table
Row name	Protection
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the protected target	Index	Unsigned integer.	N/A
ProtectionName	Name of the protected target	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
SubProtection	List of subtargets	Data	Members include:	A protected target can



Column name	Column description	Column type	Data type and restrictions	Remarks
nList	contained in the protected target	structure	<ul style="list-style-type: none"> <li>SubProtectionId.</li> <li>SubProtectionName.</li> </ul>	contain an unlimited number of subtargets.
SubProtectionId	ID of the subtarget	N/A	Unsigned integer.	N/A
Subprotection Name	Name of the subtarget	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## IPS/CategoryList

This table contains attack category information obtained from the IPS signature file.

### XML structure

```

<IPS>
  <CategoryList>
    <Category>
      <CategoryId></CategoryId>
      <CategoryName></CategoryName>
      <SubCategoryList>
        <SubCategoryId></SubCategoryId>
        <SubCategoryName></SubCategoryName>
      </SubCategoryList>
    </Category>
  </CategoryList>
</IPS>

```

### Table description

Item	Description
Feature name	IPS
Table name	CategoryList
Table type	Multi-instance table
Row name	Category
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CategoryId	ID of the attack category	Index	Unsigned integer.	N/A
CategoryName	Name of attack	N/A	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
e	category		Length: 1 to 63 characters.	
SubCategoryList	List of attack subcategories contained in the attack category	Data structure	Members include: <ul style="list-style-type: none"> <li>SubCategoryId.</li> <li>SubCategoryName.</li> </ul>	An attack category can contain an unlimited number of attack subcategories.
SubCategoryId	ID of the attack subcategory	N/A	Unsigned integer.	N/A
SubCategoryName	Name of the attack subcategory	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## IPS/PolicyExceptionSigs

This table contains information about exception signatures in an IPS policy.

### XML structure

```

<IPS>
  <PolicyExceptionSigs>
    <PolicyExceptionSig>
      <PolicyName></PolicyName>
      <Userdefined></Userdefined>
      <SigID></SigID>
      <Enabled></Enabled>
      <Action></Action>
      <Logging></Logging>
      <Capture></Capture>
    </PolicyExceptionSig>
  </PolicyExceptionSigs>
</IPS>

```

### Table description

Item	Description
Feature name	IPS
Table name	PolicyExceptionSigs
Table type	Multi-instance table
Row name	PolicyExceptionSig
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the IPS policy	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Userdefined	Whether or not the IPS signature is user defined	Index	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A
SigID	ID of the IPS signature	Index	Unsigned integer. Value range: 1 to 4294967295.	The value is obtained from the IPS signature file.
Enabled	Whether or not the IPS signature is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A
Action	Action to take on packets matching the IPS signature	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Block.</li><li>• 1—Drop.</li><li>• 2—Permit.</li><li>• 3—Reset.</li><li>• 4—Redirect.</li><li>• 5—Default.</li></ul>	N/A
Logging	Whether or not to log the matching packets	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A
Capture	Whether or not to capture the matching packets	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A

## IPS/Signatures

This table contains the IPS signature information.

## XML structure

```
<IPS>
  <Signatures>
    <Signature>
      <SigID></SigID>
      <UserDefined></UserDefined>
      <SigName></SigName>
      <SigDescription></SigDescription>
      <PublishTime></PublishTime>
      <UpdateTime></UpdateTime>
      <Protection></Protection>
      <SubProtection></SubProtection>
```

```

<Severity></Severity>
<Direction></Direction>
<Category></Category>
<CVEList>
  <CVE></CVE>
</CVEList>
<BIDList>
  <BID></BID>
</BIDList>
<MSList>
  <MS></MS>
</MSList>
<Enabled></Enabled>
<Action></Action>
<Logging></Logging>
<Capture></Capture>
<Solution></Solution>
<AttackFunction></AttackFunction>
</Signature>
</Signatures>
</IPS>

```

## Table description

Item	Description
Feature name	IPS
Table name	Signatures
Table type	Multi-instance table
Row name	Signature
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SigID	ID of the signature	Index	Unsigned integer. Value range: 1 to 536870910.	The value is obtained from the IPS signature file.
UserDefined	Whether or not the IPS signature is user defined	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
SigName	Name of the signature	N/A	String, case-insensitive. Length: 1 to 127 characters.	The value is obtained from the IPS signature file.
SigDescription	Description of the signature	N/A	String, case-insensitive. Length: 1 to 1023 characters.	The value is obtained from the IPS

Column name	Column description	Column type	Data type and restrictions	Remarks
				signature file.
PublishTime	Time when the signature was published	N/A	String, case-insensitive. Length: 1 to 11 characters. Format: YYYY-MM-DD.	The value is obtained from the IPS signature file.
UpdateTime	Time when the signature was last updated	N/A	String: case-insensitive. Length: 1 to 11 characters. Format: YYYY-MM-DD.	The value is obtained from the IPS signature file.
Protection	Protected target of the signature	N/A	String, case-insensitive. Length: 1 to 63 characters.	The value is obtained from the IPS signature file.
SubProtection	Protected subtarget of the signature	N/A	String, case-insensitive. Length: 1 to 63 characters.	The value is obtained from the IPS signature file.
Severity	Severity level of the signature	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Critical.</li> <li>2—High.</li> <li>3—Medium.</li> <li>4—Low.</li> </ul>	The value is obtained from the IPS signature file.
Direction	Traffic direction to which the signature is applied	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Client to server.</li> <li>1—Server to client.</li> <li>2—Both.</li> </ul>	The value is obtained from the IPS signature file.
Category	Attack category of the signature	N/A	String, case-insensitive. Length: 1 to 63 characters.	The value is obtained from the IPS signature file.
CVEList	CVE list	Data structure	Members include: <ul style="list-style-type: none"> <li>CVE.</li> </ul>	N/A
CVE	CVE ID of the signature	N/A	String, case-insensitive. Length: 1 to 31 characters.	The value is obtained from the IPS signature file.
BIDList	BID list	Data structure	Members include: <ul style="list-style-type: none"> <li>BID.</li> </ul>	N/A
BID	BID of the signature	N/A	String, case-insensitive. Length: 1 to 31 characters.	The value is obtained from the IPS signature file.
MSList	MS list	Data structure	Members include: <ul style="list-style-type: none"> <li>MS.</li> </ul>	N/A
MS	MS of the signature	N/A	String, case-insensitive. Length: 1 to 31 characters.	The value is obtained from the IPS signature file.
Enabled	Whether or not the IPS signature is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
Action	Action to take on packets matching the IPS signature	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Block.</li> <li>1—Drop.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—Permit.</li> <li>3—Reset.</li> <li>4—Redirect.</li> </ul>	
Logging	Whether or not to log the matching packets	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
Capture	Whether or not to capture the matching packets	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
Solution	Solution to the attack	N/A	String, case-insensitive. Length: 1 to 511 characters.	The value is obtained from the IPS signature file.
AttackFunction	Subcategory of the signature	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## IPS/SignatureFileInfos

This table contains IPS signature file information.

### XML structure

```

<IPS>
  <SignatureFileInfos>
    <FileInfo>
      <FileStatus></FileStatus>
      <Version></Version>
      <PublishedTime></PublishedTime>
      <Description></Description>
    </FileInfo>
  </SignatureFileInfos>
</IPS>

```

### Table description

Item	Description
Feature name	IPS
Table name	SignatureFileInfos
Table type	MultiSingle-instance table
Row name	FileInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileStatus	Status of the IPS signature file	Index	Enumeration: <ul style="list-style-type: none"><li>1—Current.</li><li>2—Last.</li><li>3—Factory (default).</li></ul>	N/A
Version	Version of the IPS signature file	N/A	String, case-insensitive. Length: 1 to 31 characters.	Example: 1.0.36.
PublishedTime	Time when the signature file was published	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	The local time zone is used.
Description	Description of the IPS signature file	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## IPS/SignatureAutoUpgrade

This table contains IPS signature library auto update settings.

## XML structure

```
<IPS>
  <SignatureAutoUpgrade>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrade>
</IPS>
```

## Table description

Item	Description
Feature name	IPS
Table name	SignatureAutoUpgrade
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Whether or not IPS signature library auto update is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false (default).</li></ul>	N/A
StartTime	Time when IPS signature library auto update starts	N/A	Time. Format: HH:MM:SS.	By default, IPS signature library auto update starts at 02:00:00 every day.
Type	Whether IPS signature library auto update occurs on a daily or a weekly basis	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Weekly.</li><li>1—Daily.</li></ul>	By default, IPS signature library auto update occurs on a daily basis.
Day	Days of the week on which IPS signature library auto update occurs	N/A	Unsigned integer. Value range: 0 to 6.	This column is displayed only <b>Type</b> is set to <b>0</b> .

## IPS/SignatureUpgradePercentage

This table contains the IPS signature library update progress information.

## XML structure

```
<IPS>
  <SignatureUpgradePercentage>
    <Percentage></Percentage>
  </SignatureUpgradePercentage>
</IPS>
```

## Table description

Item	Description
Feature name	IPS
Table name	SignatureUpgradePercentage
Table type	Single-instance table
Row name	None
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Percentage	Progress of the signature library update operation, in percentages.	N/A	Unsigned integer. Value range: 0 to 100.	Any value outside the valid range indicates that an error has occurred.

## IPS/ActionDefaultParameters

This table contains IPS action parameter settings.

## XML structure

```
<IPS>
  <ActionDefaultParameters>
    <ActionDefaultParameter>
      <Action></Action>
      <ParameterName></ParameterName>
    </ActionDefaultParameter>
  </ActionDefaultParameters>
</IPS>
```

## Table description

Item	Description
Feature name	IPS
Table name	ActionDefaultParameters
Table type	MultiSingle-instance table
Row name	ActionDefaultParameter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Action	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Block.</li><li>• 2—Capture.</li><li>• 3—Logging.</li><li>• 4—Redirect.</li><li>• 5—Mail.</li></ul>	N/A
ParameterNa	Parameter name	N/A	String, case-insensitive.	The IPS action

Column name	Column description	Column type	Data type and restrictions	Remarks
me			Length: 1 to 63 characters.	parameters are defined in the DIM module.

## IPS/SignaturePages

This table contains information about IPS signatures displayed on paginated lists.

### XML structure

```

<IPS>
  <SignaturePages>
    <SignaturePage>
      <UserID></UserID>
      <Position></Position>
      <TotalCount></TotalCount>
      <SigID></SigID>
      <SigName></SigName>
      <SigDescription></SigDescription>
      <PublishTime></PublishTime>
      <UpdateTime></UpdateTime>
      <Protection></Protection>
      <SubProtection></SubProtection>
      <Severity></Severity>
      <Direction></Direction>
      <Category></Category>
      <CVEList>
        <CVE></CVE>
      </CVEList>
      <BIDList>
        <BID></BID>
      </BIDList>
      <MSList>
        <MS></MS>
      </MSList>
      <Enabled></Enabled>
      <Action></Action>
      <Logging></Logging>
      <Capture></Capture>
      <Solution></Solution>
      <AttackFunction></AttackFunction>
    </SignaturePage>
  </SignaturePages>
</IPS>

```

## Table description

Item	Description
Feature name	IPS
Table name	SignaturePages
Table type	MultiSingle-instance table
Row name	SignaturePage
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserID	ID of the current user	Index	Unsigned integer.	N/A
Position	Position of the signature on the entire signature list.	Index	Unsigned integer.	N/A
TotalCount	Total number of signatures	N/A	Unsigned integer.	If the query function is used, the total number of signatures in the query results is displayed.
SigID	ID of the signature	Index	Unsigned integer. Value range: 1 to 536870910.	The value is obtained from the IPS signature file.
SigName	Name of the signature	N/A	String: case-insensitive. Length: 1 to 127 characters.	The value is obtained from the IPS signature file.
SigDescription	Description of the signature	N/A	String: case-insensitive. Length: 1 to 1023 characters.	The value is obtained from the IPS signature file.
PublishTime	Time when the signature was published	N/A	String: case-insensitive. Length: 1 to 11 characters. Format: YYYY-MM-DD.	The value is obtained from the IPS signature file.
UpdateTime	Time when the signature was last updated	N/A	String: case-insensitive. Length: 1 to 11 characters. Format: YYYY-MM-DD.	The value is obtained from the IPS signature file.
Protection	Protected target of the signature	N/A	String: case-insensitive. Length: 1 to 63 characters.	The value is obtained from the IPS signature file.
SubProtection	Protected subtarget	N/A	String: case-insensitive. Length: 1 to 63 characters.	The value is obtained from the IPS signature file.
Severity	Severity level of the signature	N/A	Enumeration: • 1—Critical.	The value is obtained from the IPS

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 2—High.</li> <li>• 3—Medium.</li> <li>• 4—Low.</li> </ul>	signature file.
Direction	Traffic direction to which the signature is applied	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Client to server.</li> <li>• 1—Server to client.</li> <li>• 2—Both.</li> </ul>	The value is obtained from the IPS signature file.
Category	Attack category of the signature	N/A	String: case-insensitive. Length: 1 to 63 characters.	The value is obtained from the IPS signature file.
CVEList	CVE List	Data structure	Members include: <ul style="list-style-type: none"> <li>• CVE.</li> </ul>	N/A
CVE	CVE-ID of the signature	N/A	String: case-insensitive. Length: 1 to 31 characters.	The value is obtained from the IPS signature file.
BIDList	BID list	Data structure	Members include: <ul style="list-style-type: none"> <li>• BID.</li> </ul>	N/A
BID	BID of the signature	N/A	String: case-insensitive. Length: 1 to 31 characters.	The value is obtained from the IPS signature file.
MSList	MS list	Data structure	Members include: <ul style="list-style-type: none"> <li>• MS.</li> </ul>	N/A
MS	MS of the signature	N/A	String: case-insensitive. Length: 1 to 31 characters.	The value is obtained from the IPS signature file.
Enabled	Whether or not the signature is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	N/A
Action	Action to take on packets matching the signature	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Block.</li> <li>• 1—Drop.</li> <li>• 2—Permit.</li> <li>• 3—Reset.</li> <li>• 4—Redirect.</li> </ul>	N/A
Logging	Whether or not to log the matching packets	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	N/A
Capture	Whether or not to capture the matching packets	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	N/A
Solution	Solution to the attack	N/A	String: case-insensitive. Length: 1 to 511 characters.	The value is obtained from the IPS signature file.
AttackFunction	Subcategory of the signature	N/A	String: case-insensitive. Length: 1 to 255 characters.	N/A

# IPS/UserSignatureAnalyseInfos

This table contains IPS signature import failure analysis information.

## XML structure

```
<IPS>
  <UserSignatureAnalyseInfos>
    <UserSignatureAnalyseInfo>
      <ID></ID>
      <AnalyseInfo></AnalyseInfo>
    </UserSignatureAnalyseInfo>
  </UserSignatureAnalyseInfos>
</IPS>
```

## Table description

Item	Description
Feature name	IPS
Table name	UserSignatureAnalyseInfos
Table type	MultiSingle-instance table
Row name	UserSignatureAnalyseInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the IPS signature failed to be imported	Index	Unsigned integer.	N/A
AnalyseInfo	Analysis information	N/A	String, case-insensitive. Length: 1 to 511 characters.	N/A

# IPS/UpdateLoggingDaily

This table contains daily sending settings for IPS signature library update logging.

## XML structure

```
<IPS>
  <UpdateLoggingDaily>
    <StartTime></StartTime>
  </UpdateLoggingDaily>
```

</IPS>

## Table description

Item	Description
Feature name	IPS
Table name	UpdateLoggingDaily
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StartTime	Time to send IPS fastlog every day	N/A	Time Format: HH:MM:SS	By default, IPS sends fastlog at 02:00:00 every day.

# Contents

IPS.....	2
IPS/SignatureManualUpgrade .....	2
IPS/SignatureAutoUpgradeNow .....	2
IPS/SignatureRollback .....	3
IPS/ImportSnortSignatures.....	3
IPS/SignatureAutoUpgrade .....	3
IPS/PolicyOnProfile .....	4
IPS/Policies .....	4
IPS/PolicyExceptionSigs.....	4
IPS/ActionDefaultParameters .....	4
IPS/UpdateLoggingDaily.....	4
IPS/UnloadSnortSignatures.....	5

# IPS

## IPS/SignatureManualUpgrade

Message	Explanation
Operation failed because no valid license could be found. 操作失败：没有找到有效的license。	When manual updating of the signature library fails because there is no license. 手动升级特征库时，没有license，升级失败。
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being updated. You can perform another update when this update is completed. 还有特征库正在升级，需等升级处理完才可以进行下一次升级。
Cannot perform this operation because of memory alert. 由于内存门限不能执行此操作。	The device is in the memory threshold state and cannot be upgraded. 设备此时处于内存门限状态，不能进行升级
Operation failed because not enough storage space was available. 操作失败：设备空间不足。	Upgrade failure due to insufficient storage space for devices. 由于设备的存储空间不足，导致升级失败。
Operation failed because not enough memory was available. 操作失败：设备内存不足。	The upgrade fails due to insufficient memory on the devices. 由于设备的内存不足，导致升级失败。

## IPS/SignatureAutoUpgradeNow

Message	Explanation
Operation failed because no valid license could be found. 操作失败：没有找到有效的license。	When manual updating of the signature library fails because there is no license. 手动升级特征库时，没有license，升级失败。
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being updated. You can perform another update when this update is completed. 还有特征库正在升级，需等升级处理完才可以进行下一次升级。
The signature version is up to date. No update is needed. 特征库已是最新版本，不需要进行升级。	Automatic upgrade is to upgrade the signature library to the latest version released on the official website. If it is the latest version, no upgrade is needed. 自动升级是将特征库升级到官网发布的最新版本，如果已经是最新版本就不需要再升级了。
Cannot do this operation because of memory alert. 由于内存门限不能执行此操作。	The device is in the memory threshold state and cannot be upgraded. 设备此时处于内存门限状态，不能进行升级
Operation failed because not enough storage space was available. 操作失败：设备空间不足。	Upgrade failure due to insufficient storage space for devices. 由于设备的存储空间不足，导致升级失败。
Operation failed because not enough memory was available.	The upgrade failed due to insufficient memory on the devices. 由于设备的内存不足，导致升级失败。



操作失败：设备内存不足。	
Operation failed because a connection to the signature library server could not be established. 操作失败：连接特征库服务器失败。	The connection to <a href="http://www.h3c.com/">http://www.h3c.com/</a> failed. For a successful upgrade, the device must connect to <a href="http://www.h3c.com/">http://www.h3c.com/</a> to get the signature library files. 需要连接 <a href="http://www.h3c.com/">http://www.h3c.com/</a> 网站获取特征库文件才能升级成功，连接 <a href="http://www.h3c.com/">http://www.h3c.com/</a> 失败。
Cannot update the signature library because the required service card cannot be found. 未检测到业务板，特征库升级失败。	M9K equipment cannot be upgraded without service card. M9k设备若没有业务板，不可以进行升级操作。

## IPS/SignatureRollback

Message	Explanation
Operation failed because no valid license could be found. 操作失败：没有找到有效的license。	When manual updating of the signature library fails because there is no license. 手动升级特征库时，没有license，升级失败。
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being updated. You can perform another update when this update is completed. 还有特征库正在升级，需等升级处理完才可以进行下一次升级。
Cannot execute this operation because of memory alert. 由于内存门限不能执行此操作。	The device is in the memory threshold state and cannot be upgraded. 设备此时处于内存门限状态，不能进行升级
Operation failed because not enough storage space was available. 操作失败：设备空间不足。	The upgrade fails due to insufficient storage space for devices. 由于设备的存储空间不足，导致升级失败。
Operation failed because not enough memory was available. 操作失败：设备内存不足。	The upgrade fails due to insufficient memory on the devices. 由于设备的内存不足，导致升级失败。

## IPS/ImportSnortSignatures

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being updated. You can perform another update when this update is completed. 还有特征库正在升级，需等升级处理完才可以进行下一次升级。
Failed to parse the snort file. Please examine the snort file. Snort文件解析错误。	When importing snort rules, snort files are illegal and parsing fails. 导入snort规则时，snort文件不合法，解析失败。

## IPS/SignatureAutoUpgrade

Message	Explanation
The signature file is updating. Please try later.	The signature library is being upgraded to fail to process

特征库正在升级，请稍后再试。	the message. 特征库正在升级，无法处理该消息。
----------------	----------------------------------

## IPS/PolicyOnProfile

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being upgraded and cannot process the message. 特征库正在升级，无法处理该消息。

## IPS/Policies

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being upgraded and cannot process the message. 特征库正在升级，无法处理该消息。

## IPS/PolicyExceptionSigs

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being upgraded and cannot process the message. 特征库正在升级，无法处理该消息。

## IPS/ActionDefaultParameters

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being upgraded and cannot process the message. 特征库正在升级，无法处理该消息。

## IPS/UpdateLoggingDaily

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being upgraded and cannot process the message. 特征库正在升级，无法处理该消息。

# IPS/UnloadSnortSignatures

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being upgraded and cannot process the message. 特征库正在升级，无法处理该消息。

# Contents

IPsec .....	1
IPsec/ResetAllISA .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPsec/ResetSAPolicies .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
IPsec/ResetSARemoteAddr .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
IPsec/ResetSASPI .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
IPsec/ClearGlobalStats .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
IPsec/ClearTunnelsStats .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
IPsec/SmartVpnMoveLinks .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
IPsec/SmartVpnActiveLinks .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
IPsec/IPSecDiagnose .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
IPsec/StopDiagnose .....	8
XML structure .....	8
Table description .....	8
Columns .....	9

# IPsec

## IPsec/ResetAllSA

This table is used to reset all IPsec SA.

### XML structure

```
<IPsec>
  <ResetAllSA>
    <Reset />
  </ResetAllSA>
</IPsec>
```

### Table description

Item	Description
Feature name	IPsec
Table name	ResetAllSA
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Reset	Reset all IPsec SA	N/A	Must be empty

## IPsec/ResetSAPolicies

This table is used to reset IPsec SA by policy.

### XML structure

```
<IPsec>
  <ResetSAPolicies>
    <Reset>
      <PolicyName></PolicyName>
      <AddrType></AddrType>
      <SeqNum></SeqNum>
    </Reset>
  </ResetSAPolicies>
</IPsec>
```

```

    </ResetSAPolicies>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	ResetSAPolicies
Table type	Multi-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	The policy name	Index	String. Length: 1 to 63 characters.	N/A
AddrType	IP protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Ipv4Address.</li> <li>2—Ipv6Address.</li> </ul>	N/A
SeqNum	The sequence number for the IPsec policy	N/A	Unsigned integer. Value range: 1 to 65535.	If don't specify SeqNum, it will reset all the IPsec SAs belong to the policy group.

## IPsec/ResetSARemoteAddr

This table is used to reset IPsec SA by remote address.

## XML structure

```

<IPsec>
  <ResetSARemoteAddrs>
    <Reset>
      <AddrType></AddrType>
      <RemoteAddr></RemoteAddr>
    </Reset>
  </ResetSARemoteAddrs>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	ResetSARemoteAddrs
Table type	Multi-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
AddrType	IP protocol type	Index	Enumeration: <ul style="list-style-type: none"><li>1—Ipv4Address.</li><li>2—Ipv6Address.</li></ul>
RemoteAddr	Remot IP address	Index	Ipv4 address or Ipv6 address

## IPsec/ResetSASPI

This table is used to reset IPsec SA by SPI, remote address and security protocol.

## XML structure

```
<IPsec>
  <ResetSASPIs>
    <Reset>
      <AddrType></AddrType>
      <RemoteAddr></RemoteAddr>
      <SecurityProto></SecurityProto>
      <SPI></SPI>
    </Reset>
  </ResetSASPIs>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	ResetSASPI
Table type	Multi-instance table
Row name	Reset

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions
AddrType	IP protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Ipv4Address.</li> <li>2—Ipv6Address.</li> </ul>
RemoteAddr	Remote IP address	Index	Ipv4 address or Ipv6 address
SecurityProto	IPsec Security Protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>1—AH.</li> <li>2—ESP.</li> </ul>
SPI	Security Parameter Index	Index	Unsigned integer. Value range: 0 to $2^{32}-1$ .

## IPsec/ClearGlobalStats

This table is used to clear IPsec global statistics.

## XML structure

```

<IPsec>
  <ClearGlobalStats>
    <Clear/>
  </ClearGlobalStats>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	ClearGlobalStats
Table type	Single-instance table
Row name	N/A
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clear IPsec global statistics	N/A	Must be empty

## IPsec/ClearTunnelsStats

This table is used to clear IPsec tunnel statistics.

## XML structure

```
<IPsec>
  <ClearTunnelsStats>
    <Clear>
      <TunnelID></TunnelID>
    </Clear>
  </ClearTunnelsStats>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	ClearTunnelsStats
Table type	Multi-instance table
Row name	Clear
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TunnelID	IPsec tunnel ID	Index	Unsigned integer.

## IPsec/SmartVpnMoveLinks

This table is used to smart-vpn move link.

## XML structure

```
<IPsec>
```

```

<SmartVpnMoveLinks>
  <SmartVpnMoveLink>
    <Name></Name>
    <SrcID></SrcID>
    <DestID></DestID>
  </SmartVpnMoveLink>
</SmartVpnMoveLinks>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	SmartVpnMoveLinks
Table type	Multi-instance table
Row name	SmartVpnMoveLink
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Profile name	Index	String Length: 1 to 63 characters.	N/A
SrcID	Source ID	N/A	Unsigned integer.	N/A
DestID	Destination ID.	N/A	Unsigned integer.	N/A

## IPsec/SmartVpnActiveLinks

This table is used to configure a smart-VPN active link.

## XML structure

```

<IPsec>
  <SmartVpnActiveLinks>
    <SmartVpnActiveLink>
      <Name></Name>
      <LinkID></LinkID>
    </SmartVpnActiveLink>
  </SmartVpnActiveLinks>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	SmartVpnActiveLinks
Table type	Multi-instance table
Row name	SmartVpnActiveLink
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Profile name	Index	String Length: 1 to 63 characters.	N/A
LinkID	Link ID	N/A	Unsigned integer. Value range: 1 to 30.	N/A

## IPsec/IPSecDiagnose

This table is used to set Diagnose item for IPsec.

## XML structure

```
<IPsec>
  <IPSecDiagnose>
    <Type></Type>
    <IfIndex></IfIndex>
    <Protocol></Protocol>
    <SrcIP></SrcIP>
    <DstIP></DstIP>
    <SrcPort></SrcPort>
    <DstPort></DstPort>
    <Vrf></Vrf>
  </IPSecDiagnose>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	IPSecDiagnose

Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	The diagnose type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Flow.</li> <li>2—Interface.</li> <li>3—RemoteIP.</li> </ul>
IfIndex	The ifindex	N/A	Unsigned integer.
Protocol	The protocol number	N/A	Unsigned integer. Value range:0 to 255
SrcIP	The source IP	N/A	IPv4:String,dotted decimal notation.
DstIP	The destination IP	N/A	IPv4:String,dotted decimal notation.
SrcPort	The source port	N/A	Unsigned integer. Value range: 0 to 65535
DstPort	The destination port	N/A	Unsigned integer. Value range: 0 to 65535
Vrf	The vpn index	N/A	String,case-sensitive. Length:1 to 31 characters.

## IPsec/StopDiagnose

This table is used to stop Diagnosing for IPsec.

## XML structure

```

<IPsec>
  <StopDiagnose>
    <Stop/>
  </StopDiagnose>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	StopDiagnose
Table type	Single-instance table
Row name	N/A

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions
Stop	Stop diagnose	N/A	Must be empty

# Contents

IPsec .....	1
IPsec/IPv4ApplyPolicies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPsec/IPv6ApplyPolicies .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
IPsec/IPv4SourceInterfaces .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
IPsec/IPv6SourceInterfaces .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
IPsec/InterfacesDFBit .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
IPsec/GlobalConf .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
IPsec/TransformSets .....	7
XML structure .....	8
Table description .....	8
Columns .....	8
IPsec/IPv4ISAKMPPolicies .....	9
XML structure .....	9
Table description .....	10
Columns .....	11
IPsec/IPv6ISAKMPPolicies .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
IPsec/IPv4ISAKMPTemplatePolicies .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
IPsec/IPv6ISAKMPTemplatePolicies .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
IPsec/IPv4PolicyTemplates .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
IPsec/IPv6PolicyTemplates .....	23
XML structure .....	24
Table description .....	24
Columns .....	25
IPsec/IPv4ManualPolicies .....	27
XML structure .....	27
Table description .....	28
Columns .....	28

IPsec/IPv6ManualPolicies.....	29
XML structure.....	29
Table description.....	29
Columns.....	30
IPsec/IPv4ManualPolicyKeys .....	30
XML structure.....	30
Table description.....	31
Columns.....	31
IPsec/IPv6ManualPolicyKeys .....	33
XML structure.....	33
Table description.....	33
Columns.....	34
IPsec/ManualProfiles .....	35
XML structure.....	35
Table description.....	36
Columns.....	36
IPsec/ManualProfileKeys .....	36
XML structure.....	36
Table description.....	37
Columns.....	37
IPsec/IsakmpProfiles .....	39
XML structure.....	39
Table description.....	39
Columns.....	39
IPsec/TunnelApplyProfile.....	40
XML structure.....	41
Table description.....	41
Columns.....	41

# IPsec

## IPsec/IPv4ApplyPolicies

This table is used to apply an IPsec IPv4 policy to an interface.

### XML structure

```
<IPsec>
  <IPv4ApplyPolicies>
    <ApplyPolicy>
      <IfIndex></IfIndex>
      <Policy></Policy>
    </ApplyPolicy>
  </IPv4ApplyPolicies>
</IPsec>
```

### Table description

Item	Description
Feature name	IPsec
Table name	IPv4ApplyPolicies
Table type	Multi-instance table
Row name	ApplyPolicy
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer
Policy	IPsec policy name		String. Length: 1 to 63 characters.

## IPsec/IPv6ApplyPolicies

This table is used to apply an IPsec IPv6 policy to an interface.



## XML structure

```
<IPsec>
  <IPv6ApplyPolicies>
    <ApplyPolicy>
      <IfIndex></IfIndex>
      <Policy></Policy>
    </ApplyPolicy>
  </IPv6ApplyPolicies>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6ApplyPolicies
Table type	Multi-instance table
Row name	ApplyPolicy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer
Policy	IPsec policy name		String. Length: 1 to 63 characters.

## IPsec/IPv4SourceInterfaces

This table is used to bound an IPsec IPv4 policy to a source interface.

## XML structure

```
<IPsec>
  <IPv4SourceInterfaces>
    <IPv4SourceInterface>
      <PolicyName></PolicyName>
      <Interface></Interface>
    </IPv4SourceInterface>
  </IPv4SourceInterfaces>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv4SourceInterfaces
Table type	Multi-instance table
Row name	IPv4SourceInterface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	IPsec policy name	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
Interface	The source interface name	N/A	String.	N/A

## IPsec/IPv6SourceInterfaces

This table is used to bound an IPsec IPv6 policy to a source interface.

## XML structure

```
<IPsec>
  <IPv6SourceInterfaces>
    <IPv6SourceInterface>
      <PolicyName></PolicyName>
      <Interface></Interface>
    </IPv6SourceInterface>
  </IPv6SourceInterfaces>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6SourceInterfaces
Table type	Multi-instance table

Item	Description
Row name	IPv6SourceInterface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	IPsec policy name	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
Interface	The source interface name	N/A	String.	N/A

## IPsec/InterfacesDFBit

This table is used to configure the DF bit on the interface.

## XML structure

```

<IPsec>
  <InterfacesDFBit>
    <InterfaceDFBit>
      <IfIndex></IfIndex>
      <DFBit></DFBit>
    </InterfaceDFBit>
  </InterfacesDFBit>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	InterfacesDFBit
Table type	Multi-instance table
Row name	InterfaceDFBit
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	N/A Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
DFBit	Set the DF bit for outer IP headers of encapsulated IPsec packets on an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—clear.</li> <li>2—copy.</li> <li>3—set.</li> </ul>	N/A

## IPsec/GlobalConf

This table is used to configure IPsec global configuration.

## XML structure

```

<IPsec>
  <GlobalConf>
    <DecryptCheck></DecryptCheck>
    <LoggingPacket></LoggingPacket>
    <Redundancy></Redundancy>
    <DFBit></DFBit>
    <AntiReplay>
      <State></State>
      <CheckWindow></CheckWindow>
    </AntiReplay>
    <SADuration>
      <Seconds></Seconds>
      <KiloBytes></KiloBytes>
    </SADuration>
    <SAIdleTime ></SAIdleTime>
    <FlowRedirect></FlowRedirect>
    <EstablishTunnelLimit></EstablishTunnelLimit>
    <Fragmentation></Fragmentation>
    <LoggingNegotiation></LoggingNegotiation>
    <SASoftDuration>
      <Seconds></Seconds>

```

```

    <KiloBytes></KiloBytes>
  </SASoftDuration>
</GlobalConf>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	GlobalConf
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
DecryptCheck	ACL checking for de-encapsulated IPsec packets.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable(default).</li> <li><b>false</b>—Disable.</li> </ul>
LoggingPacket	Logging for IPsec packets	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>
Redundancy	IPsec redundancy	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>
DFBit	Set the DF bit for outer IP headers of encapsulated IPsec packets on all interface	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—clear.</li> <li><b>2</b>—copy(default).</li> <li><b>3</b>—set.</li> </ul>
AntiReplay	Anti-replay configuration	Data structure	Members include: <ul style="list-style-type: none"> <li>State.</li> <li>CheckWindow.</li> </ul>
State	Anti-replay state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable(default).</li> <li><b>false</b>—Disable.</li> </ul>
CheckWindow	Anti-replay window size	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Window size is 64(default).</li> <li><b>2</b>—Window size is 128.</li> <li><b>3</b>—Window size is 256.</li> <li><b>4</b>—Window size is 512.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>5—Window size is 1024.</li> </ul>
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>
Seconds	The time-based global lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800. The default is 3600.
KiloBytes	The traffic-based global lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295. The default is 1843200.
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.
FlowRedirect	OpenFlow entry deployment	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>
EstablishTunnelLimit	Limit the number of IPsec tunnels	N/A	Unsigned integer. Value range: 1 to 4294967295.
Fragmentation	Fragment MTU-exceeded packets	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Fragment packets before IPsec encapsulation (default).</li> <li><b>2</b>—Fragment packets after IPsec encapsulation.</li> </ul>
LoggingNegotiation	Logging for IPsec event negotiation	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>
SASoftDuration	Global IPsec SA soft lifetime buffer	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>
Seconds	The time-based global soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 20 to 201600.
KiloBytes	The traffic-based global soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 1000 to 4294901760.

## IPsec/TransformSets

This table is used to configure IPsec transform set information.

# XML structure

```
<IPsec>
  <TransformSets>
    <TransformSet>
      <Name></Name>
      <EncapMode></EncapMode>
      <Proto></Proto>
      <ESPAuthAlgList>
        <ESPAuthAlgItem></ESPAuthAlgItem>
      </ESPAuthAlgList>
      <ESPEncrAlgList>
        <ESPEncrAlgItem></ESPEncrAlgItem>
      </ESPEncrAlgList>
      <AHAuthAlgList>
        <AHAuthAlgItem></AHAuthAlgItem>
      </AHAuthAlgList>
      <PFS></PFS>
      <EsnEnable></EsnEnable>
    </TransformSet>
  </TransformSets>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	TransformSets
Table type	Multi-instance table
Row name	TransformSet
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The name of the IPsec transform set	Index	String. Length: 1 to 63 characters.	N/A
EncapMode	Encapsulation mode	N/A	Enumeration: <ul style="list-style-type: none"><li>1—transport.</li><li>2—tunnel.</li></ul>	N/A
Proto	Security protocol	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Specifies the AH</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			protocol. <ul style="list-style-type: none"> <li>2—Specifies using the ESP protocol first and then using the AH protocol.</li> <li>3—Specifies the ESP protocol(default).</li> </ul>	
ESPAuthAlgList	The authentication algorithm for ESP	Data structure	Members include: <ul style="list-style-type: none"> <li>ESPAuthAlgItem.</li> </ul>	N/A
ESPAuthAlgItem	The authentication algorithm number for ESP	N/A	The algorithm number is defined by IPsecCapabilities table.	Contains up to 2 in ESPAuthAlgList.
ESPEncrAlgList	The encryption algorithm for ESP	Data structure	Members include: <ul style="list-style-type: none"> <li>ESPEncrAlgItem.</li> </ul>	N/A
ESPEncrAlgItem	The encryption algorithm number for ESP	N/A	The algorithm number is defined by IPsecCapabilities table	Contains up to 6 in ESPEncrAlgList.
AHAuthAlgList	The authentication algorithm number for ESP	Data structure	Members include: <ul style="list-style-type: none"> <li>AHAuthAlgItem.</li> </ul>	N/A
AHAuthAlgItem	The authentication algorithm number for AH	N/A	The algorithm number is defined by IPsecCapabilities table.	Contains up to 2 in AHAuthAlgList.
PFS	Perfect Forward Secrecy	N/A	The Diffie-Hellman group ID is defined by IPsecCapabilities table.	N/A
EsnEnable	Extended Sequence Number function	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Disable(default).</li> <li>2—ESN.</li> <li>3—ESN and non-ESN.</li> </ul>	N/A

## IPsec/IPv4ISAKMPPolicies

This table is used to configure IPv4 ISAKMP policies information.

### XML structure

```

<IPsec>
  <IPv4ISAKMPPolicies>
    <Policy>

```



```

<Name></Name>
<SeqNum></SeqNum>
<Description></Description>
<ACL>
  <Name></Name>
  <Number></Number>
  <Mode></Mode>
</ACL>
<Remote>
  <Addr></Addr>
  <HostName></HostName>
</Remote>
<LocalAddr></LocalAddr>
<IKEProfile></IKEProfile>
<TransformsetList>
  <Transformset></Transformset>
</TransformsetList>
<QosPreClassify></QosPreClassify>
<RRI>
  <RRIEnable></RRIEnable>
  <Preference></Preference>
  <Tag></Tag>
</RRI>
<SADuration>
  <Seconds></Seconds>
  <KiloBytes></KiloBytes>
</SADuration>
<SAIdleTime></SAIdleTime>
<Redundancy>
  <InboundSyncInterval></InboundSyncInterval>
  <OutboundSyncInterval></OutboundSyncInterval>
</Redundancy>
<SATriggerMode></SATriggerMode>
<SASoftDuration>
  <Seconds></Seconds>
  <KiloBytes></KiloBytes>
</SASoftDuration>
<IKEv2Profile></IKEv2Profile>
<TfcEnable></TfcEnable>
</Policy>
</IPv4ISAKMPPolicies>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec

Item	Description
Table name	IPv4ISAKMPPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The ISAKMP policy name	Index	String. Length: 1 to 63 characters.	N/A
SeqNum	The sequence number for the IPsec policy	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	Description for an IPsec policy	N/A	String. Length: 1 to 80 characters.	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Number.</li> <li>Mode.</li> </ul>	You can only specify Name or Number, but not both. To delete an ACL, specify the name, number, or both the name and number of the ACL.
Name	ACL name	N/A	String. Length: 1 to 63 characters.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Mode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—per-rule(default).</li> <li>2—per-host.</li> <li>3—aggregation.</li> </ul>	per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it. per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be

Column name	Column description	Column type	Data type and restrictions	Remarks
				protected. aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an ACL. This mode is only used to communicate with old-version devices.
Remote	Remote IP address for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Addr.</li> <li>• HostName.</li> </ul>	You can only specify Addr or HostName, but not both.
Addr	Remote IP address	N/A	Ipv4 address	N/A
HostName	Remote host name	N/A	String. Length: 1 to 253 characters.	N/A
LocalAddr	Local IP address for the IPsec policy	N/A	Ipv4 address	N/A
IKEProfile	Specify an IKE profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TransformsetList	Reference an IPsec transform set for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Transformset.</li> </ul>	N/A
Transformset	IPsec transform set name	N/A	String. Length: 1 to 63 characters.	Contains up to 6 Transformset in TransformsetList.
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable.</li> <li>• <b>false</b>—Disable(default).</li> </ul>	N/A
RRI	The IPsec reverse route inject (RRI).	Data structure	Members include: <ul style="list-style-type: none"> <li>• RRISet.</li> <li>• Preference.</li> <li>• Tag</li> </ul>	N/A
RRISet	The IPsec reverse route inject (RRI) feature	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable.</li> <li>• <b>false</b>—Disable(default).</li> </ul>	N/A
Preference	The preference of the static routes	N/A	Unsigned integer. Value range: 1 to 255. Default value is 60.	N/A
Tag	The route tag for the static routes	N/A	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1. Default value is 0.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
Redundancy	IPsec redundancy function	Data structure	Members include: <ul style="list-style-type: none"> <li>InboundSyncInterval.</li> <li>OutboundSyncInterval.</li> </ul>	N/A
InboundSyncInterval	Inbound synchronization interval	N/A	Unsigned integer. Value range: 0 to 1000. The default is 1000.	N/A
OutboundSyncInterval	Outbound synchronization interval	N/A	Unsigned integer. Value range: 1000 to 100000. The default is 100000.	N/A
SATriggerMode	IPsec SA negotiation triggering mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—traffic-based(default).</li> <li>2—auto.</li> </ul>	N/A
SASoftDuration	IPsec SA soft lifetime buffer	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 20 to 201600.	N/A
KiloBytes	The traffic-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 1000 to 4294901760.	N/A
IKEv2Profile	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TfcEnable	ESP TFC padding	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable(default).</li> </ul>	N/A

# IPsec/IPv6ISAKMPPolicies

This table is used to configure IPv6 ISAKMP policies information.

## XML structure

```
<IPsec>
  <IPv6ISAKMPPolicies>
    <Policy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Description></Description>
      <ACL>
        <Name></Name>
        <Number></Number>
        <Mode></Mode>
      </ACL>
      <Remote>
        <Addr></Addr>
        <HostName></HostName>
      </Remote>
      <LocalAddr></LocalAddr>
      <IKEProfile></IKEProfile>
      <TransformsetList>
        <Transformset></Transformset>
      </TransformsetList>
      <QosPreClassify></QosPreClassify>
      <RRI>
        <RRIEnable></RRIEnable>
        <Preference></Preference>
        <Tag></Tag>
      </RRI>
      <SADuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SADuration>
      <SAIdleTime></SAIdleTime>
      <Redundancy>
        <InboundSyncInterval></InboundSyncInterval>
        <OutboundSyncInterval></OutboundSyncInterval>
      </Redundancy>
      <SATriggerMode></SATriggerMode>
      <SASoftDuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SASoftDuration>
      <IKEv2Profile></IKEv2Profile>
      <TfcEnable></TfcEnable>
```

```

    </Policy>
  </IPv6ISAKMPPolicies>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6ISAKMPPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The ISAKMP policy name	Index	String. Length: 1 to 63 characters.	N/A
SeqNum	The sequence number for the IPsec policy	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	Description for an IPsec policy	N/A	String. Length: 1 to 80 characters.	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Number.</li> <li>Mode.</li> </ul>	You can only specify Name or Number, but not both. To delete an ACL, specify the name, number, or both the name and number of the ACL.
Name	ACL name	N/A	String. Length: 1 to 63 characters.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Mode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—per-rule(default).</li> <li>2—per-host.</li> <li>3—aggregation.</li> </ul>	per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it. per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be protected.</p> <p>aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an ACL. This mode is only used to communicate with old-version devices.</p>
Remote	Remote IP address for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Addr.</li> <li>HostName.</li> </ul>	You can only specify Addr or HostName, but not both.
Addr	Remote IP address	N/A	Ipv6 address	N/A
HostName	Remote host name	N/A	String. Length: 1 to 253 characters.	N/A
LocalAddr	Local IP address for the IPsec policy	N/A	Ipv6 address	N/A
IKEProfile	Specify an IKE profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TransformsetList	Reference an IPsec transform set for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Transformset.</li> </ul>	N/A
Transformset	IPsec transform set name	N/A	String. Length: 1 to 63 characters.	Contains up to 6 Transformset in TransformsetList.
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A
RRI	The IPsec reverse route inject (RRI).	Data structure	Members include: <ul style="list-style-type: none"> <li>RRIEnable.</li> <li>Preference.</li> <li>Tag</li> </ul>	N/A
RRIEnable	The IPsec reverse route inject (RRI)	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	feature			
Preference	The preference of the static routes	N/A	Unsigned integer. Value range: 1 to 255. Default value is 60.	N/A
Tag	The route tag for the static routes	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . Default value is 0.	N/A
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
Redundancy	IPsec redundancy function	Data structure	Members include: <ul style="list-style-type: none"> <li>InboundSyncInterval.</li> <li>OutboundSyncInterval.</li> </ul>	N/A
InboundSyncInterval	Inbound synchronization interval	N/A	Unsigned integer. Value range: 0 to 1000. The default is 1000.	N/A
OutboundSyncInterval	Outbound synchronization interval	N/A	Unsigned integer. Value range: 1000 to 100000. The default is 100000.	N/A
SATriggerMode	IPsec SA negotiation triggering mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—traffic-based(default).</li> <li>2—auto.</li> </ul>	N/A
SASoftDuration	IPsec SA soft lifetime buffer	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 20 to 201600.	N/A
KiloBytes	The traffic-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 1000 to 4294901760.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
IKEv2Profile	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TfcEnable	ESP TFC padding	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A

## IPsec/IPv4ISAKMPTemplatePolicies

This table is used to configure IPv4 ISAKMP template policies information. ISAKMP template policy is a kind of IKE-based policy which is created by referencing an IPsec policy template.

### XML structure

```

<IPsec>
  <IPv4ISAKMPTemplatePolicies>
    <TemplatePolicy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Template></Template>
    </TemplatePolicy>
  </IPv4ISAKMPTemplatePolicies>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	IPv4ISAKMPTemplatePolicies
Table type	Multi-instance table
Row name	TemplatePolicy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	The template policy name	Index	String. Length: 1 to 63 characters.
SeqNum	The sequence number for the	Index	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	template policy		Value range: 1 to 65535.
Template	Specifies an IPsec policy template by its name	N/A	String. Length: 1 to 63 characters.

## IPsec/IPv6ISAKMPTemplatePolicies

This table is used to configure IPv6 ISAKMP template policies information. ISAKMP template policy is a kind of IKE-based policy which is created by referencing an IPsec policy template.

### XML structure

```

<IPsec>
  <IPv6ISAKMPTemplatePolicies>
    <TemplatePolicy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Template></Template>
    </TemplatePolicy>
  </IPv6ISAKMPTemplatePolicies>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	IPv6ISAKMPTemplatePolicies
Table type	Multi-instance table
Row name	TemplatePolicy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	The template policy name	Index	String. Length: 1 to 63 characters.
SeqNum	The sequence number for the template policy	Index	Unsigned integer. Value range: 1 to 65535.

Column name	Column description	Column type	Data type and restrictions
Template	Specifies an IPsec policy template by its name	N/A	String. Length: 1 to 63 characters.

## IPsec/IPv4PolicyTemplates

This table is used to configure IPv4 policy templates information.

### XML structure

```

<IPsec>
  <IPv4PolicyTemplates>
    <Template>
      <Name></Name>
      <SeqNum></SeqNum>
      <Description></Description>
      <ACL>
        <Name></Name>
        <Number></Number>
        <Mode></Mode>
      </ACL>
      <Remote>
        <Addr></Addr>
        <HostName></HostName>
      </Remote>
      <LocalAddr></LocalAddr>
      <IKEProfile></IKEProfile>
      <TransformsetList>
        <Transformset></Transformset>
      </TransformsetList>
      <QosPreClassify></QosPreClassify>
      <RRI>
        <RRIEnable></RRIEnable>
        <Preference></Preference>
        <Tag></Tag>
      </RRI>
      <SADuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SADuration>
      <SAIdleTime></SAIdleTime>
      <Redundancy>
        <InboundSyncInterval></InboundSyncInterval>
        <OutboundSyncInterval></OutboundSyncInterval>

```

```

    </Redundancy>
    <IKEv2Profile></IKEv2Profile>
    <TfcEnable></TfcEnable>
  </Template>
</IPv4PolicyTemplates>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv4PolicyTemplates
Table type	Multi-instance table
Row name	Template
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The ISAKMP policy name	Index	String. Length: 1 to 63 characters.	N/A
SeqNum	The sequence number for the IPsec policy	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	Description for an IPsec policy	N/A	String. Length: 1 to 80 characters.	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Name.</li> <li>• Number.</li> <li>• Mode.</li> </ul>	You can only specify Name or Number, but not both. To delete an ACL, specify the name, number, or both the name and number of the ACL.
Name	ACL name	N/A	String. Length: 1 to 63 characters.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Mode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—per-rule(default).</li> <li>• 2—per-host.</li> <li>• 3—aggregation.</li> </ul>	per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it.

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be protected.</p> <p>aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an ACL. This mode is only used to communicate with old-version devices.</p>
Remote	Remote IP address for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Addr.</li> <li>• HostName.</li> </ul>	You can only specify Addr or HostName, but not both.
Addr	Remote IP address	N/A	Ipv4 address	N/A
HostName	Remote host name	N/A	String. Length: 1 to 253 characters.	N/A
LocalAddr	Local IP address for the IPsec policy	N/A	Ipv4 address	N/A
IKEProfile	Specify an IKE profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TransformsetList	Reference an IPsec transform set for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Transformset.</li> </ul>	N/A
Transformset	IPsec transform set name	N/A	String. Length: 1 to 63 characters.	Contains up to 6 Transformset in TransformsetList.
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable.</li> <li>• <b>false</b>—Disable(default).</li> </ul>	N/A
RRI	The IPsec reverse route inject (RRI).	Data structure	Members include: <ul style="list-style-type: none"> <li>• RRIEnable.</li> <li>• Preference.</li> <li>• Tag</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RRIEEnable	The IPsec reverse route inject (RRI) feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A
Preference	The preference of the static routes	N/A	Unsigned integer. Value range: 1 to 255. Default value is 60.	N/A
Tag	The route tag for the static routes	N/A	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1. Default value is 0.	N/A
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
Redundancy	IPsec redundancy function	Data structure	Members include: <ul style="list-style-type: none"> <li>InboundSyncInterval.</li> <li>OutboundSyncInterval.</li> </ul>	N/A
InboundSyncInterval	Inbound synchronization interval	N/A	Unsigned integer. Value range: 0 to 1000. The default is 1000.	N/A
OutboundSyncInterval	Outbound synchronization interval	N/A	Unsigned integer. Value range: 1000 to 100000. The default is 100000.	N/A
IKEv2Profile	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TfcEnable	ESP TFC padding	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A

## IPsec/IPv6PolicyTemplates

This table is used to configure IPv6 policy templates information.

# XML structure

```
<IPsec>
  <IPv6PolicyTemplates>
    <Template>
      <Name></Name>
      <SeqNum></SeqNum>
      <Description></Description>
      <ACL>
        <Name></Name>
        <Number></Number>
        <Mode></Mode>
      </ACL>
      <Remote>
        <Addr></Addr>
        <HostName></HostName>
      </Remote>
      <LocalAddr></LocalAddr>
      <IKEProfile></IKEProfile>
      <TransformsetList>
        <Transformset></Transformset>
      </TransformsetList>
      <QosPreClassify></QosPreClassify>
      <RRI>
        <RRIEnable></RRIEnable>
        <Preference></Preference>
        <Tag></Tag>
      </RRI>
      <SADuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SADuration>
      <SAIdleTime></SAIdleTime>
      <Redundancy>
        <InboundSyncInterval></InboundSyncInterval>
        <OutboundSyncInterval></OutboundSyncInterval>
      </Redundancy>
      <IKEv2Profile></IKEv2Profile>
      <TfcEnable></TfcEnable>
    </Template>
  </IPv6PolicyTemplates>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec

Item	Description
Table name	IPv6PolicyTemplates
Table type	Multi-instance table
Row name	Template
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The ISAKMP policy name	Index	String. Length: 1 to 63 characters.	N/A
SeqNum	The sequence number for the IPsec policy	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	Description for an IPsec policy	N/A	String. Length: 1 to 80 characters.	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Number.</li> <li>Mode.</li> </ul>	You can only specify Name or Number, but not both. To delete an ACL, specify the name, number, or both the name and number of the ACL.
Name	ACL name	N/A	String. Length: 1 to 63 characters.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Mode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—per-rule(default).</li> <li>2—per-host.</li> <li>3—aggregation.</li> </ul>	per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it. per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be



Column name	Column description	Column type	Data type and restrictions	Remarks
				protected. aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an ACL. This mode is only used to communicate with old-version devices.
Remote	Remote IP address for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Addr.</li> <li>• HostName.</li> </ul>	You can only specify Addr or HostName, but not both.
Addr	Remote IP address	N/A	Ipv6 address	N/A
HostName	Remote host name	N/A	String. Length: 1 to 253 characters.	N/A
LocalAddr	Local IP address for the IPsec policy	N/A	Ipv6 address	N/A
IKEProfile	Specify an IKE profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TransformsetList	Reference an IPsec transform set for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Transformset.</li> </ul>	N/A
Transformset	IPsec transform set name	N/A	String. Length: 1 to 63 characters.	Contains up to 6 Transformset in TransformsetList.
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable.</li> <li>• <b>false</b>—Disable(default).</li> </ul>	N/A
RRI	The IPsec reverse route inject (RRI).	Data structure	Members include: <ul style="list-style-type: none"> <li>• RRISet.</li> <li>• Preference.</li> <li>• Tag</li> </ul>	N/A
RRISet	The IPsec reverse route inject (RRI) feature	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable.</li> <li>• <b>false</b>—Disable(default).</li> </ul>	N/A
Preference	The preference of the static routes	N/A	Unsigned integer. Value range: 1 to 255. Default value is 60.	N/A
Tag	The route tag for the static routes	N/A	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1. Default value is 0.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
Redundancy	IPsec redundancy function	Data structure	Members include: <ul style="list-style-type: none"> <li>InboundSyncInterval.</li> <li>OutboundSyncInterval.</li> </ul>	N/A
InboundSyncInterval	Inbound synchronization interval	N/A	Unsigned integer. Value range: 0 to 1000. The default is 1000.	N/A
OutboundSyncInterval	Outbound synchronization interval	N/A	Unsigned integer. Value range: 1000 to 100000. The default is 100000.	N/A
IKEv2Profile	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TfcEnable	ESP TFC padding	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A

## IPsec/IPv4ManualPolicies

This table is used to configure IPv4 manual policies.

### XML structure

```

<IPsec>
  <IPv4ManualPolicies>
    <Policy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Description></Description>
      <Transformset></Transformset>
      <ACL>
        <Name></Name>

```

```

        <Number></Number>
    </ACL>
    <RemoteAddress></RemoteAddress>
    <QosPreClassify></QosPreClassify>
</Policy>
</IPv4ManualPolicies>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv4ManualPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The policy name.	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
SeqNum	The policy serial number.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	The policy description	N/A	String. Length: 1 to 80 characters. Case sensitive	N/A
Transform set	The name of the IPsec transform set	N/A	String. Length: 1 to 63 characters. Case insensitive	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Number.</li> </ul>	You can only specify Name or Number, but not both. To delete an ACL, specify the name, number, or both the name and number of the ACL.
Name	ACL name	N/A	String. Length: 1 to 63 characters. Case insensitive.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RemoteAddress	Remote IP address	N/A	IPv4 address	N/A
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A

## IPsec/IPv6ManualPolicies

This table is used to configure IPv6 manual policies.

### XML structure

```

<IPsec>
  <IPv6ManualPolicies>
    <Policy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Description></Description>
      <Transformset></Transformset>
      <ACL>
        <Name></Name>
        <Number></Number>
      </ACL>
      <RemoteAddress></RemoteAddress>
      <QosPreClassify></QosPreClassify>
    </Policy>
  </IPv6ManualPolicies>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	IPv6ManualPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The policy name.	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
SeqNum	The policy serial number.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	The policy description	N/A	String. Length: 1 to 80 characters. Case sensitive	N/A
Transform set	The name of the IPsec transform set	N/A	String. Length: 1 to 63 characters. Case insensitive	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Number.</li> </ul>	You can only specify Name or Number, but not both. To delete an ACL, specify the name, number, or both the name and number of the ACL.
Name	ACL name	N/A	String. Length: 1 to 63 characters. Case insensitive.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
RemoteAddress	Remote IP address	N/A	Ipv6 address	N/A
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable(default).</li> </ul>	N/A

## IPsec/IPv4ManualPolicyKeys

This table is used to configure the IPv4 manual IPsec policy key information.

### XML structure

```

<IPsec>
  <IPv4ManualPolicyKeys>
    <Key>
      <PolicyName></PolicyName>
      <SequenceNum></SequenceNum>
      <Direction></Direction>
      <Protocol></Protocol>
    </Key>
  </IPv4ManualPolicyKeys>
</IPsec>

```

```

<SPI></SPI>
<AuthorityHexKey>
  <Type></Type>
  <Value></Value>
</AuthorityHexKey>
<EncryptionHexKey>
  <Type></Type>
  <Value></Value>
</EncryptionHexKey>
<StringKey>
  <Type></Type>
  <Value></Value>
</StringKey>
</Key>
</IPv4ManualPolicyKeys>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv4ManualPolicyKeys
Table type	Multi-instance table
Row name	Key
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	The policy name.	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
SequenceNumber	The policy serial number	Index	Unsigned integer. Value range: 1 to $2^{16}-1$ .	N/A
Direction	SA's direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
Protocol	Security protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>1—ESP.</li> <li>2—AH.</li> </ul>	N/A
SPI	Security Parameter Index	N/A	Unsigned integer. Value range: $2^8$ to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthorityHexKey	The hexadecimal authentication key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
Value	The value of the key	N/A	String.	The plaintext authentication key is case insensitive and must be a 16-byte hexadecimal string for HMAC-MD5, and a 20-byte hexadecimal string for HMAC-SHA1. The ciphertext authentication key is a case-sensitive string of 1 to 85 characters.
EncryptionHexKey	The hexadecimal encryption key.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
Value	The value of the key	N/A	String.	The plaintext authentication key is case insensitive and must be must be an 8-byte hexadecimal string for DES-CBC, a 24-byte hexadecimal string for 3DES-CBC, a 16-byte hexadecimal string for AES128-CBC, a 24-byte hexadecimal string for AES192-CBC, and a 32-byte hexadecimal string for AES256-CBC. The ciphertext authentication key is a case-sensitive string of 1 to 117 characters.
StringKey	The string key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Value	The value of the key	N/A	String	The plaintext key is a case-sensitive string of 1 to 255 characters. The ciphertext key is a case-sensitive string of 1 to 373 characters.

## IPsec/IPv6ManualPolicyKeys

This table is used to configure the IPv6 manual IPsec policy key information.

### XML structure

```

<IPsec>
  <IPv6ManualPolicyKeys>
    <Key>
      <PolicyName></PolicyName>
      <SequenceNum></SequenceNum>
      <Direction></Direction>
      <Protocol></Protocol>
      <SPI></SPI>
      <AuthorityHexKey>
        <Type></Type>
        <Value></Value>
      </AuthorityHexKey>
      <EncryptionHexKey>
        <Type></Type>
        <Value></Value>
      </EncryptionHexKey>
      <StringKey>
        <Type></Type>
        <Value></Value>
      </StringKey>
    </Key>
  </IPv6ManualPolicyKeys>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	IPv6ManualPolicyKeys
Table type	Multi-instance table
Row name	Key



Item	Description
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	The policy name.	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
SequenceNum	The policy serial number	Index	Unsigned integer. Value range: 1 to $2^{16}-1$ .	N/A
Direction	SA's direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
Protocol	Security protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>1—ESP.</li> <li>2—AH.</li> </ul>	N/A
SPI	Security Parameter Index	N/A	Unsigned integer. Value range: $2^8$ to $2^{32}-1$ .	N/A
AuthorityHexKey	The hexadecimal authentication key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
Value	The value of the key	N/A	String.	The plaintext authentication key is case insensitive and must be a 16-byte hexadecimal string for HMAC-MD5, and a 20-byte hexadecimal string for HMAC-SHA1.  The ciphertext authentication key is a case-sensitive string of 1 to 85 characters.
EncryptionHexKey	The hexadecimal encryption key.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Value	The value of the key	N/A	String.	The plaintext authentication key is case insensitive and must be an 8-byte hexadecimal string for DES-CBC, a 24-byte hexadecimal string for 3DES-CBC, a 16-byte hexadecimal string for AES128-CBC, a 24-byte hexadecimal string for AES192-CBC, and a 32-byte hexadecimal string for AES256-CBC. The ciphertext authentication key is a case-sensitive string of 1 to 117 characters.
StringKey	The string key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
Value	The value of the key	N/A	String	The plaintext key is a case-sensitive string of 1 to 255 characters. The ciphertext key is a case-sensitive string of 1 to 373 characters.

## IPsec/ManualProfiles

This table is used to configure the manual IPsec profile information.

### XML structure

```

<IPsec>
  <ManualProfiles>
    <ManualProfile>
      <Name></Name>
      <Description></Description>
      <TransformSet></TransformSet>
    </ManualProfile>
  </ManualProfiles>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	ManualProfiles
Table type	Multi-instance table
Row name	ManualProfile
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The IPsec profile name.	Index	String. Length: 1 to 63 characters. Case insensitive	N/A
Description	The description of the used IPsec profile.	N/A	String. Length: 1 to 80 characters. Case sensitive	N/A
Transform set	The name of the IPsec transform set	N/A	String. Length: 1 to 63 characters. Case insensitive	N/A

## IPsec/ManualProfileKeys

This table is used to configure the manual IPsec profile key information.

## XML structure

```
<IPsec>
  <ManualProfileKeys>
    <Key>
      <ProfileName></ProfileName>
      <Direction></Direction>
      <Protocol></Protocol>
      <SPI></SPI>
      <AuthorityHexKey>
        <Type></Type>
        <Value></Value>
      </AuthorityHexKey>
      <EncryptionHexKey>
        <Type></Type>
```

```

        <Value></Value>
    </EncryptionHexKey>
    <StringKey>
        <Type></Type>
        <Value></Value>
    </StringKey>
</Key>
</ManualProfileKeys>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	ManualProfileKeys
Table type	Multi-instance table
Row name	Key
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	The IPsec profile name.	Index	String. Length: 1 to 63 characters. Case insensitive	N/A
Direction	SA's direction	Index	<ul style="list-style-type: none"> <li>Enumeration:</li> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
Protocol	Security protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>1—ESP.</li> <li>2—AH.</li> </ul>	N/A
SPI	Security Parameter Index	N/A	Unsigned integer. Value range: $2^8$ to $2^{32}-1$ .	N/A
AuthorityHexKey	The hexadecimal authentication key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The type of the key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
Value	The value of the key	N/A	String.	The plaintext authentication key is case insensitive and

Column name	Column description	Column type	Data type and restrictions	Remarks
				must be a 16-byte hexadecimal string for HMAC-MD5, and a 20-byte hexadecimal string for HMAC-SHA1.  The ciphertext authentication key is a case-sensitive string of 1 to 85 characters.
Encryption HexKey	The hexadecimal encryption key.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The type of the key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
Value	The value of the key	N/A	String.	The plaintext authentication key is case insensitive and must be an 8-byte hexadecimal string for DES-CBC, a 24-byte hexadecimal string for 3DES-CBC, a 16-byte hexadecimal string for AES128-CBC, a 24-byte hexadecimal string for AES192-CBC, and a 32-byte hexadecimal string for AES256-CBC.  The ciphertext authentication key is a case-sensitive string of 1 to 117 characters.
StringKey	The string key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	The key can only choose one of the hex and string type
Type	The type of the key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
Value	The value of the key	N/A	String	The plaintext key is a case-sensitive string of 1 to 255 characters.  The ciphertext key is a case-sensitive string of 1 to 373 characters.

# IPsec/IsakmpProfiles

This table is used to configure ISAKMP IPsec profile information.

## XML structure

```
<IPsec>
  <IsakmpProfiles>
    <IsakmpProfile>
      <Name></Name>
      <Description></Description>
      <TransformSetList>
        <TransformSet></TransformSet>
      </TransformSetList>
      <IkeProfileName></IkeProfileName>
      <SADuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SADuration>
      <SAIdleTime ></SAIdleTime>
      <SASoftDuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SASoftDuration>
      <IKEv2ProfileName></IKEv2ProfileName>
    </IsakmpProfile>
  </IsakmpProfiles>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	IsakmpProfiles
Table type	Multi-instance table
Row name	IsakmpProfile
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The IPsec profile name	Index	String, case-insensitive	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 63 characters	
Description	The description of the used IPsec profile	N/A	String, case-sensitive Length: 1 to 80 characters	N/A
TransformsetList	The list of the IPsec transform sets		Members include: • Transformset	N/A
Transformset	The name of the IPsec transform set	N/A	String, case-insensitive Length: 1 to 63 characters	A maximum of six transform set names can be specified.
IkeProfileName	The IKE profile name	N/A	String, case-insensitive Length: 1 to 63 characters	N/A
SADuration	IPsec SA life time	Data structure	Members include: • Seconds. • KiloBytes.	N/A
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
SASoftDuration	IPsec SA soft lifetime buffer	Data structure	Members include: • Seconds. • KiloBytes.	N/A
Seconds	The time-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 20 to 201600.	N/A
KiloBytes	The traffic-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 1000 to 4294901760.	N/A
IKEv2ProfileName	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A

## IPsec/TunnelApplyProfile

This table is used to apply the IPsec profile name to the tunnel interface.

## XML structure

```
<IPsec>
  <TunnelApplyProfile>
    <ApplyProfile>
      <TunnelID></TunnelID>
      <IPsecPrfName></IPsecPrfName>
    </ApplyProfile>
  </TunnelApplyProfile>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	TunnelApplyProfile
Table type	Multi-instance table
Row name	ApplyProfile
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer Value range: 0 to 1023	N/A
IPsecPrfName	IPsec profile name	N/A	String Length: 0 to 63 characters The default is empty	Case-insensitive and contains only letters, digits, and dots (.).



# Contents

IPsec .....	1
IPsec/IPv4ApplyPolicies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPsec/IPv6ApplyPolicies .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
IPsec/IPv4SourceInterfaces .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
IPsec/IPv6SourceInterfaces .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
IPsec/InterfacesDFBit .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
IPsec/GlobalConf .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
IPsec/TransformSets .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
IPsec/IPv4ISAKMPPolicies .....	9
XML structure .....	9
Table description .....	10
Columns .....	11
IPsec/IPv6ISAKMPPolicies .....	13
XML structure .....	13
Table description .....	14
Columns .....	15
IPsec/IPv4ISAKMPTemplatePolicies .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
IPsec/IPv6ISAKMPTemplatePolicies .....	18
XML structure .....	19
Table description .....	19
Columns .....	19
IPsec/IPv4PolicyTemplates .....	19
XML structure .....	19
Table description .....	20
Columns .....	21
IPsec/IPv6PolicyTemplates .....	23
XML structure .....	23
Table description .....	24
Columns .....	24
IPsec/IPv4ManualPolicies .....	27
XML structure .....	27
Table description .....	27
Columns .....	28

IPsec/IPv6ManualPolicies.....	28
XML structure.....	28
Table description.....	29
Columns.....	29
IPsec/IPv4ManualPolicyKeys .....	30
XML structure.....	30
Table description.....	30
Columns.....	31
IPsec/IPv6ManualPolicyKeys .....	31
XML structure.....	31
Table description.....	32
Columns.....	32
IPsec/ManualProfiles .....	33
XML structure.....	33
Table description.....	33
Columns.....	34
IPsec/ManualProfileKeys .....	34
XML structure.....	34
Table description.....	34
Columns.....	35
IPsec/Tunnels .....	35
XML structure.....	36
Table description.....	36
Columns.....	37
IPsec/SAs.....	38
XML structure.....	39
Table description.....	39
Columns.....	40
IPsec/GlobalSAs.....	42
XML structure.....	42
Table description.....	42
Columns.....	42
IPsec/Count .....	43
XML structure.....	43
Table description.....	43
Columns.....	44
IPsec/GlobalStats .....	44
XML structure.....	44
Table description.....	45
Columns.....	45
IPsec/TunnelStats.....	47
XML structure.....	47
Table description.....	47
Columns.....	48
IPsec/IPsecCapabilities .....	49
XML structure.....	50
Table description.....	50
Columns.....	50
IPsec/DeviceCapabilities .....	50
XML structure.....	50
Table description.....	51
Columns.....	51
IPsec/IsakmpProfiles .....	51
XML structure.....	51
Table description.....	52
Columns.....	52
IPsec/TunnelApplyProfile.....	53
XML structure.....	53
Table description.....	53
Columns.....	54
IPsec/SmartVpnProfiles .....	54
XML structure.....	54

Table description .....	55
Columns .....	55
IPsec/SmartVpnGateways .....	56
XML structure .....	56
Table description .....	56
Columns .....	56
IPsec/SmartVpnLinkLists .....	57
XML structure .....	57
Table description .....	57
Columns .....	57
IPsec/InterfacesNoNat .....	58
XML structure .....	58
Table description .....	58
Columns .....	58
IPsec/DiagnoseItem .....	59
XML structure .....	59
Table description .....	59
Columns .....	59
IPsec/DiagnoseState .....	60
XML structure .....	60
Table description .....	60
Columns .....	60
IPsec/P2MPTunnels .....	60
XML structure .....	60
Table description .....	61
Columns .....	61
IPsec/P2MPTunnelCounts .....	62
XML structure .....	62
Table description .....	62
Columns .....	62

# IPsec

## IPsec/IPv4ApplyPolicies

This table displays IPv4 policies that have been applied to interface.

### XML structure

```
<IPsec>
  <IPv4ApplyPolicies>
    <ApplyPolicy>
      <IfIndex></IfIndex>
      <Policy></Policy>
    </ApplyPolicy>
  </IPv4ApplyPolicies>
</IPsec>
```

### Table description

Item	Description
Feature name	IPsec
Table name	IPv4ApplyPolicies
Table type	Multi-instance table
Row name	ApplyPolicy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer
Policy	IPsec policy name	Index	String. Length: 1 to 63 characters.

## IPsec/IPv6ApplyPolicies

This table displays IPv6 policies that have been applied to interface.

### XML structure

```
<IPsec>
```

```

<IPv6ApplyPolicies>
  <ApplyPolicy>
    <IfIndex></IfIndex>
    <Policy></Policy>
  </ApplyPolicy>
</IPv6ApplyPolicies>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6ApplyPolicies
Table type	Multi-instance table
Row name	ApplyPolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer
Policy	IPsec policy name	Index	String. Length: 1 to 63 characters.

## IPsec/IPv4SourceInterfaces

This table displays IPv4 policies that have been bound to a source interface.

## XML structure

```

<IPsec>
  <IPv4SourceInterfaces>
    <IPv4SourceInterface>
      <PolicyName></PolicyName>
      <Interface></Interface>
    </IPv4SourceInterface>
  </IPv4SourceInterfaces>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv4SourceInterfaces
Table type	Multi-instance table
Row name	IPv4SourceInterface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	IPsec policy name	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
Interface	The source interface name	N/A	String.	N/A

## IPsec/IPv6SourceInterfaces

This table displays IPv6 policies that have been bound to a source interface.

## XML structure

```
<IPsec>
  <IPv6SourceInterfaces>
    <IPv6SourceInterface>
      <PolicyName></PolicyName>
      <Interface></Interface>
    </IPv6SourceInterface>
  </IPv6SourceInterfaces>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6SourceInterfaces
Table type	Multi-instance table
Row name	IPv6SourceInterface

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	IPsec policy name	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
Interface	The source interface name	N/A	String.	N/A

## IPsec/InterfacesDFBit

This table displays the DF bit on the interface.

## XML structure

```

<IPsec>
  <InterfacesDFBit>
    <InterfaceDFBit>
      <IfIndex></IfIndex>
      <DFBit></DFBit>
    </InterfaceDFBit>
  </InterfacesDFBit>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	InterfacesDFBit
Table type	Multi-instance table
Row name	InterfaceDFBit
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface	Index	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	index			Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
DFBit	Set the DF bit for outer IP headers of encapsulated IPsec packets on an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—clear.</li> <li>2—copy.</li> <li>3—set.</li> </ul>	N/A

## IPsec/GlobalConf

This table displays IPsec global configuration information.

### XML structure

```

<IPsec>
  <GlobalConf>
    <DecryptCheck></DecryptCheck>
    <LoggingPacket></LoggingPacket>
    <Redundancy></Redundancy>
    <DFBit></DFBit>
    <AntiReplay>
      <State></State>
      <CheckWindow></CheckWindow>
    </AntiReplay>
    <SADuration>
      <Seconds></Seconds>
      <KiloBytes></KiloBytes>
    </SADuration>
    <SAIdleTime></SAIdleTime>
    <FlowRedirect></FlowRedirect>
    <EstablishTunnelLimit></EstablishTunnelLimit>
    <Fragmentation></Fragmentation>
    <LoggingNegotiation></LoggingNegotiation>
    <SASoftDuration>
      <Seconds></Seconds>
      <KiloBytes></KiloBytes>
    </SASoftDuration>
  </GlobalConf>
</IPsec>

```



## Table description

Item	Description
Feature name	IPsec
Table name	GlobalConf
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
DecryptCheck	ACL checking for de-encapsulated IPsec packets.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>
LoggingPacket	Logging for IPsec packets	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>
Redundancy	IPsec redundancy	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>
DFBit	Set the DF bit for outer IP headers of encapsulated IPsec packets on all interface	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—clear.</li> <li><b>2</b>—copy.</li> <li><b>3</b>—set.</li> </ul>
AntiReplay	Anti-replay configuration	Data structure	Members include: <ul style="list-style-type: none"> <li>State.</li> <li>CheckWindow.</li> </ul>
State	Anti-replay state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>
CheckWindow	Anti-replay window size	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Window size is 64.</li> <li><b>2</b>—Window size is 128.</li> <li><b>3</b>—Window size is 256.</li> <li><b>4</b>—Window size is 512.</li> <li><b>5</b>—Window size is 1024.</li> </ul>
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>
Seconds	The time-based	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	global lifetime of IPsec SA		Value range: 180 to 604800. The default is 3600.
KiloBytes	The traffic-based global lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295. The default is 1843200.
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.
FlowRedirect	OpenFlow entry deployment	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable.</li> <li>• <b>false</b>—Disable.</li> </ul>
EstablishTunnelLimit	Limit the number of IPsec tunnels	N/A	Unsigned integer. Value range: 1 to 4294967295.
Fragmentation	Fragment MTU-exceeded packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Fragment packets before IPsec encapsulation.</li> <li>• <b>2</b>—Fragment packets after IPsec encapsulation.</li> </ul>
LoggingNegotiation	Logging for IPsec event negotiation	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable.</li> <li>• <b>false</b>—Disable.</li> </ul>
SASoftDuration	Global IPsec SA soft lifetime buffer	Data structure	Members include: <ul style="list-style-type: none"> <li>• Seconds.</li> <li>• KiloBytes.</li> </ul>
Seconds	The time-based global soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 20 to 201600.
KiloBytes	The traffic-based global soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 1000 to 4294901760.

## IPsec/TransformSets

This table displays transform sets information.

### XML structure

```

<IPsec>
  <TransformSets>
    <TransformSet>
      <Name></Name>
      <EncapMode></EncapMode>
      <Proto></Proto>
    </TransformSet>
  </TransformSets>
</IPsec>

```

```

<ESPAuthAlgList>
  <ESPAuthAlgItem></ESPAuthAlgItem>
</ESPAuthAlgList>
<ESPEncrAlgList>
  <ESPEncrAlgItem></ESPEncrAlgItem>
</ESPEncrAlgList>
<AHAuthAlgList>
  <AHAuthAlgItem></AHAuthAlgItem>
</AHAuthAlgList>
<PFS></PFS>
<EsnEnable></EsnEnable>
</TransformSet>
</TransformSets>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	TransformSets
Table type	Multi-instance table
Row name	TransformSet
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The name of the IPsec transform set	Index	String. Length: 1 to 63 characters.	N/A
EncapMode	Encapsulation mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—transport.</li> <li>2—tunnel.</li> </ul>	N/A
Proto	Security protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Specifies the AH protocol.</li> <li>2—Specifies using the ESP protocol first and then using the AH protocol.</li> <li>3—Specifies the ESP protocol.</li> </ul>	N/A
ESPAuthAlgList	The authentication algorithm for ESP	Data structure	Members include: <ul style="list-style-type: none"> <li>ESPAuthAlgItem.</li> </ul>	N/A
ESPAuthAlg	The	N/A	The algorithm number is defined	Contains up to 2

Column name	Column description	Column type	Data type and restrictions	Remarks
gItem	authentication algorithm number for ESP		by IPsecCapabilities table.	ESPAuthAlgItem in ESPAuthAlgList.
ESPEncrAlgList	The encryption algorithm for ESP	Data structure	Members include: <ul style="list-style-type: none"> <li>ESPEncrAlgItem.</li> </ul>	N/A
ESPEncrAlgItem	The encryption algorithm number for ESP	N/A	The algorithm number is defined by IPsecCapabilities table	Contains up to 6 in ESPEncrAlgList.
AHAuthAlgList	The authentication algorithm number for ESP	Data structure	Members include: <ul style="list-style-type: none"> <li>AHAuthAlgItem.</li> </ul>	N/A
AHAuthAlgItem	The authentication algorithm number for AH	N/A	The algorithm number is defined by IPsecCapabilities table.	Contains up to 2 in AHAuthAlgList.
PFS	Perfect Forward Secrecy	N/A	The Diffie-Hellman group ID is defined by IPsecCapabilities table.	N/A
EsnEnable	Extended Sequence Number function	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Disable(default).</li> <li>2—ESN.</li> <li>3—ESN and non-ESN.</li> </ul>	N/A

## IPsec/IPv4ISAKMPPolicies

This table displays IPv4 ISAKMP policies information.

### XML structure

```

<IPsec>
  <IPv4ISAKMPPolicies>
    <Policy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Description></Description>
      <ACL>
        <Name></Name>
        <Number></Number>
        <Mode></Mode>
      </ACL>
      <Remote>

```

```

    <Addr></Addr>
    <HostName></HostName>
</Remote>
<LocalAddr></LocalAddr>
<IKEProfile></IKEProfile>
<TransformsetList>
    <Transformset></Transformset>
</TransformsetList>
<QosPreClassify></QosPreClassify>
<RRI>
    <RRIEnable></RRIEnable>
    <Preference></Preference>
    <Tag></Tag>
</RRI>
<SADuration>
    <Seconds></Seconds>
    <KiloBytes></KiloBytes>
</SADuration>
<SAIdleTime></SAIdleTime>
<Redundancy>
    <InboundSyncInterval></InboundSyncInterval>
    <OutboundSyncInterval></OutboundSyncInterval>
</Redundancy>
<SATriggerMode></SATriggerMode>
<SASoftDuration>
    <Seconds></Seconds>
    <KiloBytes></KiloBytes>
</SASoftDuration>
<IKEv2Profile></IKEv2Profile>
    <TfcEnable></TfcEnable>    </Policy>
</IPv4ISAKMPPolicies>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv4ISAKMPPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The ISAKMP policy name	Index	String. Length: 1 to 63 characters.	N/A
SeqNum	The sequence number for the IPsec policy	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	Description for an IPsec policy	N/A	String. Length: 1 to 80 characters.	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Number.</li> <li>Mode.</li> </ul>	You can only specify Name or Number, but not both.
Name	ACL name	N/A	String. Length: 1 to 63 characters.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Mode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—per-rule.</li> <li>2—per-host.</li> <li>3—aggregation.</li> </ul>	<p>per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it.</p> <p>per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be protected.</p> <p>aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an ACL. This mode is only used to communicate with old-version devices.</p>
Remote	Remote IP address for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Addr.</li> <li>HostName.</li> </ul>	You can only specify Addr or HostName, but not both.

Column name	Column description	Column type	Data type and restrictions	Remarks
Addr	Remote IP address	N/A	Ipv4 address	N/A
HostName	Remote host name	N/A	String. Length: 1 to 253 characters.	N/A
LocalAddr	Local IP address for the IPsec policy	N/A	Ipv4 address	N/A
IKEProfile	Specify an IKE profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TransformsetList	Reference an IPsec transform set for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Transformset.</li> </ul>	N/A
Transformset	IPsec transform set name	N/A	String. Length: 1 to 63 characters.	Contains up to 6 Transformset in TransformsetList.
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
RRI	The IPsec reverse route inject (RRI).	Data structure	Members include: <ul style="list-style-type: none"> <li>RRIEnable.</li> <li>Preference.</li> <li>Tag</li> </ul>	N/A
RRIEnable	The IPsec reverse route inject (RRI) feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
Preference	The preference of the static routes	N/A	Unsigned integer. Value range: 1 to 255. Default value is 60.	N/A
Tag	The route tag for the static routes	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . Default value is 0.	N/A
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
Redundancy	IPsec redundancy function	Data structure	Members include: <ul style="list-style-type: none"> <li>InboundSyncInterval.</li> <li>OutboundSyncInterval.</li> </ul>	N/A
InboundSyncInterval	Inbound synchronization interval	N/A	Unsigned integer. Value range: 0 to 1000. The default is 1000.	N/A
OutboundSyncInterval	Outbound synchronization interval	N/A	Unsigned integer. Value range: 1000 to 100000. The default is 100000.	N/A
SATriggerMode	IPsec SA negotiation triggering mode	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—traffic-based.</li> <li><b>2</b>—auto.</li> </ul>	N/A
SASoftDuration	IPsec SA soft lifetime buffer	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 20 to 201600.	N/A
KiloBytes	The traffic-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 1000 to 4294901760.	N/A
IKEv2Profile	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TfcEnable	ESP TFC padding	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A

## IPsec/IPv6ISAKMPPolicies

This table displays IPv6 ISAKMP policies information.

### XML structure

```
<IPsec>
  <IPv6ISAKMPPolicies>
    <Policy>
      <Name></Name>
```



```

<SeqNum></SeqNum>
<Description></Description>
<ACL>
  <Name></Name>
  <Number></Number>
  <Mode></Mode>
</ACL>
<Remote>
  <Addr></Addr>
  <HostName></HostName>
</Remote>
<LocalAddr></LocalAddr>
<IKEProfile></IKEProfile>
<TransformsetList>
  <Transformset></Transformset>
</TransformsetList>
<QosPreClassify></QosPreClassify>
<RRI>
  <RRIEnable></RRIEnable>
  <Preference></Preference>
  <Tag></Tag>
</RRI>
<SADuration>
  <Seconds></Seconds>
  <KiloBytes></KiloBytes>
</SADuration>
<SAIdleTime></SAIdleTime>
<Redundancy>
  <InboundSyncInterval></InboundSyncInterval>
  <OutboundSyncInterval></OutboundSyncInterval>
</Redundancy>
<SATriggerMode></SATriggerMode>
<SASoftDuration>
  <Seconds></Seconds>
  <KiloBytes></KiloBytes>
</SASoftDuration>
<IKEv2Profile></IKEv2Profile>
<TfcEnable></TfcEnable>
</Policy>
</IPv6ISAKMPPolicies>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6ISAKMPPolicies

Item	Description
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The ISAKMP policy name	Index	String. Length: 1 to 63 characters.	N/A
SeqNum	The sequence number for the IPsec policy	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	Description for an IPsec policy	N/A	String. Length: 1 to 80 characters.	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Name.</li> <li>• Number.</li> <li>• Mode.</li> </ul>	You can only specify Name or Number, but not both.
Name	ACL name	N/A	String. Length: 1 to 63 characters.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Mode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—per-rule.</li> <li>• 2—per-host.</li> <li>• 3—aggregation.</li> </ul>	<p>per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it.</p> <p>per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be protected.</p> <p>aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				ACL. This mode is only used to communicate with old-version devices.
Remote	Remote IP address for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Addr.</li> <li>• HostName.</li> </ul>	You can only specify Addr or HostName, but not both.
Addr	Remote IP address	N/A	Ipv6 address	N/A
HostName	Remote host name	N/A	String. Length: 1 to 253 characters.	N/A
LocalAddr	Local IP address for the IPsec policy	N/A	Ipv6 address	N/A
IKEProfile	Specify an IKE profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TransformsetList	Reference an IPsec transform set for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>• Transformset.</li> </ul>	N/A
Transformset	IPsec transform set name	N/A	String. Length: 1 to 63 characters.	Contains up to 6 Transformset in TransformsetList.
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable.</li> <li>• <b>false</b>—Disable.</li> </ul>	N/A
RRI	The IPsec reverse route inject (RRI).	Data structure	Members include: <ul style="list-style-type: none"> <li>• RRISet.</li> <li>• Preference.</li> <li>• Tag</li> </ul>	N/A
RRISet	The IPsec reverse route inject (RRI) feature	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable.</li> <li>• <b>false</b>—Disable.</li> </ul>	N/A
Preference	The preference of the static routes	N/A	Unsigned integer. Value range: 1 to 255. Default value is 60.	N/A
Tag	The route tag for the static routes	N/A	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1. Default value is 0.	N/A
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>• Seconds.</li> <li>• KiloBytes.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
Redundancy	IPsec redundancy function	Data structure	Members include: <ul style="list-style-type: none"> <li>InboundSyncInterval.</li> <li>OutboundSyncInterval.</li> </ul>	N/A
InboundSyncInterval	Inbound synchronization interval	N/A	Unsigned integer. Value range: 0 to 1000. The default is 1000.	N/A
OutboundSyncInterval	Outbound synchronization interval	N/A	Unsigned integer. Value range: 1000 to 100000. The default is 100000.	N/A
SATriggerMode	IPsec SA negotiation triggering mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—traffic-based.</li> <li>2—auto.</li> </ul>	N/A
SASoftDuration	IPsec SA soft lifetime buffer	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 20 to 201600.	N/A
KiloBytes	The traffic-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 1000 to 4294901760.	N/A
IKEv2Profile	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TfcEnable	ESP TFC padding	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A

# IPsec/IPv4ISAKMPTemplatePolicies

This table displays IPv4 ISAKMP template policies information. ISAKMP template policy is a kind of IKE-based policy which is created by referencing an IPsec policy template.

## XML structure

```
<IPsec>
  <IPv4ISAKMPTemplatePolicies>
    <TemplatePolicy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Template></Template>
    </TemplatePolicy>
  </IPv4ISAKMPTemplatePolicies>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv4ISAKMPTemplatePolicies
Table type	Multi-instance table
Row name	TemplatePolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	The template policy name	Index	String. Length: 1 to 63 characters.
SeqNum	The sequence number for the template policy	Index	Unsigned integer. Value range: 1 to 65535.
Template	Specifies an IPsec policy template by its name	N/A	String. Length: 1 to 63 characters.

# IPsec/IPv6ISAKMPTemplatePolicies

This table displays IPv6 ISAKMP template policies information. ISAKMP template policy is a kind of IKE-based policy which is created by referencing an IPsec policy template.

## XML structure

```
<IPsec>
  <IPv6ISAKMPTemplatePolicies>
    <TemplatePolicy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Template></Template>
    </TemplatePolicy>
  </IPv6ISAKMPTemplatePolicies>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6ISAKMPTemplatePolicies
Table type	Multi-instance table
Row name	TemplatePolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	The template policy name	Index	String. Length: 1 to 63 characters.
SeqNum	The sequence number for the template policy	Index	Unsigned integer. Value range: 1 to 65535.
Template	Specifies an IPsec policy template by its name	N/A	String. Length: 1 to 63 characters.

## IPsec/IPv4PolicyTemplates

This table displays IPv4 policy templates information.

## XML structure

```
<IPsec>
  <IPv4PolicyTemplates>
    <Template>
```

```

<Name></Name>
<SeqNum></SeqNum>
<Description></Description>
<ACL>
  <Name></Name>
  <Number></Number>
  <Mode></Mode>
</ACL>
<Remote>
  <Addr></Addr>
  <HostName></HostName>
</Remote>
<LocalAddr></LocalAddr>
<IKEProfile></IKEProfile>
<TransformsetList>
  <Transformset></Transformset>
</TransformsetList>
<QosPreClassify></QosPreClassify>
<RRI>
  <RRIEnable></RRIEnable>
  <Preference></Preference>
  <Tag></Tag>
</RRI>
<SADuration>
  <Seconds></Seconds>
  <KiloBytes></KiloBytes>
</SADuration>
<SAIdleTime></SAIdleTime>
<Redundancy>
  <InboundSyncInterval></InboundSyncInterval>
  <OutboundSyncInterval></OutboundSyncInterval>
</Redundancy>
<IKEv2Profile></IKEv2Profile>
<TfcEnable></TfcEnable>
</Template>
</IPv4PolicyTemplates>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv4PolicyTemplates
Table type	Multi-instance table
Row name	Template
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The ISAKMP policy name	Index	String. Length: 1 to 63 characters.	N/A
SeqNum	The sequence number for the IPsec policy	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	Description for an IPsec policy	N/A	String. Length: 1 to 80 characters.	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Number.</li> <li>Mode.</li> </ul>	You can only specify Name or Number, but not both.
Name	ACL name	N/A	String. Length: 1 to 63 characters.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Mode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—per-rule.</li> <li>2—per-host.</li> <li>3—aggregation.</li> </ul>	<p>per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it.</p> <p>per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be protected.</p> <p>aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an ACL. This mode is only used to communicate with old-version devices.</p>
Remote	Remote IP address for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Addr.</li> <li>HostName.</li> </ul>	You can only specify Addr or HostName, but not both.



Column name	Column description	Column type	Data type and restrictions	Remarks
Addr	Remote IP address	N/A	Ipv4 address	N/A
HostName	Remote host name	N/A	String. Length: 1 to 253 characters.	N/A
LocalAddr	Local IP address for the IPsec policy	N/A	Ipv4 address	N/A
IKEProfile	Specify an IKE profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TransformsetList	Reference an IPsec transform set for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Transformset.</li> </ul>	N/A
Transformset	IPsec transform set name	N/A	String. Length: 1 to 63 characters.	Contains up to 6 Transformset in TransformsetList.
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
RRI	The IPsec reverse route inject (RRI).	Data structure	Members include: <ul style="list-style-type: none"> <li>RRIEnable.</li> <li>Preference.</li> <li>Tag</li> </ul>	N/A
RRIEnable	The IPsec reverse route inject (RRI) feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
Preference	The preference of the static routes	N/A	Unsigned integer. Value range: 1 to 255. Default value is 60.	N/A
Tag	The route tag for the static routes	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . Default value is 0.	N/A
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
Redundancy	IPsec redundancy function	Data structure	Members include: <ul style="list-style-type: none"> <li>InboundSyncInterval.</li> <li>OutboundSyncInterval.</li> </ul>	N/A
InboundSyncInterval	Inbound synchronization interval	N/A	Unsigned integer. Value range: 0 to 1000. The default is 1000.	N/A
OutboundSyncInterval	Outbound synchronization interval	N/A	Unsigned integer. Value range: 1000 to 100000. The default is 100000.	N/A
IKEv2Profile	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TfcEnable	ESP TFC padding	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A

## IPsec/IPv6PolicyTemplates

This table displays IPv6 policy templates information.

### XML structure

```

<IPsec>
  <IPv6PolicyTemplates>
    <Template>
      <Name></Name>
      <SeqNum></SeqNum>
      <Description></Description>
      <ACL>
        <Name></Name>
        <Number></Number>
        <Mode></Mode>
      </ACL>
      <Remote>
        <Addr></Addr>
        <HostName></HostName>
      </Remote>
      <LocalAddr></LocalAddr>
      <IKEProfile></IKEProfile>
      <TransformsetList>
        <Transformset></Transformset>
      </TransformsetList>
    </Template>
  </IPv6PolicyTemplates>
</IPsec>

```

```

</TransformsetList>
<QosPreClassify></QosPreClassify>
<RRI>
  <RRIEnable></RRIEnable>
  <Preference></Preference>
  <Tag></Tag>
</RRI>
<SADuration>
  <Seconds></Seconds>
  <KiloBytes></KiloBytes>
</SADuration>
<SAIdleTime></SAIdleTime>
<Redundancy>
  <InboundSyncInterval></InboundSyncInterval>
  <OutboundSyncInterval></OutboundSyncInterval>
</Redundancy>
<IKEv2Profile></IKEv2Profile>
<TfcEnable></TfcEnable>
</Template>
</IPv6PolicyTemplates>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6PolicyTemplates
Table type	Multi-instance table
Row name	Template
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The ISAKMP policy name	Index	String. Length: 1 to 63 characters.	N/A
SeqNum	The sequence number for the IPsec policy	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	Description for an IPsec policy	N/A	String. Length: 1 to 80 characters.	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> </ul>	You can only specify Name or Number, but not both.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Number.</li> <li>Mode.</li> </ul>	
Name	ACL name	N/A	String. Length: 1 to 63 characters.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Mode	Protection modes	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—per-rule.</li> <li>2—per-host.</li> <li>3—aggregation.</li> </ul>	<p>per-rule: One IPsec tunnel protects one data flow. The data flow permitted by an ACL rule is protected by one IPsec tunnel that is established solely for it.</p> <p>per-host: One IPsec tunnel protects one host-to-host data flow. One host-to-host data flow is identified by one ACL rule and protected by one IPsec tunnel established solely for it. This mode consumes more system resources when multiple data flows exist between two subnets to be protected.</p> <p>aggregation: One IPsec tunnel protects all data flows permitted by all the rules of an ACL. This mode is only used to communicate with old-version devices.</p>
Remote	Remote IP address for the IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Addr.</li> <li>HostName.</li> </ul>	You can only specify Addr or HostName, but not both.
Addr	Remote IP address	N/A	Ipv6 address	N/A
HostName	Remote host name	N/A	String. Length: 1 to 253 characters.	N/A
LocalAddr	Local IP address for the IPsec policy	N/A	Ipv6 address	N/A
IKEProfile	Specify an IKE profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
Transforms	Reference an	Data	Members include:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TransformsetList	IPsec transform set for the IPsec policy	structure	<ul style="list-style-type: none"> <li>Transformset.</li> </ul>	
Transformset	IPsec transform set name	N/A	String. Length: 1 to 63 characters.	Contains up to 6 in TransformsetList.
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
RRI	The IPsec reverse route inject (RRI).	Data structure	Members include: <ul style="list-style-type: none"> <li>RRIEnable.</li> <li>Preference.</li> <li>Tag</li> </ul>	N/A
RRIEnable	The IPsec reverse route inject (RRI) feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
Preference	The preference of the static routes	N/A	Unsigned integer. Value range: 1 to 255. Default value is 60.	N/A
Tag	The route tag for the static routes	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . Default value is 0.	N/A
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
Redundancy	IPsec redundancy function	Data structure	Members include: <ul style="list-style-type: none"> <li>InboundSyncInterval.</li> <li>OutboundSyncInterval.</li> </ul>	N/A
InboundSyncInterval	Inbound synchronization interval	N/A	Unsigned integer. Value range: 0 to 1000. The default is 1000.	N/A
OutboundSyncInterval	Outbound synchronization interval	N/A	Unsigned integer. Value range: 1000 to 100000. The default is 100000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IKEv2Profile	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A
TfcEnable	ESP TFC padding	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A

## IPsec/IPv4ManualPolicies

This table displays IPv4 manual policies.

### XML structure

```

<IPsec>
  <IPv4ManualPolicies>
    <Policy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Description></Description>
      <Transformset></Transformset>
      <ACL>
        <Name></Name>
        <Number></Number>
      </ACL>
      <RemoteAddress></RemoteAddress>
      <QosPreClassify></QosPreClassify>
    </Policy>
  </IPv4ManualPolicies>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	IPv4ManualPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The policy name.	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
SeqNum	The policy serial number.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	The policy description	N/A	String. Length: 1 to 80 characters. Case sensitive	N/A
Transformset	The name of the IPsec transform set	N/A	String. Length: 1 to 63 characters. Case insensitive	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Number.</li> </ul>	You can only specify Name or Number, but not both.
Name	ACL name	N/A	String. Length: 1 to 63 characters. Case insensitive.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
RemoteAddress	Remote IP address	N/A	Ipv4 address	N/A
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A

## IPsec/IPv6ManualPolicies

This table displays IPv6 manual policies.

### XML structure

```

<IPsec>
  <IPv6ManualPolicies>
    <Policy>
      <Name></Name>
      <SeqNum></SeqNum>
      <Description></Description>
      <Transformset></Transformset>
      <ACL>
        <Name></Name>
        <Number></Number>
      </ACL>
    </Policy>
  </IPv6ManualPolicies>
</IPsec>

```

```

    </ACL>
    <RemoteAddress></RemoteAddress>
    <QosPreClassify></QosPreClassify>
  </Policy>
</IPv6ManualPolicies>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6ManualPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The policy name.	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
SeqNum	The policy serial number.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	The policy description	N/A	String. Length: 1 to 80 characters. Case sensitive	N/A
Transform set	The name of the IPsec transform set	N/A	String. Length: 1 to 63 characters. Case insensitive	N/A
ACL	Reference an ACL for an IPsec policy	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Number.</li> </ul>	You can only specify Name or Number, but not both.
Name	ACL name	N/A	String. Length: 1 to 63 characters. Case insensitive.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
RemoteAddress	Remote IP address	N/A	Ipv6 address	N/A
QosPreClassify	QoS pre-classify feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>false</b>—Disable.</li> </ul>	

## IPsec/IPv4ManualPolicyKeys

This table displays the IPv4 manual IPsec policy key information.

### XML structure

```

<IPsec>
  <IPv4ManualPolicyKeys>
    <Key>
      <PolicyName></PolicyName>
      <SequenceNum></SequenceNum>
      <Direction></Direction>
      <Protocol></Protocol>
      <SPI></SPI>
      <AuthorityHexKey>
        <Type></Type>
      </AuthorityHexKey>
      <EncryptionHexKey>
        <Type></Type>
      </EncryptionHexKey>
      <StringKey>
        <Type></Type>
      </StringKey>
    </Key>
  </IPv4ManualPolicyKeys>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	IPv4ManualPolicyKeys
Table type	Multi-instance table
Row name	Key
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	The policy name.	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
SequenceNum	The policy serial number	Index	Unsigned integer. Value range: 1 to $2^{16}-1$ .	N/A
Direction	SA's direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
Protocol	Security protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>1—ESP.</li> <li>2—AH.</li> </ul>	N/A
SPI	Security Parameter Index	N/A	Unsigned integer. Value range: $2^8$ to $2^{32}-1$ .	N/A
AuthorityHexKey	The hexadecimal authentication key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
EncryptionHexKey	The hexadecimal encryption key.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
StringKey	The string key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A

## IPsec/IPv6ManualPolicyKeys

This table displays the IPv6 manual IPsec policy key information.

### XML structure

```

<IPsec>
  <IPv6ManualPolicyKeys>
    <Key>

```

```

    <PolicyName></PolicyName>
    <SequenceNum></SequenceNum>
    <Direction></Direction>
    <Protocol></Protocol>
    <SPI></SPI>
    <AuthorityHexKey>
        <Type></Type>
    </AuthorityHexKey>
    <EncryptionHexKey>
        <Type></Type>
    </EncryptionHexKey>
    <StringKey>
        <Type></Type>
    </StringKey>
</Key>
</IPv6ManualPolicyKeys>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IPv6ManualPolicyKeys
Table type	Multi-instance table
Row name	Key
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	The policy name.	Index	String. Length: 1 to 63 characters. Case insensitive.	N/A
SequenceNum	The policy serial number	Index	Unsigned integer. Value range: 1 to 2 <sup>16</sup> -1.	N/A
Direction	SA's direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
Protocol	Security protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>1—ESP.</li> <li>2—AH.</li> </ul>	N/A
SPI	Security Parameter Index	N/A	Unsigned integer. Value range: 2 <sup>8</sup> to 2 <sup>32</sup> -1.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthorityHexKey	The hexadecimal authentication key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
EncryptionHexKey	The hexadecimal encryption key.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
StringKey	The string key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A

## IPsec/ManualProfiles

This table displays the manual IPsec profile information.

### XML structure

```

<IPsec>
  <ManualProfiles>
    <ManualProfile>
      <Name></Name>
      <Description></Description>
      <TransformSet></TransformSet>
    </ManualProfile>
  </ManualProfiles>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	ManualProfiles
Table type	Multi-instance table
Row name	ManualProfile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The IPsec profile name.	Index	String. Length: 1 to 63 characters. Case insensitive	N/A
Description	The description of the used IPsec profile.	N/A	String. Length: 1 to 80 characters. Case sensitive	N/A
Transform set	The name of the IPsec transform set	N/A	String. Length: 1 to 63 characters. Case insensitive	N/A

## IPsec/ManualProfileKeys

This table displays the manual IPsec profile key information.

## XML structure

```

<IPsec>
  <ManualProfileKeys>
    <Key>
      <ProfileName></ProfileName>
      <Direction></Direction>
      <Protocol></Protocol>
      <SPI></SPI>
      <AuthorityHexKey>
        <Type></Type>
      </AuthorityHexKey>
      <EncryptionHexKey>
        <Type></Type>
      </EncryptionHexKey>
      <StringKey>
        <Type></Type>
      </StringKey>
    </Key>
  </ManualProfileKeys>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec

Item	Description
Table name	ManualProfileKeys
Table type	Multi-instance table
Row name	Key
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	The IPsec profile name.	Index	String. Length: 1 to 63 characters. Case insensitive	N/A
Direction	SA's direction	Index	<ul style="list-style-type: none"> <li>Enumeration:</li> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
Protocol	Security protocol	Index	Enumeration: <ul style="list-style-type: none"> <li>1—ESP.</li> <li>2—AH.</li> </ul>	N/A
SPI	Security Parameter Index	N/A	Unsigned integer. Value range: $2^8$ to $2^{32}-1$ .	N/A
AuthorityHexKey	The hexadecimal authentication key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
EncryptionHexKey	The hexadecimal encryption key.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A
StringKey	The string key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> </ul>	N/A
Type	The key type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple.</li> <li>2—cipher.</li> </ul>	N/A

## IPsec/Tunnels

This table displays IPsec tunnels information.

## XML structure

```
<IPsec>
  <Tunnels>
    <Tunnel>
      <TunnelID></TunnelID>
      <AddrType></AddrType>
      <Status></Status>
      <SAMode></SAMode>
      <PFS></PFS>
      <ACLNumber></ACLNumber>
      <LocalAddr></LocalAddr>
      <RemoteAddr></RemoteAddr>
      <SrcFlow>
        <Proto></Proto>
        <Addr></Addr>
        <MaskLen></MaskLen>
        <Port></Port>
      </SrcFlow>
      <DestFlow>
        <Proto></Proto>
        <Addr></Addr>
        <MaskLen></MaskLen>
        <Port></Port>
      </DestFlow>
      <SecurityProto></SecurityProto>
      <SPI>
        <ESPInbound></ESPInbound>
        <ESPOutbound></ESPOutbound>
        <AHInbound></AHInbound>
        <AHOutbound></AHOutbound>
      </SPI>
      <PolicyName></PolicyName>
      <PolicySeqNum></PolicySeqNum>
      <IfIndex></IfIndex>
      <InsideVRF></InsideVRF>
    </Tunnel>
  </Tunnels>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	Tunnels
Table type	Multi-instance table

Item	Description
Row name	Tunnel
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TunnelID	IPsec tunnel ID	Index	Unsigned integer.
AddrType	IP protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ipv4Address.</li> <li>2—Ipv6Address.</li> </ul>
Status	Stateful failover status of the IPsec SA	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—active.</li> <li>2—standby.</li> </ul>
SAMode	SA negotiation mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Manual.</li> <li>2—ISAKMP.</li> <li>3—Template.</li> </ul>
PFS	Perfect Forward Secrecy	N/A	The Diffie-Hellman group ID is defined by IPsecCapabilities table.
ACLNumber	ACL Number	N/A	Unsigned integer. Value range: 3000 to 3999.
LocalAddr	Source IP address of the IPsec tunnel	N/A	Ipv4 address or Ipv6 address
RemoteAddr	Destination IP address of the IPsec tunnel	N/A	Ipv4 address or Ipv6 address
SrcFlow	Source data flow protected by the IPsec tunnel	Data structure	Members include: <ul style="list-style-type: none"> <li>Proto.</li> <li>Addr.</li> <li>MaskLen.</li> <li>Port.</li> </ul>
Proto	Source protocol type	N/A	Unsigned integer. Value range: 0 to 255.
Addr	Source IP address	N/A	Ipv4 address or Ipv6 address
MaskLen	Source IP address mask length	N/A	Unsigned integer.
Port	Source port number	N/A	Unsigned integer. Value range: 0 to 65535.
DestFlow	Destination	Data	Members include:



Column name	Column description	Column type	Data type and restrictions
	data flow protected by the IPsec tunnel	structure	<ul style="list-style-type: none"> <li>Proto.</li> <li>Addr.</li> <li>MaskLen.</li> <li>Port.</li> </ul>
Proto	Destination protocol type	N/A	Unsigned integer. Value range: 0 to 255.
Addr	Destination IP address	N/A	Ipv4 address or Ipv6 address
MaskLen	Destination IP address mask length	N/A	Unsigned integer.
Port	Destination port number	N/A	Unsigned integer. Value range: 0 to 65535.
SecurityProto	IPsec SecurityProtocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AH.</li> <li>2—AH-ESP.</li> <li>3—ESP.</li> </ul>
SPI	Security Parameter Index	Data structure	Members include: <ul style="list-style-type: none"> <li>ESPInbound.</li> <li>ESPOutbound.</li> <li>AHInbound.</li> <li>AHOutbound.</li> </ul>
ESPInbound	ESP inbound SPI	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .
ESPOutbound	ESP outbound SPI	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .
AHInbound	AH inbound SPI	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .
AHOutbound	AH Outbound SPI	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .
PolicyName	The ISAKMP policy name	N/A	String. Length: 1 to 63 characters.
PolicySeqNum	The sequence number for the IPsec policy	N/A	Unsigned integer. Value range: 1 to 65535. N/A
IfIndex	Interface index	N/A	Unsigned integer.
InsideVRF	Inside vpn-instance	N/A	String. Length: 1 to 31 characters.

## IPsec/SAs

This table displays IPsec SA information.

# XML structure

```
<IPsec>
  <SAs>
    <SA>
      <TunnelID></TunnelID>
      <SAIndex></SAIndex>
      <Direction></Direction>
      <Proto></Proto>
      <SPI></SPI>
      <SAMode></SAMode>
      <EncapMode></EncapMode>
      <PFS></PFS>
      <AuthAlg></AuthAlg>
      <EncrAlg></EncrAlg>
      <SADuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SADuration>
      <SARemainingDuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SARemainingDuration>
      <RemainingIdleTime></RemainingIdleTime>
      <NatTraversal></NatTraversal>
      <AntiReplay>
        <State></State>
        <CheckWindow></CheckWindow>
      </AntiReplay>
      <PathMTU></PathMTU>
      <MaxRcvSN></MaxRcvSN>
      <MaxSendSN></MaxSendSN>
      <Status></Status>
      <IfIndex></IfIndex>
      <PolicyName></PolicyName>
      <PolicySeqNum></PolicySeqNum>
    </SA>
  </SAs>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	SAs
Table type	Multi-instance table

Item	Description
Row name	SA
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TunnelID	IPsec tunnel ID which the SA belongs to	Index	Unsigned integer.
SAIndex	SA index	Index	Unsigned integer.
Direction	SA's direction	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>
Proto	Security protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AH.</li> <li>2—ESP.</li> </ul>
SPI	Security Parameter Index	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .
SAMode	SA negotiation mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Manual.</li> <li>2—ISAKMP.</li> <li>3—Template.</li> </ul>
EncapMode	Encapsulation mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—transport.</li> <li>2—tunnel.</li> </ul>
PFS	Perfect Forward Secrecy	N/A	The Diffie-Hellman group ID is defined by IPsecCapabilities table.
AuthAlg	Authentication algorithm	N/A	The algorithm number is defined by IPsecCapabilities table.
EncrAlg	Encryption algorithm	N/A	The algorithm number is defined by IPsecCapabilities table.
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>
Seconds	The time-based global lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.
KiloBytes	The traffic-based global lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.
SARemainin	Remaining	Data	Members include:

Column name	Column description	Column type	Data type and restrictions
gDuration	IPsec SA lifetime	structure	<ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>
Seconds	Remaining IPsec SA lifetime in seconds	N/A	Unsigned integer. Value range: 180 to 604800.
KiloBytes	Remaining IPsec SA lifetime in kilobytes	N/A	Unsigned integer. Value range: 2560 to 4294967295.
RemainingIdleTime	Remaining IPsec SA idle time	N/A	Unsigned integer. Value range: 0 to 86400.
NatTraversal	UDP encapsulation used for NAT traversal	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>
AntiReplay	Anti-replay configuration	Data structure	Members include: <ul style="list-style-type: none"> <li>State.</li> <li>CheckWindow.</li> </ul>
State	Anti-replay state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>
CheckWindow	Anti-replay window size	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Window size is 64.</li> <li><b>2</b>—Window size is 128.</li> <li><b>3</b>—Window size is 256.</li> <li><b>4</b>—Window size is 512.</li> <li><b>5</b>—Window size is 1024.</li> </ul>
PathMTU	Path MTU of the IPsec SA	N/A	Unsigned integer.
MaxRcvSN	Max sequence number in the received packets	N/A	Unsigned integer.
MaxSendSN	Max sequence number in the sent packets	N/A	Unsigned integer.
Status	Stateful failover status of the IPsec SA	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—active.</li> <li><b>2</b>—standby.</li> </ul>
IfIndex	Interface index	N/A	Unsigned integer.
PolicyName	Name of the used IPsec policy	N/A	String. Length: 1 to 63 characters.
PolicySeqNum	Sequence number of the IPsec policy	N/A	Unsigned integer. Value range: 1 to 65535.

Column name	Column description entry	Column type	Data type and restrictions

## IPsec/GlobalSAs

This table displays information about IPsec SAs.

### XML structure

```

<IPsec>
  <GlobalSAs>
    <GlobalSA>
      <TunnelID></TunnelID>
      <SAIndex></SAIndex>
      <Direction></Direction>
      <Protocol></Protocol>
      <SPI></SPI>
      <PFS></PFS>
      <AuthorityAlg></AuthorityAlg>
      <EncryptionAlg></EncryptionAlg>
      <Status></Status>
      <ProfileName></ProfileName>
    </GlobalSA>
  </GlobalSAs>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	GlobalSAs
Table type	Multi-instance table
Row name	GlobalSA
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	IPsec tunnel ID	Index	Unsigned integer.	N/A
SAIndex	SA index	Index	Unsigned integer.	N/A
Direction	SA's direction	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound</li> </ul>	
Protocol	Security protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AH.</li> <li>2—ESP.</li> </ul>	N/A
SPI	Security Parameter Index	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
PFS	Perfect Forward Secrecy	N/A	Unsigned integer.	The algorithm number is defined by IPsecCapabilities table.
AuthorityAlg	Authentication algorithm	N/A	Unsigned integer.	The algorithm number is defined by IPsecCapabilities table.
EncryptionAlg	Encryption algorithm	N/A	Unsigned integer.	The algorithm number is defined by IPsecCapabilities table.
Status	Stateful failover status of the IPsec SA	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—active.</li> <li>2—standby.</li> </ul>	N/A
ProfileName	The IPsec profile name.	N/A	String. Length: 1 to 63 characters.	N/A

## IPsec/Count

This table displays IPsec SA and Tunnel count information.

## XML structure

```

<IPsec>
  <Count>
    <SACount></SACount>
    <TunnelCount></TunnelCount>
  </Count>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	Count
Table type	Single-instance table

Item	Description
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SACount	The number of IPsec SAs	N/A	Unsigned integer.
TunnelCount	The number of IPsec tunnels	N/A	Unsigned integer.

## IPsec/GlobalStats

This table displays IPsec global statistics information.

## XML structure

```

<IPsec>
  <GlobalStats>
    <RcvPkts></RcvPkts>
    <SentPkts></SentPkts>
    <RcvBytes></RcvBytes>
    <SentBytes></SentBytes>
    <DropRcvPkts></DropRcvPkts>
    <DropSentPkts></DropSentPkts>
    <DropPktsStats>
      <NoAvailableSA></NoAvailableSA>
      <WrongSA></WrongSA>
      <InvalidLen></InvalidLen>
      <AuthFailure></AuthFailure>
      <EncapFailure></EncapFailure>
      <DecapFailure></DecapFailure>
      <Replayed></Replayed>
      <ACLCheckFailure></ACLCheckFailure>
      <MTUCheckFailure></MTUCheckFailure>
      <LoopbackLimitExceeded></LoopbackLimitExceeded>
      <CryptospeedLimitExceeded></CryptospeedLimitExceeded>
    </DropPktsStats>
  </GlobalStats>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	GlobalStats
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
RcvPkts	Number of received sent IPsec-protected packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
SentPkts	Number of sent IPsec-protected packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
RcvBytes	Number of bytes of received IPsec-protected packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
SentBytes	Number of bytes of sent IPsec-protected packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
DropRcvPkts	Number of dropped IPsec-protected received packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
DropSentPkts	Number of dropped IPsec-protected sent packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
DropPktsStats	Dropped packets statistics	Data structure	Members include: <ul style="list-style-type: none"> <li>NoAvailableSA.</li> <li>WrongSA.</li> <li>InvalidLen.</li> <li>AuthFailure.</li> <li>EncapFailure.</li> <li>DecapFailure.</li> <li>Replayed.</li> <li>ACLCheckFailure.</li> <li>MTUCheckFailure.</li> </ul>



Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>LoopbackLimitExceeded.</li> </ul>
NoAvailableSA	Number of dropped packets due to lack of available IPsec SA	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
WrongSA	Number of dropped packets due to wrong IPsec SA	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
InvalidLen	Number of dropped packets due to invalid packet length	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
AuthFailure	Number of dropped packets due to authentication failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
EncapFailure	Number of dropped packets due to encapsulation failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
DecapFailure	Number of dropped packets due to decapsulation failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
Replayed	Number of dropped replayed packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
ACLCheckFailure	Number of dropped packets due to ACL check failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
MTUCheckFailure	Number of dropped packets due to MTU check failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
LoopbackLimitExceeded	Number of dropped packets due to loopback limit exceeded	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
CryptospeedLimitExceeded	Number of dropped packets due to	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .

Column name	Column description	Column type	Data type and restrictions
	Cryptospeed exceeded		

## IPsec/TunnelStats

This table displays IPsec tunnel statistics information.

### XML structure

```

<IPsec>
  <TunnelStats>
    <Stats>
      <TunnelID></TunnelID>
      <RcvPkts></RcvPkts>
      <SentPkts></SentPkts>
      <RcvBytes></RcvBytes>
      <SentBytes></SentBytes>
      <DropRcvPkts></DropRcvPkts>
      <DropSentPkts></DropSentPkts>
      <DropPktsStats>
        <NoAvailableSA></NoAvailableSA>
        <WrongSA></WrongSA>
        <InvalidLen></InvalidLen>
        <AuthFailure></AuthFailure>
        <EncapFailure></EncapFailure>
        <DecapFailure></DecapFailure>
        <Replayed></Replayed>
        <ACLCheckFailure></ACLCheckFailure>
        <MTUCheckFailure></MTUCheckFailure>
        <LoopbackLimitExceeded></LoopbackLimitExceeded>
        <CryptospeedLimitExceeded></CryptospeedLimitExceeded>
      </DropPktsStats>
    </Stats>
  </TunnelStats>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	TunnelStats
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TunnelID	IPsec tunnel ID	Index	Unsigned integer.
RcvPkts	Number of received sent IPsec-protected packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
SentPkts	Number of sent IPsec-protected packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
RcvBytes	Number of bytes of received IPsec-protected packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
SentBytes	Number of bytes of sent IPsec-protected packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
DropRcvPkts	Number of dropped IPsec-protected received packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
DropSentPkts	Number of dropped IPsec-protected sent packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
DropPktsStats	Dropped packets statistics	Data structure	Members include: <ul style="list-style-type: none"> <li>NoAvailableSA.</li> <li>WrongSA.</li> <li>InvalidLen.</li> <li>AuthFailure.</li> <li>EncapFailure.</li> <li>DecapFailure.</li> <li>Replayed.</li> <li>ACLCheckFailure.</li> <li>MTUCheckFailure.</li> <li>LoopbackLimitExceeded.</li> </ul>
NoAvailableSA	Number of dropped packets due to lack of available IPsec SA	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
WrongSA	Number of dropped packets due to	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .

Column name	Column description	Column type	Data type and restrictions
	wrong IPsec SA		
InvalidLen	Number of dropped packets due to invalid packet length	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
AuthFailure	Number of dropped packets due to authentication failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
EncapFailure	Number of dropped packets due to encapsulation failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
DecapFailure	Number of dropped packets due to decapsulation failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
Replayed	Number of dropped replayed packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
ACLCheckFailure	Number of dropped packets due to ACL check failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
MTUCheckFailure	Number of dropped packets due to MTU check failure	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
LoopbackLimitExceeded	Number of dropped packets due to loopback limit exceeded	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .
CryptospeedLimitExceeded	Number of dropped packets due to Cryptospeed exceeded	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .

## IPsec/IPsecCapabilities

This table displays all the algorithm capabilities that the IPsec module support.

## XML structure

```
<IPsec>
  <IPsecCapabilities>
    <IPsecCapability>
      <AlgID></AlgID>
      <AlgName></AlgName>
    </IPsecCapability>
  </IPsecCapabilities>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	IPsecCapabilities
Table type	Multi-instance table
Row name	IPsecCapability
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
AlgID	IPsec supports algorithm ID	Index	Unsigned .
AlgName	IPsec supports algorithm name	N/A	String. Length: 1 to 255 characters.

## IPsec/DeviceCapabilities

This table displays the capabilities of device.

## XML structure

```
<IPsec>
  <DeviceCapabilities>
    <SupportRedundancy></SupportRedundancy>
    <SupportFlowRedirect></SupportFlowRedirect>
  </DeviceCapabilities>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	DeviceCapabilities
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SupportRedundancy	Support for redundancy	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—The device supports redundancy.</li><li><b>false</b>—The device does not support redundancy.</li></ul>
SupportFlowRedirect	Support for OpenFlow entry deployment	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—The device supports OpenFlow entry deployment.</li><li><b>false</b>—The device does not support OpenFlow entry deployment.</li></ul>

## IPsec/IsakmpProfiles

This table displays ISAKMP IPsec profile information.

## XML structure

```
<IPsec>
  <IsakmpProfiles>
    <IsakmpProfile>
      <Name></Name>
      <Description></Description>
      <TransformSetList>
        <TransformSet></TransformSet>
      </TransformSetList>
      <IkeProfileName></IkeProfileName>
      <SADuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SADuration>
      <SAIdleTime ></SAIdleTime>
      <SASoftDuration>
        <Seconds></Seconds>
        <KiloBytes></KiloBytes>
      </SASoftDuration>
    </IsakmpProfile>
  </IsakmpProfiles>
</IPsec>
```

```

    <IKEv2ProfileName></IKEv2ProfileName>
  </IsakmpProfile>
</IsakmpProfiles>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	IsakmpProfiles
Table type	Multi-instance table
Row name	IsakmpProfile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The IPsec profile name	Index	String, case-insensitive Length: 1 to 63 characters	N/A
Description	The description of the used IPsec profile	N/A	String, case-sensitive Length: 0 to 80 characters	N/A
Transform set	The name of the IPsec transform set	N/A	String, case-insensitive Length: 0 to 63 characters	N/A
IkeProfileName	The ike profile name	N/A	String, case-insensitive Length: 0 to 63 characters	N/A
SADuration	IPsec SA life time	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The time-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 180 to 604800.	N/A
KiloBytes	The traffic-based lifetime of IPsec SA	N/A	Unsigned integer. Value range: 2560 to 4294967295.	N/A
SAIdleTime	SA idle timeout function	N/A	Unsigned integer. Value range: 60 to 86400.	N/A
SASoftDuration	IPsec SA soft lifetime buffer	Data structure	Members include: <ul style="list-style-type: none"> <li>Seconds.</li> <li>KiloBytes.</li> </ul>	N/A
Seconds	The	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	time-based soft lifetime buffer of IPsec SA		Value range: 20 to 201600.	
KiloBytes	The traffic-based soft lifetime buffer of IPsec SA	N/A	Unsigned integer. Value range: 1000 to 4294901760.	N/A
IKEv2ProfileName	Specify an IKEv2 profile for the IPsec policy	N/A	String. Length: 1 to 63 characters.	N/A

## IPsec/TunnelApplyProfile

This table displays the IPsec profile name in the ADVPN configuration for the specified tunnels.

### XML structure

```

<IPsec>
  <TunnelApplyProfile>
    <ApplyProfile>
      <TunnelID></TunnelID>
      <IPsecPrfName></IPsecPrfName>
      <ACL>
        <Name></Name>
        <Number></Number>
      </ACL>
    </ApplyProfile>
  </TunnelApplyProfile>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	TunnelApplyProfile
Table type	Multi-instance table
Row name	ApplyProfile
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	The tunnel ID	Index	String, case-insensitive Length: 1 to 63 characters	N/A
IPsecPrfName	IPsec profile name	N/A	String, case-sensitive Length: 0 to 63 characters	N/A
ACL	Reference an ACL	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Number.</li> </ul>	N/A
Name	ACL name	N/A	String, case insensitive. Length: 1 to 63 characters.	N/A
Number	ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A

## IPsec/SmartVpnProfiles

This table contains smart link policy information.

### XML structure

```

<IPsec>
  <SmartVpnProfiles>
    <SmartVpnProfile>
      <Name></Name>
      <ActiveLinkID></ActiveLinkID>
      <AutoSwitchCycles></AutoSwitchCycles>
      <DetectionInterval>
        <IntervalNum></IntervalNum>
        <PacketNum></PacketNum>
        <ThresholdLoss></ThresholdLoss>
        <ThresholdDelay></ThresholdDelay>
        <SrcAddr></SrcAddr>
        <DestAddr></DestAddr>
      </DetectionInterval>
      <Enable></Enable>
      <PolicyAlias></PolicyAlias>
    </SmartVpnProfile>
  </SmartVpnProfiles>
</IPsec>

```

## Table description

Item	Description
Featurename	IPsec
Table name	SmartVpnProfiles
Table type	Multi-instance table
Row name	SmartVpnProfile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Smart link policy name	Index	String. Length: 1 to 63 characters.	N/A
ActiveLinkID	ID of the active link	N/A	Unsigned integer. Value range: 1 to 30.	N/A
AutoSwitchCycles	Maximum number of link switchover cycles	N/A	Unsigned integer. Value range: 0 to 5.	N/A
DetectionInterval	Link quality probe configuration	Data structure	Members include: <ul style="list-style-type: none"> <li>IntervalNum</li> <li>ThresholdType</li> <li>ThresholdVal</li> <li>SrcAddr</li> <li>DestAddr</li> </ul>	N/A
IntervalNum	Probe packet sending interval	N/A	Unsigned integer. Value range: 1 to 3, in seconds.	N/A
PacketNum	Number of probe packets sent in each probe cycle	N/A	Unsigned integer. Value range: 1 to 30.	N/A
ThresholdLoss	Packet loss ratio threshold	N/A	Unsigned integer. Value range: 1 to 100, in percentages.	N/A
ThresholdDelay	Delay threshold	N/A	Unsigned integer. Value range: 1 to 3000, in milliseconds.	N/A
SrcAddr	Source IP address for link quality probe packets	N/A	String, dotted decimal notation.	N/A
DestAddr	Destination IP address for link quality probe packets	N/A	String, dotted decimal notation.	N/A
Enable	Whether the smart link policy is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyAlias	Policy alias	N/A	String. Length: 1 to 63 characters.	N/A

## IPsec/SmartVpnGateways

This table contains gateway information for local interfaces of the links.

### XML structure

```

<IPsec>
  <SmartVpnGateways>
    <SmartVpnGateway>
      <IfIndex></IfIndex>
      <GatewayAddr></GatewayAddr>
      <NoRouteEnable></NoRouteEnable>
    </SmartVpnGateway>
  </SmartVpnGateways>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	SmartVpnGateways
Table type	Multi-instance table
Row name	SmartVpnGateway
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
GatewayAddr	Gateway address	N/A	String, dotted decimal notation.	Example: 2.2.2.2.
NoRouteEnable	Whether no route is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

# IPsec/SmartVpnLinkLists

This table contains basic link list information of a smart link policy.

## XML structure

```
<IPsec>
  <SmartVpnLinkLists>
    <SmartVpnLinkList>
      <ProfileName></ProfileName>
      <LinkID></LinkID>
      <IfIndex></IfIndex>
      <LinkLocalAddr></LinkLocalAddr>
      <LinkNextHop></LinkNextHop>
      <LinkRemote></LinkRemote>
      <Loss></Loss>
      <Delay></Delay>
    </SmartVpnLinkList>
  </SmartVpnLinkLists>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	SmartVpnLinkLists
Table type	Multi-instance table
Row name	SmartVpnLinkList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Smart link policy name	Index	String Length: 1 to 63 characters.	N/A
LinkID	Link ID	Index	Unsigned integer. Value range: 1 to 10.	N/A
IfIndex	Interface index	N/A	Unsigned integer.	N/A
LinkLocalAddr	Local IPv4 address of the link	N/A	String, dotted decimal notation.	Example: 2.2.2.2.
LinkNextHop	Next hop IPv4 address of the link	N/A	String, dotted decimal notation.	Example: 2.2.2.2.

Column name	Column description	Column type	Data type and restrictions	Remarks
LinkRemote	Remote IPv4 address of the link	N/A	String, dotted decimal notation.	Example: 2.2.2.2.
Loss	Packet loss ratio threshold	N/A	Unsigned integer. Value range: 1 to 100, in percentages.	N/A
Delay	Delay threshold	N/A	Unsigned integer. Value range: 1 to 3000, in milliseconds.	N/A

## IPsec/InterfacesNoNat

This table contains the IPsec no NAT feature status information.

### XML structure

```

<IPsec>
  <InterfacesNoNat>
    <InterfaceNoNat>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </InterfaceNoNat>
  </InterfacesNoNat>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	InterfacesNoNat
Table type	Multi-instance table
Row name	InterfaceNoNat
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see "Appendix"

Column name	Column description	Column type	Data type and restrictions	Remarks
				in Ifmgr NETCONF XML API Configuration Reference.
Enable	Enabling status of no-NAT processing	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## IPsec/DiagnoseItem

This table displays the diagnostic data for IPsec.

### XML structure

```

<IPsec>
  <DiagnoseItems>
    <DiagnoseItems>
      <ItemID></ItemID>
      <Result></Result>
      <ItemName></ItemName>
      <Reason></Reason>
    </DiagnoseItems>
  </DiagnoseItems>
</IPsec>

```

### Table description

Item	Description
Feature name	IPsec
Table name	DiagnoseItems
Table type	Multi-instance table
Row name	DiagnoseItem
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ItemID	Diagnostic item ID	Index	Unsigned integer.
Result	Result of the diagnostic	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Succeeded.</li> <li><b>1</b>—Failed.</li> </ul>
ItemName	Diagnostic item	N/A	String.

Column name	Column description	Column type	Data type and restrictions
	name		Length: 1 to 63 characters.
Reason	Reason for failure	N/A	String. Length: 1 to 1023 characters.

## IPsec/DiagnoseState

This table displays IPsec diagnostic state.

### XML structure

```
<IPsec>
  <DiagnoseState>
    <State></State>
  </DiagnoseState>
</IPsec>
```

### Table description

Item	Description
Feature name	IPsec
Table name	DiagnoseState
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
State	Diagnostic state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Diagnosing.</li> <li><b>false</b>—Finished.</li> </ul>

## IPsec/P2MPTunnels

This table displays IPsec P2MP tunnels information.

### XML structure

```
<IPsec>
  <P2MPTunnels>
```

```

<P2MPTunnel>
  <TunnelID></TunnelID>
  <AddrType></AddrType>
  <PrivateDestAddr></PrivateDestAddr>
  <PublicDestAddr></PublicDestAddr>
  <PublicDestPort></PublicDestPort>
  <CreateTime></CreateTime>
</P2MPTunnel>
</P2MPTunnels>
</IPsec>

```

## Table description

Item	Description
Feature name	IPsec
Table name	P2MPTunnels
Table type	Multi-instance table
Row name	P2MPTunnel
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer.	N/A
AddrType	IP protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 address</li> <li>2—IPv6 address.</li> </ul>	N/A
PrivateDest Addr	Private destination IP address of the IPsec P2MP tunnel	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
PublicDest Addr	Public destination IP address of the IPsec P2MP tunnel	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
PublicDest Port	Public destination port number of the IPsec P2MP tunnel	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CreateTime	Existing time (in seconds) of the IPsec P2MP tunnel	N/A	Unsigned integer.	N/A



# IPsec/P2MPTunnelCounts

This table displays IPsec P2MP tunnel count information.

## XML structure

```
<IPsec>
  <P2MPTunnelCounts>
    <P2MPTunnelCount>
      <TunnelID></TunnelID>
      <AddrType></AddrType>
      <SpokeCount></SpokeCount>
    </P2MPTunnelCount>
  </P2MPTunnelCounts>
</IPsec>
```

## Table description

Item	Description
Feature name	IPsec
Table name	P2MPTunnelCounts
Table type	Multi-instance table
Row name	P2MPTunnelCount
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer.	N/A
AddrType	IP protocol type	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPv4 address</li><li>2—IPv6 address.</li></ul>	N/A
SopkeCount	Number of IPsec P2MP tunnels	N/A	Unsigned integer.	N/A

# Contents

Comware 7 IPsec NETCONF XML API Error Message Reference .....	1
IPsec/ IPv4ISAKMPPolicies .....	1
IPsec/SmartVpnProfile .....	1
IPsec/SmartVpnLinkLists .....	1
IPsec/ SmartVpnMoveLinks .....	2
IPsec/ SmartVpnActiveLinks .....	2

# Comware 7 IPsec NETCONF XML API Error Message Reference

## IPsec/ IPv4ISAKMPPolicies

Message	Explanation
Operation failed. The smart link policy is already assigned to another IPsec policy. 操作失败，该智能选路策略已经被另一个IPsec安全策略引用。	An IPsec smart link policy can only be assigned to one IPsec policy. 一个智能选路策略只能被一个IPsec策略引用。
The specified smart link policy doesn't exist. 指定的智能选路策略不存在。	You must specify an existing IPsec smart link policy by its name. 指定的IPsec智能选路策略必须已存在。

## IPsec/SmartVpnProfile

Message	Explanation
Maximum number of smart link policies already reached. 已达到智能选路策略个数的最大值。	The device supports a maximum of three IPsec smart link policies. 一台设备中最多支持配置3个IPsec智能选路策略。
The policy have bound a smart-link policy,please undo it firstly. 该策略已绑定智能选路策略，请先解除绑定。	An IPsec policy can use only one IPsec smart link policy. 一个IPsec安全策略只能引用一个IPsec智能选路策略。
IP address is not match,please try again. IP地址不匹配，请再次尝试。	When you remove the source and destination IP addresses configured for link quality probe packets, you must specify correct IP addresses . 删除IPsec智能选路链路探测的源IP地址和目的IP地址时，需要指定正确的IP地址。

## IPsec/SmartVpnLinkLists

Message	Explanation
Link is active, can not modify. 链路处于激活状态，不能修改。	Link can't be modified when it's active. 链路处在激活状态时不支持修改配置。
The same link has exist. 智能选路策略中已经存在相同的链路。	The link is already configured, can't be configured again. 该链路已经存在，不能再次配置。
Failed to configure the link. The maximum number of interfaces used by the links in the policy was already reached. 策略中链路使用的接口数达到最大值，链路创建失败。	A maximum of 10 links can be configured in an IPsec smart link policy. 一个IPsec智能选路策略下最多可配置10条链路。
Failed to configure the link. The maximum number	A maximum of 3 remote IP addresses can be configured in an

<p>of remote IP addresses used by the links in the policy was already reached.</p> <p>策略中链路使用的目的地址数达到最大值，链路创建失败。</p>	<p>IPsec smart link policy.</p> <p>一个IPsec智能选路策略下最多可配置3个目的IP地址。</p>
<p>Failed to configure the link. The specified remote address is already used by another enabled smart link policy.</p> <p>指定的目的地址已经被另一个智能选路策略使用，链路创建失败。</p>	<p>A remote IP address can be used by only one IPsec smart link policy.</p> <p>一个目的IP地址只能使用在一个IPsec智能选路策略中。</p>

## IPsec/ SmartVpnMoveLinks

Message	Explanation
<p>The specified link doesn't exist.</p> <p>指定的链路不存在。</p>	<p>A link must be configured before you move it.</p> <p>指定链路不存在，无法移动。</p>
<p>Can't move the link because it is in active state.</p> <p>链路处于激活状态，不能移动。</p>	<p>An active link can't be moved.</p> <p>链路处在激活状态时不支持移动。</p>

## IPsec/ SmartVpnActiveLinks

Message	Explanation
<p>The specified link doesn't exist.</p> <p>指定的链路不存在。</p>	<p>The link must be configured before you activate it.</p> <p>指定链路不存在，无法激活。</p>
<p>Operation failed. The link is currently in active state.</p> <p>操作失败，该链路已经激活。</p>	<p>An active link does not to be activated again.</p> <p>链路处在激活状态时不需要再次激活。</p>

# Contents

IPV4ADDRESS .....	1
IPV4ADDRESS/IPv4Addresses .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPV4ADDRESS/IPv4AddressPPPNegotiate .....	2
XML Structure .....	2
Table description .....	2
Columns .....	2
IPV4ADDRESS/ IPv4AddressCellular .....	3
XML Structure .....	3
Table description .....	3
Columns .....	3
IPV4ADDRESS/IPv4AddressUnnumbered .....	4
XML Structure .....	4
Table description .....	4
Columns .....	5

# IPV4ADDRESS

## IPV4ADDRESS/Ipv4Addresses

This table contains information about IPv4 addresses.

### XML structure

```
<IPV4ADDRESS>
  <Ipv4Addresses>
    <Ipv4Address>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
      <AddressOrigin></AddressOrigin>
    </Ipv4Address>
  </Ipv4Addresses>
</IPV4ADDRESS>
```

### Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	Ipv4Addresses
Table type	Multi-instance table
Row name	Ipv4Address
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4Address	IPv4 address.	Index	String, dotted decimal notation.	N/A
Ipv4Mask	IPv4 address mask.	N/A	String, dotted decimal notation.	N/A
AddressOrigin	The way how the IPv4 address is obtained.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Manual.</li> <li>2—Manual-sub.</li> </ul>	N/A

## IPV4ADDRESS/IPv4AddressPPPNegotiate

This table achieves IPv4 address allocation through PPP negotiation.

### XML Structure

```

<IPV4ADDRESS>
  <IPv4AddressPPPNegotiate>
    <AddressPPPNegotiate>
      <IfIndex></IfIndex>
      <ConfigOption></ConfigOption>
    </AddressPPPNegotiate>
  </IPv4AddressPPPNegotiate>
</IPV4ADDRESS>

```

### Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	AddressPPPNegotiate
Table type	Multi-instance table
Row name	AddressPPPNegotiate
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
ConfigOption	Whether the PPP Negotiate function is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false (default)</b></li> </ul>	After PPP negotiation is enabled on the interface, the IP address assigned to the interface will be deleted.

## IPV4ADDRESS/ IPv4AddressCellular

This table achieves IPv4 address allocation through cellular.

### XML Structure

```

<IPV4ADDRESS>
  <IPv4AddressCellular>
    <AddressCellular>
      <IfIndex></IfIndex>
      <ConfigOption></ConfigOption>
    </AddressCellular>
  </IPv4AddressCellular>
</IPV4ADDRESS>

```

### Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	IPv4AddressCellular
Table type	Multi-instance table
Row name	AddressCellular
Restrictions	This table supports only ethernet channel interfaces.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	NameAndIndexUnion.	Only ethernet channel interfaces are



Column name	Column description	Column type	Data type and restrictions	Remarks
				supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
ConfigOption	Whether the Cellular function is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false (default)</b></li> </ul>	After Cellular is enabled on the interface, the IP address assigned to the interface will be deleted.

## IPV4ADDRESS/IPv4AddressUnnumbered

This table achieves IPv4 address which is shared with another interface.

### XML Structure

```

<IPV4ADDRESS>
  <IPv4AddressUnnumbered>
    <AddressUnnumbered>
      <IfIndex></IfIndex>
      <UnnumberedIfIndex></UnnumberedIfIndex>
    </AddressUnnumbered>
  </IPv4AddressUnnumbered>
</IPV4ADDRESS>

```

### Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	IPv4AddressUnnumbered
Table type	Multi-instance table
Row name	AddressUnnumbered
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
UnnumberedIfIndex	Interface index.	N/A	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

# Contents

IPV4ADDRESS .....	1
IPV4ADDRESS/IPv4Addresses .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPV4ADDRESS/ Ip4AddressSpecification .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
IPV4ADDRESS/IPv4AddressPPPNegotiate .....	3
.XML Structure .....	3
Table description .....	3
Columns .....	3
IPV4ADDRESS/ IPv4AddressCellular .....	4
XML Structure .....	4
Table description .....	4
Columns .....	4
IPV4ADDRESS/IPv4AddressUnnumbered .....	5
XML Structure .....	5
Table description .....	5
Columns .....	5

# IPV4ADDRESS

## IPV4ADDRESS/IPv4Addresses

This table contains IPv4 address information.

### XML structure

```
<IPV4ADDRESS>
  <Ipv4Addresses>
    <Ipv4Address>
      <IfIndex></IfIndex>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
      <AddressOrigin></AddressOrigin>
    </Ipv4Address>
  </Ipv4Addresses>
</IPV4ADDRESS>
```

### Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	Ipv4Addresses
Table type	Multi-instance table
Row name	Ipv4Address
Restrictions	This table supports only Layer 3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
Ipv4Address	IPv4 address.	Index	String, dotted decimal notation.	N/A
Ipv4Mask	IPv4 address mask.	N/A	String, dotted decimal notation.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressOrigin	The way how the IPv4 address is obtained.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Other.</li> <li>• 1—Manual.</li> <li>• 2—Manual-sub.</li> <li>• 3—DHCP.</li> <li>• 4—BOOTP.</li> <li>• 5—Negotiate.</li> <li>• 6—Unnumbered.</li> <li>• 7—VRRP.</li> <li>• 8—Cellular.</li> <li>• 9—MAD.</li> </ul>	N/A

## IPV4ADDRESS/ Ipv4AddressSpecification

This table contains IPv4 address specification information.

### XML structure

```

<IPV4ADDRESS>
  <Ipv4AddressSpecification>
    <SupportDHCP></SupportDHCP>
  </Ipv4AddressSpecification>
</IPV4ADDRESS>

```

### Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	Ipv4AddressSpecification
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportDHCP	Support for DHCP client.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

# IPV4ADDRESS/IPv4AddressPPPNegotiate

This table achieves IPv4 address allocation through PPP negotiation

## .XML Structure

```
<IPV4ADDRESS>
  <IPv4AddressPPPNegotiate>
    <AddressPPPNegotiate>
      <IfIndex></IfIndex>
      <ConfigOption></ConfigOption>
    </AddressPPPNegotiate>
  </IPv4AddressPPPNegotiate>
</IPV4ADDRESS>
```

## Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	AddressPPPNegotiate
Table type	Multi-instance table
Row name	AddressPPPNegotiate
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
ConfigOption	Whether the PPP Negotiate function is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false (default)</b></li></ul>	N/A.

# IPV4ADDRESS/ IPv4AddressCellular

This table achieves IPv4 address allocation through cellular.

## XML Structure

```
<IPV4ADDRESS>
  <IPv4AddressCellular>
    <AddressCellular>
      <IfIndex></IfIndex>
      <ConfigOption></ConfigOption>
    </AddressCellular>
  </IPv4AddressCellular>
</IPV4ADDRESS>
```

## Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	IPv4AddressCellular
Table type	Multi-instance table
Row name	AddressCellular
Restrictions	This table supports only ethernet channel interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	NameAndIndexUnion.	Only ethernet channel interfaces are supported.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
ConfigOption	Whether the Cellular function is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false (default)</b></li></ul>	After Cellular is enabled on the interface, the IP address assigned to the interface will be deleted.

# IPV4ADDRESS/IPv4AddressUnnumbered

This table achieves IPv4 address which is shared with another interface.

## XML Structure

```
<IPV4ADDRESS>
  <IPv4AddressUnnumbered>
    <AddressUnnumbered>
      <IfIndex></IfIndex>
      <UnnumberedIfIndex></UnnumberedIfIndex>
    </AddressUnnumbered>
  </IPv4AddressUnnumbered>
</IPV4ADDRESS>
```

## Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	IPv4AddressUnnumbered
Table type	Multi-instance table
Row name	AddressUnnumbered
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
UnnumberedIfIndex	Interface index.	N/A	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For



Column name	Column description	Column type	Data type and restrictions	Remarks
				information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

## IPV4ADDRESS/IPv4AddressInterfaceRelation

This table contains IPv4 address and interface relation information.

### XML structure

```

<IPV4ADDRESS>
  <Ipv4AddressInterfaceRelation>
    <AddressInterfaceRelation>
      <VrfIndex></VrfIndex>
      <Ipv4Address></Ipv4Address>
      <AddressOrigin></AddressOrigin>
      <IfIndex></IfIndex>
    </AddressInterfaceRelation>
  </Ipv4AddressInterfaceRelation>
</IPV4ADDRESS>

```

### Table description

Item	Description
Feature name	IPV4ADDRESS
Table name	IPv4AddressInterfaceRelation
Table type	Multi-instance table
Row name	AddressInterfaceRelation
Restrictions	N/A

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Index of the VPN instance.	Index	Unsigned integer.	The value of 0 specifies the public network. Some versions support VRF name. For relevant

Column name	Column description	Column type	Data type and restrictions	Remarks
				information, see the XSD document of your product. For information about VrflIndex, see L3vpn in L3vpn NETCONF XML API Data Reference.
Ipv4Address	IPv4 address.	Index	String, dotted decimal notation.	It must be a host ip address.
AddressOrigin	The way how the IPv4 address is obtained.	Index	Enumeration: <b>1</b> —Manual. <b>2</b> —Manual-sub. <b>3</b> —DHCP. <b>4</b> —BOOTP. <b>5</b> —Negotiate. <b>6</b> —Unnumbered. <b>7</b> —VRRP.	N/A
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.

# Contents

IPV4ADDRESS .....	2
IPV4ADDRESS/IPv4Addresses .....	2
IPV4ADDRESS/IPv4AddressUnnumbered .....	2

# IPV4ADDRESS

## IPV4ADDRESS/IPv4Addresses

Message	Explanation
Invalid IP address or subnet mask. 无效IP地址或掩码长度。	Invalid IP address or subnet mask. 无效IP地址或掩码长度。
Maximum number of IP addresses already reached. 接口下已配置的IP地址个数达到上限。	Maximum number of IP addresses already reached. 接口下已配置的IP地址个数达到上限。
Address types don't match. IP地址类型不匹配。	Address types don't match. 删除地址时，类型不匹配。
The IP address doesn't exist. 该IP地址不存在。	The IP address doesn't exist, when getting or deleting it. 删除或获取地址时，该地址不存在。
Can't change the primary IP address to a secondary IP address. 不能直接将主IP地址转换成从IP地址。	Can't change the primary IP address to a secondary IP address. 不能直接将主IP地址转换成从IP地址。
The subnet overlaps with another interface. 与其他接口IP地址冲突。	The subnet overlaps with another interface. 与其他接口IP地址冲突。
Operation failed. 操作失败。	Failed to send the message. 发消息失败。
This IP address has been assigned to the management Ethernet interface on another MDC. 该IP地址已经被其它MDC的管理以太网接口占用。	This IP address has been assigned to the management Ethernet interface on another MDC. 该IP地址已经被其它MDC的管理以太网接口占用。
The configuration doesn't meet the requirements. 不符合配置要求。	The specified configuration must be empty, when deleting or removing. Or column incomplete when creating or replacing. 删除表项时，地址管理表项特殊，不支持单独恢复属性为默认值或者Create操作和Replace操作，普通列参数不齐全。

## IPV4ADDRESS/IPv4AddressUnnumbered

Message	Explanation
Operation failed. 操作失败。	Failed to send message. 发消息失败。
Invalid lend interface! 被借用接口无效！	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。
Can't borrow an IP address from an IP unnumbered interface. 被借用的接口已经配置了地址借用。	Can't borrow an IP address from an IP unnumbered interface. 被借用IP地址的接口已经配置了地址借用功能。
Can't configure IP unnumbered on the interface	Can't configure IP unnumbered on the interface that has lent its IP

that has lent its IP address to another interface. 本接口已经被其它接口配置借用，不能配置地址借用。	address to another interface. 本接口的地址已经被其它接口借用，不能配置地址借用功能。
Can't borrow an IP address from itself. 不能借用本接口的IP地址。	Can't borrow an IP address from itself. 不能借用本接口的IP地址。

# Contents

IPv4Address event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	1

# IPv4Address event

This event is used to report IPv4 address information when the IPv4 address of interface is changed.

## XML structure for event subscription

```
<IPv4AddressEvent>
  <IPv4Address>
    <Name></Name>
  </IPv4Address>
</IPv4AddressEvent>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>IPv4Address</stream>
    <filter type="subtree">
      <IPv4AddressEvent xmlns="http://www.h3c.com/netconf/event:1.0/IPv4Address:1.0">
        <IPv4Address>
          <Name>GigabitEthernet2/0/1</Name>
        </IPv4Address>
      </IPv4AddressEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	IPv4Address
Event name	IPv4AddressEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/IPv4Address:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Name	Interface name	String. Length: 1 to 47 characters.	No

## XML structure for event report

```
<IPv4AddressEvent>
  <IPv4Address>
```

```

    <Name></Name>
    <Ipv4Address></Ipv4Address>
    <Ipv4Mask></Ipv4Mask>
    <AddressOrigin></AddressOrigin>
    <AddressStatus></AddressStatus>
    <AddressEvent></AddressEvent>
  </IPv4Address>
</IPv4AddressEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <IPv4AddressEvent xmlns="http://www.h3c.com/netconf/event:1.0/IPv4Address:1.0">
    <IPv4Address>
      <Name>GigabitEthernet2/0/1</Name>
      <Ipv4Address>1.1.1.1</Ipv4Address>
      <Ipv4Mask>255.255.255.0</Ipv4Mask>
      <AddressOrigin>1</AddressOrigin>
      <AddressStatus>1</AddressStatus>
      <AddressEvent>1</AddressEvent>
    </IPv4Address>
  </IPv4AddressEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Name	Interface name	String. Length: 1 to 47 characters.	No
Ipv4Address	IPv4 address	String, dotted decimal notation.	No
Ipv4Mask	IPv4 address mask	String, dotted decimal notation.	No
AddressOrigin	The way how the IPv4 address is obtained	Enumeration: <ul style="list-style-type: none"> <li>• 1—Manual</li> <li>• 2—Manual-sub</li> <li>• 3—DHCP</li> <li>• 4—BOOTP</li> <li>• 5—Negotiate</li> <li>• 6—Unnumbered</li> <li>• 7—VRRP</li> <li>• 8—Cellular</li> <li>• 9—MAD</li> </ul>	No



Column name	Column description	Data type and restrictions	Support for extended queries
AddressStatus	IPv4 address status	<ul style="list-style-type: none"> <li>• 1—Active</li> <li>• 2---InActive</li> </ul>	No
AddressEvent	IPv4 address event	<ul style="list-style-type: none"> <li>• 1—Add</li> <li>• 2—Delete</li> <li>• 3—Update</li> </ul>	No

# Contents

IPV6ADDRESS .....	1
IPV6ADDRESS/lpv6AddressesConfig.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
IPV6ADDRESS/lpv6AddressesAuto .....	2
XML structure.....	2
Table description.....	3
Columns.....	3

# IPV6ADDRESS

## IPV6ADDRESS/Ipv6AddressesConfig

This table contains configuration information about IPv6 addresses.

### XML structure

```
<IPV6ADDRESS>
  <Ipv6AddressesConfig>
    <AddressEntry>
      <IfIndex></IfIndex>
      <Ipv6Address></Ipv6Address>
      <AddressOrigin></AddressOrigin>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <AnycastFlag></AnycastFlag>
    </AddressEntry>
  </Ipv6AddressesConfig>
</IPV6ADDRESS>
```

### Table description

Item	Description
Feature name	IPV6ADDRESS
Table name	Ipv6AddressesConfig
Table type	Multi-instance table
Row name	AddressEntry
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration

Column name	Column description	Column type	Data type and restrictions	Remarks
				Reference.
Ipv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	It must be configured as valid IPv6 prefix when the AddressOrigin column is 2.
AddressOrigin	The way how the IPv6 address is obtained.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—AssignedIP.</li> <li>2—AssignedEUI64IP.</li> <li>3—LinklocalIP.</li> </ul>	N/A
Ipv6PrefixLength	Length of the IPv6 prefix.	N/A	Unsigned integer. Value range: 1 to 128.	<p>Required when the AddressOrigin column is 1 or 2.</p> <p>Optional when the AddressOrigin column is 3.</p> <p>Value range is 1 to 64 when the AddressOrigin column is 2.</p> <p>Value range is 10 to 128 when the AddressOrigin column is 3.</p> <p>The delete and remove operations do not support this column except that the AddressOrigin column is 3.</p> <p>The merge, create, and replace operations must include this column except that the AddressOrigin column is 3.</p>
AnycastFlag	Whether the IPv6 address is an anycast address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false (default)</li> </ul>	<p>It can not be configured when the AddressOrigin column is 2 or 3.</p> <p>Can not be modified.</p> <p>The delete and remove operations do not support this column.</p> <p>The merge, create, and replace operations must include this column.</p>

## IPV6ADDRESS/Ipv6AddressesAuto

This table contains the information about IPv6 addresses autoconfiguration.

### XML structure

<IPV6ADDRESS>

```

<Ipv6AddressesAuto>
  <AutoAddress>
    <IfIndex></IfIndex>
    <Auto></Auto>
    <AutoLinkLocal></AutoLinkLocal>
  </AutoAddress>
</Ipv6AddressesAuto>
</IPV6ADDRESS>

```

## Table description

Item	Description
Feature name	IPV6ADDRESS
Table name	Ipv6AddressesAuto
Table type	Multi-instance table
Row name	AutoAddress
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Auto	Whether the stateless address autoconfiguration function is enabled on an interface.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A
AutoLinkLocal	Whether or not generate a link-local address on an interface automatically.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	N/A

# Contents

IPV6ADDRESS .....	1
IPV6ADDRESS/Ipv6AddressesConfig .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
IPV6ADDRESS/Ipv6AddressesAuto .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
IPV6ADDRESS/IPv6Addresses .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
IPV6ADDRESS/ Ipv6AddressSpecification .....	4
XML structure .....	4
Table description .....	4
Columns .....	4

# IPV6ADDRESS

## IPV6ADDRESS/Ipv6AddressesConfig

This table contains configuration information about IPv6 addresses.

### XML structure

```
<IPV6ADDRESS>
  <Ipv6AddressesConfig>
    <AddressEntry>
      <IfIndex></IfIndex>
      <Ipv6Address></Ipv6Address>
      <AddressOrigin></AddressOrigin>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <AnycastFlag></AnycastFlag>
    </AddressEntry>
  </Ipv6AddressesConfig>
</IPV6ADDRESS>
```

### Table description

Item	Description
Feature name	IPV6ADDRESS
Table name	Ipv6AddressesConfig
Table type	Multi-instance table
Row name	AddressEntry
Restrictions	This table supports only Layer 3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
Ipv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A
AddressOrigin	The way how the IPv6 address is obtained.	Index	Enumeration: <ul style="list-style-type: none"><li>1—AssignedIP.</li><li>2—AssignedEUI64IP.</li><li>3—LinklocalIP.</li></ul>	N/A
Ipv6PrefixLength	Length of the IPv6 prefix.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 1 to 128.	
AnycastFlag	Whether the IPv6 address is an anycast address.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## IPV6ADDRESS/Ipv6AddressesAuto

This table contains the information about IPv6 addresses autoconfiguration.

### XML structure

```

<IPV6ADDRESS>
  <Ipv6AddressesAuto>
    <AutoAddress>
      <IfIndex></IfIndex>
      <Auto></Auto>
      <AutoLinkLocal></AutoLinkLocal>
    </AutoAddress>
  </Ipv6AddressesAuto>
</IPV6ADDRESS>

```

### Table description

Item	Description
Feature name	IPV6ADDRESS
Table name	Ipv6AddressesAuto
Table type	Multi-instance table
Row name	AutoAddress
Restrictions	This table supports only Layer 3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
Auto	Whether the stateless address autoconfiguration function is enabled on an interface.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
LinkLocal	Whether or not generate a link-local address on an interface automatically.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## IPV6ADDRESS/IPv6Addresses

This table contains information about IPv6 addresses.

### XML structure

```

<IPV6ADDRESS>
  <Ipv6Addresses>
    <AddressEntry>
      <IfIndex></IfIndex>
      <Ipv6Address></Ipv6Address>
      <AddressOrigin></AddressOrigin>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <AnycastFlag></AnycastFlag>
    </AddressEntry>
  </Ipv6Addresses>
</IPV6ADDRESS>

```

### Table description

Item	Description
Feature name	IPV6ADDRESS
Table name	Ipv6Addresses
Table type	Multi-instance table
Row name	AddressEntry
Restrictions	This table supports only Layer 3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
Ipv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressOrigin	The way how the IPv6 address is obtained.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—AssignedIP.</li> <li>2—AssignedEUI64IP.</li> <li>3—LinklocalIP.</li> <li>4—AssignedAutolP.</li> <li>5—DHCPv6.</li> </ul>	N/A
Ipv6PrefixLength	Length of the IPv6 prefix.	N/A	Unsigned integer. Value range: 1 to 128.	N/A
AnycastFlag	Whether the IPv6 address is an anycast address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## IPV6ADDRESS/ Ipv6AddressSpecification

This table contains IPv6 address specification information.

### XML structure

```

<IPV6ADDRESS>
  <Ipv6AddressSpecification>
    <SupportDHCPv6></SupportDHCPv6>
  </Ipv6AddressSpecification>
</IPV6ADDRESS>

```

### Table description

Item	Description
Feature name	IPV6ADDRESS
Table name	Ipv6AddressSpecification
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportDHCPv6	Support for IPv6 DHCP client.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A



# Contents

IPV6ADDRESS .....1

IPV6ADDRESS/Ipv6AddressesConfig..... 1

# IPV6ADDRESS

## IPV6ADDRESS/Ipv6AddressesConfig

Message	Explanation
The IPv6 address conflicts with the IPv6 address of another interface. 该IPv6地址与其它接口IPv6地址冲突。	The IPv6 address conflicts with the IPv6 address of another interface. 该 IPv6 地址与其它接口下已经配置的 IPv6 地址冲突。
The prefix length can't be greater than 64. 前缀长度不应该超过64位。	The prefix length can't be greater than 64. 为接口配置EUI-64格式的 global 单播地址时，前缀长度取值不能大于64。
Can't assign the IPv6 unspecified address. 不能配置一个IPv6未指定地址。	Can't assign the IPv6 unspecified address. 不能将未指定地址配置为接口的 global 单播地址。
Can't assign the IPv6 loopback address. 不能配置一个IPv6环回地址。	Can't assign the IPv6 loopback address. 不能将环回地址配置为接口的 global 单播地址。
Can't assign an IPv6 multicast address. 不能配置一个IPv6组播地址。	Can't assign an IPv6 multicast address. 不能将组播地址配置为接口的 global 单播地址。
Can't assign a reserved IPv6 subnet anycast address. 不能配置一个子网路由任播地址。	Can't assign a reserved IPv6 subnet anycast address. 不能将子网路由任播地址配置为接口的 global 单播地址。
Can't assign an IPv6 link-local address. 不能配置一个链路本地地址。	Can't assign an IPv6 link-local address. 不能将链路本地地址配置为接口的 global 单播地址。
Invalid IPv6 link-local address. 非法的链路本地地址。	Invalid IPv6 link-local address. 配置的链路本地地址无效，链路本地地址的前缀是 FE80::/10。
Maximum number of IPv6 addresses on the interface already reached. 该接口下配置的IPv6地址总个数超过上限。	Maximum number of IPv6 addresses on the interface already reached. 该接口下配置的单播地址总数超过上限。缺省情况下，接口下可配置的单播地址总数为32，具体取值产品可定制。
The IPv6 global unicast address conflicts with the anycast address on the interface. 接口上的IPv6 global 单播地址和任播地址冲突。	The IPv6 global unicast address conflicts with the anycast address on the interface. 接口上的IPv6 global 单播地址和任播地址冲突。
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The specified configuration must be empty, when deleting or removing. Or column incomplete when creating or replacing. 创建地址时，下发的请求中要包含索引列和非索引列。 删除地址时，下发的请求中只能包含索引列，不能包含非索引列。
Invalid IPv6 prefix. 非法的IPv6前缀。	Invalid configuration, please modify configuration under the guidance. 为接口配置EUI-64格式的 global 单播地址时，IPv6地址和IPv6地址前缀做与操作，结果和IPv6地址不同。
The prefix length of a link-local address must	The prefix length of a link-local address must not be less

Message	Explanation
not be less than 10. 链路本地地址的前缀长度必须不小于10。	than 10. 链路本地地址的前缀长度必须大于或等于10。

# Contents

- IPv6Address event ..... 1
  - XML structure for event subscription ..... 1
  - XML structure for event report ..... 2

# IPv6Address event

This event is used to report IPv6 address information when the IPv6 address of an interface is changed.

## XML structure for event subscription

```
<IPv6AddressEvent>
  <IPv6Address>
    <Name></Name>
  </IPv6Address>
</IPv6AddressEvent>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>IPv6Address</stream>
    <filter type="subtree">
      <IPv6AddressEvent xmlns="http://www.h3c.com/netconf/event:1.0/IPv6Address:1.0">
        <IPv6Address>
          <Name>GigabitEthernet2/0/1</Name>
        </IPv6Address>
      </IPv6AddressEvent>
    </filter>
  </create-subscription>
</rpc>
```

## Table description

Item	Description
Event stream name	IPv6Address
Event name	IPv6AddressEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/IPv6Address:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Name	Interface name	String. Length: 1 to 47 characters.	No



# XML structure for event report

```
<IPv6AddressEvent>
  <IPv6Address>
    <Name></Name>
    <Ipv6Address></Ipv6Address>
    <Ipv6PrefixLength></Ipv6PrefixLength>
    <AddressOrigin></AddressOrigin>
    <AddressStatus></AddressStatus>
    <AddressEvent></AddressEvent>
  </IPv6Address>
</IPv6AddressEvent>
```

## Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <IPv6AddressEvent xmlns="http://www.h3c.com/netconf/event:1.0/IPv6Address:1.0">
    <IPv6Address>
      <Name>GigabitEthernet2/0/1</Name>
      <Ipv6Address>1::1</Ipv6Address>
      <Ipv6PrefixLength>64</Ipv6PrefixLength>
      <AddressOrigin>1</AddressOrigin>
      <AddressStatus>1</AddressStatus>
      <AddressEvent>1</AddressEvent>
    </IPv6Address>
  </IPv6AddressEvent>
</notification>
```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Name	Interface name	String. Length: 1 to 47 characters.	No
Ipv6Address	IPv6 address	Hexadecimal string, colon-separated.	No
Ipv6PrefixLength	Length of the IPv6 prefix	Unsigned integer. Value range: 1 to 128.	No
AddressOrigin	The way how the IPv6 address is obtained	Enumeration: <ul style="list-style-type: none"><li>• 1—AssignedIP</li><li>• 2—AssignedEUI64IP</li><li>• 3—LinklocalIP</li><li>• 4—AssignedAutoIP</li><li>• 5—DHCPv6</li></ul>	No

Column name	Column description	Data type and restrictions	Support for extended queries
AddressStatus	IPv6 address status	Enumeration: <ul style="list-style-type: none"> <li>• 1—Preferred</li> <li>• 2—Deprecated</li> <li>• 3—Invalid</li> <li>• 4—Tentative</li> <li>• 5—Duplicate</li> </ul>	No
AddressEvent	IPv6 address event	Enumeration: <ul style="list-style-type: none"> <li>• 1—Add</li> <li>• 2—Delete</li> <li>• 3—Update</li> </ul>	No

# Contents

IRF.....	1
IRF/ConvertMode.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
IRF/PortConfiguration .....	2
XML structure.....	2
Table description.....	2
Columns.....	2

# IRF

## IRF/ConvertMode

This table contains IRF mode convert information.

Please save the configuration before do this action.

When you convert the IRF mode the device will reboot automatically.

## XML structure

```
<IRF>
  <ConvertMode>
    <StackMode></StackMode>
    <ConvertCfg></ConvertCfg>
  </ConvertMode>
</IRF>
```

## Table description

Item	Description
Feature name	IRF
Table name	ConvertMode
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StackMode	Stack mode will be changed to.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	true: Change to stack mode. false: Change to standalone mode. Also available in standalone mode.
ConvertCfg	Whether or not convert the configuration before change the stack mode.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	true: Convert configuration file before changing stack mode. false: Don't convert configuration file before changing stack mode. Also available in standalone mode.

# IRF/PortConfiguration

This table contains IRF port configuration activate information.

Please save the configuration before do this action.

After you activated the IRF configuration, the device maybe auto merge and reboot.

## XML structure

```
<IRF>
  <PortConfiguration>
    <Activate />
  </PortConfiguration>
</IRF>
```

## Table description

Item	Description
Feature name	IRF
Table name	PortConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Activate	Activate the current IRF configuration.	N/A	This column must be empty.	N/A

# Contents

IRF.....	1
IRF/Configuration.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
IRF/Members.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
IRF/IRFPorts.....	3
XML structure.....	4
Table description.....	4
Columns.....	4

# IRF

## IRF/Configuration

This table contains IRF global configuration information.

### XML structure

```
<IRF>
  <Configuration>
    <AutoMerge></AutoMerge>
    <AutoUpgrade></AutoUpgrade>
    <Domain></Domain>
    <LinkDelay></LinkDelay>
    <MacPersist></MacPersist>
  </Configuration>
</IRF>
```

### Table description

Item	Description
Feature name	IRF
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoMerge	State of the auto merge function	N/A	EnableState. Default: variant between products.	enable: The IRF fabric automatically reboots its member devices when it fails in the master election during an IRF fabric merge. disable: Manual reboot is required to complete an IRF fabric merge.

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoUpgrade	Status of the software auto-update function	N/A	EnableState. Default: variant between products.	enable: The master device automatically pushes its software images to the device you are adding to the IRF fabric.  disable: You must manually make sure the joining device uses the same software images as the master device. If not, the new device cannot join the IRF fabric.
Domain	Domain ID for the IRF fabric	N/A	Unsigned integer. Value range: 0 to 4294967295 Default: 0	N/A
LinkDelay	IRF link down report delay	N/A	Unsigned integer. Value range: 0 to 10000. Unit: milliseconds Default: variant between products.	If the interval is set to 0, link down events are reported without any delay.
MacPersist	IRF bridge MAC persistence setting	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Timer (default)</li> <li>2—Always</li> <li>3—No</li> </ul>	Timer: A 6 minutes timer, bridge MAC address of the IRF fabric persists for 6 minutes after the master leaves.  Always: Bridge MAC address of the IRF fabric does not change after the master leaves.  No: Bridge MAC address of the new master replaces the original one as soon as the old master leaves.

## IRF/Members

This table contains configuration of the IRF members.

## XML structure

```

<IRF>
  <Members>
    <Member>
      <MemberID></MemberID>
      <NewMemberID></NewMemberID>
      <Description></Description>
    </Member>
  </Members>
</IRF>

```



```

    <Priority></Priority>
  </Member>
</Members>
</IRF>

```

## Table description

Item	Description
Feature name	IRF
Table name	Members
Table type	Multi-instance table
Row name	Member
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MemberID	Member ID.	Index	Unsigned integer. Value range: 0 to 32. Stack mode: 1 to 32. <b>Stand-alone mode: 0.</b>	The current member ID of the device. The maximum member ID is variant between products. Also available in stand-alone mode.
NewMemberID	Member ID assigned to the device.	N/A	Unsigned integer. Value range: 1 to 32. Default: Stack mode: MemberID. Stand-alone mode: 1	This member ID takes effect at reboot. The maximum member ID is variant between products. Also available in stand-alone mode.
Description	Description for the member device.	N/A	String. Max length: 1 to 127 characters.	A string of 1 to 127 ASCII characters.
Priority	Member priority.	N/A	Unsigned integer. Value range: 1 to 32. Default: 1.	Also available in stand-alone mode.

## IRF/IRFPorts

This table contains configuration of the IRF ports.

## XML structure

```
<IRF>
  <IRFPorts>
    <IRFPort>
      <MemberID></MemberID>
      <Port></Port>
      <Interface>
        <IfName></IfName>
        <MDCName></MDCName>
        <Mode></Mode>
      </Interface>
    </IRFPort>
  </IRFPorts>
</IRF>
```

## Table description

Item	Description
Feature name	IRF
Table name	IRFPorts
Table type	Multi-instance table
Row name	IRFPort
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MemberID	Member ID	Index	Unsigned integer. Value range: Stack mode: 1 to 32. Default: 1. <b>Stand-alone mode: 0.</b>	The current member ID of the device. Also available in stand-alone mode.
Port	IRF port number	Index	Unsigned integer. Value range: 1 to 2	1: IRF port 1 2: IRF port 2 Also available in stand-alone mode.
Interface	Physical port of an IRF port	Data structure	Members: <ul style="list-style-type: none"><li>IfName</li><li>MDCName</li><li>Mode</li></ul>	Multi-instance. Maximum occurrence is MaxIfNumPerIRFPort. Also available in stand-alone mode.

Column name	Column description	Column type	Data type and restrictions	Remarks
IfName	Interface name	N/A	String. Length: 2 to 47 characters.	Physical port of an IRF port
MDCName	MDC name	N/A	Case-sensitive string. Length: 1 to 15 characters Optional	If MDCName is specified, it binds physical ports on the MDC to an IRF port.  If no MDCName is specified, it binds physical ports on the default MDC to an IRF port.
Mode	Physical IRF port mode	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Normal</li> <li>2—Enhanced</li> <li>3—Extended</li> </ul> Default: variant between products.	Normal: Sets the binding mode to normal.  Enhanced: Sets the binding mode to enhanced.  Extended: Sets the binding mode to extended.

# Contents

IRF.....	1
IRF/Capability .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
IRF/Configuration.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
IRF/Members .....	5
XML structure.....	5
Table description.....	5
Columns.....	6
IRF/IRFPorts.....	6
XML structure.....	6
Table description.....	7
Columns.....	7

# IRF

## IRF/Capability

This table contains IRF global configuration information, also available in stand-alone mode.

### XML structure

```
<IRF>
  <Capability>
    <MaxMemberCount></MaxMemberCount>
    <MaxPriority></MaxPriority>
    <MaxIfNumPerIRFPort></MaxIfNumPerIRFPort>
    <SupportedIfTypes>
      <ifTypeExt></ifTypeExt>
    </SupportedIfTypes>
    <SupportNormalPortMode></SupportNormalPortMode>
    <SupportEnhancedPortMode></SupportEnhancedPortMode>
    <SupportExtendedPortMode></SupportExtendedPortMode>
    <SupportLightIRFMode></SupportLightIRFMode>
    <SupportNormalIRFMode></SupportNormalIRFMode>
    <SupportEnhancedIRFMode></SupportEnhancedIRFMode>
    <SupportIRFModeConvert></SupportIRFModeConvert>
  </Capability>
</IRF>
```

### Table description

Item	Description
Feature name	IRF
Table name	Capability
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxMemberCount	The maximum number of members in a stack.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxPriority	The highest priority that can be configured for a member in a stack	N/A	Unsigned integer.	N/A
MaxIfNumPerIRFPort	The maximum number of physical ports in an IRF port.	N/A	Unsigned integer.	N/A
SupportedIfTypes	Indicates which physical interface type can be added to IRF port.	Data structure	Members: <ul style="list-style-type: none"> <li>ifTypeExt</li> </ul>	Multi-instance.
ifTypeExt	The physical interface type.	N/A	Unsigned integer.	ifTypeExt is referenced from Interfaces table in Ifmgr NETCONF XML API, XPath is Ifmgr/Interfaces/Interface/ifTypeExt.  Please reference to <i>Comware V7 Ifmgr NETCONF XML API Data Reference</i> .
SupportNormalPortMode	Indicates whether support normal port mode.	N/A	Boolean <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SupportEnhancedPortMode	Indicates whether support enhanced port mode.	N/A	Boolean <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SupportExtendedPortMode	Indicates whether support extended port mode.	N/A	Boolean <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SupportLightIRFMode	Indicates whether support light IRF mode.	N/A	Boolean <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SupportNormalIRFMode	Indicates whether support normal IRF mode.	N/A	Boolean <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SupportEnhancedIRFMode	Indicates whether support enhanced IRF mode.	N/A	Boolean <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SupportIRFModeConvert	Indicates whether support mode convert between IRF and stand-alone mode.	N/A	Boolean <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# IRF/Configuration

This table contains IRF global configuration information.

## XML structure

```
<IRF>
  <Configuration>
    <AutoMerge></AutoMerge>
    <AutoUpgrade></AutoUpgrade>
    <Domain></Domain>
    <LinkDelay></LinkDelay>
    <MacPersist></MacPersist>
    <MacPersistTime></MacPersistTime>
    <BridgeMac></BridgeMac>
    <TopoType></TopoType>
    <StackMode></StackMode>
    <MemberCount></MemberCount>
  </Configuration>
</IRF>
```

## Table description

Item	Description
Feature name	IRF
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoMerge	State of the auto merge function	N/A	EnableState.	enable: The IRF fabric automatically reboots its member devices when it fails in the master election during an IRF fabric merge.  disable: Manual reboot is required to complete an IRF fabric merge.

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoUpgrade	Status of the software auto-update function	N/A	EnableState.	enable: The master device automatically pushes its software images to the device you are adding to the IRF fabric.  disable: You must manually make sure the joining device uses the same software images as the master device. If not, the new device cannot join the IRF fabric.
Domain	Domain ID for the IRF fabric	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
LinkDelay	IRF link down report delay	N/A	Unsigned integer. Value range: 0 to 10000. Unit: milliseconds.	If the interval is set to 0, link down events are reported without any delay.
MacPersist	IRF bridge MAC persistence setting	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Timer</li> <li>2—Always</li> <li>3—No</li> </ul>	Timer: Enables the IRF bridge MAC address to remain unchanged for n minutes after the address owner leaves.  Always: Bridge MAC address of the IRF fabric does not change after the master leaves.  No: Bridge MAC address of the new master replaces the original one as soon as the old master leaves.
MacPersistTime	IRF bridge MAC persistence time	N/A	Unsigned integer.	n: Bridge MAC address of the IRF fabric persists for n minutes after the master leaves.
BridgeMac	IRF bridge MAC address	N/A	Specifies a MAC address in the format of xx-xx-xx-xx-xx-xx. The MAC address cannot be the all-zero or all-F MAC address, or a multicast MAC address.	N/A
TopoType	Stack topology	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Chain</li> <li>2—Ring</li> <li>3—Unconverged</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
StackMode	Current stack mode of the device	N/A	Boolean <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	true: Stack mode false: Stand-alone mode Also available in stand-alone mode.
MemberCount	The number of members currently in a stack	N/A	Unsigned integer.	N/A

## IRF/Members

This table contains configuration of the IRF members.

### XML structure

```

<IRF>
  <Members>
    <Member>
      <MemberID></MemberID>
      <NewMemberID></NewMemberID>
      <Description></Description>
      <Priority></Priority>
      <CPUMac></CPUMac>
      <Board>
        <Chassis></Chassis>
        <Slot></Slot>
        <Role></Role>
      </Board>
    </Member>
  </Members>
</IRF>

```

### Table description

Item	Description
Feature name	IRF
Table name	Members
Table type	Multi-instance table
Row name	Member
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MemberID	Member ID	index	Unsigned integer. Value range: 0 to 32. Stack mode: 1 to 32. <b>Stand-alone mode: 0.</b>	The current member ID of the device. The maximum member ID is variant between products. Also available in stand-alone mode.
NewMemberID	Member ID assigned to the device	N/A	Unsigned integer. Value range: 1 to 32.	This member ID takes effect at reboot. The maximum member ID is variant between products. Also available in stand-alone mode.
Description	Description for the member device.	N/A	String. Max length: 127	A string of 1 to 127 ASCII characters.
Priority	Member priority	N/A	Unsigned integer. Value range: 1 to 32.	Also available in stand-alone mode.
CPUMac	Member's CPU MAC address	N/A	MacAddress.	N/A
Board	Board information of the member	Data structure	Members: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>Role</li> </ul>	Multi-instance
Chassis	Chassis ID of the board	N/A	Unsigned integer. Value range: 0 to 65535.	IRF(Distributed): this value is large than zero. IRF: this value is zero.
Slot	Slot ID of the board	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Role	Board role	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Master</li> <li>2—Standby</li> <li>3—Loading</li> <li>4—Other</li> </ul>	N/A

## IRF/IRFPorts

This table contains configuration of the IRF ports.

## XML structure

```
<IRF>
  <IRFPorts>
```

```

<IRFPort>
  <MemberID></MemberID>
  <Port></Port>
  <Neighbor></Neighbor>
  <State></State>
  <Interface>
    <IfName></IfName>
    <MDCName></MDCName>
    <Mode></Mode>
    <LinkState></LinkState>
  </Interface>
  <LinkStateInMDC>
    <MDCName></MDCName>
    <State></State>
  </LinkStateInMDC>
</IRFPort>
</IRFPorts>
</IRF>

```

## Table description

Item	Description
Feature name	IRF
Table name	IRFPorts
Table type	Multi-instance table
Row name	IRFPort
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MemberID	Member ID	index	Unsigned integer. Value range: Stack mode: 1 to 32. <b>Stand-alone mode: 0.</b>	The current member ID of the device. Also available in stand-alone mode.
Port	IRF port number	index	Unsigned integer. Value range: 1 to 2	1: IRF port 1 2: IRF port 2 Also available in stand-alone mode.
Neighbor	Neighbor member ID of this device.	N/A	Unsigned integer. Value range: 1 to 32.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
State	State of the IRF port.	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Disabled</li> <li>2—Up</li> <li>3—Down</li> <li>4—Isolated</li> <li>5—Timeout</li> </ul>	N/A
Interface	Physical port of an IRF port	Data structure	Members: <ul style="list-style-type: none"> <li>IfName</li> <li>MDCName</li> <li>Mode</li> <li>LinkState</li> </ul>	Multi-instance. Maximum occurrence is MaxIfNumPerIRFPort. Also available in stand-alone mode.
IfName	Interface name	N/A	String. Length: 2 to 47 characters.	Physical port of an IRF port
MDCName	MDC name	N/A	Case-sensitive string. Length: 1 to 15 Optional	If MDCName is specified, it binds physical ports on the MDC to an IRF port. If MDCName is not specified, it binds physical ports on the default MDC to an IRF port.
Mode	Physical IRF port mode	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Normal</li> <li>2—Enhanced</li> <li>3—Extended</li> </ul>	Normal: Sets the binding mode to normal. Enhanced: Sets the binding mode to enhanced. Extended: Sets the binding mode to extended.
LinkState	Link state of the interface.	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Up</li> <li>2—Down</li> <li>3—ADM</li> <li>4—Absent</li> </ul>	Up: Link is up. Down: Link is down. ADM: The port has been manually shut down with the shutdown command. Absent: Interface module that hosts the port is not present.
LinkStateInMDC	IRF link state on MDC of the specified IRF port.	Data structure	Members: <ul style="list-style-type: none"> <li>MDCName</li> <li>State</li> </ul>	Multi-instance. Also available in stand-alone mode.
MDCName	MDC name	N/A	Case-sensitive string. Length: 1 to 15 Optional	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
State	State of the IRF port in a MDC.	N/A	Enumeration. <ul style="list-style-type: none"> <li>• 1—Up</li> <li>• 2—Down</li> <li>• 3—Timeout</li> </ul>	N/A

# Contents

- IRF.....2
  - IRF/ConvertMode.....2
  - IRF/Configuration.....2
  - IRF/PortConfiguration .....3
  - IRF/IRFPorts.....3

# IRF

## IRF/ConvertMode

Message	Explanation
The device is already in stand-alone mode. 设备正是独立运行模式。	Mode convert failed. 模式设置失败。
The device is already in IRF mode. 设备正是堆叠模式运行。	Mode convert failed. 模式设置失败。
Please disconnect the IRF connection first. 请先断开堆叠连接。	Mode convert failed. 模式设置失败。
Please try again later. 请稍后再试。	Cannot convert mode right now. 暂时无法设置。
Some files are open, please try again later. 部分文件处于打开状态，请稍后再试。	Failed to reboot. 重启失败。
Flash is in write mode, please try again later. Flash处于写模式，请稍后再试。	Failed to reboot. 重启失败。
The specified boot file does not exist. 下次启动文件不存在。	Failed to reboot. 重启失败。
System is saving configuration file, please try again later. 系统正在保存配置文件，请稍后再试。	Failed to reboot. 重启失败。
System is updating, please try again later. 系统正在升级，请稍后再试。	Failed to reboot. 重启失败。
System is busy now, please try again later. 系统忙，请稍后再试。	Failed to reboot. 重启失败。
The MDC is busy. Please try again later. MDC忙，请稍后再试。	Failed to reboot. 重启失败。
The Context is busy. Please try again later. Context忙，请稍后再试。	Failed to reboot. 重启失败。
Failed to reboot. 重启失败。	Failed to reboot. 重启失败。

## IRF/Configuration

Message	Explanation
Configuration is not support in stand-alone mode. 独立运行模式不支持该配置。	Set to irf mode first 请先切换成堆叠模式

# IRF/PortConfiguration

Message	Explanation
Configuration is not support in stand-alone mode. 独立运行模式不支持该配置。	Set to irf mode first 请先切换成堆叠模式

## IRF/IRFPorts

Message	Explanation
The IRF port and the bound physical port must be on the same device. 堆叠口及其绑定的物理接口必须在同一个设备上。	The IRF port and the bound physical port are on different devices. 堆叠口及其绑定的物理接口不在同一个设备上。
Physical port %s has been bound to another IRF port. 接口已经被绑定到另一个堆叠口中。	Bounding physical port failed. 接口绑定失败。
Please shut down interface first. 请先禁用接口。	Bounding physical port failed. 接口绑定失败。
Number of physical ports exceeded the limit. 超过了堆叠口可配置的最大物理接口数量。	Failed to add physical port. 物理口数已到最大值。
Exceed the max member ID. 超过最大的成员编号。	Exceed the max member ID. 成员编号已到最大值
This mode is not support on the IRF port. 堆叠口不支持该模式。	Failed to set mode. 设置堆叠口模式失败。
Interface is not exist. 接口不存在。	Invalid interface. 接口无效。
Interface can't be bound to an IRF port. 接口不能配置为堆叠口。	Failed to bound to an IRF port. 接口配置为堆叠口失败。
Interface doesn't belong to the specified MDC. 接口不在指定的MDC中。	Failed to bound to an IRF port. 接口配置为堆叠口失败。
Configuration failed. The interface has been configured to combine with other breakout interfaces. 配置失败因为接口下配置了using命令。	Configuration failed. 配置失败。
Configuration failed. The interface has been configured to split. 配置失败因为接口下配置了using命令。	Configuration failed. 配置失败。



# Contents

ISIS.....	1
ISIS/Instances.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
ISIS/VRFs .....	2
XML structure.....	2
Table description.....	2
Columns.....	3
ISIS/Familys .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
ISIS/Interfaces .....	5
XML structure.....	6
Table description.....	6
Columns.....	7

# ISIS

## ISIS/Instances

This table contains IS-IS instance information.

### XML structure

```
<ISIS>
  <Instances>
    <Instance>
      <Name></Name>
      <VRF></VRF>
    </Instance>
  </Instances>
</ISIS>
```

### Table description

Item	Description
Feature name	ISIS
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.
VRF	VRF name.	N/A	String. Length: 0 to 31 characters.	After an instance is created, its VRF cannot be modified. An empty string indicates the public network

# ISIS/VRFs

This table contains IS-IS VRF information.

## XML structure

```
<ISIS>
  <VRFs>
    <VRF>
      <Name></Name>
      <CostStyle>
        <Style></Style>
        <RelaxSpfLimit></RelaxSpfLimit>
      </CostStyle>
      <NetworkEntity></NetworkEntity>
      <LevelId></LevelId>
      <DistributeBgpLs>
        <InstanceId></InstanceId>
        <LevelType></LevelType>
      </DistributeBgpLs>
      <NSR></NSR>
      <SRGB>
        <Lowerbound></Lowerbound>
        <Upperbound></Upperbound>
      </SRGB>
      <MplsTe>
        <Enable></Enable>
        <LevelType></LevelType>
      </MplsTe>
    </VRF>
  </VRFs>
</ISIS>
```

## Table description

Item	Description
Feature name	ISIS
Table name	VRFs
Table type	Multi-instance table
Row name	VRF
Restrictions	None
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.
CostStyle	Cost style.	Data structure	Members include: <ul style="list-style-type: none"> <li>Style.</li> <li>RelaxSpfLimit.</li> </ul>	N/A
Style	Style ID.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—narrow (default).</li> <li>2—wide.</li> <li>3—compatible.</li> <li>4—narrow-compatible.</li> <li>5—wide-compatible.</li> </ul>	N/A
RelaxSpfLimit	Whether to accept routes with cost greater than 1023.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Accept routes with cost greater than 1023.</li> <li><b>false</b>—Does not accept routes with cost greater than 1023 (default).</li> </ul>	N/A
NetworkEntity	Configure the network entity title (NET) for an IS-IS process.	N/A	String. Length: 1 to 82 characters A NET comprises the following parts: <ul style="list-style-type: none"> <li>Area ID—With a length of 1 to 13 bytes.</li> <li>System ID—A system ID uniquely identifies a host or router in the area and has a fixed 6-byte length.</li> <li>SEL—It has a value of 0 and a fixed 1-byte length.</li> </ul>	Specifies a NET as a dotted hexadecimal string in the X....X.XXXX....XX XX.00 format. The X....X segment represents the area address, the XXXX....XXXX segment represents the system ID, and the 00 segment is the SEL. Repeat supported for 3 times.
LevelId	Router working level.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Level 1.</li> <li>2—Level 2.</li> <li>3—Level-1-2 (default).</li> </ul>	N/A
DistributeBgp Ls	Allow the device to send the link state information to bgp	Data structure	Members include: <ul style="list-style-type: none"> <li>InstanceId.</li> <li>LevelType.</li> </ul>	N/A
InstanceId	Instance Id	N/A	Unsigned integer. Value range 0 to 65535	N/A
LevelType	Level type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Level 1.</li> </ul>	N/A.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—Level 2.</li> <li>3—Level-1-2 (default).</li> </ul>	
NSR	Open the ISIS protocol NSR function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Open the ISIS protocol NSR function.</li> <li><b>false</b>—Close the ISIS protocol NSR function (default).</li> </ul>	N/A .
SRGB	Specifies range of SRGB.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>Lowerbound.</b></li> <li><b>Upperbound.</b></li> </ul>	The members of Lowerbound and Upperbound must be specified.
Lowerbound	Min value of SRGB.	N/A	Unsigned integer. Value range: 16000 to 23999. Default: 16000.	N/A
Upperbound	Max value of SRGB.	N/A	Unsigned integer. Value range: 16001 to 24000. Default: 24000.	N/A
MplsTe	MPLS traffic engineering information for IS-IS.	Data structure	Members include: <ul style="list-style-type: none"> <li>Enable.</li> <li>LevelType.</li> </ul>	The member of Enable must be specified.
Enable	Enable MPLS traffic engineering for IS-IS.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable MPLS traffic engineering for IS-IS.</li> <li><b>false</b>—Disable MPLS traffic engineering for IS-IS (default).</li> </ul>	N/A
LevelType	Level type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Level 1.</li> <li>2—Level 2.</li> <li>3—Level-1-2 (default).</li> </ul>	N/A

## ISIS/Familys

This table contains address family identifier information of IS-IS.

### XML structure

```

<ISIS>
  <Familys>
    <Family>
      <Name></Name>
      <Type></Type>
      <SrMpls></SrMpls>
      <SrAdjEnable></SrAdjEnable>
    </Family>
  </Familys>
</ISIS>

```

```

    </Famillys>
</ISIS>

```

## Table description

Item	Description
Feature name	ISIS
Table name	Famillys
Table type	Multi-instance table
Row name	Family
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	You must create an instance before merge or create type .It must be an unsigned integer in the range of 1 to 65535.
Type	Address Family Identifier	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 unicast.</li> <li>2—IPv6 unicast.</li> </ul>	N/A
SrMpls	Enable SR function based on MPLS.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable SR function based on MPLS.</li> <li><b>false</b>—Disable SR function based on MPLS(default).</li> </ul>	This command only supports the ipv4 address family.
SrAdjEnable	Enable the neighbor label allocation function.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable the neighbor label allocation function.</li> <li><b>false</b>—Disable the neighbor label allocation function(default).</li> </ul>	This command only supports the ipv4 address family.

## ISIS/Interfaces

This table contains IS-IS interface information.

## XML structure

```
<ISIS>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <EnableNameV4></EnableNameV4>
      <EnableNameV6></EnableNameV6>
      <CostV4>
        <Level1Value></Level1Value>
        <Level2Value></Level2Value>
      </CostV4>
      <CostV6>
        <Level1Value></Level1Value>
        <Level2Value></Level2Value>
      </CostV6>
      <LevelType></LevelType>
      <PrefixSidV4>
        <SidType></SidType>
        <Sid></Sid>
        <ExplicitNull></ExplicitNull>
        <PHP></PHP>
        <NFlagClear></NFlagClear>
      </PrefixSidV4>
    </Interface>
  </Interfaces>
</ISIS>
```

## Table description

Item	Description
Feature name	ISIS
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
EnableName V4	Instance name	N/A	String. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.
EnableName V6	Instance name	N/A	String. Length: 1 to 31 characters..	It must be an unsigned integer in the range of 1 to 65535.
CostV4	IPv4 interface cost.	Data structure	Members include:.. <ul style="list-style-type: none"> <li>Level1Value.</li> <li>Level2Value</li> </ul>	N/A
CostV6	IPv6 interface cost	Data structure	Members include:.. <ul style="list-style-type: none"> <li>Level1Value.</li> <li>Level2Value</li> </ul>	N/A
Level1Value	Level-1 cost value.	N/A	Unsigned integer. Value range: 1 to 16777215.	N/A
Level2Value	Level-2 cost value.	N/A	Unsigned integer. Value range: 1 to 16777215	N/A
LevelType	Level type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Level 1.</li> <li><b>2</b>—Level 2.</li> <li><b>3</b>—Level-1-2(default)</li> </ul>	N/A
PrefixSidV4	Prefix Segment ID messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>SidType.</li> <li>Sid.</li> <li>ExplicitNull.</li> <li>PHP.</li> <li>NFlagClear.</li> </ul>	The members of SidType and Sid must be specified.
SidType	The type of Prefix-SID	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Absolute value of Prefix-SID.</li> <li><b>2</b>—Index value of Prefix-SID.</li> </ul>	N/A
Sid	Prefix Segment ID	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
ExplicitNull	Explicit null label	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The upstream neighbor replaces the prefix SID with an explicit null label.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>false</b>—The upstream neighbor does not replace the prefix SID with an explicit null label(default).</li> </ul>	
PHP	Penultimate hop popping flag	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Pops the penultimate hop (default).</li> <li><b>false</b>—Does not pop the penultimate hop.</li> </ul>	N/A
NFlagClear	Clear the N-flag	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Clears the N-flag for the prefix SID.</li> <li><b>false</b>—Does not clear the N-flag for the prefix SID(default).</li> </ul>	N/A

# Contents

ISIS.....	1
ISIS/Instances.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
ISIS/VRFs .....	2
XML structure.....	2
Table description.....	2
Columns.....	3
ISIS/Familys .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
ISIS/Interfaces .....	5
XML structure.....	5
Table description.....	6
Columns.....	6

# ISIS

## ISIS/Instances

This table contains IS-IS instance information.

### XML structure

```
<ISIS>
  <Instances>
    <Instance>
      <Name></Name>
      <VRF></VRF>
    </Instance>
  </Instances>
</ISIS>
```

### Table description

Item	Description
Feature name	ISIS
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.
VRF	VRF name.	N/A	String. Length: 0 to 31 characters.	After an instance is created, its VRF cannot be modified. An empty string indicates the public network

# ISIS/VRFs

This table contains IS-IS VRF information.

## XML structure

```
<ISIS>
  <VRFs>
    <VRF>
      <Name></Name>
      <CostStyle>
        <Style></Style>
        <RelaxSpfLimit></RelaxSpfLimit>
      </CostStyle>
      <NetworkEntity></NetworkEntity>
      <LevelId></LevelId>
      <DistributeBgpLs>
        <InstanceId></InstanceId>
        <LevelType></LevelType>
      </DistributeBgpLs>
      <NSR></NSR>
      <SRGB>
        <Lowerbound></Lowerbound>
        <Upperbound></Upperbound>
      </SRGB>
      <MplsTe>
        <Enable></Enable>
        <LevelType></LevelType>
      </MplsTe>
    </VRF>
  </VRFs>
</ISIS>
```

## Table description

Item	Description
Feature name	ISIS
Table name	VRFs
Table type	Multi-instance table
Row name	VRF
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.
CostStyle	Cost style.	Data structure	Members include: <ul style="list-style-type: none"> <li>Style.</li> <li>RelaxSpfLimit.</li> </ul>	N/A
Style	Style ID.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—narrow.</li> <li>2—wide.</li> <li>3—compatible.</li> <li>4—narrow-compatible.</li> <li>5—wide-compatible.</li> </ul>	N/A
RelaxSpfLimit	Whether to accept routes with cost greater than 1023.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Accept routes with cost greater than 1023.</li> <li><b>false</b>—Does not accept routes with cost greater than 1023 .</li> </ul>	N/A
NetworkEntity	Configure the network entity title (NET) for an IS-IS process.	N/A	String. Length: 1 to 82 characters A NET comprises the following parts: <ul style="list-style-type: none"> <li>Area ID—With a length of 1 to 13 bytes.</li> <li>System ID—A system ID uniquely identifies a host or router in the area and has a fixed 6-byte length.</li> <li>SEL—It has a value of 0 and a fixed 1-byte length.</li> </ul>	Specifies a NET as a dotted hexadecimal string in the X....X.XXXX....XX XX.00 format. The X....X segment represents the area address, the XXXX....XXXX segment represents the system ID, and the 00 segment is the SEL.  Repeat supported for 3 times.
LevelId	Router working level.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Level 1.</li> <li>2—Level 2.</li> <li>3—Level-1-2</li> </ul>	N/A
DistributeBgp Ls	Allow the device to send the link state information to bgp	Data structure	Members include: <ul style="list-style-type: none"> <li>InstanceId.</li> <li>LevelType.</li> </ul>	N/A
InstanceId	Instance Id	N/A	Unsigned integer. Value range 0 to 65535.	N/A
LevelType	Level type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Level 1.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—Level 2.</li> <li>3—Level-1-2.</li> </ul>	
NSR	Open the ISIS protocol NSR function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Open the ISIS protocol NSR function.</li> <li><b>false</b>—Close the ISIS protocol NSR function.</li> </ul>	N/A
SRGB	Specifies range of SRGB.	Data structure	Members include: <ul style="list-style-type: none"> <li>Lowerbound.</li> <li>Upperbound.</li> </ul>	The members of Lowerbound and Upperbound must be specified.
Lowerbound	Min value of SRGB.	N/A	Unsigned integer. Value range: 16000 to 23999.	N/A
Upperbound	Max value of SRGB.	N/A	Unsigned integer. Value range: 16001 to 24000.	N/A
MplsTe	MPLS traffic engineering information for IS-IS.	Data structure	Members include: <ul style="list-style-type: none"> <li>Enable.</li> <li>LevelType.</li> </ul>	The member of Enable must be specified.
Enable	Enable MPLS traffic engineering for IS-IS.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable MPLS traffic engineering for IS-IS.</li> <li><b>false</b>—Disable MPLS traffic engineering for IS-IS.</li> </ul>	N/A
LevelType	Level type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Level 1.</li> <li>2—Level 2.</li> <li>3—Level-1-2.</li> </ul>	N/A

## ISIS/Familys

This table contains address family identifier information of IS-IS.

## XML structure

```

<ISIS>
  <Familys>
    <Family>
      <Name></Name>
      <Type></Type>
      <SrMpls></SrMpls>
      <SrAdjEnable></SrAdjEnable>
    </Family>
  </Familys>
</ISIS>

```

## Table description

Item	Description
Feature name	ISIS
Table name	Familys
Table type	Multi-instance table
Row name	Family
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name	Index	String. Length: 0 to 31 characters.	You must create an instance before merge or create type .It must be an unsigned integer in the range of 1 to 65535.
Type	Address Family Identifier	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—IPv4 unicast.</li><li>• <b>2</b>—IPv6 unicast.</li></ul>	N/A
SrMpls	Enable SR function based on MPLS.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable SR function based on MPLS.</li><li>• <b>false</b>—Disable SR function based on MPLS.</li></ul>	This command only supports the ipv4 address family.
SrAdjEnable	Enable the neighbor label allocation function.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable the neighbor label allocation function.</li><li>• <b>false</b>—Disable the neighbor label allocation function.</li></ul>	This command only supports the ipv4 address family.

## ISIS/Interfaces

This table contains IS-IS interface information.

## XML structure

```
<ISIS>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <EnableNameV4></EnableNameV4>
```

```

    <EnableNameV6></EnableNameV6>
    <CostV4>
        <Level1Value></Level1Value>
        <Level2Value></Level2Value>
    </CostV4>
    <CostV6>
        <Level1Value></Level1Value>
        <Level2Value></Level2Value>
    </CostV6>
    <LevelType></LevelType>
    <PrefixSidV4>
        <SidType></SidType>
        <Sid></Sid>
        <ExplicitNull></ExplicitNull>
        <PHP></PHP>
        <NFlagClear></NFlagClear>
    </PrefixSidV4>
</Interface>
</Interfaces>
</ISIS>

```

## Table description

Item	Description
Feature name	ISIS
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
EnableName	Instance name	N/A	String.	It must be an



Column name	Column description	Column type	Data type and restrictions	Remarks
V4			Length: 1 to 31 characters.	unsigned integer in the range of 1 to 65535.
EnableName V6	Instance name	N/A	String. Length: 1 to 31 characters..	It must be an unsigned integer in the range of 1 to 65535.
CostV4	IPv4 interface cost.	Data structure	Members include: <ul style="list-style-type: none"> <li>Level1Value.</li> <li>Level2Value</li> </ul>	N/A
CostV6	IPv6 interface cost	Data structure	Members include: <ul style="list-style-type: none"> <li>Level1Value.</li> <li>Level2Value</li> </ul>	N/A
Level1Value	Level-1 cost value.	N/A	Unsigned integer. Value range: 1 to 16777215.	N/A
Level2Value	Level-2 cost value.	N/A	Unsigned integer. Value range: 1 to 16777215	N/A
LevelType	Level type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Level 1.</li> <li>2—Level 2.</li> <li>3—Level-1-2</li> </ul>	N/A
PrefixSidV4	Prefix Segment ID messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>SidType.</li> <li>Sid.</li> <li>ExplicitNull.</li> <li>PHP.</li> <li>NFlagClear.</li> </ul>	The members of SidType and Sid must be specified.
SidType	The type of Prefix-SID	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Absolute value of Prefix-SID.</li> <li>2—Index value of Prefix-SID.</li> </ul>	N/A
Sid	Prefix Segment ID	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
ExplicitNull	Explicit null label	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The upstream neighbor replaces the prefix SID with an explicit null label.</li> <li><b>false</b>—The upstream neighbor does not replace the prefix SID with an explicit null label.</li> </ul>	N/A
PHP	Penultimate hop popping flag	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Pops the penultimate hop.</li> <li><b>false</b>—Does not pop the penultimate hop.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
NFlagClear	Whether to clear the N-flag	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Clears the N-flag for the prefix SID.</li> <li>• <b>false</b>—Does not clear the N-flag for the prefix SID.</li> </ul>	N/A

# Contents

- ISIS.....2
  - ISIS/ Interfaces.....2
  - ISIS/VRFs .....2
  - ISIS/Familys .....3
  - ISIS/ Instances.....3

# ISIS

## ISIS/ Interfaces

Message	Explanation
IS-IS is not configured. 未配置IS-IS。	The ISIS process doesn't start. Isis进程未启动。
The specified IS-IS process does not exist. 指定IS-IS进程不存在。	The specified IS-IS process does not exist. 指定IS-IS进程不存在。
The interface and the IS-IS process belong to different VPN instances. 接口与关联的IS-IS进程属于不同的VPN。	The interface and the IS-IS process belong to different VPN instances. 接口与关联的IS-IS进程属于不同的VPN。
Cannot configure the IS-IS process. The IS-IS process is performing NSR. IS-IS进程正在进行NSR操作，无法配置该IS-IS进程。	Cannot configure the IS-IS process. The IS-IS process is performing NSR. IS-IS进程正在进行NSR操作，无法配置该IS-IS进程。
The interface isn't a loopback interface. 接口不是loopback口。	The interface isn't a loopback interface. 接口不是loopback口。
The prefix SID already exists. 该SID已配置。	The prefix SID already exists. 该SID已配置。
The prefix SID is out of the SRGB range. 该prefix SID 超出SRGB范围。	The prefix SID is out of the SRGB range. 该prefix SID 超出SRGB范围。
The Explicit-null and P-flag attributes cannot coexist. Explicit-null属性不能与P-flag共存。	The Explicit-null and P-flag attributes cannot coexist Explicit-null属性不能与P-flag共存。

## ISIS/VRFs

Message	Explanation
IS-IS is not configured. 未配置IS-IS。	The ISIS process doesn't start. Isis进程未启动。
The maximum value must be greater than the minimum value. 最大值小于等于最小值。	The maximum value must be greater than the minimum value. 最大值小于等于最小值。
Cost style must be WIDE, COMPATIBLE or WIDE-COMPATIBLE when MPLS SR is enabled for IS-IS. 当进程使能SR MPLS时，Cost style 必须是wide、compatible或wide-compatible。	Cost style must be WIDE, COMPATIBLE or WIDE-COMPATIBLE when MPLS SR is enabled for IS-IS. 当进程使能SR MPLS时，Cost style 必须是wide、compatible或wide-compatible。
The SRGB is invalid. It must contain the configured prefix SIDs. 已配置的prefix-SID值不在目前配置的SRGB范围	The SRGB is invalid. It must contain the configured prefix SIDs. 已配置的prefix-SID值不在目前配置的SRGB范围内。

内。	
IS-IS进程已存在网络实体名称，无法修改系统ID。 The IS-IS process is already configured with a NET. Cannot change the system ID.	IS-IS进程已存在网络实体名称，无法修改系统ID。 The IS-IS process is already configured with a NET. Cannot change the system ID.
A maximum of three NETs with different area IDs and the same system ID can be configured. 最多允许配置三个区域ID不同、系统ID相同的网络实体名称。	A maximum of three NETs with different area IDs and the same system ID can be configured. 最多允许配置三个区域ID不同、系统ID相同的网络实体名称。
Can't enable MPLS TE for IS-IS when the cost style isn't WIDE,COMPATIBLE,or WIDE-COMPATIBLE. 当进程使能MPLS TE时，Cost style 必须是wide、compatible或wide-compatible。	Can't enable MPLS TE for IS-IS when the cost style isn't WIDE,COMPATIBLE,or WIDE-COMPATIBLE. 当进程使能MPLS TE时，Cost style 必须是wide、compatible或wide-compatible。
The TE feature is not configured. 未配置TE。	The TE feature is not configured. 未配置TE。

## ISIS/Familys

Message	Explanation
IS-IS is not configured. 未配置IS-IS。	The ISIS process doesn't start. Isis进程未启动。
Can't enable MPLS SR for IS-IS when the cost style isn't WIDE, COMPATIBLE, or WIDE-COMPATIBLE. cost style未配置为wide、compatible或wide-compatible。	Can't enable MPLS SR for IS-IS when the cost style isn't WIDE, COMPATIBLE, or WIDE-COMPATIBLE. cost style未配置为wide、compatible或wide-compatible。

## ISIS/ Instances

Message	Explanation
IS-IS is not configured. 未配置IS-IS。	The ISIS process doesn't start. Isis进程未启动。
The interface and the IS-IS process belong to different VPN instances. 接口与关联的IS-IS进程属于不同的VPN。	The interface and the IS-IS process belong to different VPN instances. 接口与关联的IS-IS进程属于不同的VPN。
The IS-IS process has already been attached to another VPN instance. 已为IS-IS进程指定其所属的VPN。	The IS-IS process has already been attached to another VPN instance. 已为IS-IS进程指定其所属的VPN。

# Contents

KDNS .....	1
KDNS/ClearDNSCaches .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
KDNS/ClearAllDNSCaches .....	1
XML structure .....	2
Table description .....	2
Columns .....	2

# KDNS

## KDNS/ClearDNSCaches

This table is used to clear the specified DNS cache.

### XML structure

```
<KDNS>
  <ClearDNSCaches>
    <ClearDNSCache>
      <DomainName></DomainName>
      <Clear></Clear>
    </ClearDNSCache>
  </ClearDNSCaches>
</KDNS>
```

### Table description

Item	Description
Feature name	KDNS
Table name	ClearDNSCaches
Table type	Single-instance table
Row name	ClearDNSCache
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Clear	Action of clearing the specified DNS cache.	N/A	This column must be empty.	N/A

## KDNS/ClearAllDNSCaches

This table is used to clear all DNS caches.

## XML structure

```
<KDNS>
  <ClearAllDNSCache>
    <Clear></Clear>
  </ClearAllDNSCache>
</KDNS>
```

## Table description

Item	Description
Feature name	KDNS
Table name	ClearAllDNSCache
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all DNS caches.	N/A	This column must be empty.	N/A



# Contents

- KDNS .....1
  - KDNS/DNSCaches.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# KDNS

## KDNS/DNSCaches

This table contains information about DNS cache.

### XML structure

```
<KDNS>
  <DNSCaches>
    <DNSCache>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <DomainName></DomainName>
      <Index></Index>
      <DataType></DataType>
      <DataLength></DataLength>
      <DataValue></DataValue>
      <Lifetime></Lifetime>    </DNSCache>
    </DNSCaches>
  </KDNS>
```

### Table description

Item	Description
Feature name	KDNS
Table name	DNSCaches
Table type	Multi-instance table
Row name	DNSCache
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the card.		Value range: 0 to 255.	
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).
Index	Index of the DNS cache.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
DataType	Type of data.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—IPv4.</li> <li>• 1—IPv6.</li> </ul>	N/A
DataLength	Length of data.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
DataValue	Data value.	N/A	String, case-insensitive. Length: 1 to 253 characters.	N/A
Lifetime	Lifetime of DNS cache items.	N/A	Unsigned integer. Value range: 1 to 1440. Unit: minute	N/A

# Contents

- L2MAD .....1
  - L2MAD/L2MADEnable .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# L2MAD

## L2MAD/L2MADEnable

This table contains ARP MAD and ND MAD configuration information.

### XML structure

```
<L2MAD>
  <L2MADEnable>
    <Enable>
      <IfIndex></IfIndex>
      <MADARPEnable></MADARPEnable>
      <MADNDEnable></MADNDEnable>
    </Enable>
  </L2MADEnable>
</L2MAD>
```

### Table description

Item	Description
Feature name	L2MAD
Table name	L2MADEnable
Table type	Multi-instance table
Row name	Enable
Restrictions	This table supports interface types: VLAN interface
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only VLAN interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
MADARPEnable	Whether the ARP MAD function is enable.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	<p>You can use ARP MAD with BFD MAD and ND MAD, but not with LACP MAD.</p> <p>Do not configure ARP MAD on VLAN-interface 1.</p>
MADNDEnable	Whether the ND MAD function is enable.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	<p>You can use ND MAD with BFD MAD and ARP MAD, but not with LACP MAD.</p> <p>Do not configure ND MAD on VLAN-interface 1.</p>

# Contents

- L2MAD .....1
  - L2MAD/L2MADEnable .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# L2MAD

## L2MAD/L2MADEnable

This table contains ARP MAD and ND MAD configuration information.

### XML structure

```
<L2MAD>
  <L2MADEnable>
    <Enable>
      <IfIndex></IfIndex>
      <MADARPEnable></MADARPEnable>
      <MADNDEnable></MADNDEnable>
    </Enable>
  </L2MADEnable>
</L2MAD>
```

### Table description

Item	Description
Feature name	L2MAD
Table name	L2MADEnable
Table type	Multi-instance table
Row name	Enable
Restrictions	This table supports interface types: VLAN interface
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only VLAN interfaces are supported.
MADARPEnable	Whether the ARP MAD function is enable.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
MADNDEnable	Whether the ND MAD function is enable.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A



---

# Contents

- L2TPV2..... 1**
- L2TPV2/L2TPV2TunnelInfoClear/Table ..... 1
  - XML structure..... 1
  - Table description ..... 1
  - Columns..... 1

# L2TPV2

## L2TPV2/L2TPV2TunnelInfoClear/Table

This table is used to clear tunnel information.

### XML structure

```
<L2TPV2>
  <L2TPV2TunnelInfoClear>
    <TunnelInfoClear>
      <TunnelID></TunnelID>
      <RemoteName></RemoteName>
      <LocalAddress></LocalAddress>
    </TunnelInfoClear>
  </L2TPV2TunnelInfoClear>
</L2TPV2>
```

### Table description

Item	Description
Feature name	L2TPV2
Table name	L2TPV2TunnelInfoClear
Table type	Multi-instance table
Row name	TunnelInfoClear
Restrictions	The TunnelID or the LocalAddress can't be set together with the RemoteName

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel id	N/A	Unsigned integer. Value range: 1 to 65535	N/A
RemoteName	Tunnel peer name	N/A	String, case-sensitive. Length: 1 to 31 characters	N/A
LocalAddress	Tunnel local IP address	N/A	String, dotted decimal notation.	N/A

---

# Contents

L2TPV2 .....	1
L2TPV2/L2tpAutoClient .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
L2TPV2/L2tpv2LacSrcIP .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
L2TPV2/L2tpVaPool .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
L2TPV2/L2tpGlobal .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
L2TPV2/L2tpv2Group .....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# L2TPV2

## L2TPV2/L2tpAutoClient

This table contains the information about auto client.

### XML structure

```
<L2TPV2>
  <L2tpAutoClient>
    <AutoClient>
      <IfIndex></IfIndex>
      <GroupID></GroupID>
    </AutoClient>
  </L2tpAutoClient>
</L2TPV2>
```

### Table description

Item	Description
Feature name	L2TPV2
Table name	L2tpAutoClient
Table type	Multi-instance table
Row name	AutoClient
Restrictions	This table supports interface types: virtual-ppp interface
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	The LAC uses tunnel parameters of the L2TP group to establish the tunnel.	N/A	Unsigned integer. Value range: 1 to 65535	The L2TP group specified must be an existing one in LAC mode.

## L2TPV2/L2tpv2LacSrcIP

This table contains the information about L2TP tunnel source IP addresses.

### XML structure

```

<L2TPV2>
  <L2tpv2LacSrcIP>
    <LacSrcIP>
      <IfIndex></IfIndex>
      <IPAddress></IPAddress>
    </LacSrcIP>
  </L2tpv2LacSrcIP>
</L2TPV2>

```

### Table description

Item	Description
Feature name	L2TPV2
Table name	L2tpv2LacSrcIP
Table type	Multi-instance table
Row name	LacSrcIP
Restrictions	This table supports interface types: vsi interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
lflindex	Interface index	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about lflindex, see "Appendix" in lfmgr NETCONF XML API Configuration Reference.
IPaddress	Tunnel local IP address	N/A	String, dotted decimal notation.	N/A

## L2TPV2/L2tpVaPool

This table contains the information about using L2TPV2 va-pool.

## XML structure

```
<L2TPV2>
  <L2tpVaPool>
    <VaPool>
      <L2tpVTNum></L2tpVTNum>
      <L2tpVNum></L2tpVNum>
    </VaPool>
  </L2tpVaPool>
</L2TPV2>
```

## Table description

Item	Description
Feature name	L2TPV2
Table name	L2tpVaPool
Table type	Multi-instance table
Row name	VaPool
Restrictions	VT interface must be exist
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
L2tpVTNum	Template-number	Index	Unsigned integer. Value range: 1 to 2047	Specifies an existing VT interface by its number to use the VA pool.  The value range for this argument varies by device model.
L2tpVANum	Va-volume	N/A	Unsigned integer. Value range: 1 to 65534	Specifies the maximum number of VA interfaces contained in the VA pool.

## L2TPV2/L2tpGlobal

This table contains the information about global configuration of l2tp.

### XML structure

```

<L2TPV2>
  <L2tpGlobal>
    <L2tpEnable></L2tpEnable>
    <IcrqLimit></IcrqLimit>
    <ScrqLimit></ScrqLimit>
  </L2tpGlobal>
</L2TPV2>

```

### Table description

Item	Description
Feature name	L2TPV2
Table name	L2tpGlobal
Table type	Single instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
L2tpEnable	Whether the function of L2TP is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false(default)</b></li> </ul>	N/A
IcrqLimit	Maximum number of ICRQ packets processed per second	N/A	Unsigned integer. Value range: 1 to 60000. Default: 0	N/A
SccrqLimit	Maximum number of SCCRQ packets processed per second	N/A	Unsigned integer. Value range: 1 to 10000. Default: 0	N/A

## L2TPV2/L2tpv2Group

This table contains L2TP group configuration information.

### XML structure

```

<L2TPV2>
  <L2tpv2Group>
    <Group>
      <GroupNum></GroupNum>
      <Mode></Mode>
      <AllowVTNum></AllowVTNum>
      <AllowRtmName></AllowRtmName>
      <LnsIP></LnsIP>
      <UserType></UserType>
      <UserName></UserName>
      <TunnelName></TunnelName>
      <Password></Password>
      <AuthEnable></AuthEnable>
      <MChapEnable></MChapEnable>
      <MLcpEnable></MLcpEnable>
      <AvpHiddenEnable></AvpHiddenEnable>
      <FlowControlEnable></FlowControlEnable>
      <HelloTime></HelloTime>
    </Group>
  </L2tpv2Group>
</L2TPV2>

```

### Table description

Item	Description
Feature name	L2TPV2



Table name	L2tpv2Group
Table type	Multi-instance table
Row name	Group
Restrictions	N/A
Support for row creation and deletion	YES

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNum	Group number.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Mode	Group mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—lac.</li> <li>1—Ins</li> </ul>	N/A
AllowVTNum	Specifies a VT interface by its number.	N/A	Unsigned integer.	It can only be configured when Mode is Ins. The value range depended on device.
AllowRtmName	Specifies the name of the tunnel peer (LAC) initiating tunneling requests	N/A	String, case-sensitive. Length: 1 to 31 characters.	It can only be configured when Mode is Ins.
InsIP	Specifies LNS IP addresses.	N/A	String, case-sensitive. Length: 1 to 79 characters.	It can only be configured when Mode is lac. Separated by space if there are multiple addresses. Specifies a space-separated list of up to five addresses Example: 1.1.1.1 2.2.2.2 3.3.3.3.
UserType	To configure the condition for the LAC to initiate tunneling requests	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—domain name</li> <li>1—full user name</li> </ul>	It can only be configured when Mode is lac.
UserName	user name.	N/A	String, case-sensitive. Length: 1 to 255 characters.	It can only be configured when Mode is lac.
TunnelName	Local tunnel name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
PassWord	password.	N/A	String, case-sensitive. Length: 1 to 16 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthEnable	L2TP tunnel authentication.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true(default)</b></li> <li>• <b>false</b></li> </ul>	N/A
MChapEnable	To force the LNS to perform CHAP authentication for users.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false(default)</b></li> </ul>	It can only be configured when Mode is Ins.
MLcpEnable	To force an LNS to perform LCP negotiation with users.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false(default)</b></li> </ul>	It can only be configured when Mode is Ins.
AvpHiddenEnable	To enable transferring AVP data in hidden mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false(default)</b></li> </ul>	N/A
FlowControlEnable	To enable L2TP session flow control.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false(default)</b></li> </ul>	N/A
HelloTime	Hello interval.	N/A	Unsigned integer. Value range: 60 to 1000. Default: 60	N/A

---

# Contents

L2TPV2 .....	1
L2TPV2/L2tpAutoClient .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
L2TPV2/L2tpv2LacSrcIP .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
L2TPV2/L2tpVaPool .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
L2TPV2/L2tpGlobal .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
L2TPV2/L2TPV2TunnelInfo .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
L2TPV2/L2TPV2TunnelExtendInfo .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
L2TPV2/L2tpv2Group .....	8
XML structure .....	8
Table description .....	9
Columns .....	9

# L2TPV2

## L2TPV2/L2tpAutoClient

This table contains the information about auto client.

### XML structure

```
<L2TPV2>
  <L2tpAutoClient>
    <AutoClient>
      <IfIndex></IfIndex>
      <GroupID></GroupID>
    </AutoClient>
  </L2tpAutoClient>
</L2TPV2>
```

### Table description

Item	Description
Feature name	L2TPV2
Table name	L2tpAutoClient
Table type	Multi-instance table
Row name	AutoClient
Restrictions	This table supports interface types: virtual-ppp interface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	The LAC uses tunnel parameters of the L2TP group to establish the tunnel.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

## L2TPV2/L2tpv2LacSrcIP

This table contains the information about L2TP tunnel source IP addresses.

### XML structure

```
<L2TPV2>
  <L2tpv2LacSrcIP>
    <LacSrcIP>
      <IfIndex></IfIndex>
      <IPAddress></IPAddress>
    </LacSrcIP>
  </L2tpv2LacSrcIP>
</L2TPV2>
```

### Table description

Item	Description
Feature name	L2TPV2
Table name	L2tpv2LacSrcIP
Table type	Multi-instance table
Row name	LacSrcIP
Restrictions	This table supports interface types: vsi interface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
IPAddress	Tunnel local IP address.	N/A	String, dotted decimal notation.	N/A

## L2TPV2/L2tpVaPool

This table contains the information about L2TPV2 va-pool.

### XML structure

```

<L2TPV2>
  <L2tpVaPool>
    <VaPool>
      <L2tpVTNum></L2tpVTNum>
      <L2tpVANum></L2tpVANum>
    </VaPool>
  </L2tpVaPool>
</L2TPV2>

```

### Table description

Item	Description
Feature name	L2TPV2
Table name	PPPUsePap
Table type	Multi-instance table
Row name	VaPool
Restrictions	VT interface must be exist

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
L2tpVTNum	Template-number	Index	Unsigned integer. Value range: 1 to 2047	Specifies an existing VT interface by its number to use the VA pool. The value range for this argument varies by device model.
L2tpVANum	<i>Va-volume</i>	N/A	Unsigned integer. Value range: 1 to 65534	N/A

# L2TPV2/L2tpGlobal

This table contains the information about global configuration of l2tp.

## XML structure

```
<L2TPV2>
  <L2tpGlobal>
    <L2tpEnable></L2tpEnable>
    <IcrqLimit></IcrqLimit>
    <ScqrqLimit></ScqrqLimit>
  </L2tpGlobal>
</L2TPV2>
```

## Table description

Item	Description
Feature name	L2TPV2
Table name	L2tpGlobal
Table type	Single instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
L2tpEnable	Whether the function of L2TP is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li>• true</li><li>• false</li></ul>	N/A
IcrqLimit	Maximum number of ICRQ packets processed per second	N/A	Unsigned integer. Value range: 1 to 60000.	N/A
ScqrqLimit	Maximum number of SCCRQ packets processed per second	N/A	Unsigned integer. Value range: 1 to 10000.	N/A

# L2TPV2/L2TPV2TunnelInfo

This table contains the information about using display l2tp tunnel to display information about L2TP tunnels.

## XML structure

```
<L2TPV2>
  <L2TPV2TunnelInfo>
    <TunnelInfo>
      <LocalTIDIndex></LocalTIDIndex>
      <RemoteTID></RemoteTID>
      <State></State>
      <Sessions></Sessions>
      <RemoteAddr></RemoteAddr>
      <RemotePort></RemotePort>
      <RemoteName></RemoteName>
      <ModeType></ModeType>
    </TunnelInfo>
  </L2TPV2TunnelInfo>
</L2TPV2>
```

## Table description

Item	Description
Feature name	L2TPV2
Table name	L2TPV2TunnelInfo
Table type	Multi-instance table
Row name	TunnelInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalTIDIndex	Local tunnel ID.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
RemoteTID	Remote tunnel ID.	N/A	Unsigned integer. • Value range: 1 to 65535.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
State	Tunnel state.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0—Idle (default)</b></li> <li>• <b>1—Wait-reply</b></li> <li>• <b>2—Wait-connect</b></li> <li>• <b>3—Established</b></li> <li>• <b>4—Stopping</b></li> </ul>	Session state: Idle. Wait-tunnel—Waits for the tunnel to be established. Wait-reply—Waits for an ICRP message indicating the call is accepted. Wait-connect—Waits for an ICCN message. Established—Establishes the tunnel successfully. Stopping—Is being offline.
Sessions	Number of sessions within the tunnel.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
RemoteAddr	IP address of the peer.	N/A	String, dotted decimal notation.	N/A
RemotePort	UDP port number of the peer.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RemoteName	Name of the tunnel peer.	N/A	String, case insensitive. Length: 1 to 31 characters.	N/A
ModeType	TunnelModeType.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0—LAC</b></li> <li>• <b>1—LNS</b></li> </ul>	N/A

## L2TPV2/L2TPV2TunnelExtendInfo

This table contains the information about using display l2tp tunnel to display information about L2TP tunnels for extension.

### XML structure

```

<L2TPV2>
  <L2TPV2TunnelExtendInfo>
    <TunnelExtendInfo>
      <LocalAddrIndex></LocalAddrIndex>
      <LocalTIDIndex></LocalTIDIndex>
      <RemoteTID></RemoteTID>
      <State></State>
      <Sessions></Sessions>
  
```

```

    <RemoteAddr></RemoteAddr>
    <RemotePort></RemotePort>
    <RemoteName></RemoteName>
    <ModeType></ModeType>
  </TunnelExtendInfo>
</L2TPV2TunnelExtendInfo>
</L2TPV2>

```

## Table description

Item	Description
Feature name	L2TPV2
Table name	L2TPV2TunnelExtendInfo
Table type	Multi-instance table
Row name	TunnelExtendInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalAddrIndex	Local tunnel IP address.	Index	String, dotted decimal notation.	N/A
LocalTIDIndex	Local tunnel ID.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
RemoteTID	Remote tunnel ID.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
State	Tunnel state.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>0</b>—Idle (default)</li> <li>• <b>1</b>—Wait-reply</li> <li>• <b>2</b>—Wait-connect</li> <li>• <b>3</b>—Established</li> <li>• <b>4</b>—Stopping</li> </ul>	<p>Session state:</p> <ul style="list-style-type: none"> <li>• <b>Idle.</b></li> <li>• <b>Wait-tunnel</b>—Waits for the tunnel to be established.</li> <li>• <b>Wait-reply</b>—Waits for an ICRP message indicating the call is accepted.</li> <li>• <b>Wait-connect</b>—Waits for an ICCN message.</li> <li>• <b>Established</b>—Establishes the tunnel successfully.</li> <li>• <b>Stopping</b>—Is being offline.</li> </ul>
Sessions	Number of sessions within the tunnel.	N/A	<p>Unsigned integer.</p> <p>Value range: 1 to 65535.</p>	N/A
Remote Addr	IP address of the peer.	N/A	String, dotted decimal notation.	N/A
Remote Port	UDP port number of the peer.	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 65535.</p>	N/A
Remote Name	Name of the tunnel peer.	N/A	<p>String, case insensitive.</p> <p>Length: 1 to 31 characters.</p>	N/A
ModeType	Tunnel mode.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>0</b>—LAC</li> <li>• <b>1</b>—LNS</li> </ul>	N/A

## L2TPV2/L2tpv2Group

This table contains L2TP group configuration information.

### XML structure

```

<L2TPV2>
  <L2tpv2Group>
    <Group>
      <GroupNum></GroupNum>

```

```

    <Mode></Mode>
    <AllowVTNum></AllowVTNum>
    <AllowRtmName></AllowRtmName>
    <LnsIP></LnsIP>
    <UserType></UserType>
    <UserName></UserName>
    <TunnelName></TunnelName>
    <Password></Password>
    <AuthEnable></AuthEnable>
    <MChapEnable></MChapEnable>
    <MLcpEnable></MLcpEnable>
    <AvpHiddenEnable></AvpHiddenEnable>
    <FlowControlEnable></FlowControlEnable>
    <HelloTime></HelloTime>
  </Group>
</L2tpv2Group>
</L2TPV2>

```

## Table description

Item	Description
Feature name	L2TPV2
Table name	L2tpv2Group
Table type	Multi-instance table
Row name	Group
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNum	Group number.	Index	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 1 to 65535.</li> </ul>	N/A
Mode	Group mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0—lac</b></li> <li><b>1—lms</b></li> </ul>	N/A
AllowVTNum	Specifies a VT interface by its number.	N/A	Unsigned integer.	It can only be visible when Mode is lms. The value range depended on device.

Column name	Column description	Column type	Data type and restrictions	Remarks
AllowRtmName	Specifies the name of the tunnel peer (LAC) initiating tunneling requests	N/A	String, case-sensitive. Length: 1 to 31 characters.	It can only be visible when Mode is Ins.
InsIP	Specifies LNS IP addresses.	N/A	String, case-sensitive. Length: 1 to 79 characters.	It can only be visible when Mode is lac. Separated by space if there are multiple addresses. Specifies a space-separated list of up to five addresses Example: 1.1.1.1 2.2.2.2 3.3.3.3.
UserType	To configure the condition for the LAC to initiate tunneling requests	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0—domain name</b></li> <li>• <b>1—full user name</b></li> </ul>	It can only be visible when Mode is lac.
UserName	user name.	N/A	String, case-sensitive. Length: 1 to 255 characters.	It can only be visible when Mode is lac.
TunnelName	Local tunnel name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
PassWord	password.	N/A	String, case-sensitive. Length: 1 to 16 characters.	N/A
AuthEnable	L2TP tunnel authentication.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
MChapEnable	To force the LNS to perform CHAP authentication for users.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	It can only be visible when Mode is Ins.
MLcpEnable	To force an LNS to perform LCP negotiation with users.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	It can only be visible when Mode is Ins.
AvpHiddenEnable	To enable transferring AVP data in hidden mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
FlowControlEnable	To enable L2TP session flow control.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
HelloTime	Hello interval.	N/A	Unsigned integer. Value range: 60 to 1000.	N/A



---

# Contents

Comware 7 L2TPV2 NETCONF XML API Error Message Reference .....	1
L2TPV2/L2tpAutoClient .....	1
L2TPV2/L2tpGlobal .....	1
L2TPV2/L2TPV2TunnelInfoClear .....	1
L2TPV2/L2tpv2Group .....	1
L2TPV2/L2tpv2LacSrcIP .....	2

# Comware 7 L2TPV2 NETCONF XML API Error Message Reference

## L2TPV2/L2tpAutoClient

Message	Explanation
Failed to process. 处理失败。	The operation failed 操作失败。

## L2TPV2/L2tpGlobal

Message	Explanation
Failed to process.. 处理失败。	The operation failed 操作失败。

## L2TPV2/L2TPV2TunnelInfoClear

Message	Explanation
The configuration doesn't meet the requirements. 配置不符合要求。	The configuration parameter is incomplete. 配置参数不全。
Failed to process. 操作失败。	The operation failed 操作失败。
Invalid IP address. 非法IP地址。	Invalid IP address. 非法IP地址。

## L2TPV2/L2tpv2Group

Message	Explanation
The configuration doesn't meet the requirements. 配置不符合要求。	The configuration parameter is incomplete. 配置参数不全。
Duplicate IP address. IP地址重复。	Duplicate IP address. IP地址重复。
Failed to process. 操作失败。	The operation failed 操作失败。
The L2TP group already exists, and its mode is LAC.	The L2TP group already exists, and its mode is LAC.



该L2TP组已存在，其模式为LAC。	该L2TP组已存在，其模式为LAC。
The L2TP group already exists, and its mode is LNS.	The L2TP group already exists, and its mode is LNS.
该L2TP组已存在，其模式为LNS。	该L2TP组已存在，其模式为LNS。
The number of L2TP groups has reached the maximum.	The number of L2TP groups has reached the maximum.
L2TP组个数已达上限。	L2TP组个数已达上限。
This LAC is already specified for L2TP group x.	This LAC is already specified for L2TP group x.
该LAC已被L2TP组x使用。	该LAC已被L2TP组x使用。
The value is out of range.	The specified VT interface is out of range.
参数值超出范围。	VT口参数超出范围。
The specified VT interface doesn't exist.	The specified VT interface doesn't exist.
指定的VT口不存在。	指定的VT口不存在。
The local IP address or tunnel peer name is inconsistent with the configured local IP address or tunnel peer name.	The local IP address or tunnel peer name is inconsistent with the configured local IP address or tunnel peer name.
本地IP地址或对端隧道名与配置的IP地址或对端隧道名有冲突。	本端隧道名或IP和对端隧道名或IP冲突。
L2TP group x is already configured to provide service for users who use this name.	The user who use this name has been used by L2TP group x.
L2TP组x已经配置为使用这个名字的用户提供服务。	该用户名已被L2TP组x使用。
L2TP group x is already configured to provide service for users in this domain.	The domain has been used by L2TP group x.
L2TP组x已经配置为该域的用户提供服务。	该域已被L2TP组x使用。
Invalid IP address.	Invalid IP address.
非法IP地址。	非法IP地址。
The object does not support the specified configuration.	The configuration can't be applied to this object.
对象不支持指定配置。	配置不能应用在这个对象上。

## L2TPV2/L2tpv2LacSrcIP

Message	Explanation
Invalid IP address.	Invalid IP address.
非法IP地址。	非法IP地址。
The object does not support the specified configuration.	The configuration can't be applied to this object.
对象不支持指定配置。	配置不能应用在这个对象上。

# Contents

L2VPN .....	1
L2VPN/ClearVSIStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
L2VPN/ClearAllVSIStatistics .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
L2VPN/ClearACStatistics .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
L2VPN/ClearAllACStatistics .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
L2VPN/SwitchoverPW .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
L2VPN/ClearVSI MAC .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
L2VPN/ClearAllMAC .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
L2VPN/ClearAllPWStatistics .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
L2VPN/ClearVSI PWStatistics .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
L2VPN/ClearXC GPWStatistics .....	8
XML structure .....	8
Table description .....	8
Columns .....	8

# L2VPN

## L2VPN/ClearVSIStatistics

This table is used to clear traffic statistics of the VSI.

### XML structure

```
<L2VPN>
  <ClearVSIStatistics>
    <VSIStatistics>
      <VsiName></VsiName>
      <Clear></Clear>
    </VSIStatistics>
  </ClearVSIStatistics>
</L2VPN>
```

### Table description

Item	Description
Feature name	L2VPN
Table name	ClearVSIStatistics
Table type	Multi-instance table
Row name	VSIStatistics
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
Clear	Clear VSI traffic statistics.	N/A	This column must be empty.	Clear

## L2VPN/ClearAllVSIStatistics

This table is used to clear traffic statistics of all VSI.

## XML structure

```
<L2VPN>
  <ClearAllVSIStatistics>
    <Clear></Clear>
  </ClearAllVSIStatistics>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	ClearAllVSIStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clears statistics on all VSIs.	N/A	This column must be empty.

## L2VPN/ClearACStatistics

This table is used to clear traffic statistics of an AC. [Currently, the AC can only be an Ethernet service instance.](#)

## XML structure

```
<L2VPN>
  <ClearACStatistics>
    <ACStatistics>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <Clear></Clear>
    </ACStatistics>
  </ClearACStatistics>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	ClearACStatistics
Table type	Multi-instance table
Row name	ACStatistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
Clear	Clear traffic statistics.	N/A	This column must be empty.	Clear

## L2VPN/ClearAllACStatistics

This table is used to clear traffic statistics of all ACs. [Currently, an AC can only be an Ethernet service instance.](#)

## XML structure

```
<L2VPN>
  <ClearAllACStatistics>
    <Clear></Clear>
  </ClearAllACStatistics>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	ClearAllACStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clears statistics on all ACs.	N/A	This column must be empty.

## L2VPN/SwitchoverPW

This table is used to switch traffic from the specified PW to its backup PW.

## XML structure

```
<L2VPN>
  <SwitchoverPW>
    <PeerAddr></PeerAddr>
    <PWID></PWID>
    <Switch></Switch>
  </SwitchoverPW>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	SwitchoverPW
Table type	Single-instance table
Row name	N/A
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PeerAddr	LSR ID of the peer PE	N/A	String, dotted decimal notation.	N/A
PWID	PW ID of the PW	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
Switch	Switch to backup PW	N/A	This column must be empty.	N/A

## L2VPN/ClearVSIMAC

This table is used to reset learned MAC address for the specified VSI.

## XML structure

```
<L2VPN>
  <ClearVSIMAC>
    <VSI>
      <VsiName></VsiName>
      <Clear></Clear>
    </VSI>
  </ClearVSIMAC>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	ClearVSIMAC
Table type	Multi-instance table
Row name	VSI
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
Clear	Clear learned MAC address for the VSI.	N/A	This column must be empty.	N/A

# L2VPN/ClearAllMAC

This table is used to reset all learned MAC address.

## XML structure

```
<L2VPN>
  <ClearAllMAC>
    <Clear></Clear>
  </ClearAllMAC>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	ClearAllMAC
Table type	Single-instance table
Row name	N/A
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all learned MAC address	N/A	This column must be empty.	N/A

# L2VPN/ClearAllPWStatistics

This table is used to clear all PW statistics.

## XML structure

```
<L2VPN>
  <ClearAllPWStatistics>
    <Clear></Clear>
  </ClearAllPWStatistics>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN



Table name	ClearAllPWStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all PW statistics	N/A	This column must be empty.	N/A

## L2VPN/ClearVSIPWStatistics

This table is used to clear specific PW related to the specific VSI.

## XML structure

```

<L2VPN>
  <ClearVSIPWStatistics>
    <ClearVSIPWStatistic>
      <VsiName></VsiName>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <Clear></Clear>
    </ClearVSIPWStatistic>
  </ClearVSIPWStatistics>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	ClearVSIPWStatistics
Table type	Multi-instance table
Row name	ClearVSIPWStatistic
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 31 characters.	
PeerAddr	LSR ID of the peer PE	N/A	String, dotted decimal notation.	This column must be specified together with PWID.
PWID	PW ID of the PW	N/A	Unsigned integer. Value range: 1 to 4294967295.	This column must be specified together with PeerAddr.
Clear	Clear specific PW statistics	N/A	This column must be empty.	N/A

## L2VPN/ClearXCGPWStatistics

This table is used to clear PW statistics related to the specific XCG.

### XML structure

```

<L2VPN>
  <ClearXCGPWStatistics>
    <ClearXCGPWStatistic>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <Clear></Clear>
    </ClearXCGPWStatistic>
  </ClearXCGPWStatistics>
</L2VPN>

```

### Table description

Item	Description
Feature name	L2VPN
Table name	ClearXCGPWStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	Support for this table depends on the device model.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ConnectionName	Connection Name	N/A	String. Length: 1 to 20 characters.	N/A
Clear	Clear specific PW statistics	N/A	This column must be empty.	N/A

# Contents

L2VPN .....	1
L2VPN/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
L2VPN/VSI .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
L2VPN/PWClasses .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
L2VPN/SRVs .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
L2VPN/ACs .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
L2VPN/L3Interfaces .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
L2VPN/FloodingMACs .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
L2VPN/LocalMACs .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
L2VPN/VSIInterfaces .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
L2VPN/VSIIPv4Subnets .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
L2VPN/VSIIPv6Subnets .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
L2VPN/InterfaceConfigs .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
L2VPN/SrvRewrites .....	18
XML structure .....	19
Table description .....	19
Columns .....	19
L2VPN/L3Rewrites .....	20
XML structure .....	20
Table description .....	21
Columns .....	21

# L2VPN

## L2VPN/Base

This table contains global L2VPN information.

### XML structure

```
<L2VPN>
  <Base>
    <Enable></Enable>
    <StatisticsInterval></StatisticsInterval>
  </Base>
</L2VPN>
```

### Table description

Item	Description
Feature name	L2VPN
Table name	Base
Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only global configurations.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether L2VPN feature is enabled globally	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled(default).</li></ul>	N/A
StatisticsInterval	Interval for collecting packets statistics	N/A	Unsigned integer Value range: 30 to 65535. Unit: seconds.	N/A

## L2VPN/VSI

This table contains information about VSIs.

## XML structure

```
<L2VPN>
  <VSIs>
    <VSI>
      <VsiName></VsiName>
      <HubSpoke></HubSpoke>
      <ArpSuppression></ArpSuppression>
      <NdSuppression></NdSuppression>
      <MacLearning></MacLearning>
      <MacLimit></MacLimit>
      <Flooding></Flooding>
      <FloodType></FloodType>
      <VsiInterfaceID></VsiInterfaceID>
      <Statistics></Statistics>
      <StatisticsOverlayTunnel></StatisticsOverlayTunnel>
      <Description></Description>
      <Bandwidth></Bandwidth>
      <BroadcastRestrain></BroadcastRestrain>
      <MulticastRestrain></MulticastRestrain>
      <UnknownUnicastRestrain></UnknownUnicastRestrain>
      <AdminStatus></AdminStatus>
      <Dscp></Dscp>
      <ServiceClass></ServiceClass>
    </VSI>
  </VSIs>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	VSIs
Table type	Multi-instance table
Row name	VSI
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A

HubSpoke	Support for hub spoke capability.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Supported.</li> <li>• false—Not supported(default).</li> </ul>	Support for this column depends on the device model. No modification.
ArpSuppression	ARP flooding suppression	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enabled.</li> <li>• false—Disabled(default).</li> </ul>	Need confirm by products .
NdSuppression	ND flooding suppression	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enabled.</li> <li>• false—Disabled(default).</li> </ul>	Need confirm by products .
MacLearning	MAC address learning	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enabled(default).</li> <li>• false—Disabled.</li> </ul>	Support for this column depends on the device model.
MacLimit	MAC table limit	N/A	Unsigned integer. Value range: The value range varies by device model.	Support for this column depends on the device model.
Flooding	Flooding for all destination-unknown frames	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enabled(default).</li> <li>• false—Disabled.</li> </ul>	N/A
FloodType	Flood type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Broadcast</li> <li>• 2—Unknown unicast</li> <li>• 4—Multicast</li> <li>• 3—Broadcast and unknown unicast.</li> <li>• 5—Broadcast and multicast.</li> <li>• 6—Unknown unicast and multicast.</li> <li>• 7—Broadcast, unknown unicast, and multicast.</li> <li>• 9—Broadcast DCI</li> <li>• 10—Unknown unicast DCI</li> <li>• 11—Broadcast and unknown unicast on DCI tunnels.</li> <li>• 12—Multicast DCI</li> <li>• 13—Broadcast and multicast on DCI tunnels.</li> <li>• 14—Unknown unicast and multicast on DCI tunnels.</li> <li>• 15—Broadcast, unknown unicast, and multicast on DCI tunnels.</li> <li>• 17—Broadcast all-direction</li> <li>• 18—Unknown unicast all-direction</li> </ul>	The value is always 7 when Flooding is enabled.  The value must be set when flooding set to disabled.

			<ul style="list-style-type: none"> <li>• 20—Multicast all-direction</li> <li>• 19—Broadcast and unknown unicast in all directions.</li> <li>• 21—Broadcast and multicast in all directions.</li> <li>• 22—Unknown unicast and multicast in all directions.</li> <li>• 23—Broadcast, unknown unicast, and multicast in all directions. Default: 7</li> </ul>	
VsiInterfaceID	VSI interface ID	N/A	Unsigned integer	The range of VsiInterfaceID is reference in table of Base which in Data API.
Statistics	VSI statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enabled.</li> <li>• false—Disabled(default).</li> </ul>	N/A
StatisticsOverlayTunnel	Overlay Tunnel statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enabled.</li> <li>• false—Disabled(default).</li> </ul>	N/A
Description	description for the VSI	N/A	String. Length: 1 to 80 characters.	N/A
Bandwidth	VSI bandwidth	N/A	Unsigned integer Value range: The minimum value is 64 kbps. The maximum value (in kbps) varies by device model.	Support for this column depends on the device model.
BroadcastRestrain	Broadcast suppression bandwidth threshold	N/A	Unsigned integer. Value range: 0, 64 to the maximum, in kbps. The default value and maximum value vary by device model.	Support for this column depends on the device model. The default value of BroadcastRestrain is the value of VSIBroadcastRestrainDefault in the Base table of Data API.
MulticastRestrain	Multicast suppression bandwidth threshold	N/A	Unsigned integer. Value range: 0, 64 to the maximum, in kbps. The default value and maximum value vary by device model.	Support for this column depends on the device model. The default value of MulticastRestrain is the value of VSIMulticastRestrainDefault in the Base table of Data API.
UnknownUnicastRestrain	Unknown-unicast	N/A	Unsigned integer.	Support for this column depends



	suppression bandwidth threshold		Value range: 0, 64 to the maximum, in kbps. The default value and maximum value vary by device model.	on the device model. The default value of UnknownUnicast Restrained is the value of VSIUnicastRestrainedDefault in the Base table of Data API.
AdminStatus	Administratively status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Administratively up(default).</li> <li>2—Administratively down.</li> </ul>	N/A
Dscp	DSCP value	N/A	Unsigned integer Value range: 0 to 63.	Support for this column depends on the device model.
ServiceClass	Service class value	N/A	Unsigned integer Value range: The value range varies by device model.	Support for this column depends on the device model. The maximum value for this column is defined in the Base table of Data API.

## L2VPN/PWClasses

This table contains PW class information.

### XML structure

```

<L2VPN>
  <PWClasses>
    <PWClass>
      <PWClassName></PWClassName>
      <ControlWord></ControlWord>
      <PWType></PWType>
      <SequencingBoth></SequencingBoth>
    </PWClass>
  </PWClasses>
</L2VPN>

```

### Table description

Item	Description
Feature name	L2VPN
Table name	PWClasses

Table type	Multi-instance table
Row name	PWClass
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PWClassName	PW class name	Index	String. Length: 1 to 19 characters.	N/A
ControlWord	control word for ACs	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	N/A
PWType	PW type for PWs	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—VLAN(default).</li> <li>2—Ethernet.</li> </ul>	N/A
SequencingBoth	Sequencing for both incoming and outgoing packets	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this column depends on the device model.

## L2VPN/SRVs

This table contains information about service instances of layer 2 ethernet interfaces.

## XML structure

```

<L2VPN>
  <SRVs>
    <SRV>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <Encap></Encap>
      <SVlanRange></SVlanRange>
      <CVlanRange></CVlanRange>
    </SRV>
  </SRVs>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	SRVs

Table type	Multi-instance table
Row name	SRV
Restrictions	<p>This table supports only layer 2 Ethernet interfaces.</p> <p>You must follow these restrictions:</p> <ul style="list-style-type: none"> <li>Specify SVlanRange and not CVlanRange when the value of Encap is SvlanId or SvlanIdOnlyTagged or SvlanList or SvlanListOnlyTagged;</li> <li>Specify both SVlanRange and CVlanRange when the value of Encap is SvlanIdCvlanId or SvlanIdCvlanList or SvlanIdCvlanAll; the value of CVlanRange must be 1-4094 when the value of Encap is SvlanIdCvlanAll.</li> <li>Specify CVlanRange and not SVlanRange when the value of Encap is CvlanId or CvlanList;</li> <li>Don't specify SVlanRange and CVlanRange when the value of Encap is Default or Untagged or Tagged.</li> </ul>
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
Encap	Encapsulation type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—Default.</li> <li>2—Untagged.</li> <li>3—Tagged</li> <li>4—SvlanId</li> <li>5—SvlanIdOnlyTagged</li> <li>6—SvlanIdCvlanId</li> <li>7—CvlanId</li> <li>8—CvlanList</li> <li>9—SvlanIdCvlanList</li> <li>10—SvlanIdCvlanAll</li> <li>11—SvlanList</li> <li>12—SvlanListOnlyTagged</li> <li>13—SvlanListCvlanList</li> </ul>	<p>Can not be modified after creation.</p> <p>You must and only need specify this column when you remove or delete the encapsulation, and the <b>SVlanRange</b> column or <b>CVlanRange</b> column is ignored.</p>

SVlanRange	A outer VLAN ID or a list of outer VLAN IDs	N/A	<p>Number string.</p> <p>It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range, and the end VLAN ID must be larger than the start VLAN ID.</p> <p>The string must not end with a comma or hyphen, or include any whitespace characters.</p>	<p>Example: 1,2,3,5-8,10-20.</p> <p>The value must be different in different VLAN ID ranges.</p> <p>If this column is required, you must also specify the <b>Encap</b> column.</p>
CVlanRange	A inner VLAN ID or a list of inner VLAN IDs	N/A	<p>Number string.</p> <p>It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range, and the end VLAN ID must be larger than the start VLAN ID.</p> <p>The string must not end with a comma or hyphen, or include any whitespace characters.</p>	<p>Example: 1,2,3,5-8,10-20.</p> <p>The value must be different in different VLAN ID ranges.</p> <p>If this column is required, you must also specify the <b>Encap</b> column.</p>

## L2VPN/ACs

This table contains information about ACs.

### XML structure

```

<L2VPN>
  <ACs>
    <AC>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <VsiName></VsiName>
      <AccessMode></AccessMode>
      <Hub></Hub>
      <Statistics></Statistics>
      <Bandwidth></Bandwidth>
      <LearningMode></LearningMode>
      <Flooding></Flooding>
      <FloodType></FloodType>
      <ForwardingMode></ForwardingMode>
      <TrackEntryNumber></TrackEntryNumber>
    </AC>
  </ACs>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	ACs
Table type	Multi-instance table
Row name	AC
Restrictions	This table supports only layer 2 Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	You must create a service instance first before you merge, replace or create ACs.
VsiName	VSI name	N/A	String. Length: 1 to 31 characters.	You must create a VSI first before you merge, replace or create ACs.  You must specify this column when the operation is create, merge or replace.  Can not be modified after creation.
AccessMode	The access mode of this AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Vlan.</li> <li>2—Ethernet.</li> </ul>	Can not be modified after creation.  By default, the value is 1.

Hub	Hub spoke attribute for the Link.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke(default).</li> </ul>	You must first create the VSI with the hub-spoke capability. Can not be modified after creation.
Statistics	Whether statistics function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	N/A
Bandwidth	AC bandwidth	N/A	Unsigned integer Value range: The minimum value is 64 kbps. The maximum value (in kbps) varies by device model.	Support for this column depends on the device model.
LearningMode	MAC learning mode of this AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—MAC mode.</li> <li>1—SVID only.</li> <li>2—Double VIDs.</li> <li>3—Learning disabled</li> </ul>	By Default,the value is 0 (MAC mode). Support for this column depends on the device.
Flooding	Enabling status of flooding	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled(default).</li> <li>false—Disabled.</li> </ul>	N/A
FloodType	Flooding type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—All ports.</li> <li>2—Source port.</li> </ul>	The value must be set when flooding set to disabled.
ForwardingMode	Forwarding mode of this AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—MAC mode (default).</li> <li>1—SVID only.</li> <li>2—Double VIDs.</li> </ul>	Support for this column depends on the device model.
TrackEntryNumber	Track entry number list	N/A	Number string: It is a comma-separated list of up to three Track entry numbers. The string must end with a number.	Example: 1,2,3 A Track entry number list cannot contain duplicate Track entry numbers.

## L2VPN/L3Interfaces

This table contains information about ACs for Layer 3 Ethernet interfaces.

### XML structure

```

<L2VPN>
  <L3Interfaces>
    <L3Interface>
      <IfIndex></IfIndex>

```

```

    <VsiName></VsiName>
    <AccessMode></AccessMode>
    <Hub></Hub>
    <TrackEntryNumber></TrackEntryNumber>
  </L3Interface>
</L3Interfaces>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	L3Interfaces
Table type	Multi-instance table
Row name	L3Interface
Restrictions	This table supports only layer 3 Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
VsiName	VSI name	N/A	String. Length: 1 to 31 characters.	You must create a VSI first before you merge, replace or create ACs.  You must specify this column when the operation is create, merge or replace.  Can not be modified after creation.
AccessMode	Access mode of	N/A	Enumeration:	Cannot be

	the AC		<ul style="list-style-type: none"> <li>1—VLAN.</li> <li>2—Ethernet.</li> </ul>	modified after creation. By default, the value is 1.
Hub	Hub spoke attribute for the Link.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke(default).</li> </ul>	You must first create the VSI with the hub-spoke capability. Can not be modified after creation.
TrackEntryNumber	Track entry number	N/A	Number string: It is a comma-separated list of up to three Track entry numbers. The string must end with a number.	Example: 1,2,3 A Track entry number list cannot contain duplicate Track entry numbers.

## L2VPN/FloodingMACs

This table contains information about MAC address which can be selectively flooded.

### XML structure

```

<L2VPN>
  <FloodingMACs>
    <MAC>
      <VsiName></VsiName>
      <MacAddr></MacAddr>
    </MAC>
  </FloodingMACs>
</L2VPN>

```

### Table description

Item	Description
Feature name	L2VPN
Table name	FloodingMACs
Table type	Multi-instance table
Row name	MAC
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
MacAddr	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated. The value can't be broadcast address.	Example: 00-0c-af-e3-5d-c0. Some versions only support unicast address or all 0s.

## L2VPN/LocalMACs

This table contains information about setting static local MAC addresses for each VSI.

## XML structure

```
<L2VPN>
  <LocalMACs>
    <MAC>
      <VsiName></VsiName>
      <MacAddr></MacAddr>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
    </MAC>
  </LocalMACs>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	LocalMACs
Table type	Multi-instance table
Row name	MAC
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	You must create a VSI first.
MacAddr	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
IfIndex	Interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference. IfIndex cannot be modified after creation.
SrvID	Service instance ID	N/A	Unsigned integer. Value range: 1 to 4096.	SrvID cannot be modified after creation.

## L2VPN/VSIInterfaces

This table is used to create or delete VSI interfaces

## XML structure

```

<L2VPN>
  <VSIInterfaces>
    <Interface>
      <ID></ID>
      <LocalEnable></LocalEnable>
      <L3VNI></L3VNI>
      <ArpSendRate></ArpSendRate>
      <PrefixRouteGenerate></PrefixRouteGenerate>
    </Interface>
  </VSIInterfaces>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	VSIInterfaces
Table type	Multi-instance table
Row name	Interface

Restrictions	You must enable global L2VPN feature at first.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	VSI interface ID	Index	Unsigned integer	The range of VsiInterfaceID is reference in table of Base which in Data API.
LocalEnable	Local distributed gateway	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>	N/A
L3VNI	L3 VNI for the tenant	N/A	Unsigned integer	N/A
ArpSendRate	ARP packet sending rate limit	N/A	Unsigned integer Value range: 0 to 500.	By default, the value is 0 for no limit.
PrefixRouteGenerate	Whether EVPN route advertisement is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled (default).</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## L2VPN/VSIIPv4Subnets

This table contains information about IPv4 subnet configurations.

## XML structure

```

<L2VPN>
  <VSIIPv4Subnets>
    <Ipv4Subnet>
      <VsiName></VsiName>
      <SubnetAddress></SubnetAddress>
      <WildcardMask></WildcardMask>
    </Ipv4Subnet>
  </VSIIPv4Subnets>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	VSIIPv4Subnets

Table type	Multi-instance table
Row name	Ipv4Subnet
Restrictions	You must specify a gateway interface for the VSI at first.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
SubnetAddress	IPv4 address	Index	String, dotted decimal notation.	N/A
WildcardMask	Wildcard mask	Index	String, dotted decimal notation.	N/A

## L2VPN/VSIIPv6Subnets

This table contains information about IPv6 subnet configurations.

## XML structure

```

<L2VPN>
  <VSIIPv6Subnets>
    <Ipv6Subnet>
      <VsiName></VsiName>
      <SubnetAddress></SubnetAddress>
      <PrefixLength></PrefixLength>
    </Ipv6Subnet>
  </VSIIPv6Subnets>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	VSIIPv6Subnets
Table type	Multi-instance table
Row name	Ipv6Subnet
Restrictions	You must specify a gateway interface for the VSI at first.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
SubnetAddress	IPv6 address	Index	Hexadecimal string, colon-separated.	Example: ABCD:EF01::1
PrefixLength	Prefix length of the IPv6 address	Index	Unsigned integer. <ul style="list-style-type: none"><li>Value range: 1- 128.</li></ul>	N/A

## L2VPN/InterfaceConfigs

This table contains information about configurations of interfaces.

### XML structure

```
<L2VPN>
  <InterfaceConfigs>
    <InterfaceConfig>
      <IfIndex></IfIndex>
      <SoftwareLearning></SoftwareLearning>
      <Dci></Dci>
      <VxlanOverVxlan></VxlanOverVxlan>
      <MacBasedAc></MacBasedAc>
      <LearningMode></LearningMode>
      <ForwardingMode></ForwardingMode>
    </InterfaceConfig>
  </InterfaceConfigs>
</L2VPN>
```

### Table description

Item	Description
Feature name	L2VPN
Table name	InterfaceConfigs
Table type	Multi-instance table
Row name	InterfaceConfig
Restrictions	You must first enable the L2VPN feature globally.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
SoftwareLearning	Whether learning MAC addresses through software function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false (default)</li> </ul>	N/A
Dci	Whether Dci is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false (default)</li> </ul>	Support for this column depends on the device model.
VxlanOverVxlan	Whether VXLAN over VXLAN is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false (default)</li> </ul>	Support for this column depends on the device model.
MacBasedAc	Whether mac based ac is enable	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false (default)</li> </ul>	Support for this column depends on the device model.
LearningMode	MAC learning mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—MAC mode (default).</li> <li>1—SVID only.</li> <li>2—Double VIDs.</li> <li>3—Learning disabled.</li> </ul>	Support for this column depends on the device model.
ForwardingMode	Forwarding mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—MAC mode (default).</li> <li>1—SVID only.</li> <li>2—Double VIDs.</li> </ul>	Support for this column depends on the device model.

## L2VPN/SrvRewrites

This table contains information about VLAN tag rewrite capability of service instances.

## XML structure

```
<L2VPN>
  <SrvRewrites>
    <SrvRewrite>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <Inbound>
        <RewriteType></RewriteType>
        <SVlanID></SVlanID>
        <CVlanID></CVlanID>
        <Symmetric></Symmetric>
      </Inbound>
      <Outbound>
        <RewriteType></RewriteType>
        <SVlanID></SVlanID>
        <CVlanID></CVlanID>
      </Outbound>
    </SrvRewrite>
  </SrvRewrites>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	SrvRewrites
Table type	Multi-instance table
Row name	SrvRewrite
Restrictions	You must first enable the L2VPN feature globally.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF

				XML API Configuration Reference.
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	You must create a service instance before you merge, replace or create SrvRewrites.
Inbound	Inbound direction of packets	N/A	Members include: <ul style="list-style-type: none"> <li>RewriteType</li> <li>SvlanID</li> <li>CvlanID</li> <li>Symmetric</li> </ul>	RewriteType must be specified.
Outbound	Outbound direction of packets	N/A	Members include: <ul style="list-style-type: none"> <li>RewriteType</li> <li>SvlanID</li> <li>CvlanID</li> </ul>	The members of RewriteType must be specified.
RewriteType	Rewrite type	N/A	Unsigned integer. Value: <ul style="list-style-type: none"> <li>1: NEST</li> <li>2: REMARK_ONE</li> <li>3: REMARK_TWO</li> <li>4: STRIP_SVLAN</li> <li>5: STRIP_CVLAN</li> <li>6: STRIP_BOTH</li> </ul>	N/A
SVlanID	Outer VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
CVlanID	Inner VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
Symmetric	Applies the opposite VLAN tag processing rule to outgoing traffic	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	By default, the value is false.

## L2VPN/L3Rewrites

This table contains information about rewrite capability of ac interface.

### XML structure

```

<L2VPN>
  <L3Rewrites>
    <L3Rewrite>
      <IfIndex></IfIndex>
      <RewriteType></RewriteType>
      <SVlanID></SVlanID>
      <CVlanID></CVlanID>
      <Symmetric></Symmetric>
    </L3Rewrite>
  </L3Rewrites>
</L2VPN>

```



```

    </L3Rewrites>
  </L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	L3Rewrites
Table type	Multi-instance table
Row name	L3Rewrite
Restrictions	You must enable L2VPN feature globally at first.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
RewriteType	RewriteType	N/A	Unsigned integer. Value: <ul style="list-style-type: none"> <li>1: NEST_S</li> <li>2: NEST_C</li> <li>3: NEST_SC</li> <li>8: REMARK_1TO2</li> </ul>	
SVlanID	Outer VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
CVlanID	Inner VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
Symmetric	Symmetric	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	By default, the value is false.

# Contents

L2VPN .....	1
L2VPN/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
L2VPN/SrvEncapCapabilities .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
L2VPN/VSI s .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
L2VPN/PWClasses .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
L2VPN/SRVs .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
L2VPN/ACs .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
L2VPN/L3Interfaces .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
L2VPN/FloodingMACs .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
L2VPN/LocalMACs .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
L2VPN/VSIStatistics .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
L2VPN/AvailableVSIInterfaceID .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
L2VPN/VSIInterfaces .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
L2VPN/VSIIPv4Subnets .....	21
XML structure .....	21
Table description .....	21
Columns .....	21
L2VPN/VSIIPv6Subnets .....	22
XML structure .....	22
Table description .....	22
Columns .....	22

L2VPN/InterfaceConfigs .....	22
XML structure .....	23
Table description .....	23
Columns .....	23
L2VPN/SrvRewrites .....	24
XML structure .....	24
Table description .....	25
Columns .....	25
L2VPN/L3Rewrites .....	26
XML structure .....	26
Table description .....	26
Columns .....	26

# L2VPN

## L2VPN/Base

This table contains global L2VPN information.

### XML structure

```
<L2VPN>
  <Base>
    <Enable></Enable>
    <SupportVsiInterface></SupportVsiInterface>
    <VsiInterfaceMinID></VsiInterfaceMinID>
    <VsiInterfaceMaxID></VsiInterfaceMaxID>
    <SupportSRV></SupportSRV>
    <SupportControlWord></SupportControlWord>
    <SupportVPLSHubSpoke></SupportVPLSHubSpoke>
    <SupportVPLSMACLimit></SupportVPLSMACLimit>
    <MACLimitMAX></MACLimitMAX>
    <SupportVPWSInterworking></SupportVPWSInterworking>
    <SupportVPWSDualReceive></SupportVPWSDualReceive>
    <SupportVSIStatistics></SupportVSIStatistics>
    <SupportPWStatistics></SupportPWStatistics>
    <SupportVSIBandwidth></SupportVSIBandwidth>
    <SupportVSIBroadcastRestrained></SupportVSIBroadcastRestrained>
    <VSIBroadcastRestrainedDefault></VSIBroadcastRestrainedDefault>
    <SupportVSIMulticastRestrained></SupportVSIMulticastRestrained>
    <VSIMulticastRestrainedDefault></VSIMulticastRestrainedDefault>
    <SupportVSIUnicastRestrained></SupportVSIUnicastRestrained>
    <VSIUnicastRestrainedDefault></VSIUnicastRestrainedDefault>
    <SupportACBandwidth></SupportACBandwidth>
    <SupportVxlanOverVxlan></SupportVxlanOverVxlan>
    <SupportDscp></SupportDscp>
    <SupportServiceClass></SupportServiceClass>
    <ServiceClassValueMax></ServiceClassValueMax>
    <StatisticsInterval></StatisticsInterval>
    <SupportOverlayTunnelStatistics></SupportOverlayTunnelStatistics>
  </Base>
</L2VPN>
```

### Table description

Item	Description
Feature name	L2VPN
Table name	Base

Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only global configurations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether L2VPN feature is enabled globally	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SupportVsiInterface	Whether VSI interface feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
VsiInterfaceMinID	Minimum VSI interface ID.	N/A	Unsigned integer.	N/A
VsiInterfaceMaxID	Maximum VSI interface ID.	N/A	Unsigned integer.	N/A
SupportSRV	Whether SRV feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportControlWord	Whether control word feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportVPLSHubSpoke	Whether VPLS hub-spoke feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportVPLSMACLimit	Whether VPLS MAC limit feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
MACLimitMax	Maximum VPLS MAC limit	N/A	Unsigned integer	N/A
SupportVPWSInterworking	Whether VPWS interworking feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportVPWSDualReceive	Whether VPWS dualreceive feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportVSIStatistics	Whether VSI statistics feature is	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A

	supported			
SupportPWStatistics	Whether PW statistics feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportVSIBandwidth	Whether VSI bandwidth feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportVSIBroadcastRestrain	Whether VSI broadcast suppression feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
VSIBroadcastRestrainDefault	The default value of broadcast suppression bandwidth threshold.	N/A	Unsigned integer.	N/A
SupportVSIMulticastRestraining	Whether VSI multicast suppression feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
VSIMulticastRestrainingDefault	The default value of multicast suppression bandwidth threshold.	N/A	Unsigned integer.	N/A
SupportVSIUnknownUnicastRestraining	Whether VSI Unknown-unicast suppression feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
VSIUnknownUnicastRestrainingDefault	The default value of Unknown-unicast suppression bandwidth threshold.	N/A	Unsigned integer.	N/A
SupportACBandwidth	Whether AC bandwidth feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportVxlanOverVxlan	Whether VXLAN over VXLAN is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportDscp	Whether the DSCP feature is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
SupportServ	Whether the	N/A	Boolean:	N/A

ceClass	service class feature is supported.		<ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	
ServiceClass ValueMax	Maximum service class value.	N/A	Unsigned integer.	N/A
StatisticsInterval	Interval for collecting packets statistics	N/A	Unsigned integer Value range: 30 to 65535. Unit: seconds.	N/A
SupportOverlayTunnelStatistics	Whether the Overlay Tunnel statistics feature is supported	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A

## L2VPN/SrvEncapCapabilities

This table contains the encapsulation capabilities of service instance.

### XML structure

```

<L2VPN>
  <SrvEncapCapabilities>
    <Default></Default>
    <Untagged></Untagged>
    <Tagged></Tagged>
    <SvlanId></SvlanId>
    <SvlanIdOnlyTagged></SvlanIdOnlyTagged>
    <SvlanIdCvlanId></SvlanIdCvlanId>
    <CvlanId></CvlanId>
    <CvlanList></CvlanList>
    <SvlanIdCvlanList></SvlanIdCvlanList>
    <SvlanIdCvlanAll></SvlanIdCvlanAll>
    <SvlanList></SvlanList>
    <SvlanListOnlyTagged></SvlanListOnlyTagged>
    <SvlanListCvlanList></SvlanListCvlanList>
  </SrvEncapCapabilities>
</L2VPN>

```

### Table description

Item	Description
Feature name	L2VPN
Table name	SrvEncapCapabilities
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Default	Support for matching packets by the default criteria which matches packets that do not match any other service instance.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
Untagged	Support for matching untagged packets.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
Tagged	Support for matching all tagged packets.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SvlanId	Support for matching packets by a SVLAN ID.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SvlanIdOnlyTagged	Support for matching only tagged packets by a SVLAN ID.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SvlanIdCvlanId	Support for matching packets by a SVLAN ID and a CVLAN ID.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
CvlanId	Support for matching packets by a CVLAN ID.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
CvlanList	Support for matching packets by CVLAN ID list.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SvlanIdCvlanList	Support for matching packets by a SVLAN ID and CVLAN ID list.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SvlanIdCvlanAll	Support for matching packets by a SVLAN ID and all CVLAN ID.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SvlanList	Support for matching packets by SVLAN ID list	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SvlanListOnlyTagged	Support for matching only tagged packets by SVLAN ID list.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SvlanListCvlanList	Support for matching packets by SVLAN ID list and CVLAN ID list.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A



# L2VPN/VSIs

This table contains information about VSIs.

## XML structure

```
<L2VPN>
  <VSIs>
    <VSI>
      <VsiName></VsiName>
      <HubSpoke></HubSpoke>
      <VsiIndex></VsiIndex>
      <VxlanID></VxlanID>
      <NvgreID></NvgreID>
      <ArpSuppression></ArpSuppression>
      <NdSuppression></NdSuppression>
      <MacLearning></MacLearning>
      <MacLimit></MacLimit>
      <Flooding></Flooding>
      <FloodType></FloodType>
      <VsiInterfaceID></VsiInterfaceID>
      <Statistics></Statistics>
      <StatisticsOverlayTunnel></StatisticsOverlayTunnel>
      <Description></Description>
      <Bandwidth></Bandwidth>
      <BroadcastRestrain></BroadcastRestrain>
      <MulticastRestrain></MulticastRestrain>
      <UnknownUnicastRestrain></UnknownUnicastRestrain>
      <AdminStatus></AdminStatus>
      <Status></Status>
      <LocMacCnt></LocMacCnt>
      <Dscp></Dscp>
      <ServiceClass></ServiceClass>
    </VSI>
  </VSIs>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	VSIs
Table type	Multi-instance table
Row name	VSI
Restrictions	When the number of VSIs is large, it is recommended to use the <get-bulk> operation instead of the <get> operation

that may cost a lot of time and cause the UI to get stuck.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
HubSpoke	Support for hub spoke capability	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Supported.</li> <li>false—Not supported.</li> </ul>	No modification. Support for this column depends on the device model.
VsiIndex	VSI index	N/A	Unsigned integer.	N/A
VxlanID	VXLAN ID	N/A	Unsigned integer, Value range: 0-16777215.	N/A
NvgreID	NVGRE ID	N/A	Unsigned integer, Value range: 4096-16777214.	N/A
ArpSuppression	ARP flooding suppression	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
NdSuppression	ND flooding suppression	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
MacLearning	MAC address learning	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
MacLimit	MAC table limit	N/A	Unsigned integer. Value range: The value range varies by device model.	Support for this column depends on the device model.
Flooding	Flooding for all destination-unknown frames	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
FloodType	Flood type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Broadcast</li> <li>2—Unknown unicast</li> <li>4—Multicast</li> <li>3—Broadcast and unknown unicast.</li> <li>5—Broadcast and multicast.</li> <li>6—Unknown unicast and multicast.</li> <li>7—Broadcast, unknown unicast, and multicast.</li> <li>9—Broadcast DCI</li> </ul>	N/A

			<ul style="list-style-type: none"> <li>• 10—Unknown unicast DCI</li> <li>• 12—Multicast DCI</li> <li>• 11—Broadcast and unknown unicast on DCI tunnels.</li> <li>• 13—Broadcast and multicast on DCI tunnels.</li> <li>• 14—Unknown unicast and multicast on DCI tunnels.</li> <li>• 15—Broadcast, unknown unicast, and multicast on DCI tunnels.</li> <li>• 17—Broadcast all-direction</li> <li>• 18—Unknown unicast all-direction</li> <li>• 20—Multicast all-direction</li> <li>• 19—Broadcast and unknown unicast in all directions.</li> <li>• 21—Broadcast and multicast in all directions.</li> <li>• 22—Unknown unicast and multicast in all directions.</li> <li>• 23—Broadcast, unknown unicast, and multicast in all directions.</li> </ul>	
VsiInterfacelD	VSI interface ID	N/A	Unsigned integer.	N/A
Statistics	VSI statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled</li> </ul>	N/A
StatisticsOverlayTunnel	Overlay Tunnel statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled</li> </ul>	N/A
Description	Description for the VSI	N/A	String. Length: 1 to 80 characters.	N/A
Bandwidth	VSI bandwidth	N/A	Unsigned integer Value range: The minimum value is 64 kbps. The maximum value (in kbps) varies by device model.	N/A
BroadcastRestrain	Broadcast suppression bandwidth threshold	N/A	Unsigned integer. Value range: 0, 64 to the maximum, in kbps. The maximum value varies by device model.	N/A
MulticastRestrain	Multicast suppression bandwidth threshold	N/A	Unsigned integer. Value range: 0, 64 to the maximum, in kbps. The maximum value varies by device model.	N/A
UnknownUnicastRestrain	Unknown-unicast suppression	N/A	Unsigned integer. Value range: 0, 64 to the	N/A

	bandwidth threshold		maximum, in kbps. The maximum value varies by device model.	
AdminStatus	Administratively status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Administratively up.</li> <li>2—Administratively down.</li> </ul>	N/A
Status	VSI status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Up.</li> <li>2—Down.</li> </ul>	N/A
LocMacCnt	The count of local MAC addresses	N/A	Unsigned integer.	The value is always zero when the mode of VSI is not VXLAN. The value may be not zero when the mode of VSI is VXLAN.
Dscp	DSCP value	N/A	Unsigned integer. Value range: 0-63.	Support for this column depends on the device
ServiceClass	Service class value	N/A	Unsigned integer. Value range: The value range varies by device model.	Support for this column depends on the device

## L2VPN/PWClasses

This table contains PW class information.

### XML structure

```

<L2VPN>
  <PWClasses>
    <PWClass>
      <PWClassName></PWClassName>
      <ControlWord></ControlWord>
      <PWType></PWType>
      <SequencingBoth></SequencingBoth>
    </PWClass>
  </PWClasses>
</L2VPN>

```

### Table description

Item	Description
Feature name	L2VPN
Table name	PWClasses
Table type	Multi-instance table

Row name	PWClass
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PWClassName	PW class name	Index	String. Length: 1 to 19 characters.	N/A
ControlWord	Control word for ACs	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
PWType	PW type for ACs	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—VLAN.</li> <li>2—Ethernet.</li> </ul>	N/A
SequencingBoth	Sequencing for both incoming and outgoing packets	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	Support for this column depends on the device model.

## L2VPN/SRVs

This table contains information about service instances of layer 2 ethernet interfaces.

## XML structure

```

<L2VPN>
  <SRVs>
    <SRV>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <Encap></Encap>
      <SVlanRange></SVlanRange>
      <CVlanRange></CVlanRange>
    </SRV>
  </SRVs>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	SRVs
Table type	Multi-instance table

Row name	SRV
Restrictions	This table supports only layer 2 Ethernet interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
Encap	Encapsulation type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Default.</li> <li>2—Untagged.</li> <li>3—Tagged</li> <li>4—SvlanId</li> <li>5—SvlanIdOnlyTagged</li> <li>6—SvlanIdCvlanId</li> <li>7—CvlanId</li> <li>8—CvlanList</li> <li>9—SvlanIdCvlanList</li> <li>10—SvlanIdCvlanAll</li> <li>11—SvlanList</li> <li>12—SvlanListOnlyTagged</li> <li>13—SvlanListCvlanList</li> </ul>	N/A
SVlanRange	A outer VLAN ID or a list of outer VLAN IDs	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range, and the end VLAN ID must be larger than the start VLAN ID. The string must not end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. The column is available when the value of Encap is SvlanId or SvlanIdOnlyTagged or SvlanList or SvlanListOnlyTagged or SvlanIdCvlanId or SvlanIdCvlanList or SvlanIdCvlanAll.
CVlanRange	A inner VLAN ID	N/A	Number string.	Example:

	or a list of inner VLAN IDs		It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range, and the end VLAN ID must be larger than the start VLAN ID.  The string must not end with a comma or hyphen, or include any whitespace characters.	1,2,3,5-8,10-20.  The column is available when the value of Encap is CvlanId or CvlanList or SvlanIdCvlanId or SvlanIdCvlanList or SvlanIdCvlanAll.
--	-----------------------------	--	---	---

## L2VPN/ACs

This table contains information about ACs.

### XML structure

```

<L2VPN>
  <ACs>
    <AC>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <VsiName></VsiName>
      <AccessMode></AccessMode>
      <Hub></Hub>
      <Statistics></Statistics>
      <Bandwidth></Bandwidth>
      <LearningMode></LearningMode>
      <InPkts></InPkts>
      <InOctets></InOctets>
      <OutPkts></OutPkts>
      <OutOctets></OutOctets>
      <Flooding></Flooding>
      <FloodType></FloodType>
      <ForwardingMode></ForwardingMode>
      <TrackEntryNumber></TrackEntryNumber>
    </AC>
  </ACs>
</L2VPN>

```

### Table description

Item	Description
Feature name	L2VPN
Table name	ACs
Table type	Multi-instance table
Row name	AC

## Restrictions

This table supports only layer 2 Ethernet interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
VsiName	VSI name	N/A	String. Length: 1 to 31 characters.	N/A
AccessMode	The access mode of this AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Vlan.</li> <li>2—Ethernet.</li> </ul>	N/A
Hub	Hub spoke attribute for the Link.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke.</li> </ul>	Only exists when the VSI supports hub-spoke capability.
Statistics	Whether statistics function is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
Bandwidth	AC bandwidth	N/A	Unsigned integer Value range: The minimum value is 64 kbps. The maximum value (in kbps) varies by device model.	N/A
LearningMode	MAC learning mode of the AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—MAC mode.</li> <li>1—SVID only.</li> <li>2—Double VIDs.</li> <li>3—Learning disabled</li> </ul>	By Default, the value is 0 (MAC mode). Support for this column depends on the device.
InPkts	Number of inbound packets	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
InOctets	Number of inbound bytes	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
OutPkts	Number of	N/A	Unsigned integer64.	N/A



	Outbound packets		Value range: 0 to $2^{64} - 1$ .	
OutOctets	Number of Outbound bytes	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
Flooding	Enabling status of flooding	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
FloodType	Flooding type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—All ports.</li> <li>2—Source port.</li> </ul>	N/A
ForwardingMode	Forwarding mode of this AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—MAC mode.</li> <li>1—SVID only.</li> <li>2—Double VIDs.</li> </ul>	Support for this column depends on the device.
TrackEntryNumber	Track entry number list	N/A	Number string: It is a comma-separated list of up to three Track entry numbers. The string must end with a number.	Example: 1,2,3

## L2VPN/L3Interfaces

This table contains information about ACs for Layer 3 Ethernet interfaces.

### XML structure

```

<L2VPN>
  <L3Interfaces>
    <L3Interface>
      <IfIndex></IfIndex>
      <VsiName></VsiName>
      <AccessMode></AccessMode>
      <Hub></Hub>
      <TrackEntryNumber></TrackEntryNumber>
    </L3Interface>
  </L3Interfaces>
</L2VPN>

```

### Table description

Item	Description
Feature name	L2VPN
Table name	L3Interfaces
Table type	Multi-instance table
Row name	L3Interface

Restrictions	This table supports only layer 3 Ethernet interfaces.
Support for row creation and deletion	This table supports only layer 3 Ethernet interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
VsiName	VSI name	N/A	String. Length: 1 to 31 characters.	You must create a VSI first before you merge, replace or create ACs.
AccessMode	Access mode of the AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—VLAN.</li> <li>2—Ethernet.</li> </ul>	N/A
Hub	Hub spoke attribute for the Link.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke.</li> </ul>	Only exists when the VSI supports hub-spoke capability.
TrackEntryNumber	Track entry number list	N/A	Number string: It is a comma-separated list of up to three Track entry numbers. The string must end with a number.	Example: 1,2,3

## L2VPN/FloodingMACs

This table contains information about MAC addresses which can be selectively flooded.

### XML structure

```
<L2VPN>
  <FloodingMACs>
```

```

    <MAC>
      <VsiName></VsiName>
      <MacAddr></MacAddr>
    </MAC>
  </FloodingMACs>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	FloodingMACs
Table type	Multi-instance table
Row name	MAC
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
MacAddr	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

## L2VPN/LocalMACs

This table contains information about local MAC addresses of each VSI.

## XML structure

```

<L2VPN>
  <LocalMACs>
    <MAC>
      <VsiName></VsiName>
      <MacAddr></MacAddr>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <Type></Type>
    </MAC>
  </LocalMACs>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	LocalMACs
Table type	Multi-instance table
Row name	MAC
Restrictions	Only supported when the mode of VSI is VXLAN.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
MacAddr	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
IfIndex	Interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Service instance ID	N/A	Unsigned integer. Value range: 1 to 4096.	N/A
Type	Type of local MAC address	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Dynamic</li><li>1—Static</li></ul>	N/A

## L2VPN/VSIStatistics

This table contains VSI traffic statistics.

## XML structure

```
<L2VPN>
  <VSIStatistics>
    <Statistics>
```

```

    <VsiName></VsiName>
    <InPkts></InPkts>
    <InOctets></InOctets>
    <InErrors></InErrors>
    <InDiscards></InDiscards>
    <OutPkts></OutPkts>
    <OutOctets></OutOctets>
    <OutErrors></OutErrors>
    <OutDiscards></OutDiscards>
  </Statistics>
</VSISStatistics>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	VSISStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
InPkts	Number of inbound packets	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
InOctets	Number of inbound bytes	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
InErrors	Number of inbound error packets	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
InDiscards	Number of inbound discard packets	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
OutPkts	Number of Outbound packets	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
OutOctets	Number of Outbound bytes	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
OutErrors	Number of Outbound error packets	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A

OutDiscards	Number of Outbound discard packets	N/A	Unsigned integer64. Value range: 0 to $2^{64} - 1$ .	N/A
-------------	------------------------------------	-----	---	-----

## L2VPN/AvailableVSIInterfaceID

This table contains the available VSI interface ID.

### XML structure

```
<L2VPN>
  <AvailableVSIInterfaceID>
    <ID></ID>
  </AvailableVSIInterfaceID>
</L2VPN>
```

### Table description

Item	Description
Feature name	L2VPN
Table name	AvailableVSIInterfaceID
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Available VSI interface ID	N/A	Unsigned integer.	The range of VsiInterfaceID is reference in table of Base which in Data API.

## L2VPN/VSIInterfaces

This table contains information about VSI interfaces.

### XML structure

```
<L2VPN>
  <VSIInterfaces>
    <Interface>
```

```

<ID></ID>
<IfIndex></IfIndex>
<Name></Name>
<LocalEnable></LocalEnable>
<L3VNI></L3VNI>
<ArpSendRate></ArpSendRate>
<PrefixRouteGenerate></PrefixRouteGenerate>
</Interface>
</VSIInterfaces>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	VSIInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	You must enable global L2VPN feature at first.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	VSI interface ID	Index	Unsigned integer.	N/A
IfIndex	Interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Name	Full name of an interface	N/A	String. Length: 2 to 47 characters.	N/A
LocalEnable	Local distributed gateway	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
L3VNI	L3 VNI for the tenant	N/A	Unsigned integer	N/A
ArpSendRate	ARP packet	N/A	Unsigned integer.	0 for no limit.

	sending rate limit			
PrefixRouteGenerate	Whether EVPN route advertisement is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## L2VPN/VSIIPv4Subnets

This table contains information about IPv4 subnet configurations.

### XML structure

```
<L2VPN>
  <VSIIPv4Subnets>
    <Ipv4Subnet>
      <VsiName></VsiName>
      <SubnetAddress></SubnetAddress>
      <WildcardMask></WildcardMask>
      <VsiInterfaceID></VsiInterfaceID>
    </Ipv4Subnet>
  </VSIIPv4Subnets>
</L2VPN>
```

### Table description

Item	Description
Feature name	L2VPN
Table name	VSIIPv4Subnets
Table type	Multi-instance table
Row name	Ipv4Subnet
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
SubnetAddress	IPv4 address	Index	String, dotted decimal notation.	N/A
WildcardMask	Wildcard mask	Index	String, dotted decimal notation.	N/A
VsiInterfaceID	VSI interface ID	N/A	Unsigned integer	N/A



# L2VPN/VSIIPv6Subnets

This table contains information about IPv6 subnet configurations.

## XML structure

```
<L2VPN>
  <VSIIPv6Subnets>
    <Ipv6Subnet>
      <VsiName></VsiName>
      <SubnetAddress></SubnetAddress>
      <PrefixLength></PrefixLength>
      <VsiInterfaceID></VsiInterfaceID>
    </Ipv6Subnet>
  </VSIIPv6Subnets>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	VSIIPv6Subnets
Table type	Multi-instance table
Row name	Ipv6Subnet
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
SubnetAddress	IPv6 address	Index	Hexadecimal string, colon-separated.	Example: ABCD:EF01::1
PrefixLength	Prefix length of the IPv6 address	N/A	Unsigned integer. Value range: 1- 128.	N/A
VsiInterfaceID	VSI interface ID	N/A	Unsigned integer	N/A

# L2VPN/InterfaceConfigs

This table contains information about configurations of interfaces.

# XML structure

```
<L2VPN>
  <InterfaceConfigs>
    <InterfaceConfig>
      <IfIndex></IfIndex>
      <SoftwareLearning></SoftwareLearning>
      <Dci></Dci>
      <VxlanOverVxlan></VxlanOverVxlan>
      <MacBasedAc></MacBasedAc>
      <LearningMode></LearningMode>
      <ForwardingMode></ForwardingMode>
    </InterfaceConfig>
  </InterfaceConfigs>
</L2VPN>
```

## Table description

Item	Description
Feature name	L2VPN
Table name	InterfaceConfigs
Table type	Multi-instance table
Row name	InterfaceConfig
Restrictions	You must first enable the L2VPN feature globally.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
SoftwareLearning	Whether learning MAC addresses through software function is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A
Dci	Whether Dci is	N/A	Boolean:	N/A

	enabled		<ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	
VxlanOverVxlan	Whether VXLAN over VXLAN is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	N/A
MacBasedAc	Whether mac based ac is enable	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Support for this column depends on the device model.
LearningMode	MAC learning mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—MAC mode (default).</li> <li>• 1—SVID only.</li> <li>• 2—Double VIDs.</li> <li>• 3—Learning disabled.</li> </ul>	Support for this column depends on the device model.
ForwardingMode	Forwarding mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—MAC mode (default).</li> <li>• 1—SVID only.</li> <li>• 2—Double VIDs.</li> </ul>	Support for this column depends on the device model.

## L2VPN/SrvRewrites

This table contains information about VLAN tag rewrite capability of service instances.

### XML structure

```

<L2VPN>
  <SrvRewrites>
    <SrvRewrite>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <Inbound>
        <RewriteType></RewriteType>
        <SVlanID></SVlanID>
        <CVlanID></CVlanID>
        <Symmetric></Symmetric>
      </Inbound>
      <Outbound>
        <RewriteType></RewriteType>
        <SVlanID></SVlanID>
        <CVlanID></CVlanID>
      </Outbound>
    </SrvRewrite>
  </SrvRewrites>
</L2VPN>

```

## Table description

Item	Description
Feature name	L2VPN
Table name	SrvRewrites
Table type	Multi-instance table
Row name	SrvRewrite
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
Inbound	Inbound direction of packets	N/A	Members include: <ul style="list-style-type: none"> <li>RewriteType</li> <li>SvlanID</li> <li>CvlanID</li> <li>Symmetric</li> </ul>	NA
Outbound	Outbound direction of packets	N/A	Members include: <ul style="list-style-type: none"> <li>RewriteType</li> <li>SvlanID</li> <li>CvlanID</li> </ul>	N/A
RewriteType	Rewrite type	N/A	Unsigned integer. Value: <ul style="list-style-type: none"> <li>1: NEST</li> <li>2: REMARK_ONE</li> <li>3: REMARK_TWO</li> <li>4: STRIP_SVLAN</li> <li>5: STRIP_CVLAN</li> <li>6: STRIP_BOTH</li> </ul>	N/A
SVlanID	Outer VLAN ID	N/A	Unsigned integer.	N/A

			Value range: 1 to 4094.	
CVlanID	Inner VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
Symmetric	Whether opposite VLAN tag processing is enabled for outgoing traffic	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	By default, the value is false.

## L2VPN/L3Rewrites

This table contains information about rewrite capability of ac interface.

### XML structure

```

<L2VPN>
  <L3Rewrites>
    <L3Rewrite>
      <IfIndex></IfIndex>
      <RewriteType></RewriteType>
      <SVlanID></SVlanID>
      <CVlanID></CVlanID>
      <Symmetric></Symmetric>
    </L3Rewrite>
  </L3Rewrites>
</L2VPN>

```

### Table description

Item	Description
Feature name	L2VPN
Table name	L3Rewrites
Table type	Multi-instance table
Row name	L3Rewrite
Restrictions	You must enable L2VPN feature globally at first.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD

				document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
RewriteType	RewriteType	N/A	Unsigned integer. Value: <ul style="list-style-type: none"> <li>• 1: NEST_S</li> <li>• 2: NEST_C</li> <li>• 3: NEST_SC</li> <li>• 8: REMARK_1TO2</li> </ul>	
SVlanID	Outer VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
CVlanID	Inner VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
Symmetric	Symmetric	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>	N/A.

# Contents

L2VPN .....	2
L2VPN/BASE .....	2
L2VPN/VS .....	2
L2VPN/PWCLASSES .....	2
L2VPN/SRV .....	3
L2VPN/L3INTERFACES .....	4
L2VPN/AC .....	4
L2VPN/FLOODINGMAC .....	5
L2VPN/LOCALMAC .....	5
L2VPN/CLEARVSISTATISTICS .....	6
L2VPN/CLEARALLVSISTATISTICS .....	6
L2VPN/VSISTATISTICS .....	7
L2VPN/AVAILABLE INTERFACE ID .....	7
L2VPN/INTERFACE ID .....	7
L2VPN/VSIIIPv4SUBNETS .....	8
L2VPN/VSIIIPv6SUBNETS .....	8
L2VPN/CLEARALLPWSTATISTICS .....	9
L2VPN/CLEARVSIPWSTATISTICS .....	9
L2VPN/CLEARVSIXCGSTATISTICS .....	9
L2VPN/CLEARVSIMACTAB .....	9
L2VPN/IFCFG .....	10
L2VPN/CLEAR AC STATISTICS .....	10
L2VPN/CLEAR ALL AC STATISTICS .....	11
L2VPN/REWRITE .....	11
L2VPN/VBRECIDS .....	12

# L2VPN

## L2VPN/BASE

Message	Explanation
Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Parameters don't exist. 参数不存在。	When the spare board is not prepared,the parameters don't exist. 备板未准备，参数不存在。

## L2VPN/VS1

Message	Explanation
When set is operated, the set value doesn't meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When set is operated, the set value doesn't meet the requirements of the module. SET操作时，所设的值不符合模块要求。
Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Executed the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Executing the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。

## L2VPN/PWCLASSES

Message	Explanation
Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。



Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Parameters don't exist. 参数不存在。	The MOR value of the column doesn't exist. 列的MOR值不存在。
Executed the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	1. Edit is not allowed. 2.No support for message sorting,the variable can't be modified. 1.不允许编辑。 2.不支持消息排序，变量不允许修改。
Failure to apply for resources. 申请资源失败。	Failure to apply for resources.Such as failure in memory applications. 申请资源失败，比如申请内存失败。

## L2VPN/SRV

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
No operation permissions. 无操作权限。	No RBAC permissions. 无RBAC权限。
Executed the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	1.Non-two-layer interface has no AC data. 2.The current interface is not a Ethernet interface and aggregate interface. 3.Encap does not support. 1.非二层接口无 AC 数据。 2.当前接口不是以太网接口和聚合接口。 3.不支持 Encap。
Parameters don't exist. 参数不存在。	Invailld service instance ID. 无效的服务实例ID。
Configration information does not meet module requirements.	Configration information does not meet module requirements.

配置信息不符合模块要求。	
--------------	--

## L2VPN/L3INTERFACES

Message	Explanation
Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server. 1. 访问一个no-access节点。 2. 发送、接收数据超。 3. 向服务器发起连接失败。
No operation permissions. 无操作权限。	No RBAC permissions. 无RBAC权限。
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	1. Interface does not support L3AC. 2. Hub-spoke function is not supported. 3. The user has the attribute column label, but there is no Vsiname tag at the same time. 1. 接口不支持 L3AC。 2. 不支持 hub-spoke 功能。 3. 用户具有属性列标签，同时没有 Vsiname 标签。
Executes the set command, and the variable exists, but the assignment fails because the condition is not satisfied in the current environment. 执行SET命令，变量存在，但因当前环境下条件不满足而导致赋值失败。	Executes the set command, and the variable exists, but the assignment fails because the condition is not satisfied in the current environment. For example, set MTU=1 in the Ethernet SNAO format. 执行SET命令，变量存在，但因当前环境下条件不满足而导致赋值失败。例如在以太网SNAO格式中设置MTU=1。
Parameters don't exist. 参数不存在。	Delete failure due to unconfigured AC. 由于未配置AC删除失败。

## L2VPN/AC

Message	Explanation
Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向	1. Access a no-access node. 2. Send/receive data timeout.

服务器发起连接失败。	<p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>No operation permissions.</p> <p>无操作权限。</p>	<p>No RBAC permissions.</p> <p>无RBAC权限。</p>
<p>Executed the set commamd, the variable exists but can not be modified.</p> <p>执行SET命令，变量存在但不能被修改。</p>	<p>1.Non-two-layer interface has no AC data.</p> <p>2.The current interface is not a Ethernet interface and aggregate interface.</p> <p>3.Interface does not support AC statistics.</p> <p>4.Interface does not support AC bandwidth.</p> <p>5.Hub-spoke function is not supported.</p> <p>1.非二层接口无AC数据。</p> <p>2.当前接口不是以太网接口和聚合接口。</p> <p>3.接口不支持AC统计。</p> <p>4.接口不支持AC带宽。</p> <p>5.不支持Encap。</p>
<p>When you delete the operation,you bring the AC mode or hub tag,but there is no VSI name tag.</p> <p>删除操作时，若带了ACmode或Hub标签，但是没有带VsiName标签，报错，不允许修改。</p>	<p>When you delete the operation,you bring the AC mode or hub tag,but there is no VSI name tag.</p> <p>删除操作时，若带了ACmode或Hub标签，但是没有带VsiName标签，报错，不允许修改。</p>

## L2VPN/FLOODINGMAC

Message	Explanation
<p>Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>

## L2VPN/LOCALMAC

Message	Explanation
<p>Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符</p>	<p>Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>

的情况。	
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Parameters don't exist. 参数不存在。	VSI index doesn't exist.. VSI索引不存在。

## L2VPN/CLEARVSI STATISTICS

Message	Explanation
Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Interface does not support VSI statistics. 接口不支持 VSI 统计。

## L2VPN/CLEARALLVSI STATISTICS

Message	Explanation
Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Interface does not support VSI statistics. 接口不支持 VSI 统计。

# L2VPN/VSI STATISTICS

Message	Explanation
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server.
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Invalid configuration messages. 无效的配置信息。

# L2VPN/AVAILABLE INTERFACE ID

Message	Explanation
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server. 1. 访问一个no-access节点。 2. 发送、接收数据超。 3. 向服务器发起连接失败。

# L2VPN/INTERFACE ID

Message	Explanation
Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server. 1. 访问一个no-access节点。 2. 发送、接收数据超。 3. 向服务器发起连接失败。
No operation permissions. 无操作权限。	No RBAC permissions. 无 RBAC 权限。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	Unauthorized VSIIFID. 未经授权的 VSIIFID。
Parameters don't exist. 参数不存在。	1. VSIIFID doesn't exist. 2. Invalid VXLAN-ID. 1. VSIIFID 不存在。

2.无效的 VXLAN-ID。

## L2VPN/VSIIPV4SUBNETS

Message	Explanation
<p>Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>Executed the set command, the variable exists but can not be modified.</p> <p>执行SET命令，变量存在但不能被修改。</p>	<p>Vsiif is not supported.</p> <p>不支持 VSIIF。</p>
<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>	<p>Invalid subnet address.</p> <p>无效的子网地址。</p>

## L2VPN/VSIIPV6SUBNETS

Message	Explanation
<p>Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>Executed the set command, the variable exists but can not be modified.</p> <p>执行SET命令，变量存在但不能被修改。</p>	<p>Invalid VSI index.</p> <p>无效的 VSI 索引。</p>
<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>	<p>Invalid subnet address.</p> <p>无效的子网地址。</p>

## L2VPN/CLEARALLPWSTATISTICS

Message	Explanation
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	PW statistics are not supported. 不支持 PW 统计。

## L2VPN/CLEARVSIPWSTATISTICS

Message	Explanation
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server. 1. 访问一个no-access节点。 2. 发送、接收数据超。 3. 向服务器发起连接失败。
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	PW statistics are not supported. 不支持 PW 统计。

## L2VPN/CLEARVSIXCGSTATISTICS

Message	Explanation
Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	PW statistics are not supported. 不支持 PW 统计。

## L2VPN/CLEARVSIMACTAB

Message	Explanation
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server. 1. 访问一个no-access节点。 2. 发送、接收数据超。 3. 向服务器发起连接失败。

## L2VPN/IFCFG

Message	Explanation
Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server. 1. 访问一个no-access节点。 2. 发送、接收数据超。 3. 向服务器发起连接失败。
No operation permissions. 无操作权限。	No RBAC permissions. 无RBAC权限。
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	1. Do not support Mac software learning. 2. The sub interface cannot configure the DCI. 1. 不支持Mac软件学习。 2. 子接口未配置DCI。
Parameters don't exist. 参数不存在。	The configuration of delete has a default value and doesn't allow delete. Delete配置有默认值且不允许删除。

## L2VPN/CLEAR AC STATISTICS

Message	Explanation
Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server. 1. 访问一个no-access节点。 2. 发送、接收数据超。 3. 向服务器发起连接失败。
No operation permissions. 无操作权限。	No RBAC permissions. 无RBAC权限。
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	1. Non-two-layer interface has no AC data. 2. The current interface is not a Ethernet interface and aggregate interface. 3. Interface does not support AC statistics.



	1.非二层接口无AC数据。 2.当前接口不是以太网接口和聚合接口。 3.接口不支持AC统计。
Parameters don't exist. 参数不存在。	The instance number of the configured message does not exist. 配置消息的实例编号不存在。

## L2VPN/CLEAR ALL AC STATISTICS

Message	Explanation
Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Executed the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Interface does not support AC statistics. 接口不支持AC统计。

## L2VPN/REWRITE

Message	Explanation
Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Executed the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	1.Non-two-layer interfaces have no SRV data. 2.The current interface is not a stack interface. 3.SRV rewrite is not supported. 4.When there is a symmetric attribute,inbound can only be configured. 5.The property does not configure inbound or outbound. 6.The rewriting direction is not consistent with the configuration information. 7.Illegal labels. 8.Delete rows are not supported. 1.非二层接口无 SRV 数据。 2.当前接口无栈接口。 3.不支持 SRV 重写。 4.当有对称属性是，只能配置 inbound。 5.未配置 inbound 或 outbound 属性。 6.重写方向与配置信息不一致。 7.非法的标签。 8.不支持删除行。

Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
No operation permissions. 无操作权限。	No RBAC permissions. 无 RBAC 权限。
Parameters don't exist. 参数不存在。	The rewrite information of the specified object does not exist. 指定对象的重写信息不存在。
When <i>set</i> is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When <i>set</i> is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。

## L2VPN/VBRECIDS

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
When <i>set</i> is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When <i>set</i> is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。

# Contents

ietf-network-instance .....	1
ietf-network-instance/network-instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ietf-network-instance/network-instances/vrf-root .....	2
XML structure .....	2
Table description .....	2
Example .....	2

# ietf-network-instance

The namespace of flexbng-device-info is "urn:ietf:params:xml:ns:yang:ietf-network-instance".

The Example on the end of the module sets an instance that the module can't be under top node.

## ietf-network-instance/network-instances

This table contains network-instances information.

### XML structure

```
<ietf-network-instance>
  <network-instances>
    <network-instance>
      <name></name>
      <vrf-root>
      </vrf-root>
    </network-instance>
  </network-instances>
</ietf-network-instance>
```

### Table description

Item	Description
Feature name	ietf-network-instance
Table name	network-instances
Table type	Multi-instance table
Row name	network-instance
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	VRF name	Index	String. Length: 1 to 31 characters.	After an instance is created, its VRF cannot be modified

Column name	Column description	Column type	Data type and restrictions	Remarks
vrf-root	Information of the vrf-root	Sublist	The details of the sublist refer to vrf-root table.	N/A

## ietf-network-instance/network-instances/vrf-root

This table contains vrf-root information.

## XML structure

Please refer to the XML Structure of `ietf-network-instance/network-instances`.

## Table description

Item	Description
Feature name	ietf-network-instance
Table name	Vrf-root
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Example

配置一个 vpn 为 a 的 ospfv3 实例，并在该实例下创建一个 area

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target>
      <running/>
    </target>
    <config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0">
      <v:network-instances
xmlns:v="urn:ietf:params:xml:ns:yang:ietf-network-instance">
        <v:network-instance xc:operation="merge">
          <v:name>a</v:name>
          <v:vrf-root>
            <v:routing>
              <v:control-plane-protocols>
                <v:control-plane-protocol>
```

```

    <v:type>ospfv3</v:type>
    <v:name>12</v:name>
    <b:ospfv3 xmlns:b="urn:ietf:params:xml:ns:yang:ietf-ospfv3">
      <b:instance>
        <b:af>ipv6</b:af>
        <b:areas>
          <b:area>
            <b:area-id>255.255.255.255</b:area-id>
          </b:area>
        </b:areas>
      </b:instance>
    </b:ospfv3>
  </v:control-plane-protocol>
</v:control-plane-protocols>
</v:routing>
</v:vrf-root>
</v:network-instance>
</v:network-instances>
</config>
</edit-config>
</rpc>

```

# Contents

ietf-network-instance .....	1
ietf-network-instance/network-instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ietf-network-instance/network-instances/vrf-root .....	2
XML structure .....	2
Table description .....	2
Example .....	2

# ietf-network-instance

The namespace of flexbng-device-info is "urn:ietf:params:xml:ns:yang:ietf-network-instance".

The Example on the end of the module sets an instance that the module can't be under top node.

## ietf-network-instance/network-instances

This table contains network-instances information.

### XML structure

```
<ietf-network-instance>
  <network-instances>
    <network-instance>
      <name></name>
      <vrf-root>
      </vrf-root>
    </network-instance>
  </network-instances>
</ietf-network-instance>
```

### Table description

Item	Description
Feature name	ietf-network-instance
Table name	network-instances
Table type	Multi-instance table
Row name	network-instance
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	VRF name.	Index	String. Length: 1 to 31 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
vrf-root	Information of the vrf-root.	Sublist	The details of the sublist refer to vrf-root table.	N/A

## ietf-network-instance/network-instances/vrf-root

This table contains vrf-root information.

## XML structure

Please refer to the XML Structure of `ietf-network-instance/network-instances`.

## Table description

Item	Description
Feature name	ietf-network-instance
Table name	vrf-root
Table type	Single-instance table
Row name	None
Restrictions	None

## Example

获取指定 vpn 下的 ospfv3 实例信息

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <get-bulk>
    <filter type="subtree">
      <v:network-instances
xmlns:v="urn:ietf:params:xml:ns:yang:ietf-network-instance">
        <v:network-instance>
          <v:name>a</v:name>
          <v:vrf-root>
            <v:routing>
              <v:control-plane-protocols>
                <v:control-plane-protocol>
                  <v:type>ospfv3</v:type>
                  <v:name>2</v:name>
                  <b:ospfv3 xmlns:b="urn:ietf:params:xml:ns:yang:ietf-ospfv3">
                    <b:instance>
                      <b:af>ipv6</b:af>
                      <b:explicit-router-id/>

```

```

    <b:areas>
      <b:area>
        <b:area-id/>
        <b:area-type/>
        <b:interfaces>
          <b:interface>
            <b:name>5</b:name>
            <b:instance-id/>
          </b:interface>
        </b:interfaces>
      </b:area>
    </b:areas>
  </b:instance>
</b:ospfv3>
</v:control-plane-protocol>
</v:control-plane-protocols>
</v:routing>
</v:vrf-root>
</v:network-instance>
</v:network-instances>
</filter>
</get-bulk>
</rpc>

```

# Contents

L3vpn .....	1
L3vpn/L3vpnVRF .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
L3vpn/L3vpnIf .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
L3vpn/L3vpnRT .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
L3vpn/L3vpnPeer .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
L3vpn/L3vpnRep .....	8
XML structure .....	8
Table description .....	8
Columns .....	8

# L3vpn

## L3vpn/L3vpnVRF

This table contains basic information of L3VPN VPN instances.

### XML structure

```
<L3vpn>
  <L3vpnVRF>
    <VRF>
      <VRF></VRF>
      <Description></Description>
      <RD></RD>
      <IPv4RD></IPv4RD>
      <IPv6RD></IPv6RD>
      <FlowSpecRD></FlowSpecRD>
      <CreationTime></CreationTime>
      <AssociatedInterfaceCount></AssociatedInterfaceCount>
      <Ipv4RoutingLimit>
        <Ipv4MaxRoutes></Ipv4MaxRoutes>
        <Ipv4RouteThreshold></Ipv4RouteThreshold>
        <Ipv4SimplyAlert></Ipv4SimplyAlert>
      </Ipv4RoutingLimit>
      <Ipv6RoutingLimit>
        <Ipv6MaxRoutes></Ipv6MaxRoutes>
        <Ipv6RouteThreshold></Ipv6RouteThreshold>
        <Ipv6SimplyAlert></Ipv6SimplyAlert>
      </Ipv6RoutingLimit>
      <ExportRoutePolicy></ExportRoutePolicy>
      <EVPNExportRoutePolicy></EVPNExportRoutePolicy>
      <Ipv4ExportRoutePolicy></Ipv4ExportRoutePolicy>
      <Ipv6ExportRoutePolicy></Ipv6ExportRoutePolicy>
      <ImportRoutePolicy></ImportRoutePolicy>
      <EVPNImportRoutePolicy></EVPNImportRoutePolicy>
      <Ipv4ImportRoutePolicy></Ipv4ImportRoutePolicy>
      <Ipv6ImportRoutePolicy></Ipv6ImportRoutePolicy>
      <TunnelPolicy></TunnelPolicy>
      <Ipv4TunnelPolicy></Ipv4TunnelPolicy>
      <Ipv6TunnelPolicy></Ipv6TunnelPolicy>
      <Ipv4VrfLabel>
        <Ipv4VrfLabelMode></Ipv4VrfLabelMode>
        <Ipv4VrfLabelValue></Ipv4VrfLabelValue>
      </Ipv4VrfLabel>
      <Ipv6VrfLabel>
        <Ipv6VrfLabelMode></Ipv6VrfLabelMode>
```

```

        <Ipv6VrfLabelValue></Ipv6VrfLabelValue>
    </Ipv6VrfLabel>
</VRF>
</L3vpnVRF>
</L3vpn>

```

## Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnVRF
Table type	Multi-instance table
Row name	VRF
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name.	Index	String, case-sensitive. Length: 1 to 31 characters.	A null string indicates the public instance.
Description	VPN instance description.	N/A	String, case-sensitive. Length: 1 to 79 characters.	Public instance doesn't support the column.
RD	Route distinguisher.	Data structure	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn	The VRF RD must be the same as the RD of address family.
IPv4RD	IPv4 address family route distinguisher.	N/A	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn.	Public instance doesn't support the column.
IPv6RD	IPv6 address family route distinguisher.	N/A	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn.	Public instance doesn't support the column.
FlowSpecRD	IPv4 FlowSpec address family route distinguisher.	N/A	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn.	Public instance doesn't support the column.
CreationTime	Creation time	N/A	String. Format:	N/A

			YYYY-MM-DDTHH:MM:SS.	
AssociatedInterfaceCount	Number of interfaces bound with the VPN instance	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Ipv4RoutingLimit	The maximum number of active routes limit of ipv4 address family view.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv4MaxRoutes</li> <li>Ipv4RouteThreshold</li> <li>Ipv4SimplyAlert.</li> </ul>	Public instance doesn't support the column.
Ipv4MaxRoutes	The maximum number of active routes of ipv4 address family view.	N/A	Unsigned integer.	Public instance doesn't support the column.
Ipv4RouteThreshold	Threshold value.	N/A	Unsigned integer. Value range: 1 to 100.	Mutex with Ipv4SimplyAlert. Public instance doesn't support the column.
Ipv4SimplyAlert	Whether to print syslog.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Print syslog.</li> <li>false—Does not print syslog (default).</li> </ul>	Mutex with Ipv4RouteThreshold. Public instance doesn't support the column.
Ipv6RoutingLimit	The maximum number of active routes limit of ipv6 address family view.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6MaxRoutes</li> <li>Ipv6RouteThreshold</li> <li>Ipv6SimplyAlert.</li> </ul>	Public instance doesn't support the column.
Ipv6MaxRoutes	The maximum number of active routes of ipv6 address family view.	N/A	Unsigned integer.	Public instance doesn't support the column.
Ipv6RouteThreshold	Threshold value.	N/A	Unsigned integer. Value range: 1 to 100.	Mutex with Ipv6SimplyAlert. Public instance doesn't support the column.
Ipv6SimplyAlert	Whether to print syslog.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Print syslog.</li> <li>false—Does not print syslog (default).</li> </ul>	Mutex with Ipv6RouteThreshold. Public instance doesn't support the column.
ExportRoutePolicy	The export route policy in VPN view.	N/A	String. Length: 1 to 63 characters.	N/A
EVPNExportRoutePolicy	The export route policy in EVPN address family view.	N/A	String. Length: 1 to 63 characters.	Public instance doesn't support the column.
Ipv4ExportRoutePolicy	The export route policy in IPv4 address family	N/A	String. Length: 1 to 63 characters.	N/A

	view.			
Ipv6ExportRoutePolicy	The export route policy in IPv6 address family view.	N/A	String. Length: 1 to 63 characters.	N/A
ImportRoutePolicy	The import route policy in VPN view.	N/A	String. Length: 1 to 63 characters.	N/A
EVPNImportRoutePolicy	The import route policy in EVPN address family view.	N/A	String. Length: 1 to 63 characters.	Public instance doesn't support the column.
Ipv4ImportRoutePolicy	The import route policy in IPv4 address family view.	N/A	String. Length: 1 to 63 characters.	N/A
Ipv6ImportRoutePolicy	The import route policy in IPv6 address family view.	N/A	String. Length: 1 to 63 characters.	N/A
TunnelPolicy	The tunnel policy in VPN instance view.	N/A	String. Length: 1 to 19 characters.	Public instance doesn't support the column.
Ipv4TunnelPolicy	The tunnel policy in IPv4 address family view.	N/A	String. Length: 1 to 19 characters.	Public instance doesn't support the column.
Ipv6TunnelPolicy	The tunnel policy in IPv6 address family view.	N/A	String. Length: 1 to 19 characters.	Public instance doesn't support the column.
Ipv4VrfLabel	Method of distributing labels to VPN instance routes.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv4VrfLabelMode.</li> <li>Ipv4VrfLabelValue.</li> </ul>	Public instance doesn't support the column.
Ipv4VrfLabelMode	Label allocation mode for the VPN instance routes.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PerInstance.</li> <li>2—PerRoute.</li> <li>3—PerNextHop (default).</li> </ul>	N/A
Ipv4VrfLabelValue	Static label value for the VPN instance routes.	N/A	Unsigned integer. Value range: 16 to the device-specific upper limit.	Only the PerInstance mode supports the column.
Ipv6VrfLabel	Method of distributing labels to VPN instance routes.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6VrfLabelMode.</li> <li>Ipv6VrfLabelValue.</li> </ul>	Public instance doesn't support the column.
Ipv6VrfLabelMode	Label allocation mode for the VPN instance routes.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PerInstance.</li> <li>2—PerRoute.</li> <li>3—PerNextHop (default).</li> </ul>	N/A
Ipv6VrfLabelValue	Static label value for the VPN	N/A	Unsigned integer. Value range: 16 to the	Only the PerInstance mode supports

	instance routes.		device-specific upper limit.	the column.
--	------------------	--	------------------------------	-------------

## L3vpn/L3vpnIf

This table contains information about VPN instance-to-interface bindings.

## XML structure

```

<L3vpn>
  <L3vpnIf>
    <Bind>
      <VRF></VRF>
      <IfIndex></IfIndex>
    </Bind>
  </L3vpnIf>
</L3vpn>

```

## Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnIf
Table type	Multi-instance table
Row name	Bind
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name.	Index	String, case-sensitive. Length: 1 to 31 characters.	Public instance doesn't support the column.
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference. Public instance doesn't support the column.



# L3vpn/L3vpnRT

This table contains L3VPN route target information.

## XML structure

```
<L3vpn>
  <L3vpnRT>
    <RT>
      <VRF></VRF>
      <AddressFamily></AddressFamily>
      <RTType></RTType>
      <RTEntry></RTEntry>
    </RT>
  </L3vpnRT>
</L3vpn>
```

## Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnRT
Table type	Multi-instance table
Row name	RT
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
AddressFamily	Address family.	Index	Enumeration. <ul style="list-style-type: none"><li>1—IPv4 unicast</li><li>2—IPv6 unicast</li><li>3—VPN</li><li>4—EVPN</li></ul>	N/A
RTType	RT type.	Index	Enumeration. <ul style="list-style-type: none"><li>1—Import</li><li>2—Export</li></ul>	N/A
RTEntry	Route target.	Index	String. Length: 3 to 21 characters. <ul style="list-style-type: none"><li>The format is ASN:nn or</li></ul>	Example: 100:1 or 192.168.1.1: 1.

Column name	Column description	Column type	Data type and restrictions	Remarks
			IP_address:nn	

## L3vpn/L3vpnPeer

This table contains L3VPN peer information.

### XML structure

```

<L3vpn>
  <L3vpnPeer>
    <Peer>
      <PeerName></PeerName>
      <PeerId></PeerId>
      <UserProfile></UserProfile>
    </Peer>
  </L3vpnPeer>
</L3vpn>

```

### Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnPeer
Table type	Multi-instance table
Row name	Peer
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PeerName	VPN peer name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
PeerId	Peer ID	N/A	Unsigned integer. Value range: 1 to 134217727	N/A
UserProfile	User profile name	N/A	String, case-sensitive. Length: 1 to 31 characters.	A user profile name can contain alphabets, digits, and underlines, and it must begin with an alphabet.

# L3vpn/L3vpnRep

This table contains L3VPN route replication configuration.

## XML structure

```
<L3vpn>
  <L3vpnRep>
    <Replicate>
      <VRF></VRF>
      <AddressFamily></AddressFamily>
      <RepVRF></RepVRF>
      <Protocol></Protocol>
      <ProtocolID></ProtocolID>
      <Advertise></Advertise>
      <RoutePolicyName></RoutePolicyName>
    </Replicate>
  </L3vpnRep>
</L3vpn>
```

## Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnRep
Table type	Multi-instance table
Row name	Rep
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	Destination VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	A null string indicates the public instance.
AddressFamily	Address family	Index	Enumeration. <ul style="list-style-type: none"><li>1—IPv4 unicast.</li><li>2—IPv6 unicast.</li><li>3—VPN (currently not supported).</li><li>4—EVPN (currently not supported).</li></ul>	N/A
RepVRF	Source VPN	Index	String, case-sensitive.	A null string indicates the

	instance name		Length: 1 to 31 characters.	public instance.
Protocol	Protocol name	Index	Enumeration. <ul style="list-style-type: none"> <li>• 1—Direct.</li> <li>• 2—Static.</li> <li>• 3—RIP.</li> <li>• 4—OSPF.</li> <li>• 5—IS-IS.</li> <li>• 6—EIGRP (IPv6 currently not supported).</li> <li>• 7—BGP.</li> </ul>	N/A
Protocol ID	Process ID or autonomous System number	Index	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>• 1 to 65535 for IGP protocol and EIGRP process ID.</li> <li>• 1 to 4294967295 for BGP AS number.</li> <li>• 0 for direct and static routes.</li> </ul>	N/A
Advertise	Advertise the replicated routes to routing protocols	N/A	Enumeration. <ul style="list-style-type: none"> <li>• 0—Not advertise.</li> <li>• 1—Advertise.</li> </ul>	This column can only be set to 0 when the Protocol column is set to BGP.
RoutePolicyName	Name of the routing policy applied to replicated routes	N/A	String. Length: 1 to 63 characters.	A null string indicates no routing policy is applied to replicated routes.

# Contents

L3vpn .....	1
L3vpn/L3vpnVRF .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
L3vpn/L3vpnIf .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
L3vpn/L3vpnRT .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
L3vpn/L3vpnPeer .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
L3vpn/L3vpnRep .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
Appendix .....	9

# L3vpn

## L3vpn/L3vpnVRF

This table contains basic information of L3VPN VPN instances.

### XML structure

```
<L3vpn>
  <L3vpnVRF>
    <VRF></VRF>
    <VrfIndex></VrfIndex>
    <Description></Description>
    <RD></RD>
    <IPv4RD></IPv4RD>
    <IPv6RD></IPv6RD>
    <FlowSpecRD></FlowSpecRD>
    <CreationTime></CreationTime>
    <AssociatedInterfaceCount></AssociatedInterfaceCount>
    <Ipv4RoutingLimit>
      <Ipv4MaxRoutes></Ipv4MaxRoutes>
      <Ipv4RouteThreshold></Ipv4RouteThreshold>
      <Ipv4SimplyAlert></Ipv4SimplyAlert>
    </Ipv4RoutingLimit>
    <Ipv6RoutingLimit>
      <Ipv6MaxRoutes></Ipv6MaxRoutes>
      <Ipv6RouteThreshold></Ipv6RouteThreshold>
      <Ipv6SimplyAlert></Ipv6SimplyAlert>
    </Ipv6RoutingLimit>
    <ExportRoutePolicy></ExportRoutePolicy>
    <EVPNExportRoutePolicy></EVPNExportRoutePolicy>
    <Ipv4ExportRoutePolicy></Ipv4ExportRoutePolicy>
    <Ipv6ExportRoutePolicy></Ipv6ExportRoutePolicy>
    <ImportRoutePolicy></ImportRoutePolicy>
    <Ipv4ImportRoutePolicy></Ipv4ImportRoutePolicy>
    <EVPNImportRoutePolicy></EVPNImportRoutePolicy>
    <Ipv6ImportRoutePolicy></Ipv6ImportRoutePolicy>
    <TunnelPolicy></TunnelPolicy>
    <Ipv4TunnelPolicy></Ipv4TunnelPolicy>
    <Ipv6TunnelPolicy></Ipv6TunnelPolicy>
    <Ipv4VrfLabel>
      <Ipv4VrfLabelMode></Ipv4VrfLabelMode>
      <Ipv4VrfLabelValue></Ipv4VrfLabelValue>
    </Ipv4VrfLabel>
    <Ipv6VrfLabel>
```

```

        <Ipv6VrfLabelMode></Ipv6VrfLabelMode>
        <Ipv6VrfLabelValue></Ipv6VrfLabelValue>
    </Ipv6VrfLabel>
</VRF>
</L3vpnVRF>
</L3vpn>

```

## Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnVRF
Table type	Multi-instance table
Row name	VRF
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name.	Index	String, case-sensitive. Length: 1 to 31 characters.	A null string indicates the public instance.
VrfIndex	VPN instance index.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Description	VPN instance description.	N/A	String, case-sensitive. Length: 1 to 79 characters.	Public instance doesn't support the column.
RD	Route distinguisher.	Data structure	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn.	The VRF RD must be the same as the RD of address family.
IPv4RD	IPv4 address family route distinguisher.	N/A	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn.	Public instance doesn't support the column.
IPv6RD	IPv6 address family route distinguisher.	N/A	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn.	Public instance doesn't support the column.
FlowSpecRD	IPv4 FlowSpec address family route distinguisher.	N/A	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn.	Public instance doesn't support the column.

Column name	Column description	Column type	Data type and restrictions	Remarks
CreationTime	Creation time.	N/A	String. The format is YYYY-MM-DDTHH:MM:SS.	N/A
AssociatedInterfaceCount	The number of interfaces that are binded with this VRF.	N/A	Unsigned integer.	N/A
Ipv4RoutingLimit	The maximum number of active routes limit of ipv4 address family view.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv4MaxRoutes</li> <li>Ipv4RouteThreshold</li> <li>Ipv4SimplyAlert.</li> </ul>	N/A
Ipv4MaxRoutes	The maximum number of active routes of ipv4 address family view.	N/A	Unsigned integer.	N/A
Ipv4RouteThreshold	Threshold value.	N/A	Unsigned integer. Value range: 1 to 100.	N/A
Ipv4SimplyAlert	Whether to print syslog.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Print syslog.</li> <li>false—Does not print syslog (default).</li> </ul>	Public instance doesn't support the column.
Ipv6RoutingLimit	The maximum number of active routes limit of ipv6 address family view.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6MaxRoutes</li> <li>Ipv6RouteThreshold</li> <li>Ipv6SimplyAlert.</li> </ul>	N/A
Ipv6MaxRoutes	The maximum number of active routes of ipv6 address family view.	N/A	Unsigned integer.	N/A
Ipv6RouteThreshold	Threshold value.	N/A	Unsigned integer. Value range: 1 to 100.	N/A
Ipv6SimplyAlert	Whether to print syslog.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Print syslog.</li> <li>false—Does not print syslog (default).</li> </ul>	Public instance doesn't support the column.
ExportRoutePolicy	The export route policy in VPN view.	N/A	String. Length: 1 to 63 characters.	N/A
EVPNExportRoutePolicy	The export route policy in EVPN address family view.	N/A	String. Length: 1 to 63 characters.	Public instance doesn't support the column.
Ipv4ExportRoutePolicy	The export route policy in IPv4 address family view.	N/A	String. Length: 1 to 63 characters.	N/A
Ipv6ExportRoutePolicy	The export route policy in IPv6 address family view.	N/A	String. Length: 1 to 63 characters.	N/A
ImportRoutePolicy	The import route	N/A	String.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
cy	policy in VPN view.		Length: 1 to 63 characters.	
EVPNImportRoutePolicy	The import route policy in EVPN address family view.	N/A	String. Length: 1 to 63 characters.	Public instance doesn't support the column.
Ipv4ImportRoutePolicy	The import route policy in IPv4 address family view.	N/A	String. Length: 1 to 63 characters.	N/A
Ipv6ImportRoutePolicy	The import route policy in IPv6 address family view.	N/A	String. Length: 1 to 63 characters.	N/A
TunnelPolicy	The tunnel policy in VPN instance view.	N/A	String. Length: 1 to 19 characters.	Public instance doesn't support the column.
Ipv4TunnelPolicy	The tunnel policy in IPv4 address family view.	N/A	String. Length: 1 to 19 characters.	Public instance doesn't support the column.
Ipv6TunnelPolicy	The tunnel policy in IPv6 address family view.	N/A	String. Length: 1 to 19 characters.	Public instance doesn't support the column.
Ipv4VrfLabel	Method of distributing labels to VPN instance routes.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv4VrfLabelMode</li> <li>Ipv4VrfLabelValue</li> </ul>	Public instance doesn't support the column.
Ipv4VrfLabelMode	Label allocation mode for the VPN instance routes.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PerInstance.</li> <li>2—PerRoute.</li> <li>3—PerNextHop.</li> </ul>	N/A
Ipv4VrfLabelValue	Static label value for the VPN instance routes.	N/A	Unsigned integer. Value range: 16 to the device-specific upper limit.	Only the PerInstance mode supports the column.
Ipv6VrfLabel	Method of distributing labels to VPN instance routes.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6VrfLabelMode</li> <li>Ipv6VrfLabelValue</li> </ul>	Public instance doesn't support the column.
Ipv6VrfLabelMode	Label allocation mode for the VPN instance routes.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PerInstance.</li> <li>2—PerRoute.</li> <li>3—PerNextHop.</li> </ul>	N/A
Ipv6VrfLabelValue	Static label value for the VPN instance routes.	N/A	Unsigned integer. Value range: 16 to the device-specific upper limit.	Only the PerInstance mode supports the column.

## L3vpn/L3vpnIf

This table contains information about VPN instance-to-interface bindings.

## XML structure

```
<L3vpn>
  <L3vpnIf>
    <Bind>
      <VRF></VRF>
      <IfIndex></IfIndex>
    </Bind>
  </L3vpnIf>
</L3vpn>
```

## Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnIf
Table type	Multi-instance table
Row name	Bind
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name.	Index	String, case-sensitive. Length: 1 to 31 characters.	Public instance doesn't support the column.
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference. Public instance doesn't support the column.

## L3vpn/L3vpnRT

This table contains L3VPN Route target information.

## XML structure

```
<L3vpn>
  <L3vpnRT>
```

```

<RT>
  <VRF></VRF>
  <AddressFamily></AddressFamily>
  <RTType></RTType>
  <RTEntry></RTEntry>
</RT>
</L3vpnRT>
</L3vpn>

```

## Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnRT
Table type	Multi-instance table
Row name	RT
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
AddressFamily	Address family.	Index	Enumeration. <ul style="list-style-type: none"> <li>1—IPv4 unicast</li> <li>2—IPv6 unicast</li> <li>3—VPN</li> <li>4—EVPN</li> </ul>	N/A
RTType	RT type.	Index	Enumeration. <ul style="list-style-type: none"> <li>1—Import</li> <li>2—Export</li> </ul>	N/A
RTEntry	Route target.	Index	String. Length: 3 to 21 characters. <ul style="list-style-type: none"> <li>The format is ASN:nn or IP_address:nn</li> </ul>	Example: 100:1 or 192.168.1.1: 1.

## L3vpn/L3vpnPeer

This table contains L3VPN peer information.

## XML structure

```

<L3vpn>
  <L3vpnPeer>

```

```

    <Peer>
      <PeerName></PeerName>
      <PeerId></PeerId>
      <UserProfile></UserProfile>
    </Peer>
  </L3vpnPeer>
</L3vpn>

```

## Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnPeer
Table type	Multi-instance table
Row name	Peer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PeerName	VPN peer name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
PeerId	Peer ID	N/A	Unsigned integer. Value range: 1 to 134217727	N/A
UserProfile	User profile name	N/A	String, case-sensitive. Length: 1 to 31 characters.	A user profile name can contain alphabets, digits, and underlines, and it must begin with an alphabet.

## L3vpn/L3vpnRep

This table contains L3VPN route replication information.

## XML structure

```

<L3vpn>
  <L3vpnRep>
    <Replicate>
      <VRF></VRF>
      <AddressFamily></AddressFamily>
      <RepVRF></RepVRF>
      <Protocol></Protocol>
      <ProtocolID></ProtocolID>
    </Replicate>
  </L3vpnRep>
</L3vpn>

```

```

    <Advertise></Advertise>
    <RoutePolicyName></RoutePolicyName>
  </Replicate>
</L3vpnRep>
</L3vpn>

```

## Table description

Item	Description
Feature name	L3vpn
Table name	L3vpnRep
Table type	Multi-instance table
Row name	Rep
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	Destination VRF name.	Index	String, case-sensitive. Length: 1 to 31 characters.	A null string indicates the public instance.
AddressFamily	Address family.	Index	Enumeration. <ul style="list-style-type: none"> <li>1—IPv4 unicast</li> <li>2—IPv6 unicast</li> <li>3—VPN (currently not supported)</li> <li>4—EVPN(currently not supported)</li> </ul>	N/A
RepVRF	Source VRF name.	Index	String, case-sensitive. Length: 1 to 31 characters.	A null string indicates the public instance.
Protocol	Protocol.	Index	Enumeration. <ul style="list-style-type: none"> <li>1—Direct</li> <li>2—Static</li> <li>3—Rip</li> <li>4—OSPF</li> <li>5—ISIS</li> <li>6—EIGRP (ipv6 currently not supported)</li> <li>7—BGP</li> </ul>	N/A
Protocol ID	Process ID/ Autonomous System number	Index	Unsigned integer. Value range: 1 to 65535, or 1 to 4294967295, or 0	For IGP Protocol and EIGRP Protocol, This is 1 to 65535. For BGP Protocol, This is 1 to

				4294967295. For Direct Protocol and Static Protocol, This is 0.
Advertise	The routes can be advertised to routing protocols	N/A	<b>Enumeration.</b> <ul style="list-style-type: none"> <li>• 0—Not advertise</li> <li>• 1—Advertise</li> </ul>	This column can only be set to 0 when the Protocol column is set to BGP.
RoutePolicyName	Specify a routing policy	N/A	String. Length: 1 to 63 characters.	A null string indicates without specify a routing policy

## Appendix

- A string contains only one VRF name.  
Example: vpn1,vpn2 (name with comma)  
It is going to find the information of the VRF whose name is "vpn1,vpn2", rather than "vpn1" and "vpn2".  
Example: vpn1 vpn2 (name with space)  
It is going to find the information of the VRF whose name is "vpn1 vpn2", rather than "vpn1" and "vpn2".
- When a VRF's name is the same as another VRF's index, name is used prior to index.  
Example: VRF-1's name is vpn and index is 1; VRF-2's name is 1 and index is 2;  
When the VrfIndex is assigned to 1, it is considered as VRF-2's name rather than VRF-1's index.

# Contents

L3vpn .....	2
L3vpn/L3vpnVRF .....	2
L3vpn/L3vpnIf .....	3
L3vpn/L3vpnRT .....	3
L3vpn/L3vpnPeer .....	3
L3vpn/L3vpnRep .....	4

# L3vpn

## L3vpn/L3vpnVRF

Message	Explanation
The VRF instance is being deleted. 该VRF正在删除中。	The specified VRF is being deleted, when replacing or deleting it.
The VRF instance already has an RD. 该VRF已经配置RD。	Configuration already exists, when set new configuration.
RouteThreshold and SimplyAlert can't both be null. 请输入RouteThreshold或者SimplyAlert选项。	Invalid configuration.
Can't connect to an L3VPN process. 连接不上L3VPN进程。	Operation failed when L3VPN process has not been started.
IPv4 route limit is exceeded. IPv4路由门限超过最大值。	Invalid configuration, please modify configuration under the guidance.
IPv6 route limit is exceeded. IPv6路由门限超过最大值。	Invalid configuration, please modify configuration under the guidance.
The IPv4 route limit cannot be 0. IPv4路由门限不能为0。	Invalid configuration, please modify configuration under the guidance.
The IPv6 route limit cannot be 0. IPv6路由门限不能为0。	Invalid configuration, please modify configuration under the guidance.
Route distinguisher format error. 路由标识格式错误。	Invalid configuration, please modify configuration under the guidance.
The IPv4 route distinguisher format error. IPv4路由标识格式错误。	Invalid configuration, please modify configuration under the guidance.
The IPv6 route distinguisher format error. IPv6路由标识格式错误。	Invalid configuration, please modify configuration under the guidance.
The FlowSpec route distinguisher format error. FlowSpec路由标识格式错误。	Invalid configuration, please modify configuration under the guidance.
The VRF RD is inconsistent with IPv4 RD. 全局RD与IPv4的RD不一致。	Invalid configuration.
The VRF RD is inconsistent with IPv6 RD. 全局RD与IPv6的RD不一致。	Invalid configuration.
The VRF RD is inconsistent with FlowSpec RD. 全局RD与FlowSpec的RD不一致。	Invalid configuration.
The label allocation mode must be 'PerInstance'. 这个标签值的申请模式必须是每实例。	Invalid configuration. Please modify configuration under the guidance.
The static label is already allocated to another VPN instance. Please specify another label.	Invalid configuration. Please modify configuration under the guidance.



这个静态标签值已经被其他VRF占用，请重新指定标签值。	
Not enough resources to allocate the static label. 系统资源不足导致标签申请未成功。	No enough resource. Please check your device.
The static label is already allocated to the current VPN instance. Please specify another label. 这个静态标签值已经被当前VRF占用，请重新指定标签值。	Invalid configuration. Please modify configuration under the guidance.
The static label is already used by another module. Please specify another label. 这个静态标签值已经被其他模块占用，请重新指定标签值。	Invalid configuration. Please modify configuration under the guidance.

## L3vpn/L3vpnIf

Message	Explanation
The interface is already bound to another VRF instance. 该接口已经和其他VRF绑定。	The specified configuration is already existed, when creating a new configuration.
The interface doesn't exist. 接口不存在。	The specified interface is not existed.
Failed to allocate memory. 内存不足。	No enough resource, please check your device.
Configurations on the interface ware already removed. 接口下配置已删除。	When configurations take effect, some other configurations on the interface will be removed.
The interface is not supported. 接口不支持。	The specified interface is not supported.

## L3vpn/L3vpnRT

Message	Explanation
NULL	NULL

## L3vpn/L3vpnPeer

Message	Explanation
The VPN peer does not exist. VPN peer不存在。	The specified VPN peer does not exist, when deleting or removing.
The VPN peer ID cannot be modified. VPN peer ID不能被修改。	The specified VPN peer ID cannot be modified.

The VPN peer ID has been used. VPN peer ID已经被使用。	The specified VPN peer ID has been used.
VPN peer ID and profile-name do not have default value, must be empty. VPN peer ID和profile-name无默认值，必须下刷空列。	The specified configuration must be empty, when deleting or removing.

## L3vpn/L3vpnRep

Message	Explanation
The IPv6 address family doesn't support the EIGRP protocol. IPv6地址族下不支持配置EIGRP。	The IPv6 address family doesn't support the EIGRP protocol.
ProtocolID must be a number between 1 to 65535 if Protocol is IGP or EIGRP. 对于IGP和EIGRP，ProtocolID字段取值范围为1-65535。	The value of ProtocolID must be a number between 1 to 65535 if the protocol is IGP or EIGRP.
ProtocolID must be 0 if Protocol is direct or static. 对于Direct和Static，ProtocolID字段必须为0。	ProtocolID must be 0 if the protocol is direct or static.
Advertise must be 0 if Protocol is BGP. BGP协议中Advertise字段必须为0	The value of Advertise must be 0 if the protocol is BGP.

# Contents

LAGG .....	1
LAGG/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
LAGG/Groups .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
LAGG/Members .....	4
XML structure .....	4
Table description .....	4
Columns .....	5

# LAGG

## LAGG/Base

This table contains global LAGG information.

### XML structure

```
<LAGG>
  <Base>
    <SystemPriority></SystemPriority>
    <LoadSharingMode></LoadSharingMode>
    <AutoAggregationEnable></AutoAggregationEnable>
    <Capability>
      <MaxGroupNum></MaxGroupNum>
      <MaxSelectPortNum></MaxSelectPortNum>
    </Capability>
  </Base>
</LAGG>
```

### Table description

Item	Description
Feature name	LAGG
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
SystemPriority	Priority assigned to the local system	N/A	Unsigned integer Value range: 0 to 65535. Default: 32768. The smaller the value, the higher the system LACP priority.
LoadSharingMode	Global link-aggregation load sharing mode.	N/A	Unsigned integer64. Default: 0. Ingress Port <b>is encoded in bit 1</b> .

			Destination MAC <b>is encoded in bit 2.</b> Source MAC <b>is encoded in bit 3.</b> Destination IP <b>is encoded in bit 4.</b> Source IP <b>is encoded in bit 5.</b> VLAN ID <b>is encoded in bit 6.</b> Layer 4 destination-port <b>is encoded in bit 7.</b> Layer 4 source-port <b>is encoded in bit 8.</b> IP Protocol <b>is encoded in bit 9.</b> MPLS Label1 <b>is encoded in bit 10.</b> MPLS Label2 <b>is encoded in bit 11.</b> MPLS Label3 <b>is encoded in bit 12.</b> Packet type-based sharing <b>is encoded in bit 13.</b> Per-packet <b>is encoded in bit 14.</b>
AutoAggregationEnable	Automatic aggregation.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable(default).</li> </ul>
Capability	System capability of link aggregation	Data structure	Members include: <ul style="list-style-type: none"> <li>MaxGroupNum.</li> <li>MaxSelectPortNum.</li> </ul>
MaxGroupNum	The maximum number of aggregation groups that the system can create.	N/A	Unsigned integer. Length:32bits.
MaxSelectPortNum	The maximum number of Selected ports per aggregation group.	N/A	Unsigned integer. Length:32bits.

## LAGG/Groups

This table contains information about link aggregation groups.

## XML structure

```

<LAGG>
  <LAGGGroups>
    <LAGGGroup>
      <GroupId></GroupId>
      <LinkMode></LinkMode>
      <LacpEdgeEnable></LacpEdgeEnable>
      <LoadSharingMode></LoadSharingMode>
      <IrfSelectMode></IrfSelectMode>
      <DynamicLoadSharing>
        <Mode></Mode>
        <FlowletGapTime></FlowletGapTime>
      </DynamicLoadSharing>
    </LAGGGroup>
  </LAGGGroups>

```

</LAGG>

## Table description

Item	Description
Feature name	LAGG
Table name	LAGGGroups
Table type	Multi-instance table
Row name	LAGGGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupId	Aggregation group ID	Index	Unsigned integer. Value range: <ul style="list-style-type: none"><li>Layer 2 aggregation group: 1 to 16384.</li><li>Layer 3 aggregation group: 16385 to 32768.</li><li>Blade aggregation group: 32769 to 36864.</li><li>S-channel bundle group: 36865 to 40960.</li></ul>
LinkMode	Link aggregation mode	N/A	Enumeration: <ul style="list-style-type: none"><li><b>1</b>—Static (default).</li><li><b>2</b>—Dynamic.</li></ul> Not configured for blade aggregation group.
LacpEdgeEnable	Edge aggregate interface feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—<b>Disabled</b>(default).</li></ul> Not configured for blade aggregation group.
LoadSharingMode	Link-aggregation load sharing mode	N/A	Unsigned integer64. Default: 0. Ingress Port <b>is encoded in bit 1</b> . Destination MAC <b>is encoded in bit 2</b> . Source MAC <b>is encoded in bit 3</b> . Destination IP <b>is encoded in bit 4</b> . Source IP <b>is encoded in bit 5</b> . VLAN ID <b>is encoded in bit 6</b> . Layer 4 destination-port <b>is encoded in bit 7</b> .

			Layer 4 source-port <b>is encoded in bit 8.</b> IP Protocol <b>is encoded in bit 9.</b> MPLS Label1 <b>is encoded in bit 10.</b> MPLS Label2 <b>is encoded in bit 11.</b> MPLS Label3 <b>is encoded in bit 12.</b> Packet type-based sharing <b>is encoded in bit 13.</b> Per-packet <b>is encoded in bit 14.</b> Not configured for S-channel bundle group.
IrfSelectMode	Irf device select mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None (default).</li> <li>• <b>1</b>—Master-first.</li> <li>• <b>2</b>—Bandwidth-first.</li> </ul>
Mode	Dynamic load sharing mode of link aggregation	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None (default).</li> <li>• <b>1</b>—Spray.</li> <li>• <b>2</b>—Fixed.</li> <li>• <b>4</b>—Eligible.</li> </ul>
FlowletGapTime	Flowlet gap time of dynamic load sharing	N/A	Unsigned integer Value range: 16 to 65535 Default: 1000.

## LAGG/Members

This table contains information about link aggregation members.

## XML structure

```

<LAGG>
  <LAGGMembers>
    <LAGGMember>
      <IfIndex></IfIndex>
      <GroupId></GroupId>
      <BindMode></BindMode>
      <LacpMode></LacpMode>
      <LacpShortPeriodEnable></LacpShortPeriodEnable>
      <ActorPortPriority></ActorPortPriority>
    </LAGGMember>
  </LAGGMembers>
</LAGG>

```

## Table description

Item	Description
Feature name	LAGG

Table name	LAGGMembers
Table type	Multi-instance table
Row name	LAGGMember
Restrictions	This table supports only Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Member port index	Index	Unsigned integer.
GroupId	Aggregation group ID	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>Layer 2 aggregation group: 1 to 16384.</li> <li>Layer 3 aggregation group: 16385 to 32768.</li> <li>S-channel bundle group: 36865 to 40960.</li> <li>Default: 0. Not assigned to any link aggregation group.</li> </ul>
BindMode	Binding mode	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Normal. Not check aggregation group configuration</li> <li><b>2</b>—Force. Synchronize aggregation group configuration (Layer 3 Ethernet interfaces do not support Force to join aggregation groups)</li> <li><b>3</b>—check. Check aggregation group configuration</li> </ul>
LacpMode	LACP mode of a member port	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active (default).</li> <li><b>2</b>—Passive.</li> </ul>
LacpShortPeriodEnable	LACP short period function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>
ActorPortPriority	Priority assigned to this local port	N/A	Unsigned integer Value range: 0 to 65535 Default: 32768. The smaller the value, the higher the system LACP priority.



# Contents

LAGG .....	1
LAGG/Capabilities .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
LAGG/LoadSharing .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
LAGG/Base .....	3
XML structure .....	4
Table description .....	4
Columns .....	4
LAGG/Groups .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
LAGG/Members .....	7
XML structure .....	8
Table description .....	8
Columns .....	8

# LAGG

## LAGG/Capabilities

This table contains link aggregation capability information.

### XML structure

```
<LAGG>
  <Capabilities>
    <Capability>
      <MaxGroup></MaxGroup>
      <MaxSelectPortList></MaxSelectPortList>
    </Capability>
  </Capabilities>
</LAGG>
```

### Table description

Item	Description
Feature name	LAGG
Table name	Capabilities
Table type	Multi-instance table
Row name	Capability
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Capability	System capability of link aggregation	Data structure	Members include: <ul style="list-style-type: none"><li>MaxGroup.</li><li>MaxSelectPortList.</li></ul>	N/A
MaxGroup	Maximum number of aggregation groups.	Index	Unsigned integer. Length:32bits.	N/A
MaxSelectPortList	Supported maximum number of Selected ports per aggregation group.	N/A	Number string. It is a comma-separated list of maximum Selected port numbers. The string cannot end with a comma or hyphen, or include any whitespace characters.	For example: 8,4,2.

# LAGG/LoadSharing

This table contains link aggregation LoadSharing information.

## XML structure

```
<LAGGLoadSharing>
  <GroupId></GroupId>
  <Ingress-port><Ingress-port/>
  <Fowarding><Fowarding/>
  <Destination-ip><Destination-ip/>
  <Destination-ipv6><Destination-ipv6/>
  <Source-ip><Source-ip/>
  <Source-ipv6><Source-ipv6/>
  <Destination-mac><Destination-mac/>
  <Destination-port><Destination-port/>
  <Ethernet-type><Ethernet-type/>
  <Ip-protocol><Ip-protocol/>
  <Source-mac><Source-mac/>
  <Source-port><Source-port/>
  <Vlan><Vlan/>
  <Mpls-label-offset><Mpls-label-offset/>
  <Egress-Port></Egress-Port>
</LAGGLoadSharing>
```

## Table description

Item	Description
Feature name	LAGG
Table name	LoadSharing
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupId	Aggregation group ID	Index	Unsigned integer. <ul style="list-style-type: none"><li>0: Not assigned to any link aggregation group.</li><li>Layer 2 aggregation group: 1 to 16384.</li><li>Layer 3 aggregation group: 16385 to 32768.</li><li>Blade aggregation group: 32769</li></ul>

			to 36864. <ul style="list-style-type: none"> <li>S-channel bundle group: 36865 to 40960.</li> </ul>
Ingress-port	Message ingress port	Index	Unsigned integer. Length: 32 bits.
Fowarding	Fowarding mode	N/A	Unsigned integer. Length: 32 bits.
Destination-ip	Destination ip address	N/A	Base64 Binary. Length: 1 to 31 octets. The format of data depends on the management address subtype.
Destination-ipv6	Destination ipv6 address	N/A	Base64 Binary. Length: 1 to 31 octets. The format of data depends on the management address subtype.
Source-ip	Source ip address	N/A	Base64 Binary. Length: 1 to 31 octets. The format of data depends on the management address subtype.
Source-ipv6	Source ipv6 address	N/A	Base64 Binary. Length: 1 to 31 octets. The format of data depends on the management address subtype.
Destination-mac	Destination mac	N/A	Example: 00-0c-af-e3-5d-c0.
Destination-port	Destination port	N/A	Unsigned integer. Value range: 1 to 65535
Ethernet-type	Ethernet type	N/A	Unsigned integer. Value range: 1 to 65535
Ip-protocol	Ip protocol	N/A	Unsigned integer. Length: 32 bits.
Source-mac	Source mac	N/A	Example: 00-0c-af-e3-5d-c0.
Source-port	Source port	N/A	Unsigned integer. Value range: 1 to 65535
Vlan	Vlan	N/A	Unsigned integer. Value range: 1 to 4094
Mpls-label-number	Mpls label number	N/A	Unsigned integer. Length: 32 bits.
Egress-Port	Egress port	N/A	Unsigned integer. Length: 32 bits.

## LAGG/Base

This table contains global LAGG information.

## XML structure

```
<LAGG>
  <Base>
    <SystemID></SystemID>
    <SystemPriority></SystemPriority>
    <LoadSharingMode></LoadSharingMode>
    <AutoAggregationEnable></AutoAggregationEnable>
    <Capability>
      <MaxGroupNum></MaxGroupNum>
      <MaxSelectPortNum></MaxSelectPortNum>
    </Capability>
  </Base>
</LAGG>
```

## Table description

Item	Description
Feature name	LAGG
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SystemID	The Actor's System ID	N/A	A 6-octet MAC address value.	N/A
SystemPriority	The priority assigned to the Actor System	N/A	Unsigned integer: 0 to 65535. The smaller the value, the higher the system LACP priority.	N/A
LoadSharingMode	Global link-aggregation load sharing mode.	N/A	Unsigned integer64. Ingress Port <b>is encoded in bit 1.</b> Destination MAC <b>is encoded in bit 2.</b> Source MAC <b>is encoded in bit 3.</b> Destination IP <b>is encoded in bit 4.</b> Source IP <b>is encoded in bit 5.</b> VLAN ID <b>is encoded in bit 6.</b>	N/A

			Layer 4 destination-port is encoded in bit 7. Layer 4 source-port is encoded in bit 8. IP Protocol is encoded in bit 9. MPLS Label1 is encoded in bit 10. MPLS Label2 is encoded in bit 11. MPLS Label3 is encoded in bit 12. Packet type-based sharing is encoded in bit 13. Per-packet is encoded in bit 14.	
AutoAggregationEnable	Automatic aggregation	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	N/A
Capability	System capability of link aggregation	Data structure	Members include: <ul style="list-style-type: none"> <li>MaxGroupNum.</li> <li>MaxSelectPortNum.</li> </ul>	N/A
MaxGroupNum	The maximum number of aggregation groups that the system can create.	N/A	Unsigned integer. Length:32bits.	This value will take effect at the next reboot when you first configured. 0 represent for nothing configured.
MaxSelectPortNum	The maximum number of Selected ports per aggregation group.	N/A	Unsigned integer. Length:32bits.	This value will take effect at the next reboot when you first configured. 0 represent for nothing configured.

## LAGG/Groups

This table contains link aggregation group information.

## XML structure

```

<LAGG>
  <LAGGGroups>
    <LAGGGroup>
      <GroupId></GroupId>
      <LinkMode></LinkMode>
      <IfIndex></IfIndex>
      <MemberList></MemberList>
      <SelectedMemberList></SelectedMemberList>
      <LacpEdgeEnable></LacpEdgeEnable>
      <LoadSharingMode></LoadSharingMode>
      <PartnerSystemID></PartnerSystemID>
    </LAGGGroup>
  </LAGGGroups>
</LAGG>

```

```

    <PartnerSystemPriority></PartnerSystemPriority>
    <IrfSelectMode></IrfSelectMode>
    <DynamicLoadSharing>
        <Mode></Mode>
        <FlowletGapTime></FlowletGapTime>
    </DynamicLoadSharing>
</LAGGGroup>
</LAGGGroups>
</LAGG>

```

## Table description

Item	Description
Feature name	LAGG
Table name	LAGGGroups
Table type	Multi-instance table
Row name	LAGGGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupId	Aggregation group ID	Index	Unsigned integer. <ul style="list-style-type: none"> <li>Layer 2 aggregation group: 1 to 16384.</li> <li>Layer 3 aggregation group: 16385 to 32768.</li> <li>Blade aggregation group: 32769 to 36864.</li> <li>S-channel bundle group: 36865 to 40960.</li> </ul>
LinkMode	Link aggregation mode	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Static.</li> <li><b>2</b>—Dynamic.</li> </ul>
IfIndex	Aggregate interface index	N/A	Unsigned integer.
MemberList	Member list	N/A	Bitmap. No length restrictions. Each octet within this value specifies a set of eight ports, with the first octet specifying ports 1 through 8, the second octet specifying ports 9 through 16, etc. Within each octet, the most significant bit represents the lowest numbered port, and the least significant bit represents the highest numbered port. Thus, each port of the bridge is represented by a single bit within the value of this object. If that bit has a value of '1' then that port is included in the set of ports; the port is not included if

			its bit has a value of '0'.
SelectedMemberList	Selected member list	N/A	Bitmap. No length restrictions. Same <b>restriction with</b> MemberList.
LacpEdgeEnable	Edge aggregate interface feature	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>
LoadSharingMode	Link-aggregation load sharing mode	N/A	Unsigned integer64. Ingress Port <b>is encoded in bit 1.</b> Destination MAC <b>is encoded in bit 2.</b> Source MAC <b>is encoded in bit 3.</b> Destination IP <b>is encoded in bit 4.</b> Source IP <b>is encoded in bit 5.</b> VLAN ID <b>is encoded in bit 6.</b> Layer 4 destination-port <b>is encoded in bit 7.</b> Layer 4 source-port <b>is encoded in bit 8.</b> IP Protocol <b>is encoded in bit 9.</b> MPLS Label1 <b>is encoded in bit 10.</b> MPLS Label2 <b>is encoded in bit 11.</b> MPLS Label3 <b>is encoded in bit 12.</b> Packet type-based sharing <b>is encoded in bit 13.</b> Per-packet <b>is encoded in bit 14.</b>
PartnerSystemID	The Partner's System ID	N/A	A 6-octet MAC address value. A value of zero indicates that there is no known Partner or the aggregation is static mode.
PartnerSystemPriority	The priority assigned to the Partner System	N/A	Unsigned integer: 0 to 65535 Default value is 32768. The smaller the value, the higher the system LACP priority.
LrfSelectMode	Lrf device select mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>1</b>—Master-first.</li> <li>• <b>2</b>—Bandwidth-first.</li> </ul>
Mode	Dynamic load sharing mode of link aggregation	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None (default).</li> <li>• <b>1</b>—Spray.</li> <li>• <b>2</b>—Fixed.</li> <li>• <b>4</b>—Eligible.</li> </ul>
FlowletGapTime	Flowlet gap time of dynamic load sharing	N/A	Unsigned integer Value range: 16 to 65535 Default: 1000.

## LAGG/Members

This table contains aggregation member port information.



# XML structure

```
<LAGG>
  <LAGGMembers>
    <LAGGMember>
      <IfIndex></IfIndex>
      <GroupId></GroupId>
      <SelectedStatus></SelectedStatus>
      <UnSelectedReason></UnSelectedReason>
      <LacpEnable></LacpEnable>
      <LacpMode></LacpMode>
      <LacpShortPeriodEnable></LacpShortPeriodEnable>
      <ActorPortPriority></ActorPortPriority>
      <ActorState></ActorState>
      <ActorOperKey></ActorOperKey>
      <ActorPort></ActorPort>
      <PartnerSystemID></PartnerSystemID>
      <PartnerSystemPriority></PartnerSystemPriority>
      <PartnerPortPriority></PartnerPortPriority>
      <PartnerState></PartnerState>
      <PartnerOperKey></PartnerOperKey>
      <PartnerPort></PartnerPort>
    </LAGGMember>
  </LAGGMembers>
</LAGG>
```

## Table description

Item	Description
Feature name	LAGG
Table name	LAGGMembers
Table type	Multi-instance table
Row name	LAGGMember
Restrictions	This table supports only Ethernet interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Member port index	Index	Unsigned integer.
GroupId	Aggregation group ID	N/A	Unsigned integer. <ul style="list-style-type: none"><li>0: Not assigned to any link aggregation group.</li><li>Layer 2 aggregation group: 1 to 16384.</li><li>Layer 3 aggregation group: 16385</li></ul>

			to 32768. <ul style="list-style-type: none"> <li>Blade aggregation group: 32769 to 36864.</li> <li>S-channel bundle group: 36865 to 40960.</li> </ul>
SelectedStatus	Selected status of a member port	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Selected.</li> <li><b>2</b>—Unselected.</li> <li><b>3</b>—Individual.</li> </ul>
UnSelectedReason	Unselected reason of a member port	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—The port is attached to this aggregator. Indicate that selected status of a member port is Selected or Individual.</li> <li><b>1</b>—The current number of active ports has reached the upper limit.</li> <li><b>2</b>—All aggregation resources are already in-use.</li> <li><b>3</b>—The port's configuration is improper for being attached.</li> <li><b>4</b>—The port's partner is improper for being attached.</li> <li><b>5</b>—The number of current active ports has not reached the lower limit.</li> <li><b>6</b>—The port's physical state (down) is improper for being attached.</li> <li><b>7</b>—The port is not selected for an aggregator.</li> <li><b>8</b>—The port's hardware restriction is improper for being attached.</li> <li><b>9</b>—The port's speed is improper for being attached.</li> <li><b>10</b>—The port's duplex mode is improper for being attached.</li> </ul>
LacpEnable	LACP enable flag of a member port	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
LacpMode	LACP mode of a member port	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Active.</li> <li><b>2</b>—Passive.</li> </ul>
LacpShortPeriodEnable	LACP short period function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
ActorPortPriority	The priority assigned to this port by the Actor	N/A	Unsigned integer Value eange: 0 to 65535 The smaller the value, the higher the system LACP priority.
ActorState	The Actor's state variables for the port	N/A	Encoded as individual bits within a single octet <ul style="list-style-type: none"> <li><b>LACP_Activity is encoded in bit 0. This flag indicates the</b></li> </ul>

			<p>Activity control value with regard to this link. Active LACP is encoded as a 1; Passive LACP is encoded as a 0.</p> <ul style="list-style-type: none"> <li>• LACP_Timeout is encoded in bit 1. This flag indicates the Timeout control value with regard to this link. Short Timeout is encoded as a 1; Long Timeout is encoded as a 0.</li> <li>• Aggregation is encoded in bit 2. If TRUE (encoded as a 1), this flag indicates that the System considers this link to be Aggregatable. If FALSE (encoded as a 0), the link is considered to be Individual.</li> <li>• Synchronization is encoded in bit 3. If TRUE (encoded as a 1), the System considers this link to be IN_SYNC. If FALSE (encoded as a 0), then this link is currently OUT_OF_SYNC.</li> <li>• Collecting is encoded in bit 4. TRUE (encoded as a 1) means collection of incoming frames on this link is definitely enabled. Its value is otherwise FALSE (encoded as a 0).</li> <li>• Distributing is encoded in bit 5. FALSE (encoded as a 0) means distribution of outgoing frames on this link is definitely disabled. Its value is otherwise TRUE (encoded as a 1).</li> <li>• Defaulted is encoded in bit 6. If TRUE (encoded as a 1), this flag indicates that the Actor's Receive machine is using Defaulted operational Partner information, administratively configured for the Partner. If FALSE (encoded as a 0), the operational Partner information in use has been received in a LACPDU;</li> <li>• Expired is encoded in bit 7. If TRUE (encoded as a 1), this flag indicates that the Actor's Receive machine is in the EXPIRED state; if FALSE (encoded as a 0), this flag indicates that the Actor's Receive machine is not in the EXPIRED state.</li> </ul>
ActorOperKey	The operational Key value assigned to the port by the Actor	N/A	Unsigned integer
ActorPort	The port number assigned to the port by the Actor	N/A	Unsigned integer

PartnerSystemID	The Partner's System ID	N/A	A 6-octet MAC address value. A value of zero indicates that there is no known Partner or the aggregation is static mode.
PartnerSystemPriority	The priority assigned to the Partner System	N/A	Unsigned integer Value eange: 0 to 65535 The smaller the value, the higher the system LACP priority.
PartnerPortPriority	The priority assigned to this port by the Partner	N/A	Unsigned integer Value eange: 0 to 65535 The smaller the value, the higher the system LACP priority.
PartnerState	The Partner's state variables for the port	N/A	Encoded as individual bits within a single octet. <b>Encoded meaning in every bits relate to ActorState.</b>
PartnerOperKey	The operational Key value assigned to the port by the Partner	N/A	Unsigned integer.
PartnerPort	The port number assigned to the port by the Partner	N/A	Unsigned integer.

# Contents

LAGG .....1

LAGG/Groups .....1

LAGG/Members .....2

# LAGG

## LAGG/Groups

Message	Explanation
The link aggregation group doesn't exist. 指定的聚合组不存在。	The link aggregation group doesn't exist. 指定的聚合组不存在。
Failed to create the link aggregation group. 聚合组创建失败。	Failed to create the link aggregation group. 聚合组创建失败。
Failed to set the hash key mode, because the mode is not supported. 设置负载分担模式失败，因为设备不支持指定的模式。	Failed to set the hash key mode, because the mode is not supported. 设置负载分担模式失败，因为设备不支持指定的模式。
The load-sharing mode of flexible can not be configured with others. 负载分担flexible模式不能和其他模式同时配置	The load-sharing mode of flexible can not be configured with others. 负载分担flexible模式不能和其他模式同时配置
The load-sharing mode of per-packet can not be configured with others. 负载分担per-packet模式不能和其他模式同时配置	The load-sharing mode of per-packet can not be configured with others. 负载分担per-packet模式不能和其他模式同时配置
Failed to set the dynamic hash key mode, because the mode is not supported. 设置动态负载分担模式失败，因为设备不支持指定的模式。	Failed to set the dynamic hash key mode, because the mode is not supported. 设置动态负载分担模式失败，因为设备不支持指定的模式。
The load-sharing dynamic mode of spray can not be configured with others. 动态负载分担Spray模式不能和其他模式同时配置。	The load-sharing dynamic mode of spray can not be configured with others. 动态负载分担Spray模式不能和其他模式同时配置。
The load-sharing dynamic mode of fixed can not be configured with others. 动态负载分担Fixed模式不能和其他模式同时配置。	The load-sharing dynamic mode of fixed can not be configured with others. 动态负载分担Fixed模式不能和其他模式同时配置。
The load-sharing dynamic mode of eligible can not be configured with others. 动态负载分担Eligible模式不能和其他模式同时配置。	The load-sharing dynamic mode of eligible can not be configured with others. 动态负载分担Eligible模式不能和其他模式同时配置。
Failed to set the dynamic hash time, because the time is out of range. 设置时间间隔失败，超出定制范围。	Failed to set the dynamic hash time, because the time is out of range. 设置时间间隔失败，超出定制范围。
Failed to set the dynamic hash time, because only eligible mode can configure FlowletGapTime. 设置时间间隔失败，只有Eligible模式可以配置FlowletGapTime。	Failed to set the dynamic hash time, because only eligible mode can configure FlowletGapTime. 设置时间间隔失败，只有Eligible模式可以配置FlowletGapTime。
Failed to delete the dynamic hash time, because the FlowletGapTime unable to configure separately. 删除时间间隔失败，无法单独删除时间间隔配置。	Failed to delete the dynamic hash time, because the FlowletGapTime unable to configure separately. 删除时间间隔失败，无法单独删除时间间隔配置。

# LAGG/Members

Message	Explanation
%s has been assigned to another aggregation group. %s已经加入其他聚合组。	%s has been assigned to another aggregation group. %s已经加入其他聚合组。
Can't assign %s to a link aggregation group because the interface has subinterfaces.. 加入聚合组失败，因为该端口包含子接口。	Can't assign %s to a link aggregation group because the interface has subinterfaces.. 加入聚合组失败，因为该端口包含子接口。
Can't assign the L2VPN-enabled interface %s to a link aggregation group. 加入聚合组失败，因为该端使能了L2VPN业务	Can't assign the L2VPN-enabled interface %s to a link aggregation group. 加入聚合组失败，因为该端使能了L2VPN业务
Can't assign %s to a link aggregation group because the interface is enabled with port security, MAC authentication, or 802.1X authentication. 加入聚合组失败，因为该端口使能了端口安全、MAC认证或者802.1X认证。	Can't assign %s to a link aggregation group because the interface is enabled with port security, MAC authentication, or 802.1X authentication. 加入聚合组失败，因为该端口使能了端口安全、MAC认证或者802.1X认证。
Can't assign the subinterface %s to a link aggregation group. 加入聚合组失败，因为该端口是子接口。	Can't assign the subinterface %s to a link aggregation group. 加入聚合组失败，因为该端口是子接口。
Can't assign %s to a link aggregation group because the interface is shared by multiple contexts. 加入聚合组失败，因为该端口已被多个context共享。	Can't assign %s to a link aggregation group because the interface is shared by multiple contexts. 加入聚合组失败，因为该端口已被多个context共享。
Can't assign %s to a link aggregation group because the interface is shared by multiple contexts.'t assign the port to the aggregation group because its attribute configurations are different than the aggregate interface. 接口上存在的属性类配置和聚合接口不同，该接口不能加入聚合组。	Can't assign %s to a link aggregation group because the interface is shared by multiple contexts.'t assign the port to the aggregation group because its attribute configurations are different than the aggregate interface. 接口上存在的属性类配置和聚合接口不同，该接口不能加入聚合组。

# Contents

LB.....	1
LB/ClearVirtualServerStats .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
LB/ClearAllVirtualServerStats .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
LB/ClearRealServerStats .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
LB/ClearAllRealServerStats .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
LB/Dellpv4Proximities .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
LB/DelAllIPv4Proximities .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
LB/Dellpv6Proximities .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
LB/DelAllpv6Proximities .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
LB/TestIpv4Routes .....	7
XML structure .....	7
Responded XML structure .....	7
Table description .....	8
Columns .....	8
Responded columns .....	9
LB/TestIpv6Routes .....	11
XML structure .....	11
Responded XML structure .....	11
Table description .....	12
Columns .....	12
Responded columns .....	13
LB/DelVRFProximities .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
LB/ClearLinkStatistics .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
LB/ClearAllLinkStatistics .....	17
XML structure .....	17
Table description .....	17
Columns .....	17



LB/ClearDNSListenerStats .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
LB/ClearAllDNSListenerStats .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
LB/ClearDNSServerStats .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
LB/ClearAllDNSServerStats .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
LB/ClearDNSProxyStats .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
LB/ClearAllDNSProxyStats .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
LB/ClearClassCounter .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
LB/ClearAllClassCounter .....	23
XML structure .....	23
Table description .....	23
Columns .....	23
LB/ClearIpv4ProximityCounter .....	23
XML structure .....	24
Table description .....	24
Columns .....	24
LB/ClearAllIpv4ProximityCounter .....	24
XML structure .....	24
Table description .....	25
Columns .....	25
LB/ClearIpv6ProximityCounter .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
LB/ClearAllIpv6ProximityCounter .....	26
XML structure .....	26
Table description .....	26
Columns .....	26
LB/ReloadHTTPResponses .....	27
XML structure .....	27
Table description .....	27
Columns .....	27
LB/ReloadAllHTTPResponses .....	27
XML structure .....	27
Table description .....	28
Columns .....	28

# LB

## LB/ClearVirtualServerStats

This table is used to clear the statistics of the virtual server.

### XML structure

```
<LB>
  <ClearVirtualServerStats>
    <ClearVirtualServerStat>
      <Name></Name>
      <Clear></Clear>
    </ClearVirtualServerStat>
  </ClearVirtualServerStats>
</LB>
```

### Table description

Item	Description
Feature name	LB
Table name	ClearVirtualServerStats
Table type	Multi-instance table
Row name	ClearVirtualServerStat
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. <ul style="list-style-type: none"><li>Length: 1 to 63 characters.</li></ul>	N/A
Clear	Action of clearing the specified virtual server.	N/A	This column must be empty.	<ul style="list-style-type: none"><li>N/A</li></ul>

## LB/ClearAllVirtualServerStats

This table is used to clear all virtual servers' statistics.

## XML structure

```
<LB>
  <ClearAllVirtualServerStats>
    <Clear></Clear>
  </ClearAllVirtualServerStats>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ClearAllVirtualServerStats
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all virtual servers' statistics.	N/A	This column must be empty.	<ul style="list-style-type: none"><li>N/A</li></ul>

## LB/ClearRealServerStats

This table is used to clear the statistics of the real server.

## XML structure

```
<LB>
  <ClearRealServerStats>
    <ClearRealServerStat>
      <Name></Name>
      <Clear></Clear>
    </ClearRealServerStat>
  </ClearRealServerStats>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ClearRealServerStats
Table type	Multi-instance table
Row name	ClearRealServerStat
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the real server.	Index	String, case-insensitive. <ul style="list-style-type: none"><li>Length: 1 to 63 characters.</li></ul>	N/A
Clear	Action of clearing the specified real server.	N/A	This column must be empty.	<ul style="list-style-type: none"><li>N/A</li></ul>

## LB/ClearAllRealServerStats

This table is used to clear all real servers' statistics.

## XML structure

```
<LB>
  <ClearAllRealServerStats>
    <Clear></Clear>
  </ClearAllRealServerStats>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ClearAllRealServerStats
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all real servers' statistics.	N/A	This column must be empty.	<ul style="list-style-type: none"><li>N/A</li></ul>

## LB/Dellpv4Proximities

This table is used to delete IPv4 proximity which belongs to the specified VPN.

## XML structure

```
<LB>
  <DelIpv4Proximities>
    <DelIpv4Proximity>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Delete></Delete>
    </DelIpv4Proximity>
  </DelIpv4Proximities>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	Dellpv4Proximities
Table type	Multi-instance table
Row name	Dellpv4Proximity
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. <ul style="list-style-type: none"><li>Length: 0 to 31 characters.</li></ul>	The null string indicates public network.
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation.	N/A
Delete	Action of deleting the specified IPv4 proximity.	N/A	This column must be empty.	N/A

# LB/DelAllIPv4Proximities

This table is used to delete all IPv4 proximities.

## XML structure

```
<LB>
  <DelAllIpv4Proximities>
    <Delete></Delete>
  </DelAllIpv4Proximities>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	DelAllIpv4Proximities
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Delete	Action of deleting all IPv4 proximities.	N/A	This column must be empty.	N/A

# LB/DelIpv6Proximities

This table is used to delete IPv6 proximity which belongs to the specified VPN.

## XML structure

```
<LB>
  <DelIpv6Proximities>
    <DelIpv6Proximity>
      <VRF></VRF>
      <Ipv6Address></Ipv6Address>
      <Delete></Delete>
    </DelIpv6Proximity>
  </DelIpv6Proximities>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	Dellpv6Proximities
Table type	Multi-instance table
Row name	Dellpv6Proximity
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Ipv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A
Delete	Action of deleting the specified IPv6 proximity.	N/A	This column must be empty.	N/A

## LB/DelAllIpv6Proximities

This table is used to delete all IPv6 proximities.

## XML structure

```
<LB>
  <DelAllIpv6Proximities>
    <Delete></Delete>
  </DelAllIpv6Proximities>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	DelAllIpv6Proximities
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Delete	Action of deleting all IPv6 proximities.	N/A	This column must be empty.	N/A

## LB/TestIpv4Routes

This table is used to test IPv4 route in the specified VPN.

## XML structure

```
<LB>
  <TestIpv4Routes>
    <TestIpv4Route>
      <VRF></VRF>
      <Protocol></Protocol>
      <DstIpv4Address></DstIpv4Address>
      <SrcIpv4Address></SrcIpv4Address>
      <DstPort></DstPort>
      <SrcPort></SrcPort>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
    </TestIpv4Route>
  </TestIpv4Routes>
</LB>
```

## Responded XML structure

```
<LB>
  <TestIpv4Routes>
    <TestIpv4Route>
      <VRF></VRF>
      <Protocol></Protocol>
      <DstIpv4Address></DstIpv4Address>
      <SrcIpv4Address></SrcIpv4Address>
      <DstPort></DstPort>
      <SrcPort></SrcPort>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <VirtualServer></VirtualServer>
      <ZoneType></ZoneType>
      <Class></Class>
```



```

    <ForwardType></ForwardType>
    <DropType></DropType>
    <ServerFarm></ServerFarm>
    <RealServer></RealServer>
    <LinkGroup></LinkGroup>
    <Link></Link>
    <ScheduleType></ScheduleType>
  </TestIpv4Route>
</TestIpv4Routes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	TestIpv4Routes
Table type	Multi-instance table
Row name	TestIpv4Route
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Protocol	IPv4 protocol number.	Index	Unsigned integer. Value range: 0 to 255.	N/A
DstIpv4Address	IPv4 destination address.	Index	String. Dotted decimal notation.	N/A
SrcIpv4Address	IPv4 source address.	Index	String. Dotted decimal notation.	N/A
DstPort	Destination port.	Index	Unsigned integer. Value range: 0 to 65535.	If Protocol isn't TCP (6) or UDP (17), this column must be zero.
SrcPort	Source port.	Index	Unsigned integer. Value range: 0 to 65535.	If Protocol isn't TCP (6) or UDP (17), this column must be zero.
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			0 to 255.	
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A

## Responded columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Protocol	IPv4 protocol number.	Index	Unsigned integer. Value range: 0 to 255.	N/A
DstIpv4Address	IPv4 destination address.	Index	String. Dotted decimal notation.	N/A
SrcIpv4Address	IPv4 source address.	Index	String. Dotted decimal notation.	N/A
DstPort	Destination port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPort	Source port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VirtualServer	Name of the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ZoneType	Zone type of the result.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Class.</li> <li>1—Default class.</li> <li>2—Default server farm.</li> <li>3—Default link group.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
ForwardType	Forward mode of the result.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Drop.</li> <li>2—Forward all.</li> <li>3—Server farm.</li> <li>4—Address of LB device.</li> <li>5—Match HTTP virtual server.</li> <li>6—No matched virtual server.</li> <li>7—Link group.</li> <li>8—Waiting.</li> </ul>	N/A
DropType	Drop reason of the result	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Action drop.</li> <li>2—Virtual server limited.</li> <li>3—No real server.</li> <li>4—No class or server farm.</li> <li>5—Match sticky but real server limited.</li> <li>6—No server farm in action.</li> <li>7—No link.</li> <li>8—No class or link group.</li> <li>9—Match sticky but link limited.</li> <li>10—No link group in action.</li> <li>11—Server farm busy.</li> <li>12—Queue overflow.</li> </ul>	N/A
ServerFarm	Name of the sever farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
RealServer	Name of the real server.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
LinkGroup	Name of the link group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
Link	Name of the link.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
ScheduleType	The method of selecting real server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Algorithm.</li> <li>1—Sticky.</li> <li>2—Proximity.</li> </ul>	N/A

## LB/TestIpv6Routes

This table is used to test IPv6 route in the specified VPN.

### XML structure

```

<LB>
  <TestIpv6Routes>
    <TestIpv6Route>
      <VRF></VRF>
      <Protocol></Protocol>
      <DstIpv6Address></DstIpv6Address>
      <SrcIpv6Address></SrcIpv6Address>
      <DstPort></DstPort>
      <SrcPort></SrcPort>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
    </TestIpv6Route>
  </TestIpv6Routes>
</LB>

```

### Response XML structure

```

<LB>
  <TestIpv6Routes>
    <TestIpv6Route>
      <VRF></VRF>
      <Protocol></Protocol>
      <DstIpv6Address></DstIpv6Address>
      <SrcIpv6Address></SrcIpv6Address>
      <DstPort></DstPort>
      <SrcPort></SrcPort>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
    </TestIpv6Route>
  </TestIpv6Routes>
</LB>

```

```

<VirtualServer></VirtualServer>
<ZoneType></ZoneType>
<Class></Class>
<ForwardType></ForwardType>
<DropType></DropType>
<ServerFarm></ServerFarm>
<RealServer></RealServer>
<LinkGroup></LinkGroup>
<Link></Link>
<ScheduleType></ScheduleType>
</TestIpv6Route>
</TestIpv6Routes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	TestIpv6Routes
Table type	Multi-instance table
Row name	TestIpv6Route
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Protocol	IPv6 protocol number.	Index	Unsigned integer. Value range: 0 to 255.	N/A
DstIpv6Address	IPv6 destination address.	Index	Hexadecimal string, colon-separated.	N/A
SrcIpv6Address	IPv6 source address.	Index	Hexadecimal string, colon-separated.	N/A
DstPort	Destination port.	Index	Unsigned integer. Value range: 0 to 65535.	If Protocol isn't TCP (6) or UDP (17), this column must be zero.
SrcPort	Source port.	Index	Unsigned integer. Value range: 0 to 65535.	If Protocol isn't TCP (6) or UDP (17), this column must be zero.
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			0 to 255.	
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A

## Responded columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Protocol	IPv6 protocol number.	Index	Unsigned integer. Value range: 0 to 255.	N/A
DstIpv6Address	IPv6 destination address.	Index	Hexadecimal string, colon-separated.	N/A
SrcIpv6Address	IPv6 source address.	Index	Hexadecimal string, colon-separated.	N/A
DstPort	Destination port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
SrcPort	Source port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VirtualServer	Name of the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ZoneType	Zone type of the result.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Class.</li> <li>1—Default class.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 2—Default server farm.</li> <li>• 3—Default link group.</li> </ul>	
Class	Name of the class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
ForwardType	Forward mode of the result.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Drop.</li> <li>• 2—Forward all.</li> <li>• 3—Server farm.</li> <li>• 4—Address of LB device.</li> <li>• 5—Match HTTP virtual server.</li> <li>• 6—No matched virtual servers.</li> <li>• 7—Link group.</li> <li>• 8—Waiting.</li> </ul>	N/A
DropType	Drop reason of the result	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Action drop.</li> <li>• 2—Virtual server limited.</li> <li>• 3—No real server.</li> <li>• 4—No class or server farm.</li> <li>• 5—Match sticky but real server limited.</li> <li>• 6—No server farm in action.</li> <li>• 7—No link.</li> <li>• 8—No class or link group.</li> <li>• 9—Match sticky but link limited.</li> <li>• 10—No link group in action.</li> <li>• 11—Server farm busy.</li> <li>• 12—Queue overflow.</li> </ul>	N/A
ServerFarm	Name of the sever farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
RealServer	Name of the real server.	N/A	String, case-insensitive.	The null string indicates the label is not

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 0 to 63 characters.	configured.
LinkGroup	Name of the link group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
Link	Name of the link.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
ScheduleType	The method of selecting real server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Algorithm.</li> <li>1—Sticky.</li> <li>2—Proximity.</li> </ul>	N/A

## LB/DelVRFProximities

This table is used to delete all proximities which belong to the specified VPN.

### XML structure

```

<LB>
  <DelVRFProximities>
    <DelVRFProximity>
      <VRF></VRF>
      <AF></AF>
      <Delete></Delete>
    </DelVRFProximity>
  </DelVRFProximities>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	DelVRFProximities
Table type	Multi-instance table
Row name	DelVRFProximity
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. • Length: 0 to 31 characters.	The null string indicates public network.
AF	Address family.	Index	Enumeration: • 1—IPv4. • 2—IPv6. • 3—All.	N/A
Delete	Action of deleting the specified VPN proximities.	N/A	This column must be empty.	N/A

## LB/ClearLinkStatistics

This table is used to clear the statistics of the link.

## XML structure

```

<LB>
  <ClearLinkStatistics>
    <ClearLinkStatistic>
      <Name></Name>
      <Clear></Clear>
    </ClearLinkStatistic>
  </ClearLinkStatistics>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ClearLinkStatistics
Table type	Multi-instance table
Row name	ClearLinkStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link.	Index	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Length: 1 to 63 characters.</li> </ul>	
Clear	Action of clearing the specified link.	N/A	This column must be empty.	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## LB/ClearAllLinkStatistics

This table is used to clear all links statistics.

### XML structure

```
<LB>
  <ClearAllLinkStatistics>
    <Clear></Clear>
  </ClearAllLinkStatistics>
</LB>
```

### Table description

Item	Description
Feature name	LB
Table name	ClearAllLinkStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all links statistics.	N/A	This column must be empty.	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## LB/ClearDNSListenerStats

This table is used to clear the statistics of the DNS listener.

### XML structure

```
<LB>
  <ClearDNSListenerStats>
    <ClearDNSListenerStat>
      <Name></Name>
    </ClearDNSListenerStat>
  </ClearDNSListenerStats>
</LB>
```

```

    <Clear></Clear>
  </ClearDNSListenerStat>
</ClearDNSListenerStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ClearDNSListenerStats
Table type	Multi-instance table
Row name	ClearDNSListenerStat
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS listener.	Index	String, case-insensitive. <ul style="list-style-type: none"> <li>Length: 1 to 63 characters.</li> </ul>	N/A
Clear	Action of clearing the specified DNS listener.	N/A	This column must be empty.	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## LB/ClearAllDNSListenerStats

This table is used to clear all DNS listener' statistics.

## XML structure

```

<LB>
  <ClearAllDNSListenerStats>
    <Clear></Clear>
  </ClearAllDNSListenerStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ClearAllDNSListenerStats
Table type	Single-instance table

Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all DNS listener' statistics.	N/A	This column must be empty.	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## LB/ClearDNSServerStats

This table is used to clear the statistics of the DNS server.

## XML structure

```

<LB>
  <ClearDNSServerStats>
    <ClearDNSServerStat>
      <Name></Name>
      <Clear></Clear>
    </ClearDNSServerStat>
  </ClearDNSServerStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ClearDNSServerStats
Table type	Multi-instance table
Row name	ClearDNSServerStat
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS server.	Index	String, case-insensitive. <ul style="list-style-type: none"> <li>Length: 1 to 63 characters.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Action of clearing the specified DNS server.	N/A	This column must be empty.	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## LB/ClearAllDNSServerStats

This table is used to clear all DNS servers' statistics.

### XML structure

```
<LB>
  <ClearAllDNSServerStats>
    <Clear></Clear>
  </ClearAllDNSServerStats>
</LB>
```

### Table description

Item	Description
Feature name	LB
Table name	ClearAllDNSServerStats
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all DNS servers' statistics.	N/A	This column must be empty.	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## LB/ClearDNSProxyStats

This table is used to clear the statistics of the DNS proxy.

### XML structure

```
<LB>
  <ClearDNSProxyStats>
    <ClearDNSProxyStat>
```

```

    <Name></Name>
    <Clear></Clear>
  </ClearDNSProxyStat>
</ClearDNSProxyStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ClearDNSProxyStats
Table type	Multi-instance table
Row name	ClearDNSProxyStat
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS proxy.	Index	String, case-insensitive. <ul style="list-style-type: none"> <li>Length: 1 to 63 characters.</li> </ul>	N/A
Clear	Action of clearing the specified DNS proxy.	N/A	This column must be empty.	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## LB/ClearAllDNSProxyStats

This table is used to clear all DNS proxies' statistics.

## XML structure

```

<LB>
  <ClearAllDNSProxyStats>
    <Clear></Clear>
  </ClearAllDNSProxyStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ClearAllDNSProxyStats
Table type	Single-instance table

Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all DNS proxies' statistics.	N/A	This column must be empty.	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## LB/ClearClassCounter

This table is used to clear all rule match counter statistics of a class.

## XML structure

```

<LB>
  <ClearClassCounters>
    <ClearClassCounter>
      <ClassName></ClassName>
      <Clear></Clear>
    </ClearClassCounter>
  </ClearClassCounters>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ClearClassCounters
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClassName	Name of the class proxy.	Index	String, case-insensitive. <ul style="list-style-type: none"><li>Length: 1 to 63 characters.</li></ul>	<ul style="list-style-type: none"><li></li></ul>
Clear	Action of clearing rule match counter statistics.	N/A	This column must be empty.	<ul style="list-style-type: none"><li>N/A</li></ul>

## LB/ClearAllClassCounter

This table is used to clear rule match counter statistics of all classes.

## XML structure

```
<LB>
  <ClearAllClassCounters>
    <Clear></Clear>
  </ClearAllClassCounters>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ClearAllClassCounters
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear rule match counter statistics of all classe.	N/A	This column must be empty.	N/A

## LB/ClearIpv4ProximityCounter

This table is used to clear the used counter statistics for the IPv4 proximity of a VPN instance.



## XML structure

```
<LB>
  <ClearIpv4ProximityCounters>
    <ClearIpv4ProximityCounter>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Clear></Clear>
    </ClearIpv4ProximityCounter>
  </ClearIpv4ProximityCounters>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ClearIpv4ProximityCounters
Table type	Multi-instance table
Row name	ClearIpv4ProximityCounter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. <ul style="list-style-type: none"><li>Length: 0 to 31 characters.</li></ul>	The null string indicates the public network.
Ipv4Address	IPv4 address.	Index	String. <ul style="list-style-type: none"><li>Dotted decimal notation.</li></ul>	N/A
Clear	Action of clearing the count of the specified IPv4 proximity.	N/A	This column must be empty.	N/A

## LB/ClearAllIpv4ProximityCounter

This table is used to clear the used counter statistics of all IPv4 proximities.

## XML structure

```
<LB>
  <ClearAllIpv4ProximityCounters>
    <Clear></Clear>
  </ClearAllIpv4ProximityCounters>
```

</LB>

## Table description

Item	Description
Feature name	LB
Table name	ClearAllIpv4ProximityCounters
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Action of clearing the count of all IPv4 proximities.	N/A	This column must be empty.	N/A

## LB/ClearIpv6ProximityCounter

This table is used to clear the used counter statistics for the IPv6 proximity of a VPN instance.

## XML structure

```
<LB>
  <ClearIpv6ProximityCounters>
    <ClearIpv6ProximityCounter>
      <VRF></VRF>
      <Ipv6Address></Ipv6Address>
      <Clear></Clear>
    </ClearIpv6ProximityCounter>
  </ClearIpv6ProximityCounters>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ClearIpv6ProximityCounters
Table type	Multi-instance table
Row name	ClearIpv6ProximityCounter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. <ul style="list-style-type: none"><li>Length: 0 to 31 characters.</li></ul>	The null string indicates the public network.
Ipv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A
Clear	Action of clearing the the count of the specified IPv6 proximity.	N/A	This column must be empty.	N/A

## LB/ClearAllIpv6ProximityCounter

This table is used to clear the used counter statistics of all IPv6 proximities.

## XML structure

```
<LB>
  <ClearAllIpv6ProximityCounters>
    <Clear></Clear>
  </ClearAllIpv6ProximityCounters>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ClearAllIpv6ProximityCounters
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Action of clearing the count of all IPv6 proximities.	N/A	This column must be empty.	N/A

# LB/ReloadHTTPResponses

This table is used to reload an HTTP response file.

## XML structure

```
<LB>
  <ReloadHTTPResponses>
    <ReloadHTTPResponse>
      <FileName></FileName>
      <Reload></Reload>
    </ReloadHTTPResponse>
  </ReloadHTTPResponses>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ReloadHTTPResponses
Table type	Multi-instance table
Row name	ReloadHTTPResponse
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the file for the response.	Index	String, case-insensitive. <ul style="list-style-type: none"><li>Length: 1 to 255 characters.</li></ul>	
Reload	Action of reloading the response file.	N/A	This column must be empty.	N/A

# LB/ReloadAllHTTPResponses

This table is used to reload all HTTP response files.

## XML structure

```
<LB>
```

```

<ReloadAllHTTPResponses>
  <ReloadAllHTTPResponse>
    <Reload></Reload>
  </ReloadAllHTTPResponse>
</ReloadAllHTTPResponses>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ReloadAllHTTPResponses
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Reload	Reload all response files.	N/A	This column must be empty.	<ul style="list-style-type: none"> <li>N/A</li> </ul>

# Contents

LB.....	1
LB/HTTPVirtualServers .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
LB/GenericVirtualServers .....	6
XML structure .....	6
Table description .....	7
Columns .....	8
LB/RADIUSVirtualServers .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
LB/SIPVirtualServers .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
LB/MySQLVirtualServers .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
LB/RealServers .....	25
XML structure .....	25
Table description .....	26
Columns .....	26
LB/RealServerProbes .....	30
XML structure .....	30
Table description .....	30
Columns .....	31
LB/ServerFarms .....	31
XML structure .....	31
Table description .....	32
Columns .....	32
LB/ServerFarmProbes .....	36
XML structure .....	36
Table description .....	36
Columns .....	37
LB/SNATPools .....	37
XML structure .....	37
Table description .....	37
Columns .....	38
LB/NewSNATPools .....	38
XML structure .....	38
Table description .....	39
Columns .....	39
LB/SNATPoolsIpv4Infos .....	39
XML structure .....	39
Table description .....	40
Columns .....	40
LB/SNATPoolsIpv6Infos .....	40
XML structure .....	41
Table description .....	41
Columns .....	41
LB/IPParameters .....	42
XML structure .....	42
Table description .....	42
Columns .....	42

LB/TCPParameters .....	43
XML structure .....	43
Table description .....	43
Columns .....	44
LB/TCPAppParameters .....	45
XML structure .....	45
Table description .....	45
Columns .....	46
LB/HTTPParameters .....	46
XML structure .....	46
Table description .....	47
Columns .....	47
LB/HTTPCompressionParameters .....	49
XML structure .....	49
Table description .....	49
Columns .....	49
LB/HTTPStatisticsParameters .....	50
XML structure .....	50
Table description .....	51
Columns .....	51
LB/OneConnectParameters .....	51
XML structure .....	51
Table description .....	52
Columns .....	52
LB/MySQLParameters .....	53
XML structure .....	53
Table description .....	53
Columns .....	53
LB/HTTPCompressionParameterRules .....	54
XML structure .....	54
Table description .....	55
Columns .....	55
LB/AddressPortStickyGroups .....	55
XML structure .....	55
Table description .....	56
Columns .....	56
LB/RADIUSStickyGroups .....	57
XML structure .....	57
Table description .....	58
Columns .....	58
LB/PayloadStickyGroups .....	58
XML structure .....	58
Table description .....	59
Columns .....	59
LB/HTTPContentStickyGroups .....	60
XML structure .....	60
Table description .....	61
Columns .....	61
LB/HTTPCookieStickyGroups .....	62
XML structure .....	62
Table description .....	62
Columns .....	63
LB/HTTPHeaderStickyGroups .....	64
XML structure .....	64
Table description .....	65
Columns .....	65
LB/SSLStickyGroups .....	66
XML structure .....	66
Table description .....	66
Columns .....	67
LB/SIPStickyGroups .....	67
XML structure .....	67

Table description .....	68
Columns .....	68
LB/Policies .....	68
XML structure .....	69
Table description .....	69
Columns .....	69
LB/ClassActions .....	70
XML structure .....	70
Table description .....	70
Columns .....	70
LB/GenericActions .....	71
XML structure .....	71
Table description .....	71
Columns .....	71
LB/RADIUSActions .....	72
XML structure .....	72
Table description .....	73
Columns .....	73
LB/LinkGenericActions .....	74
XML structure .....	74
Table description .....	74
Columns .....	74
LB/DNSActions .....	75
XML structure .....	75
Table description .....	76
Columns .....	76
LB/HTTPActions .....	77
XML structure .....	77
Table description .....	77
Columns .....	78
LB/HTTPActionResponseFiles .....	80
XML structure .....	80
Table description .....	80
Columns .....	81
LB/HTTPActionRewriteURLs .....	81
XML structure .....	81
Table description .....	81
Columns .....	82
LB/HTTPActionSSLURLs .....	83
XML structure .....	83
Table description .....	83
Columns .....	84
LB/HTTPActionHeaders .....	84
XML structure .....	84
Table description .....	85
Columns .....	85
LB/Classes .....	88
XML structure .....	88
Table description .....	88
Columns .....	89
LB/GenericMatchRules .....	89
XML structure .....	89
Table description .....	90
Columns .....	90
LB/LinkGenericMatchRules .....	92
XML structure .....	92
Table description .....	93
Columns .....	93
LB/DNSMatchRules .....	95
XML structure .....	96
Table description .....	96
Columns .....	96



LB/HTTPMatchRules .....	99
XML structure .....	99
Table description .....	100
Columns .....	100
LB/RADIUSMatchRules .....	102
XML structure .....	102
Table description .....	103
Columns .....	103
LB/MySQLMatchRules .....	104
XML structure .....	104
Table description .....	105
Columns .....	105
LB/ISPs .....	106
XML structure .....	107
Table description .....	107
Columns .....	107
LB/ISPFile .....	107
XML structure .....	107
Table description .....	108
Columns .....	108
LB/FlowMode .....	108
XML structure .....	108
Table description .....	108
Columns .....	109
LB/Ipv4ISPAddressGroups .....	109
XML structure .....	109
Table description .....	109
Columns .....	109
LB/Ipv6ISPAddressGroups .....	110
XML structure .....	110
Table description .....	110
Columns .....	110
LB/ProximityParameters .....	111
XML structure .....	111
Table description .....	111
Columns .....	112
LB/VRFProximityParameters .....	113
XML structure .....	113
Table description .....	113
Columns .....	114
LB/ProximityProbeRules .....	115
XML structure .....	115
Table description .....	115
Columns .....	115
LB/VRFProximityProbeRules .....	116
XML structure .....	116
Table description .....	116
Columns .....	117
LB/ALG .....	117
XML structure .....	117
Table description .....	118
Columns .....	118
LB/LimitPolicies .....	119
XML structure .....	119
Table description .....	120
Columns .....	120
LB/LimitRules .....	120
XML structure .....	120
Table description .....	121
Columns .....	121
LB/Links .....	122
XML structure .....	122

Table description .....	123
Columns .....	123
LB/LinkProbes .....	126
XML structure .....	126
Table description .....	127
Columns .....	127
LB/LinkGroups .....	127
XML structure .....	127
Table description .....	128
Columns .....	128
LB/LinkGroupProbes .....	130
XML structure .....	130
Table description .....	131
Columns .....	131
LB/Regions .....	131
XML structure .....	131
Table description .....	131
Columns .....	132
LB/RegionISPs .....	132
XML structure .....	132
Table description .....	132
Columns .....	133
LB/TopolgyRegions .....	133
XML structure .....	133
Table description .....	133
Columns .....	134
LB/TopolgyRegionIPv4s .....	134
XML structure .....	134
Table description .....	135
Columns .....	135
LB/TopolgyRegionIPv6s .....	135
XML structure .....	135
Table description .....	136
Columns .....	136
LB/DNSListeners .....	136
XML structure .....	136
Table description .....	137
Columns .....	137
LB/DNSProxies .....	138
XML structure .....	138
Table description .....	139
Columns .....	139
LB/DNSServers .....	140
XML structure .....	140
Table description .....	141
Columns .....	141
LB/DNSServerProbes .....	142
XML structure .....	142
Table description .....	143
Columns .....	143
LB/DNSServerPools .....	143
XML structure .....	143
Table description .....	144
Columns .....	144
LB/DNSServerPoolProbes .....	145
XML structure .....	145
Table description .....	146
Columns .....	146
LB/Log .....	146
XML structure .....	146
Table description .....	146
Columns .....	147

LB/ServerFarmMembers .....	147
XML structure .....	147
Table description .....	148
Columns .....	148
LB/LinkGroupMembers .....	149
XML structure .....	149
Table description .....	150
Columns .....	150
LB/DNSServerPoolMembers .....	151
XML structure .....	151
Table description .....	152
Columns .....	152
LB/SnatArpInterfaces .....	153
XML structure .....	153
Table description .....	153
Columns .....	154
LB/VServerArpInterfaces .....	154
XML structure .....	154
Table description .....	154
Columns .....	155
LB/ProbeTemplate .....	155
XML structure .....	155
Table description .....	155
Columns .....	156
LB/ISPWhoisMntnrs .....	156
XML structure .....	156
Table description .....	156
Columns .....	157
LB/ISPUpdate .....	157
XML structure .....	157
Table description .....	157
Columns .....	158
LB/DNSCachesGlobalCfg .....	158
XML structure .....	158
Table description .....	159
Columns .....	159
LB/RSTProbeTemplate .....	159
XML structure .....	159
Table description .....	159
Columns .....	160
LB/ZeroWindowProbeTemplate .....	160
XML structure .....	161
Table description .....	161
Columns .....	161
LB/ProbeTemplate .....	162
XML structure .....	162
Table description .....	162
Columns .....	163
LB/HTTPPassiveProbeTemplate .....	163
XML structure .....	163
Table description .....	164
Columns .....	164
LB/HTTPStatsParameterObjectGroups .....	165
XML structure .....	165
Table description .....	165
Columns .....	166
LB/HTTPStatsParameterNodes .....	166
XML structure .....	166
Table description .....	166
Columns .....	166
LB/HTTPStatsParameterNodeRules .....	167
XML structure .....	167

Table description .....	167
Columns .....	167
LB/HTTPStatsParameterNodeRuleLists .....	168
XML structure .....	168
Table description .....	168
Columns .....	169
LB/TCPParameterOptions .....	169
XML structure .....	169
Table description .....	170
Columns .....	170

# LB

## LB/HTTPVirtualServers

This table contains information about HTTP and fast HTTP virtual servers.

### XML structure

```
<LB>
  <HTTPVirtualServers>
    <HTTPVirtualServer>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <DefaultServerFarm></DefaultServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <Policy></Policy>
      <IPParameter></IPParameter>
      <TCPParameter></TCPParameter>
      <HTTPParameter></HTTPParameter>
      <TCPParameterClientSide></TCPParameterClientSide>
      <TCPParameterServerSide></TCPParameterServerSide>
      <HTTPStatsParameter></HTTPStatsParameter>
      <OneConnectParameter></OneConnectParameter>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitBandwidth></RateLimitBandwidth>
      <SSLServerPolicy></SSLServerPolicy>
      <SSLClientPolicy></SSLClientPolicy>
      <RedirectRelocation></RedirectRelocation>
      <RedirectReturnCode></RedirectReturnCode>
      <ServiceEnable></ServiceEnable>
      <RateLimitInBandwidth></RateLimitInBandwidth>
      <RateLimitOutBandwidth></RateLimitOutBandwidth>
      <BusyProtectEnable></BusyProtectEnable>
      <RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
      <ConnSynEnable></ConnSynEnable>
      <StickySynEnable></StickySynEnable>
      <StickySyncType></StickySyncType>
      <RedundancyGroup></RedundancyGroup>
      <VrrpVrid></VrrpVrid>
```

```

    <VrrpIfIndex></VrrpIfIndex>
<HTTPCompressionParameter></HTTPCompressionParameter>
    <LimitPolicy></LimitPolicy>
    <RouteAdvertisementEnable></RouteAdvertisementEnable>
    <CachePolicy></CachePolicy>
</HTTPVirtualServer>
</HTTPVirtualServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPVirtualServers
Table type	Multi-instance table
Row name	HTTPVirtualServer
Restrictions	Only HTTP and FASTHTTP virtual servers can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—HTTP.</li> <li>1—FASTHTTP</li> </ul>	When a virtual server is created, the column must be specified. Once created, this column cannot be changed.
Description	Description for the virtual server.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2. Loopback addresses, multicast

Column name	Column description	Column type	Data type and restrictions	Remarks
			By default, no IPv6 address is specified.	addresses, and link local addresses are not supported.
PortNumber	Port number.	N/A	Unsigned integer. Value range: 1 to 65535. By default, the value is 80.	N/A
DefaultServerFarm	Name of the default server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
BackupServerFarm	Name of the backup server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
TCPParameter	Parameter profile whose type is TCP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
HTTPParameter	Parameter profile whose type is HTTP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column is conflicted with TCPParameterClientSide/TCPParameterServerSide column, they cannot be configured both
TCPParameterClientSide	Client-side tcp parameter	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column is conflicted with TCPParameter column, they cannot be configured both.
TCPParameterServerSide	Server-side tcp parameter	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column is conflicted with TCPParameter column, they cannot be configured both.
HTTPStatsParameter	Parameter whose type is HTTP statistics for	N/A	String, case-insensitive. Length: 1 to 63	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the virtual server.		characters.	
OneConnectParameter	Parameter profile whose type is OneConnect for the virtual server	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
MaxConnectionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0, which indicates no limit.	N/A
RateLimitConnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no limit.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s, which indicates no limit.	N/A
SSLServerPolicy	Name of the SSL server policy.	N/A	String, case-insensitive. Length: 0 to 31 characters.	This column can be configured only when the type is HTTP (0).
SSLClientPolicy	Name of the SSL client policy.	N/A	String, case-insensitive. Length: 0 to 31 characters.	This column can only be configured when the type is HTTP (0).
RedirectRelocation	Redirection URL.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column can only be configured when the type is HTTP (0). The column which has two special usages, analyses host and URL from requests. Only three symbols such as 'p', 'h' and '%' can be put behind '%'. Two '%' are regarded as one '%', process can handle, so the number of '%' must be even. They input below, except '%%p' and '%%h'. '%p' and '%h' only have one occurrence in the messages.
RedirectReturnCode	Redirection condition code.	N/A	Enumeration: <ul style="list-style-type: none"> <li>301—The requested</li> </ul>	This column can only be configured when the type of the virtual server is HTTP (0).



Column name	Column description	Column type	Data type and restrictions	Remarks
			<p>resource has been permanently moved.</p> <ul style="list-style-type: none"> <li>302—The requested resource has been temporarily moved (default).</li> </ul>	
ServiceEnable	Enable the virtual server.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit number.	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to <math>2^{32}-1</math>.</p> <p>Unit: KB/s.</p> <p>By default, the value is 0 KB/s, which indicates no inbound limit.</p>	N/A
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit number.	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to <math>2^{32}-1</math>.</p> <p>Unit: KB/s.</p> <p>By default, the value is 0 KB/s, which indicates no outbound limit.</p>	N/A
BusyProtectEnable	Enable link protection.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics that are used for bandwidth protection.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics (default).</li> <li>1—Using interface bandwidth statistics.</li> </ul>	N/A
ConnSyncEnable	Enable connection synchronization.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	This column can only be configured when the Type is FASTHTTP (1).
StickySyncEnable	Enable sticky synchronization.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
StickySyncT	Sticky	N/A	Enumeration:	This column can only be configured

Column name	Column description	Column type	Data type and restrictions	Remarks
type	synchronization type.		<ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	when the StickySynEnable is Enable (1).
Redundancy Group	Name of redundancy group for virtual server flow-redirect.	N/A	String, case-insensitive. Length: 1 to 15 characters.	N/A
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
VrrpIfIndex	Interface index of VRRP.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference. VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
HTTPCompressionParameter	Parameter profile whose type is HTTP compression for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column can only be configured when the Type is HTTP (0)
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
CachePolicy	Name of the cache policy	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## LB/GenericVirtualServers

This table contains information about IP, TCP and UDP virtual servers.

### XML structure

```

<LB>
  <GenericVirtualServers>
    <GenericVirtualServer>

```

```

<Name></Name>
<Type></Type>
<Description></Description>
<VRF></VRF>
<Ipv4Address></Ipv4Address>
<Ipv4PrefixLength></Ipv4PrefixLength>
<Ipv6Address></Ipv6Address>
<Ipv6PrefixLength></Ipv6PrefixLength>
<PortNumber></PortNumber>
<PortNumberList></PortNumberList>
<DefaultServerFarm></DefaultServerFarm>
<BackupServerFarm></BackupServerFarm>
<DefaultLinkGroup></DefaultLinkGroup>
<BackupLinkGroup></BackupLinkGroup>
<StickyGroup></StickyGroup>
<Policy></Policy>
<IPParameter></IPParameter>
<TCPParameter></TCPParameter>
<TCPAppParameter></TCPAppParameter>
<SSLServerPolicy></SSLServerPolicy>
<MaxConnectionLimit></MaxConnectionLimit>
<RateLimitConnection></RateLimitConnection>
<RateLimitBandwidth></RateLimitBandwidth>
<UDPPerPacket></UDPPerPacket>
<ServiceEnable></ServiceEnable>
<RateLimitInBandwidth></RateLimitInBandwidth>
<RateLimitOutBandwidth></RateLimitOutBandwidth>
<BusyProtectEnable></BusyProtectEnable>
<RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
<ConnSynEnable></ConnSynEnable>
<StickySynEnable></StickySynEnable>
<StickySyncType></StickySyncType>
<RedundancyGroup></RedundancyGroup>
<VrrpVrid></VrrpVrid>
<VrrpIfIndex></VrrpIfIndex>      <LimitPolicy></LimitPolicy>
<RouteAdvertisementEnable></RouteAdvertisementEnable>
<ApplicationMode></ApplicationMode>
</GenericVirtualServer>
</GenericVirtualServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	GenericVirtualServers
Table type	Multi-instance table

Row name	GenericVirtualServer
Restrictions	Only IP, TCP , UDP and LINK-IP virtual server can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—IP.</li> <li>1—TCP.</li> <li>2—UDP.</li> <li>3—LINK-IP.</li> </ul>	When a virtual server is created, the column must be specified. Once created, this column cannot be changed.
Description	Description for the virtual server.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates a public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column cannot be configured if no IPv4 address is configured.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link local addresses are not supported.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column cannot be configured if no IPv6 address is configured.
PortNumber	Port number.	N/A	Unsigned integer. Value range: 0 to 65535. By default, the value is 0.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumberList	List of port numbers	N/A	<p>Number string.</p> <p>It is a comma-separated list of ports. An item can be an individual port or a port range. Use a hyphen (-) to separate the start and end port of a range.</p> <p>The string cannot end with a comma or hyphen, or include any whitespace characters.</p> <p>Value range: 0 to 65535.</p> <p>By default, the value is 0.</p> <p>Items range: 1 to 8.</p>	<p>Example: 1,2,3,5-8,10-20.</p> <p>The item is permitted to incremental edit.</p>
DefaultServerFarm	Name of the default server farm.	N/A	<p>String, case-insensitive.</p> <p>Length: 1 to 63 characters.</p>	N/A
BackupServerFarm	Name of the backup server farm.	N/A	<p>String, case-insensitive.</p> <p>Length: 1 to 63 characters.</p>	This column cannot be configured if the default server farm is not configured.
DefaultLinkGroup	Name of the default link group.	N/A	<p>String, case-insensitive.</p> <p>Length: 1 to 63 characters.</p>	N/A
BackupLinkGroup	Name of the backup link group.	N/A	<p>String, case-insensitive.</p> <p>Length: 1 to 63 characters.</p>	This column cannot be configured if the default link group is not configured.
StickyGroup	Name of the sticky group.	N/A	<p>String, case-insensitive.</p> <p>Length: 1 to 63 characters.</p>	This column cannot be configured if the default server farm is not configured.
Policy	Name of the policy.	N/A	<p>String, case-insensitive.</p> <p>Length: 1 to 63 characters.</p>	N/A
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	<p>String, case-insensitive.</p> <p>Length: 1 to 63 characters.</p>	N/A
TCPParameter	Parameter profile whose type is TCP for the virtual	N/A	<p>String, case-insensitive.</p> <p>Length: 1 to 63</p>	This column can only be configured when the Type is TCP (1).

Column name	Column description	Column type	Data type and restrictions	Remarks
	server.		characters.	
TCPAppParameter	Parameter profile whose type is TCPApplication for the virtual server	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column can only be configured when the Type is TCP (1).
SSLServerPolicy	Name of the SSL server policy.	N/A	String, case-insensitive. Length: 0 to 31 characters.	This column can be configured only when the Type is TCP (1).
MaxConnectionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0, which indicates no limit.	N/A
RateLimitConnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no limit.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s, which indicates no limit.	N/A
UDPPerPacket	Enable UDP per-packet load balancing.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	This column can only be configured when the Type is UDP (2).
ServiceEnable	Enable the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no inbound limit.	N/A
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit: cps. By default, the value is 0, which indicates no outbound limit.	
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics that are used for bandwidth protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics (default).</li> <li>1—Using interface bandwidth statistics.</li> </ul>	N/A
ConnSynEnable	Enable connection synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
StickySynEnable	Enable sticky synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
StickySyncType	Sticky synchronization type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	This column can only be configured when the StickySynEnable is Enable (1).
RedundancyGroup	Name of redundancy group for virtual server flow-redirect.	N/A	String, case-insensitive. Length: 1 to 15 characters.	N/A
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
VrrpIfIndex	Interface index of VRRP.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.  VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/RADIUSVirtualServers

This table contains information about RADIUS virtual servers.

### XML structure

```

<LB>
  <RADIUSVirtualServers>
    <RADIUSVirtualServer>
      <Name></Name>
      <Description></Description>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumberList></PortNumberList>
      <DefaultServerFarm></DefaultServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <Policy></Policy>
      <IPParameter></IPParameter>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitBandwidth></RateLimitBandwidth>
      <UDPPerPacket></UDPPerPacket>
      <ServiceEnable></ServiceEnable>
      <RateLimitInBandwidth></RateLimitInBandwidth>
      <RateLimitOutBandwidth></RateLimitOutBandwidth>
      <BusyProtectEnable></BusyProtectEnable>
      <RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
      <ConnSynEnable></ConnSynEnable>
      <StickySynEnable></StickySynEnable>
      <VrrpVrid></VrrpVrid>
      <VrrpIfIndex></VrrpIfIndex>      <LimitPolicy></LimitPolicy>
      <RouteAdvertisementEnable></RouteAdvertisementEnable>
    </RADIUSVirtualServer>
  </RADIUSVirtualServers>
</LB>

```



## Table description

Item	Description
Feature name	LB
Table name	RADIUSVirtualServers
Table type	Multi-instance table
Row name	RADIUSVirtualServer
Restrictions	Only RADIUS virtual server can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description for the virtual server.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates a public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link local addresses are not supported.
PortNumber List	List of port numbers	N/A	Number string. It is a comma-separated list of ports. An item can be an individual port or a port range. Use a hyphen (-) to separate the start and end port of a range.  The string cannot end with a comma or hyphen, or include any whitespace	Example: 1,2,3,5-8,10-20. The item is permitted to incremental edit.

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters. Value range: 0 to 65535. By default, the value is 0. Items range: 1 to 8.	
DefaultServerFarm	Name of the default server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
BackupServerFarm	Name of the backup server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
MaxConnectionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0, which indicates no limit.	N/A
RateLimitConnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no limit.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s, which indicates no limit.	N/A
UDPPerPacket	Enable UDP per-packet load	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> </ul>	This column can only be configured when the Type is UDP (2).

Column name	Column description	Column type	Data type and restrictions	Remarks
	balancing.		<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
ServiceEnable	Enable the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no inbound limit.	N/A
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no outbound limit.	N/A
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics that are used for bandwidth protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics (default).</li> <li>1—Using interface bandwidth statistics.</li> </ul>	N/A
ConnSyncEnable	Enable connection synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
StickySyncEnable	Enable sticky synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
VrrpIfIndex	Interface index of VRRP.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference. VrrpVrid and VrrpIfIndex are

Column name	Column description	Column type	Data type and restrictions	Remarks
				mutually dependent and both of them should be set in a single message.
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/SIPVirtualServers

This table contains information about SIPUDP and SIPTCP virtual servers.

### XML structure

```

<LB>
  <SIPVirtualServers>
    <SIPVirtualServer>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <DefaultServerFarm></DefaultServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <Policy></Policy>
      <IPParameter></IPParameter>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitBandwidth></RateLimitBandwidth>
      <UDPPerPacket></UDPPerPacket>
      <ServiceEnable></ServiceEnable>
      <RateLimitInBandwidth></RateLimitInBandwidth>
      <RateLimitOutBandwidth></RateLimitOutBandwidth>
      <BusyProtectEnable></BusyProtectEnable>
      <RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
      <ConnSynEnable></ConnSynEnable>
      <StickySynEnable></StickySynEnable>
      <StickySyncType></StickySyncType>
      <RedundancyGroup></RedundancyGroup>
      <VrrpVrid></VrrpVrid>

```

```

    <VrrpIfIndex></VrrpIfIndex>    <LimitPolicy></LimitPolicy>
    <RouteAdvertisementEnable></RouteAdvertisementEnable>
  </SIPVirtualServer>
</SIPVirtualServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	SIPVirtualServers
Table type	Multi-instance table
Row name	SIPVirtualServer
Restrictions	Only SIP-UDP and SIP-TCP virtual server can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—SIP-UDP</li> <li>1—SIP-TCP</li> </ul>	When a virtual server is created, the column must be specified. Once created, this column cannot be changed.
Description	Description for the virtual server.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
VRF	VRF name.	N/A	String, Length: 1 to 31 characters. By default, no VRF is specified.	The null string indicates a public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link local addresses are not supported.

Column name	Column description	Column type	Data type and restrictions	Remarks
PortNumber	Port number.	N/A	Unsigned integer. Value range: 0 to 65535. By default, the value is 5060.	N/A
DefaultServerFarm	Name of the default server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
BackupServerFarm	Name of the backup server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
MaxConnectionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0, which indicates no limit.	N/A
RateLimitConnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no limit.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s, which indicates no limit.	N/A
UDPPerPacket	Enable the UDP per-packet load	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> </ul>	This column can only be configured when the Type is UDP (2).

Column name	Column description	Column type	Data type and restrictions	Remarks
	balancing.		<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
ServiceEnable	Enable the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no inbound limit.	N/A
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no outbound limit.	N/A
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics which is used for bandwidth protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics (default).</li> <li>1—Using interface bandwidth statistics.</li> </ul>	N/A
ConnSynEnable	Enable the connection synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
StickySynEnable	Enable the sticky synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
StickySyncType	Sticky synchronization type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	This column can only be configured when the StickySynEnable is Enable (1).
RedundancyGroup	Name of redundancy group for virtual server	N/A	String, case-insensitive. Length: 1 to 15	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	flow-redirect.		characters.	
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrplfIndex are mutually dependent and both of them should be set in a single message.
VrrplfIndex	Interface index of VRRP..	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.  VrrpVrid and VrrplfIndex are mutually dependent and both of them should be set in a single message.
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/MySQLVirtualServers

This table contains information about MySQL virtual servers.

### XML structure

```

<LB>
  <MySQLVirtualServers>
    <MySQLVirtualServer>
      <Name></Name>
      <Description></Description>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <DefaultServerFarm></DefaultServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <Policy></Policy>
      <IPParameter></IPParameter>
      <TCPParameter></TCPParameter>
      <TCPParameterClientSide></TCPParameterClientSide>
      <TCPParameterServerSide></TCPParameterServerSide>
      <MySQLParameter></MySQLParameter>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>

```



```

<RateLimitBandwidth></RateLimitBandwidth>
<ServiceEnable></ServiceEnable>
<RateLimitInBandwidth></RateLimitInBandwidth>
<RateLimitOutBandwidth></RateLimitOutBandwidth>
<BusyProtectEnable></BusyProtectEnable>
<RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
<StickySynEnable></StickySynEnable>
<StickySyncType></StickySyncType>
<LimitPolicy></LimitPolicy>
<RouteAdvertisementEnable></RouteAdvertisementEnable>
<Version></Version>
<ReadServerFarm></ReadServerFarm>
<ReadStickyGroup></ReadStickyGroup>
<WriteServerFarm></WriteServerFarm>
<WriteStickyGroup></WriteStickyGroup>
<RedundancyGroup></RedundancyGroup>
<VrrpVrid></VrrpVrid>
<VrrpIfIndex></VrrpIfIndex>      <UserList>
  <UserName></UserName>
  <Password></Password>
  <Type></Type>
</UserList>
</MySQLVirtualServer>
</MySQLVirtualServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	MySQLVirtualServers
Table type	Multi-instance table
Row name	MySQLVirtualServer
Restrictions	Only MySQL virtual server can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description for the virtual	N/A	String. Length: 0 to 127	The null string indicates the label is not configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
	server.		characters.	
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates a public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link local addresses are not supported.
PortNumber	Port number.	N/A	Unsigned integer. Value range: 1 to 65535. By default, the value is 3306.	N/A
DefaultServerFarm	Name of the default server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
BackupServerFarm	Name of the backup server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
TCPParameter	Parameter profile whose type is TCP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
TCPParameterClientSide	Client-side tcp parameter	N/A	String, case-insensitive. Length: 1 to 63	This column is conflicted with TCPParameter column, they cannot be configured both.

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
TCPPParameterServerSide	Server-side tcp parameter	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column is conflicted with TCPPParameter column, they cannot be configured both.
MySQLParameter	Parameter profile whose type is MySQL for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
MaxConnectionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0, which indicates no limit.	N/A
RateLimitConnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no limit.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s, which indicates no limit.	N/A
ServiceEnable	Enable the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no inbound limit.	N/A
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no outbound limit.	N/A
BusyProtect	Enable link	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	protection.		<ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics that are used for bandwidth protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics (default).</li> <li>1—Using interface bandwidth statistics.</li> </ul>	N/A
StickySynEnable	Enable sticky entry synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
StickySyncType	Sticky synchronization type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	This column can only be configured when the StickySynEnable is Enable (1).
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
Version	MySQL version info.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—5.0.</li> <li>1—5.1.</li> <li>2—5.5.</li> <li>3—5.6.</li> <li>4—5.7.</li> </ul> By default, 3 is configured.	N/A
Redundancy Group	Name of redundancy group for virtual server flow-redirect.	N/A	String, case-insensitive. Length: 1 to 15 characters.	N/A
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
VrrpIfIndex	Interface index of VRRP.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML

Column name	Column description	Column type	Data type and restrictions	Remarks
				API Configuration Reference. VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
UserList	MySQL database user list.	Data structure	Members include: <ul style="list-style-type: none"> <li>UserName.</li> <li>Password.</li> </ul>	Max user count is 100.
UserName	MySQL database login username.	N/A	String, Length: 1 to 63 characters.	N/A
PassWord	MySQL database login password.	N/A	String, Length: 1 to 127 characters.	This column cannot be configured if the username is not configured or the password is obtained from the CLI.
Type	Password type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Simple.</li> <li>1—No password.</li> </ul>	This column cannot be configured if the password is obtained from the CLI.
ReadServer Farm	MySQL read server farm name for read/write separation	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ReadSticky Group	Name of the sticky group for read server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the read server farm is not configured.
WriteServer Farm	MySQL write server farm name for read/write separation	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
WriteSticky Group	Name of the sticky group for write server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the write server farm is not configured.

## LB/RealServers

This table contains information about real server.

### XML structure

```

<LB>
  <RealServers>
    <RealServer>
      <Name></Name>
      <Description></Description>
      <Ipv4Address></Ipv4Address>

```

```

    <Ipv6Address></Ipv6Address>
    <PortNumber></PortNumber>
    <Weight></Weight>
    <Priority></Priority>
    <ServerFarm></ServerFarm>
    <Shutdown></Shutdown>
    <MaxConnectionLimit></MaxConnectionLimit>
    <RateLimitConnection></RateLimitConnection>
    <RateLimitHTTPRequest></RateLimitHTTPRequest>
    <RateLimitBandwidth></RateLimitBandwidth>
    <ProbeSuccessCriteria></ProbeSuccessCriteria>
    <RateLimitInBandwidth></RateLimitInBandwidth>
    <RateLimitOutBandwidth></RateLimitOutBandwidth>
    <InBandwidthBusyRatio></InBandwidthBusyRatio>
    <OutBandwidthBusyRatio></OutBandwidthBusyRatio>
    <BandwidthBusyRatio></BandwidthBusyRatio>
    <InBandwidthBusyRecoverRatio></InBandwidthBusyRecoverRatio>
    <OutBandwidthBusyRecoverRatio></OutBandwidthBusyRecoverRatio>
    <BandwidthBusyRecoverRatio></BandwidthBusyRecoverRatio>
    <Cost></Cost>
    <MaxBandwidth></MaxBandwidth>
    <InMaxBandwidth></InMaxBandwidth>
    <OutMaxBandwidth></OutMaxBandwidth>
    <VRF></VRF>
    <InheritVPN></InheritVPN>
  </RealServer>
</RealServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RealServers
Table type	Multi-instance table
Row name	RealServer
Restrictions	Only Real server can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the real server.	Index	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 63 characters.	
Description	Description of the real server.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no Ipv4Address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses are not supported, and address such as 0.x.x.x are not supported either.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no Ipv6Address is specified.	Example: 2::2. Loopback address, multicast address, link local address and 0::0 address are not supported.
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 0 to 65535. By default, the value is 0.	N/A
Weight	Weight of the real server.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.
Priority	Priority of the real server.	N/A	Unsigned integer. Value range: 1 to 8. By default, the value is 4.	A larger value means a higher priority.
ServerFarm	Name of the server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no server farm is specified.	N/A
Shutdown	Shutdown state for the real server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not configured (default).</li> <li>1—Shutdown.</li> <li>2—Slow-shutdown.</li> </ul>	N/A
MaxConnectionLimit	Maximum connections limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates no preset limit.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RateLimitConnection	Maximum connections rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0 which indicates no preset limit.	N/A
RateLimitHTTPRequest	Maximum HTTP request rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: qps. By default, the value is 0, which indicates the rate is not limit.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s which indicates no preset limit.	N/A
ProbeSuccessCriteria	Probe success criteria for the real server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates that probe success criteria is all.	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s which indicate no preset inbound limit.	N/A
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s which indicate no preset outbound limit.	N/A
InBandwidthBusyRatio	Inbound bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 70.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
OutBandwidthBusyRatio	Outbound bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 70.	N/A
BandwidthBusyRatio	Total bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 70.	N/A
InBandwidthBusyRecoverRatio	Inbound bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
OutBandwidthBusyRecoverRatio	Outbound bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
BandwidthBusyRecoverRatio	Total bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
Cost	The cost of link bandwidth.	NA	Unsigned integer. Value range: 0 to 10240. By default, the value is 0 which indicates that cost factor can be ignore when calculate proximities.	N/A
MaxBandwidth	Max bandwidth.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
InMaxBandwidth	Max inbound bandwidth.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutMaxBandwidth	Max outbound bandwidth.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
dwidth	bandwidth.		Value range: 0 to $2^{32}-1$ . Unit: KB/s.	
VRF	VRF name	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
InheritVPN	Inherit the VPN of virtual server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable inherit the VPN (default).</li> <li>1—Enable inherit the VPN.</li> </ul>	N/A

## LB/RealServerProbes

This table contains information about Real Server Probe that only uses NQA template.

### XML structure

```

<LB>
  <RealServerProbes>
    <RealServerProbe>
      <RealServer></RealServer>
      <Probe></Probe>
      <NQADefaultPortEnable></NQADefaultPortEnable>
    </RealServerProbe>
  </RealServerProbes>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	RealServerProbes
Table type	Multi-instance table
Row name	RealServerProbe
Restrictions	Only Real server probe can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RealServer	Name of the real server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the real server.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
NQADefaultPortEnable	Enable detection using the default port of the NQA template.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/ServerFarms

This table contains information about server farm.

## XML structure

```

<LB>
  <ServerFarms>
    <ServerFarm>
      <Name></Name>
      <Description></Description>
      <Predictor></Predictor>
      <HashIpv4PrefixLength></HashIpv4PrefixLength>
      <HashIpv6PrefixLength></HashIpv6PrefixLength>
      <SelectServerMinNumber></SelectServerMinNumber>
      <SelectServerMaxNumber></SelectServerMaxNumber>
      <SlowOnlineEnable></SlowOnlineEnable>
      <SlowOnlineStandbyTime></SlowOnlineStandbyTime>
      <SlowOnlineRampUpTime></SlowOnlineRampUpTime>
      <Transparent></Transparent>
      <ActivateLower></ActivateLower>
      <ActivateUpper></ActivateUpper>
      <SNATPool></SNATPool>
      <FailAction></FailAction>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <ProximityEnable></ProximityEnable>
      <Offset></Offset>
      <Length></Length>
      <Start></Start>
      <End></End>
      <BusyAction></BusyAction>

```

```

    <QueueLength></QueueLength>
    <QueueTimeout></QueueTimeout>
    <RSTProbe></RSTProbe>
    <ZeroWindowProbe></ZeroWindowProbe>
    <RecoverTimeInterval></RecoverTimeInterval>
    <HTTPPassiveProbe></HTTPPassiveProbe>    </ServerFarm>
</ServerFarms>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ServerFarms
Table type	Multi-instance table
Row name	ServerFarm
Restrictions	Only server farm can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the server farm.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the server farm.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Predictor	Predictor algorithm for LB to select a real server to serve a client request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Round-robin (default).</li> <li>1—Random.</li> <li>2—Least-connection.</li> <li>3—Hash source address.</li> <li>4—Hash source port.</li> <li>5—Hash destination address.</li> <li>6—Bandwidth.</li> <li>7—Inbound bandwidth.</li> <li>8—Outbound bandwidth.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>9—Max bandwidth.</li> <li>10—Max inbound bandwidth.</li> <li>11—Max outbound bandwidth.</li> <li>12—Least time.</li> <li>13—Dynamic round-robin.</li> <li>14—Hash HTTP.</li> <li>15—CARP HTTP.</li> <li>16—CARP source address.</li> <li>17—CARP source port.</li> <li>18—CARP destination address.</li> <li>19—Least-connection member.</li> <li>20—Least time member.</li> </ul>	
HashIpv4PrefixLength	Length of IPv4 address mask for hash or CARP algorithm.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column can only be configured when the Predictor is hash or CARP source address (3/16), hash source port (4/17) and hash destination address (5/18).
HashIpv6PrefixLength	Length of IPv6 address prefix for hash or CARP algorithm.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column can only be configured when the Predictor hash or CARP source address (3/16), hash source port (4/17) and hash destination address (5/18).
SelectServerMinNumber	Minimum number of the active real server in the server farm.	N/A	Unsigned integer. Value range: 1 to 1000. By default, the column is not configured which indicates only the real server of highest priority can be dispatched.	If one of SelectServerMinNumber and SelectServerMaxNumber is not configured, the other cannot be configured. The value of SelectServerMaxNumber must be greater or equal than SelectServerMinNumber.
SelectServerMaxNumber	Maximum number of the active real server in the server farm.	N/A	Unsigned integer. Value range: 1 to 1000. By default, the column is not configured.	If one of SelectServerMinNumber and SelectServerMaxNumber is not configured, the other cannot be configured. The value of SelectServerMaxNumber must be greater or equal than SelectServerMinNumber.
SlowOnlineEnable	Enable the server farm slow online.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> </ul>	If the column is 0, SlowOnlineStandbyTime and SlowOnlineRampUpTime cannot be configured without default value.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
SlowOnlineStandbyTime	Standby time of the slow online.	N/A	Unsigned integer. Value range: 0 to 600. Unit: second. By default, the value is 5.	N/A
SlowOnlineRampUpTime	Ramp up time of the slow online.	N/A	Unsigned integer. Value range: 3 to 600. Unit: second. By default, the value is 5.	N/A
Transparent	Disable NAT for the server farm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
ActivateLower	The status of main server farm will be changed from in use to backup when the ratio of the available real servers in main server farm becomes smaller than this value.	N/A	Unsigned integer. Value range: 1 to 99. By default, the column is not configured which indicates if one real server is active, the server farm is active.	If one of ActivateLower and ActivateUpper is not configured, the other cannot be configured. The value of ActivateUpper must be greater or equal than ActivateLower.
ActivateUpper	The status of main server farm will be changed from backup to in use when the ratio of the available real servers in main server farm reaches or over this value.		Unsigned integer. Value range: 1 to 99. By default, the column is not configured.	If one of ActivateLower and ActivateUpper is not configured, the other cannot be configured. The value of ActivateUpper must be greater or equal than ActivateLower.
SNATPool	SNAT pool for the server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
FailAction	Specify the action that the LB takes with respect to connections if any real server fails in a server farm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Keep (default).</li> <li>1—Reset.</li> <li>2—Reschedule.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ProbeSuccessCriteria	The condition that real server is available through probes.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0.	By default, indicates that when real server is available, all results of probes must be success.
ProximityEnable	Enable the proximity.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—disable (default).</li> <li>1—enable.</li> </ul>	N/A
Offset	Offset to the first byte of the payload.	N/A	Unsigned integer. Value range: 0 to 1000. By default, 0 is configured.	The column can only be configured when the Predictor hash source address (14/15).
Length	Length of the payload portion.	N/A	Unsigned integer. Value range: 0 to 1000. By default, 0 is configured.	The column can only be configured when the Predictor hash source address (14/15). If one of Length and End is not configured, the other cannot be configured.
Start	Beginning pattern for CARP.	N/A	String. Length: 0 to 127 characters.	The column can only be configured when the Predictor hash source address (14/15). The null string indicates the label is not configured.
End	Ending pattern for CARP.	N/A	String. Length: 0 to 127 characters.	The column can only be configured when the Predictor hash source address (14/15). The null string indicates the label is not configured.
BusyAction	Busy protection policies for server nodes	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Drop(default).</li> <li>1—Enqueue.</li> <li>2—Force.</li> </ul>	N/A
QueueLength	Queue length for aging	N/A	Unsigned integer. Value range: 1 to 100000. By default, the column is not configured.	The column can only be configured when the BusyAction enqueue (1).
QueueTimeout	Node aging time	N/A	Unsigned integer. Value range: 0 to 60. Unit: second. By default, the column is not configured.	The column can only be configured when the BusyAction enqueue (1).
RSTProbe	RST type probe template.	N/A	String, case-insensitive. Length: 1 to 32 characters.	Only one template can be configured for each type.
ZeroWindowProbe	Zero-Window type probe template.	N/A	String, case-insensitive. Length: 1 to 32	Only one template can be configured for each type.

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
RecoverTimeInterval	Auto recover time interval	N/A	Unsigned integer. Value range: 0 to 15300. Unit:minute. By default, the value is 0.	N/A
HTTPPassiveProbe	HTTP passive probe template.	N/A	String, case-insensitive. Length: 1 to 32 characters.	Only one template can be configured for each probe type.

## LB/ServerFarmProbes

This table contains information about Server Farm Probe that only uses NQA template.

### XML structure

```

<LB>
  <ServerFarmProbes>
    <ServerFarmProbe>
      <ServerFarm></ServerFarm>
      <Probe></Probe>
      <NQADefaultPortEnable></NQADefaultPortEnable>
    </ServerFarmProbe>
  </ServerFarmProbes>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	ServerFarmProbes
Table type	Multi-instance table
Row name	ServerFarmProbe
Restrictions	Only server farm probe can be configured by this table.
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerFarm	Name of the server farm.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the server farm.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
NQADefaultPortEnable	Enable detection using the default port of the NQA template.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable (default).</li><li>1—Enable.</li></ul>	N/A

## LB/SNATPools

This table contains information about SNAT pool.

## XML structure

```
<LB>
  <SNATPools>
    <SNATPool>
      <Name></Name>
      <Description></Description>
      <Ipv4AddressStart></Ipv4AddressStart>
      <Ipv4AddressEnd></Ipv4AddressEnd>
      <Ipv6AddressStart></Ipv6AddressStart>
      <Ipv6AddressEnd></Ipv6AddressEnd>
    </SNATPool>
  </SNATPools>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	SNATPools
Table type	Multi-instance table
Row name	SNATPool
Restrictions	Only SNAT pool can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the SNAT Pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the SNAT Pool.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Ipv4AddressStart	Start IPv4 address of the SNAT pool.	N/A	String. Dotted decimal notation. By default, no IPv4 addressStart is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either. If one of Ipv4AddressStart and Ipv4AddressEnd is not configured, the other cannot be configured.
Ipv4AddressEnd	End IPv4 address of the SNAT pool.	N/A	String. Dotted decimal notation. By default, no IPv4 addressEnd is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either. If one of Ipv4AddressStart and Ipv4AddressEnd is not configured, the other cannot be configured. Number of addresses in the SNAT pool cannot exceed the limit 255.
Ipv6AddressStart	Start IPv6 address of the SNAT pool.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 addressStart is specified.	Example: 2::2. Loopback address, multicast address, link local address and 0::0 address are not supported. If one of Ipv6AddressStart and Ipv6AddressEnd is not configured, the other cannot be configured.
Ipv6AddressEnd	End IPv6 address of the SNAT pool.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 addressEnd is specified.	Example: 2::2. Loopback address, multicast address, link local address and 0::0 address are not supported. If one of Ipv6AddressStart and Ipv6AddressEnd is not configured, the other cannot be configured. Number of addresses in the SNAT pool cannot exceed the limit 65535.

## LB/NewSNATPools

This table contains LB SNAT pool information.

## XML structure

<LB>

```

<NewSNATPools>
  <NewSNATPool>
    <SNATPoolName></SNATPoolName>
    <Description></Description>
  </NewSNATPool>
</NewSNATPools>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	NewSNATPools
Table type	Multi-instance table
Row name	NewSNATPool
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SNATPoolName	Name of SNAT pool	Index	String. Case-insensitive. Length: 1 to 63 characters.	N/A.
Description	SNAT pool description.	N/A	String: Case-sensitive Length: No more than 127 characters	N/A

## LB/SNATPoolsIpv4Infos

This table contains information about IPv4 addresses in an LB SNAT pool.

## XML structure

```

<LB>
  <SNATPoolsIpv4Infos>
    <SNATPoolsIpv4Info>
      <Name></Name>
      <Ipv4AddressStart></Ipv4AddressStart>
      <Ipv4AddressEnd></Ipv4AddressEnd>
    </SNATPoolsIpv4Info>
  </SNATPoolsIpv4Infos>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	SNATPoolsIpv4Infos
Table type	Multi-instance table
Row name	SNATPoolsIpv4Info
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of SNAT pool	Index	String.Case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4AddressStart	Start IP address	Index	IPv4: String, dotted decimal notation.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either. If one of Ipv4AddressStart and Ipv4AddressEnd is not configured, the other cannot be configured.
Ipv4AddressEnd	End IP address	Index	IPv4: String, dotted decimal notation.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either. If one of Ipv4AddressStart and Ipv4AddressEnd is not configured, the other cannot be configured.

## LB/SNATPoolsIpv6Infos

This table contains information about IPv6 addresses in an LB SNAT pool.

## XML structure

```
<LB>
  <SNATPoolsIpv6Infos>
    <SNATPoolsIpv6Info>
      <Name></Name>
      <Ipv6AddressStart></Ipv6AddressStart>
      <Ipv6AddressEnd></Ipv6AddressEnd>
    </SNATPoolsIpv6Info>
  </SNATPoolsIpv6Infos>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	SNATPoolsIpv6Infos
Table type	Multi-instance table
Row name	SNATPoolsIpv6Info
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of SNAT pool	Index	String.Case-insensitive. Length: 1 to 63 characters.	N/A
Ipv6AddressStart	Start IPv6 address	Index	IPv6: Hexadecimal string, colon-separated.	Example: 2::2. Loopback address, multicast address, link local address and 0::0 address are not supported. If one of Ipv6AddressStart and Ipv6AddressEnd is not configured, the other cannot be configured.
Ipv6AddressEnd	End IPv6 address	Index	IPv6: Hexadecimal string, colon-separated.	Example: 2::2. Loopback address, multicast address, link local address and 0::0 address are not supported. If one of Ipv6AddressStart and Ipv6AddressEnd is not configured, the other

				cannot be configured. Number of addresses in the SNAT pool cannot exceed the limit 65535.
--	--	--	--	--

## LB/IPParameters

This table contains information about IP parameter profile.

### XML structure

```
<LB>
  <IPParameters>
    <IPParameter>
      <Name></Name>
      <Description></Description>
      <IPToS></IPToS>
    </IPParameter>
  </IPParameters>
</LB>
```

### Table description

Item	Description
Feature name	LB
Table name	IPParameters
Table type	Multi-instance table
Row name	IPParameter
Restrictions	Only IP parameter profile can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	N/A
IPToS	ToS number of the IP packet sent to client.	N/A	Unsigned integer. Value range: 0 to 255. By default, no IPToS is	N/A

Column name	Column description	Column type	Data type and restrictions specified.	Remarks

## LB/TCPParameters

This table contains information about TCP parameter profile.

### XML structure

```

<LB>
  <TCPParameters>
    <TCPParameter>
      <Name></Name>
      <Description></Description>
      <ExceedMSS></ExceedMSS>
      <WindowSize></WindowSize>
      <TimeWaitTime></TimeWaitTime>
      <IdleTimeout></IdleTimeout>
      <MSS></MSS>
      <SynRetransTime></SynRetransTime>
      <KeepAliveTime></KeepAliveTime>
      <KeepAliveInterval></KeepAliveInterval>
      <KeepAliveCount></KeepAliveCount>
      <FinWait1Time></FinWait1Time>
      <FinWait2Time></FinWait2Time>
    </TCPParameter>
  </TCPParameters>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	TCPParameters
Table type	Multi-instance table
Row name	TCPParameter
Restrictions	Only TCP parameter profile can be configured by this table.
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
ExceedMSS	Processing method when segments exceed the maximum segment size of TCP segment.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Permit (default).</li> <li>1—Drop.</li> </ul>	N/A
WindowSize	Starting value of the receive window size.	N/A	Unsigned integer. Value range: 8192 to 65535. By default, 65535 is configured.	N/A
TimeWaitTime	The time of TCP time-wait	N/A	Unsigned integer. Value range: 1 to 65535. Unit: second. By default, 2 is configured.	N/A
IdleTimeout	Timeout time of idle connections.	N/A	Unsigned integer. Value range: 10 to 86400. Unit: second.	The 0 indicates the label is not configured.
MSS	Maximum segment size of TCP segments.	N/A	Unsigned integer. Value range: 128 to 1460.	The 0 indicates the label is not configured.
SynRetransTime	Timeout time for syn retransmission	N/A	Unsigned integer. Value range: 1 to 75. Unit: second. By default, 10 is configured.	N/A
KeepAliveTime	Timeout time of keep-alive	N/A	Unsigned integer. Value range: 1 to 65535. Unit: second. By default, 1800 is configured.	N/A
KeepAliveInt	Interval time of	N/A	Unsigned integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
KeepAliveInterval	keep-alive retransmission		Value range: 1 to 65535. Unit: second. By default, 10 is configured.	
KeepAliveCount	Number of times of keep-alive retransmission	N/A	Unsigned integer. Value range: 1 to 65535. By default, 3 is configured.	N/A
FinWait1Time	Timeout time of FIN-WAIT1	N/A	Unsigned integer. Value range: 1 to 65535. Unit: second. By default, 5 is configured.	N/A
FinWait2Time	Timeout time of FIN-WAIT2	N/A	Unsigned integer. Value range: 1 to 65535. Unit: second. By default, 5 is configured.	N/A

## LB/TCPAppParameters

This table contains information about TCP Application parameter profile.

### XML structure

```

<LB>
  <TCPAppParameters>
    <TCPAppParameter>
      <Name></Name>
      <Description></Description>
      <MatchBufferSize></MatchBufferSize>
      <MatchBufferEnd></MatchBufferEnd>
      <MatchBufferTime></MatchBufferTime>
    </TCPAppParameter>
  </TCPAppParameters>
</LB>

```

### Table description

Item	Description
Feature name	LB

Table name	TCPAppParameters
Table type	Multi-instance table
Row name	TCPAppParameter
Restrictions	Only TCP application parameter profile can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
MatchBuffer Size	The max match size of TCP buffer stream.	N/A	Unsigned integer. Value range: 1 to 4096. • By default, 4096 is configured.	N/A
MatchBuffer End	The match end string of TCP buffer stream.	N/A	String. Length: 0 to 10 characters.	N/A
MatchBuffer Time	The match time of TCP buffer stream	N/A	Unsigned integer. Value range: 1 to 5 Unit: second. By default, 3 is configured.	N/A

## LB/HTTPParameters

This table contains information about HTTP parameter profile.

## XML structure

```

<LB>
  <HTTPParameters>
    <HTTPParameter>
      <Name></Name>
      <Description></Description>
      <RebalancePerRequest></RebalancePerRequest>
      <ServerConnectionReuse></ServerConnectionReuse>
      <CaseInsensitive></CaseInsensitive>
      <HeaderModifyPerRequest></HeaderModifyPerRequest>
      <HeaderMaxParseLength></HeaderMaxParseLength>

```

```

    <ContentMaxParseLength></ContentMaxParseLength>
    <SecondaryCookieDelimiters></SecondaryCookieDelimiters>
    <SecondaryCookieStart></SecondaryCookieStart>
    <ExceedLength></ExceedLength>
  </HTTPParameter>
</HTTPParameters>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPParameters
Table type	Multi-instance table
Row name	HTTPParameter
Restrictions	Only HTTP parameter profile can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
RebalancePerRequest	Enable implement load balancing for each HTTP request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
ServerConnectionReuse	Enable connections to persist and be reused by multiple client connections.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
CaseInsensitive	Disable case-sensitivity matching for HTTP.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
HeaderModifyPerRequest	Enable modify the HTTP header of every HTTP request or	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A



# LB/HTTPCompressionParameters

This table contains information about HTTP compression parameter profile.

## XML structure

```
<LB>
  <HTTPCompressionParameters>
    <HTTPCompressionParameter>
      <Name></Name>
      <Level></Level>
      <Description></Description>
      <PreferMethod></PreferMethod>
      <ContentLengthThreshold></ContentLengthThreshold>
      <InsertVary></InsertVary>
      <RequestVersion></RequestVersion>
      <DeleteAcceptEncoding></DeleteAcceptEncoding>
      <MemorySize></MemorySize>
      <WindowSize></WindowSize>
    </HTTPCompressionParameter>
  </HTTPCompressionParameters>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	HTTPCompressionParameters
Table type	Multi-instance table
Row name	HTTPCompressionParameter
Restrictions	Only HTTP compression parameter profile can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Level	Level of compress	N/A	Unsigned integer:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	packet.		Value range: 1 to 9 By default, 1 is configured.	
PreferMethod	Prefer method of compression	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Gzip (default).</li> <li>2—Deflate.</li> </ul>	N/A
ContentLengthThreshold	Minimum number of bytes to compress the response packet.	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . By default, 1024 is configured.	N/A
InsertVary	Enable insert vary header in HTTP response packet.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable(default).</li> </ul>	N/A
RequestVersion	Enable compress the HTTP response of version 1.0.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
DeleteAcceptEncoding	Enable delete accept-encoding header in HTTP request packet.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable(default).</li> </ul>	N/A
MemorySize	Memory size of compression.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1KB.</li> <li>2—2KB.</li> <li>4—4KB.</li> <li>8—8KB(default).</li> <li>16—16KB.</li> <li>32—32KB.</li> <li>64—64KB.</li> </ul>	N/A
WindowSize	Window size of compression.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—1KB.</li> <li>2—2KB.</li> <li>4—4KB.</li> <li>8—8KB.</li> <li>16—16KB(default).</li> <li>32—32KB.</li> </ul>	N/A

## LB/HTTPStatisticsParameters

This table contains information about HTTP statistics parameter profile.

### XML structure

<LB>

```

<HTTPStatisticsParameters>
  <HTTPStatisticsParameter>
    <Name></Name>
    <Description></Description>
  </HTTPStatisticsParameter>
</HTTPStatisticsParameters>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPStatisticsParameters
Table type	Multi-instance table
Row name	HTTPStatisticsParameter
Restrictions	Only HTTP statistics parameter profile can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.

## LB/OneConnectParameters

This table contains information about the OneConnect parameter profile.

## XML structure

```

<LB>
  <OneConnectParameters>
    <OneConnectParameter>
      <Name></Name>
      <Description></Description>
      <MaxReuse></MaxReuse>
      <IdleTime></IdleTime>
      <MaskType></MaskType>
      <SourceMask></SourceMask>
    </OneConnectParameter>
  </OneConnectParameters>
</LB>

```

```
</OneConnectParameters>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	OneConnectParameters
Table type	Multi-instance table
Row name	OneConnectParameter
Restrictions	Only OneConnect parameter profile can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	N/A
MaxReuse	Maximum reuse number	N/A	Unsigned integer. Value range: 1 to 4294967295. By default, the number is 1000.	N/A
IdleTime	Idle connection expiration time	N/A	Unsigned integer. Value range: 1 to 4294967295. By default, the time length is 86400.	N/A
MaskType	Type of source mask	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4</li> <li>1—IPv6</li> </ul>	N/A
SourceMask	Source mask to determine its eligibility for reuse.	N/A	Unsigned integer. IPv4 Value range: 0 to 32. IPv6 Value range: 0 to 128. By default, the value is 0.	N/A



# LB/MySQLParameters

This table contains information about a MySQL parameter profile.

## XML structure

```
<LB>
  <MySQLParameters>
    <MySQLParameter>
      <Name></Name>
      <Description></Description>
      <PoolSize></PoolSize>
      <ServerConnectionReuse></ServerConnectionReuse>
      <MaxReuse></MaxReuse>
      <IdleTime></IdleTime>
      <IPv4SourceMask></IPv4SourceMask>
      <IPv6SourceMask></IPv6SourceMask>
    </MySQLParameter>
  </MySQLParameters>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	MySQLParameters
Table type	Multi-instance table
Row name	MySQLParameter
Restrictions	Only MySQL parameter profile can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	N/A
PoolSize	Max cache connection count.	N/A	Unsigned integer. Value range: 1 to 64000. By default, the count is	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			1024.	
ServerConnectionReuse	Enable connections to persist and be reused by multiple client connections.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
MaxReuse	Maximum reuse number	N/A	Unsigned integer. Value range: 1 to 4294967295. By default, the number is 1000.	N/A
IdleTime	Idle connection expiration time	N/A	Unsigned integer. Value range: 1 to 4294967295. By default, the time length is 86400.	N/A
IPv4SourceMask	IPv4 source mask to determine its eligibility for reuse.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 0.	N/A
IPv6SourceMask	IPv6 source mask to determine its eligibility for reuse.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 0.	N/A

## LB/HTTPCompressionParameterRules

This table contains information about HTTP compression parameter rule.

### XML structure

```

<LB>
  <HTTPCompressionParameterRules>
    <HTTPCompressionParameterRule>
      <Name></Name>
      <ID></ID>
      <Type></Type>
      <FilterType></FilterType>
      <Expression></Expression>
    </HTTPCompressionParameterRule>
  </HTTPCompressionParameterRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPCompressionParameterRules
Table type	Multi-instance table
Row name	HTTPCompressionParameterRule
Restrictions	Only HTTP compression parameter rule can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range:1 to 65535.	N/A
Type	Type of the rule.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Permit.</li><li>1—Deny.</li></ul>	N/A
FilterType	Filter type of the rule.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—URL.</li><li>1—Content.</li></ul>	N/A.
Expression	Regular expression matched the filter type.	N/A	String. Length: 0 to 255 characters.	N/A

## LB/AddressPortStickyGroups

This table contains information about address-port sticky groups.

## XML structure

```
<LB>
  <AddressPortStickyGroups>
    <AddressPortStickyGroup>
      <Name></Name>
```

```

<Description></Description>
<Timeout></Timeout>
<Ipv4MethodType></Ipv4MethodType>
<Ipv4PrefixLength></Ipv4PrefixLength>
<Ipv6MethodType></Ipv6MethodType>
<Ipv6PrefixLength></Ipv6PrefixLength>
<OverrideLimit></OverrideLimit>
<PriorBusyEnable></PriorBusyEnable>
</AddressPortStickyGroup>
</AddressPortStickyGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	AddressPortStickyGroups
Table type	Multi-instance table
Row name	AddressPortStickyGroup
Restrictions	Only address-port sticky groups can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second. By default, the value is 60s .	N/A
Ipv4MethodType	IPv4 sticky method of the address-port sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—Source IP stickiness.</li> <li>2—Source IP port stickiness.</li> <li>3—Destination IP stickiness.</li> <li>4—Destination IP port stickiness.</li> <li>5—Source IP and</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			destination IP stickiness. <ul style="list-style-type: none"> <li>6—Source IP port and destination IP port stickiness.</li> </ul>	
Ipv4PrefixLength	IPv4 mask for IPv4 sticky method.	N/A	Unsigned integer. Value range: 0 to 32.	The column can only be configured when Ipv4MethodType is not none (0).
Ipv6MethodType	IPv6 sticky method of the address-port sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—Source IPv6 stickiness.</li> <li>2—Source IPv6 port stickiness.</li> <li>3—Destination IPv6 stickiness.</li> <li>4—Destination IPv6 port stickiness.</li> <li>5—Source IPv6 and destination IPv6 stickiness.</li> <li>6—Source IPv6 port and destination IPv6 port stickiness.</li> </ul>	N/A
Ipv6PrefixLength	IPv6 prefix for IPv6 sticky method.	N/A	Unsigned integer. Value range: 0 to 128.	The column can only be configured when Ipv6MethodType is not none (0).
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/RADIUSStickyGroups

This table contains information about RADIUS sticky groups.

### XML structure

```

<LB>
  <RADIUSStickyGroups>
    <RADIUSStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
    </RADIUSStickyGroup>
  </RADIUSStickyGroups>
</LB>

```

```

        <AttributeCode></AttributeCode>
        <OverrideLimit></OverrideLimit>
    </RADIUSStickyGroup>
</RADIUSStickyGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RADIUSStickyGroups
Table type	Multi-instance table
Row name	RADIUSStickyGroup
Restrictions	Only RADIUS sticky groups can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second. By default, the value is 60s .	N/A
AttributeCode	Code of attribute	N/A	Unsigned integer. Value range: 1 to 255.	N/A
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/PayloadStickyGroups

This table contains information about payload sticky groups.

## XML structure

```
<LB>
```

```

<PayloadStickyGroups>
  <PayloadStickyGroup>
    <Name></Name>
    <Description></Description>
    <Type></Type>
    <Timeout></Timeout>
    <Offset></Offset>
    <Length></Length>
    <Start></Start>
    <End></End>
    <OverrideLimit></OverrideLimit>
    <PriorBusyEnable></PriorBusyEnable>
  </PayloadStickyGroup>
</PayloadStickyGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	PayloadStickyGroups
Table type	Multi-instance table
Row name	PayloadStickyGroup
Restrictions	Only HTTP payload sticky groups can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description information for the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Type	Sticky method of the payload sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—Payload stickiness.</li> </ul>	Only when the type is payload stickiness (1), configurations of offset, length, start and end can be configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second. By default, 60s is configured.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Offset	Offset to the first byte of the payload.	N/A	Unsigned integer. Value range: 0 to 1000. By default, 0 is configured.	N/A
Length	Length of the payload portion.	N/A	Unsigned integer. Value range: 0 to 1000. By default, 0 is configured.	If one of Length and End is not configured, the other cannot be configured.
Start	Beginning pattern for the payload stickiness.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
End	Ending pattern for the payload stickiness.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/HTTPContentStickyGroups

This table contains information about HTTP content sticky groups.

### XML structure

```

<LB>
  <HTTPContentStickyGroups>
    <HTTPContentStickyGroup>
      <Name></Name>
      <Description></Description>
      <Type></Type>
      <Timeout></Timeout>
      <Offset></Offset>
      <Length></Length>
      <Start></Start>
      <End></End>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </HTTPContentStickyGroup>
  </HTTPContentStickyGroups>
</LB>

```



## Table description

Item	Description
Feature name	LB
Table name	HTTPContentStickyGroups
Table type	Multi-instance table
Row name	HTTPContentStickyGroup
Restrictions	Only HTTP content sticky groups can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description information for the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Type	Sticky method of HTTP content sticky group.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—None (default).</li><li>1—Content stickiness.</li></ul>	Only when the type is content stickiness (1), configurations of offset, length, start and end can be configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second. By default, the value is 60s .	N/A
Offset	Offset to the first byte of the HTTP content.	N/A	Unsigned integer. Value range: 0 to 1000. By default, the value is 0.	N/A
Length	Length of the HTTP content.	N/A	Unsigned integer. Value range: 0 to 1000. By default, the value is 0.	If one of Length and End is not configured, the other cannot be configured.
Start	Beginning pattern for the HTTP content stickiness.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
End	Ending pattern for the HTTP content stickiness.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
OverrideLimit	Ignore the	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	limits for sessions that match sticky entries.		<ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/HTTPCookieStickyGroups

This table contains information about HTTP cookie sticky groups.

### XML structure

```

<LB>
  <HTTPCookieStickyGroups>
    <HTTPCookieStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <Type></Type>
      <CookieName></CookieName>
      <Offset></Offset>
      <Length></Length>
      <Start></Start>
      <End></End>
      <CookieSecondary></CookieSecondary>
      <CheckAll></CheckAll>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </HTTPCookieStickyGroup>
  </HTTPCookieStickyGroups>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPCookieStickyGroups
Table type	Multi-instance table
Row name	HTTPCookieStickyGroup
Restrictions	Only HTTP cookie sticky groups can be configured by this table.



Column name	Column description	Column type	Data type and restrictions	Remarks
CookieSecondary	Name of the secondary cookie.	N/A	String. Length: 0 to 63 characters.	Characters 0~31 and 127~255 in ASCII are not supported, such as characters of "(" ")" "<" ">" "@" ";", ":", "\", " /" "[", "]" "?", "=", "{", "}" SP HT are not supported either.
CheckAll	Enable the check option for an HTTP cookie type persistence group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/HTTPHeaderStickyGroups

This table contains information about HTTP header sticky groups.

### XML structure

```

<LB>
  <HTTPHeaderStickyGroups>
    <HTTPHeaderStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <Type></Type>
      <HeaderName></HeaderName>
      <Offset></Offset>
      <Length></Length>
      <Start></Start>
      <End></End>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </HTTPHeaderStickyGroup>
  </HTTPHeaderStickyGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPHeaderStickyGroups
Table type	Multi-instance table
Row name	HTTPHeaderStickyGroup
Restrictions	Only HTTP header sticky groups can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description information for the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second. By default, the value is 60s.	N/A
Type	Sticky method of HTTP header sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—URL stickiness.</li> <li>2—Host stickiness</li> <li>3—Method stickiness</li> <li>4—Version stickiness</li> <li>5—Name stickiness</li> </ul>	Only when the type is URL stickiness (1) or host stickiness (2) or name stickiness (5) , configurations of offset, length, start, and end can be configured.
HeaderName	Header name.	N/A	String, case-insensitive. Length: 0 to 63 characters.	When Type is method stickiness (3), this column must be configured. Characters 0~31 and 127~255 in ASCII are not supported, such as characters of "(" ")" "<" ">" "@" " " ; " , " . " \ " " / " "[ " "]" "?" " = " "{" "}" SP HT are not supported either.
Offset	Offset to the first byte of the HTTP header value.	N/A	Unsigned integer. Value range: 0 to 1000. By default, the value is 0.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Length	Length of the HTTP header value.	N/A	Unsigned integer. Value range: 0 to 1000. By default, the value is 0.	If one of Length and End is not configured, the other cannot be configured.
Start	Beginning pattern for the HTTP header value.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
End	Ending pattern for the HTTP header value.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/SSLStickyGroups

This table contains information about SSL sticky groups.

### XML structure

```

<LB>
  <SSLStickyGroups>
    <SSLStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <Type></Type>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </SSLStickyGroup>
  </SSLStickyGroups>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	SSLStickyGroups
Table type	Multi-instance table
Row name	SSLStickyGroup

Restrictions	Only SSL sticky groups can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description information for the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second. By default, the value is 60s.	N/A
Type	Sticky method of SSL sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—SSL Session-ID stickiness.</li> </ul>	N/A
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/SIPStickyGroups

This table contains information about SIP sticky groups.

## XML structure

```

<LB>
  <SIPStickyGroups>
    <SIPStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <Type></Type>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </SIPStickyGroup>
  </SIPStickyGroups>
</LB>

```

```
</SIPStickyGroups>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	SIPStickyGroups
Table type	Multi-instance table
Row name	SIPStickyGroup
Restrictions	Only SIP sticky groups can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description information for the sticky group.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second. By default, the value is 60s.	N/A
Type	Sticky method of SIP sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—SIP Call-ID stickiness.</li> </ul>	N/A
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable(default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/Policies

This table contains information about policies.



## XML structure

```
<LB>
  <Policies>
    <Policy>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <DefaultClassAction></DefaultClassAction>
    </Policy>
  </Policies>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	Only policy can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the policy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type for the policy.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Generic.</li><li>• 1—HTTP.</li><li>• 2—Link-generic.</li><li>• 3—DNS.</li><li>• 4—RADIUS.</li><li>• 5—MySQL.</li></ul>	When this column is configured, the value of this column cannot be modified.
Description	Description information for the policy.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
DefaultClassAction	Action for the default class of the policy.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.

# LB/ClassActions

This table contains information about policy rules.

## XML structure

```
<LB>
  <ClassActions>
    <ClassAction>
      <Policy></Policy>
      <Class></Class>
      <Action></Action>
      <BeforeClass></BeforeClass>
    </ClassAction>
  </ClassActions>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ClassActions
Table type	Multi-instance table
Row name	ClassAction
Restrictions	Only policy rules can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	Name of the policy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Action	Name of the action for the class.	N/A	String, case-insensitive. Length: 1 to 63 characters.	When a row is created, the column must be configured.
BeforeClass	Name of the class that the row will be inserted before.	N/A	String, case-insensitive. Length: 0 to 63 characters.	BeforeClass must be an existing class. By default, indicates the row will be inserted at last.

# LB/GenericActions

This table contains information about IP, TCP and UDP action.

## XML structure

```
<LB>
  <GenericActions>
    <GenericAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <ServerFarm></ServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <IPToS></IPToS>
      <Fallback></Fallback>
      <TCPPDropType></TCPPDropType>
    </GenericAction>
  </GenericActions>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	GenericActions
Table type	Multi-instance table
Row name	GenericAction
Restrictions	Only IP, TCP and UDP action can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	N/A
ForwardType	Forward mode of the action.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Drop (default).</li></ul>	When ForwardType changes from server farm (3) to drop (1) or forward

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—Forward all.</li> <li>3—Server farm.</li> </ul>	all (2), ServerFarm and BackupServerFarm become default value.
ServerFarm	Name of the sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	When the column is configured, ForwardType becomes server farm (3).
BackupServerFarm	Name of the backup sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when ServerFarm is not configured.
StickyGroup	Name of the sticky group farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when ServerFarm is not configured.
IPToS	ToS number of IP packet sent to server.	N/A	Unsigned integer. Value range: 0 to 255. By default, no IPToS is specified.	N/A
Fallback	Fallback action when real server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—Match next class.</li> <li>3—Fin close.</li> <li>4—Rst close.</li> </ul>	N/A
TCPDropType	Type of closing TCP connection	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Fin close(default).</li> <li>1—Rst close</li> </ul>	N/A

## LB/RADIUSActions

This table contains information about RADIUS action.

### XML structure

```

<LB>
  <RADIUSActions>
    <RADIUSAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <ServerFarm></ServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <IPToS></IPToS>
      <Fallback></Fallback>
    </RADIUSAction>
  </RADIUSActions>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RADIUSActions
Table type	Multi-instance table
Row name	RADIUSAction
Restrictions	Only RADIUS action can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	N/A
ForwardType	Forward mode of the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Drop (default).</li> <li>2—Forward all.</li> <li>3—Server farm.</li> </ul>	When ForwardType changes from server farm (3) to drop (1) or forward all (2), ServerFarm and BackupServerFarm become default value.
ServerFarm	Name of the sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	When the column is configured, ForwardType becomes server farm (3).
BackupServer Farm	Name of the backup sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when ServerFarm is not configured.
StickyGroup	Name of the sticky group for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when ServerFarm is not configured.
IPToS	ToS number of IP packet sent to server.	N/A	Unsigned integer. Value range: 0 to 255. By default, no IPToS is specified.	N/A
Fallback	Fallback action when real server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—Match next class.</li> </ul>	N/A

# LB/LinkGenericActions

This table contains information about Link-generic action.

## XML structure

```
<LB>
  <LinkGenericActions>
    <LinkGenericAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <LinkGroup></LinkGroup >
      <BackupLinkGroup></BackupLinkGroup>
      <StickyGroup></StickyGroup>
      <IPToS></IPToS>
      <Fallback></Fallback>
      <BusyFallback></BusyFallback>
    </LinkGenericAction>
  </LinkGenericActions>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	LinkGenericActions
Table type	Multi-instance table
Row name	LinkGenericAction
Restrictions	Only Link-generic action can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
ForwardType	Forward mode of the action.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Drop (default).</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—Forward all.</li> <li>3—Server farm.</li> </ul>	
LinkGroup	Name of the link group for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	When the column is configured, ForwardType becomes link group (3).
BackupLinkGroup	Name of the backup link group for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when LinkGroup is not configured.
StickyGroup	Name of the sticky group farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when LinkGroup is not configured.
IPToS	ToS number of IP packet sent to server.	N/A	Unsigned integer. Value range: 0 to 255. By default, no IPToS is specified.	N/A
Fallback	Fallback action when real server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—Match next class.</li> </ul>	N/A
BusyFallback	Fallback action when real server all busy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Force (default).</li> <li>1—Match next class.</li> </ul>	N/A

## LB/DNSActions

This table contains information about DNS action.

## XML structure

```

<LB>
  <DNSActions>
    <DNSAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <DNSServerPool></DNSServerPool>
      <IPToS></IPToS>
      <Fallback></Fallback>
      <StickyGroup></StickyGroup>
      <BusyFallback></BusyFallback>
    </DNSAction>
  </DNSActions>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSActions
Table type	Multi-instance table
Row name	DNSAction
Restrictions	Only DNS action can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
ForwardType	Forward mode of the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Drop (default).</li> <li>2—Forward all.</li> <li>3—DNS server pool.</li> <li>4—Skip current DNS proxy.</li> </ul>	N/A
DNSServerPool	Name of the DNS server pool for the action.	N/A	String, case-insensitive. Length: 1 to 63 characters.	When the column is configured, ForwardType becomes DNS server pool (3).
IPToS	ToS number of IP packet sent to DNS server.	N/A	Unsigned integer. Value range: 0 to 255. By default, no IPToS is specified.	N/A
Fallback	Fallback action when DNS server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—Match next class.</li> </ul>	N/A
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the DNSServerPool is not configured.
BusyFallback	Fallback action when real server all busy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Force (default).</li> <li>1—Match next class.</li> </ul>	N/A



# LB/HTTPActions

This table contains information about HTTP action.

## XML structure

```
<LB>
  <HTTPActions>
    <HTTPAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <ServerFarm></ServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <SSLClientPolicy></SSLClientPolicy>
      <IPToS></IPToS>
      <Fallback></Fallback>
      <RewriteValue></RewriteValue>
      <ReplaceValue></ReplaceValue>
      <Redirect></Redirect>
      <ReturnCode></ReturnCode>
      <ZipFileWorkpath></ZipFileWorkpath>
      <ResponseZipFile></ResponseZipFile>
      <FallbackResponseRawFile></FallbackResponseRawFile>
      <TCPPDropType></TCPPDropType>
    </HTTPAction>
  </HTTPActions>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	HTTPActions
Table type	Multi-instance table
Row name	HTTPAction
Restrictions	Only HTTP action can be configured by this table.
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	N/A
ForwardType	Forward mode of the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Drop (default).</li> <li>3—Server farm.</li> <li>8—Redirect</li> <li>9—Response.</li> </ul>	When ForwardType changes from server farm (3) to drop (1) or redirect (8) or response (9), ServerFarm and BackupServerFarm become default value.
ServerFarm	Name of the sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	When the column is configured, ForwardType becomes server farm (3).
BackupServer Farm	Name of the backup sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when ServerFarm is not configured.
StickyGroup	Name of the sticky group farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when ServerFarm is not configured.
SSLClientPolicy	Name of the SSL client policy.	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
IPToS	ToS number of IP packet sent to server.	N/A	Unsigned integer. Value range: 0 to 255. By default, no IPToS is specified.	N/A
Fallback	Fallback action when real server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None (default).</li> <li>1—Match next class.</li> <li>2—Response.</li> <li>3—Fin close.</li> <li>4—Rst close.</li> </ul>	N/A
RewriteValue	Content value need to be replaced in response.	N/A	String. Length: 1 to 127 characters.	This column and the column of ReplaceValue must be configured together.
ReplaceValue	New content value after replaced in response.	N/A	String. Length: 1 to 127 characters.	Some special applications and constraints as below: %is: insert source IPv4 address or source IPv6 address into header of the message. %ps: insert source port into header of the message.

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>%id: insert destination IPv4 address or IPv6 address into header of the message.</p> <p>%pd: insert destination port into header of the message.</p> <p>To the above-mentioned applications, some situations, like only %, ps, id, pd can behind %, must be constrained unless those serial % are not odd number.</p>
Redirect	Redirection URL.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The column has two special usages, analyzes host and URL from requests. Only three symbols such as 'p', 'h' and '%' can be put behind '%'. Two '%' are regarded as one '%'. Process can handle, so the number of '%' must be even. They input below, except '%%p' and '%%h'. '%p' and '%h' only have one occurrence in the messages.
ReturnCode	Status code in the returned redirection packets.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>301—The requested resource has been permanently deleted.</li> <li>302—The requested resource has been temporarily deleted (default).</li> </ul>	N/A
ZipFileWorkpath	Work path of the zip file for the response.	N/A	String. Length: 1 to 255 characters.	<p>If the column is not '/', it must start with /, and cannot end with /.</p> <p>The null string indicates the label is not configured.</p>
ResponseZipFile	<p>Full path and name of the zip file for the response.</p> <p>Example:</p> <ul style="list-style-type: none"> <li>flash:/lb/1.html</li> <li>chassis3#slot1#flash:/lb/1.html</li> </ul>	N/A	String, case-insensitive. Length: 1 to 255 characters.	<p>The column can be configured when ForwardType is Response (9) or there is no ForwardType column.</p> <p>When the column is configured, ForwardType becomes Resposne (9).</p> <p>The column cannot be configured when ZipFileWorkpath is not configured.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
FallbackResponseRawFile	Full path and name of the raw file for the fallback action response. Example: <ul style="list-style-type: none"> <li>flash:/lb/1.html</li> <li>chassis3#slot1#flash:/lb/1.html</li> </ul>	N/A	String, case-insensitive. Length: 1 to 255 characters.	The column can be configured when Fallback is Response(2).
TCPDropType	Type of closing TCP connection	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Fin close(default).</li> <li>1—Rst close</li> </ul>	N/A

## LB/HTTPActionResponseFiles

This table contains information about HTTP action response file.

When this table is configured the ForwardType of http action becomes response(9).

## XML structure

```

<LB>
  <HTTPActionResponseFiles>
    <HTTPActionResponseFile>
      <Action></Action>
      <URL></URL>
      <FileName></FileName>
    </HTTPActionResponseFile>
  </HTTPActionResponseFiles>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPActionResponseFiles
Table type	Multi-instance table
Row name	HTTPActionHeader
Restrictions	Only HTTP action response file can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
URL	URL of file for the action response.	Index	String. Length: 1 to 255 characters.	The column must start with /. When the column is configured, ForwardType becomes Resposne (9).
FileName	Full path and name of the file for the action response.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The column must start witch device name.

## LB/HTTPActionRewriteURLs

This table contains information about HTTP action rewrite URL.

## XML structure

```
<LB>
  <HTTPActionRewriteURLs>
    <HTTPActionRewriteURL>
      <LocationURL></LocationURL>
      <Replace></Replace>
      <Encode></Encode>
    </HTTPActionRewriteURL>
  </HTTPActionRewriteURLs>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	HTTPActionRewriteURLs
Table type	Multi-instance table
Row name	HTTPActionURL
Restrictions	Only HTTP action rewrite URL can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocationURL	URL of location value for the HTTP request line.	Index	String. Length: 0 to 127 characters.	N/A
Replace	Replaced string that method of URL rewrite process.	N/A	String. Length: 0 to 127 characters.	<p>This column only can be configured when LocationURL is configured. Some special applications and constraints as below:</p> <p>%is: source IPv4 address or source IPv6 address.</p> <p>%ps: source port.</p> <p>%id: destination IPv4 address or IPv6 address</p> <p>%pd: destination port.</p> <p>%sis: source IPv4 address or source IPv6 address of server.</p> <p>%sps: source port of server.</p> <p>%sid: destination IPv4 address or IPv6 address of server.</p> <p>%spd: destination port of server.</p> <p>%{x509v}: the version of certificate</p> <p>%{x509issuer}: the issuer of certificate</p> <p>%{x509before}: the vaild time of certificate(invaild before this time)</p> <p>%{x509after}: the vaild time of certificate(invaild after this time)</p> <p>%{x509hash}: the MD5 hash of certificate</p> <p>%{x509snum}: the serial number of certificate</p> <p>%{x509sigalgo}: the signature algorithm of certificate</p> <p>%{x509sub}: the subject of certificate</p> <p>%{x509spktype}: the subject public key type of certificate</p> <p>%{x509spk}: the subject public key of certificate</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				%{x509spkRSA}: the number of subject public key bits of certificate %{dncn}: common name %{dne}: email %{dno}: company/organization %{dnou}: organization unit %{dnc}: country %{dns}: state/province %{dnl}: location To the above-mentioned applications, some situations, like only % and rewrite variate can behind %, must be constrained unless those serial % are not odd number.
Encode	Encode type of URL rewrite.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None.</li> <li>• 1—URL.</li> <li>• 2—Base64</li> </ul>	

## LB/HTTPActionSSLURLs

This table contains information about HTTP action SSLURL.

### XML structure

```

<LB>
  <HTTPActionSSLURLs>
    <HTTPActionSSLURL>
      <Name></Name>
      <LocationURL></LocationURL>
      <ClearPort></ClearPort>
      <SSLPort></SSLPort>
    </HTTPActionSSLURL>
  </HTTPActionSSLURLs>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPActionSSLURLs

Table type	Multi-instance table
Row name	HTTPActionSSLURL
Restrictions	Only HTTP action SSL URL can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
LocationURL	URL of location value for the HTTP header.	Index	String. Length: 1 to 63 characters.	N/A
ClearPort	HTTP port of Location for rewriting redirection message.	Index	Unsigned integer. Value range: 1 to 65535.	This column can only be configured when LocationURL is configured.
SSLPort	SSL port of the LB device.	N/A	Unsigned integer. Value range: 1 to 65535. By default, the value is 443.	This column can only be configured when LocationURL is configured.

## LB/HTTPActionHeaders

This table contains information about HTTP action header.

## XML structure

```

<LB>
  <HTTPActionHeaders>
    <HTTPActionHeader>
      <Action></Action>
      <Type></Type>
      <Direction></Direction>
      <HeaderName></HeaderName>
      <HeaderValue></HeaderValue>
      <HeaderExpress></HeaderExpress>
      <Replace></Replace>
      <Encode></Encode>
    </HTTPActionHeader>
  </HTTPActionHeaders>
</LB>

```



## Table description

Item	Description
Feature name	LB
Table name	HTTPActionHeaders
Table type	Multi-instance table
Row name	HTTPActionHeader
Restrictions	Only HTTP action header can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the header process.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Header Delete.</li> <li>1—Header Insert.</li> <li>2—Header Rewrite.</li> </ul>	N/A
Direction	Process direction.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Request and Response.</li> <li>1—Request.</li> <li>2—Response.</li> </ul>	N/A
HeaderName	Name of the header.	Index	String, case-insensitive. Length: 1 to 63 characters.	HeaderName cannot contain any one of characters following: 0 to 31 and 127 to 255 in the ASCII table, character as "(" ")" "<" ">" "@" " " "," ";" ".:" "\" " " /" "[" "]" "?" "=" "{" "}" " SP HT.
HeaderValue	Header value that method of Header Insert process.	N/A	String. Length: 0 to 255 characters.	This column has validity in Header Insert process. You cannot configure this column if the type is not Header Insert. Some special applications and constraints as below: %is: source IPv4 address or source IPv6 address. %ps: source port. %id: destination IPv4 address or IPv6 address. %pd: destination port.

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>%sis: source IPv4 address or source IPv6 address of server.</p> <p>%sps: source port of server.</p> <p>%sid: destination IPv4 address or IPv6 address of server.</p> <p>%spd: destination port of server.</p> <p>%{x509v}: the version of certificate</p> <p>%{x509issuer}: the issuer of certificate</p> <p>%{x509before}: the vaild time of certificate(invaild before this time)</p> <p>%{x509after}: the vaild time of certificate(invaild after this time)</p> <p>%{x509hash}: the MD5 hash of certificate</p> <p>%{x509snum}: the serial number of certificate</p> <p>%{x509sigalgo}: the signature algorithm of certificate</p> <p>%{x509sub}: the subject of certificate</p> <p>%{x509spktype}: the subject public key type of certificate</p> <p>%{x509spk}: the subject public key of certificate</p> <p>%{x509spkRSA}: the number of subject public key bits of certificate</p> <p>%{dn cn}: common name</p> <p>%{dn e}: email</p> <p>%{dn o}: company/organization</p> <p>%{dn ou}: organization unit</p> <p>%{dn c}: country</p> <p>%{dn s}: state/province</p> <p>%{dn l}: location</p> <p>To the above-mentioned applications, some situations, like only % and rewrite variate can behind %, must be constrained unless those serial % are not odd number.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
HeaderExpress	Header value that method of Header Rewrite process.	N/A	String. Length: 0 to 127 characters.	This column can only be configured when the type is Header Rewrite (2).
Replace	Replaced string that method of Header Rewrite process.	N/A	String. Length: 0 to 127 characters.	<p>This column can only be configured when the type is Header Rewrite (2).</p> <p>Some special applications and constraints as below:</p> <p>%is: source IPv4 address or source IPv6 address.</p> <p>%ps: source port.</p> <p>%id: destination IPv4 address or IPv6 address</p> <p>%pd: destination port.</p> <p>%sis: source IPv4 address or source IPv6 address of server.</p> <p>%sps: source port of server.</p> <p>%sid: destination IPv4 address or IPv6 address of server.</p> <p>%spd: destination port of server.</p> <p>%{x509v}: the version of certificate</p> <p>%{x509issuer}: the issuer of certificate</p> <p>%{x509before}: the vaild time of certificate(invaild before this time)</p> <p>%{x509after}: the vaild time of certificate(invaild after this time)</p> <p>%{x509hash}: the MD5 hash of certificate</p> <p>%{x509snum}: the serial number of certificate</p> <p>%{x509sigalgo}: the signature algorithm of certificate</p> <p>%{x509sub}: the subject of certificate</p> <p>%{x509spktype}: the subject public key type of certificate</p> <p>%{x509spk}: the subject public key of certificate</p> <p>%{x509spkRSA}: the number of subject public key bits of certificate</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				%{dncn}: common name %{dne}: email %{dno}: company/organization %{dnou}: organization unit %{dnc}: country %{dns}: state/province %{dnl}: location To the above-mentioned applications, some situations, like only % and rewrite variate can behind %, must be constrained unless those serial % are not odd number.
Encode	Encode type of URL rewrite.	N/A	Enumeration: • 0—None. • 1—URL. • 2—Base64	Encode

## LB/Classes

This table contains information about classes.

## XML structure

```

<LB>
  <Classes>
    <Class>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <MatchCondition></MatchCondition>
    </Class>
  </Classes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Classes
Table type	Multi-instance table
Row name	Class

Restrictions	Only class can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the class.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Generic.</li> <li>1—HTTP.</li> <li>2—Link-generic.</li> <li>3—DNS.</li> <li>4—RADIUS.</li> <li>5—MySQL.</li> </ul>	When a class is created, the column must be configured. Once created, this column cannot be changed.
Description	Description of the class.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
MatchCondition	The rule matched class.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Match any.</li> <li>1—Match all (default).</li> </ul>	Once created, this column cannot be changed.

## LB/GenericMatchRules

This table contains information about generic match rule.

## XML structure

```

<LB>
  <GenericMatchRules>
    <GenericMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
      <ReferClass></ReferClass>
      <AclNum></AclNum>
      <AclName></AclName>
      <ISP></ISP>
      <User></User>
      <UserGroup></UserGroup>
    </GenericMatchRule>
  </GenericMatchRules>
</LB>

```

```

<IdentityDomain></IdentityDomain>
<InterfaceName></InterfaceName>
<PayloadExpression></PayloadExpression>
<CaseInsensitive></CaseInsensitive>
<Not></Not>    </GenericMatchRule>
</GenericMatchRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	GenericMatchRules
Table type	Multi-instance table
Row name	GenericMatchRule
Restrictions	Only generic match rule can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Class.</li> <li>3—IPv4 ACL.</li> <li>4—IPv6 ACL.</li> <li>5—ISP.</li> <li>6—User.</li> <li>7—User group.</li> <li>8—Interface.</li> <li>9—payload.</li> </ul>	N/A
SrcIpv4Address	Match rule of Source IPv4.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	This column can be configured only when the type is Source IPv4(0).

Column name	Column description	Column type	Data type and restrictions	Remarks
Srclpv4Prefix Length	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	This column can be configured only when IPv4 address is configured.
Srclpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	This column can be configured only when the type is Source IPv6 (1).
Srclpv6Prefix Length	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	This column can be configured only when IPv6 address is configured.
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	This column can be configured only when the type is <b>Class</b> (2).
AclNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999. By default, no ACL number is specified.	AclNum and AclName are mutually exclusive and only one of them can be set in a single message. This column can only be configured when the type is IPv4 ACL (3) or IPv6 ACL (4).
AclName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ACL name is specified.	AclNum and AclName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (3) or IPv6 ACL (4).
ISP	Name of the ISP.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ISP name is specified.	This column can be configured only when the type is ISP (5).
User	Name of the user.	N/A	String, case-sensitive.. Length: 1 to 55 characters. By default, no username is specified.	This column can be configured only when the type is user (6).
UserGroup	Name of the user group.	N/A	String, case-insensitive.. Length: 1 to 32 characters. By default, no user group name is specified.	This column can be configured only when the type is user group (7).
IdentityDomain	The domain name of the user or user group.	N/A	String, case-insensitive.. Length: 1 to 255 characters. By default, no domain name is specified.	This column can be configured only when the type is user or user group (6 or 7). The name cannot contain question marks (?).
InterfaceName	Name of the interface.	N/A	String, case-insensitive.. Length: 1 to 47 characters.	This column can be configured only when the

Column name	Column description	Column type	Data type and restrictions	Remarks
			By default, no interface name is specified.	type is interface (8).
PayloadExpression	Regular expression matched the payload content.	N/A	String. Length: 0 to 255 characters	This column can be configured only when the type is payload (9).
CaseInsensitive	Whether the payload content expression is case insensitive	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Case sensitive (default)</li> <li>1—Case insensitive</li> </ul>	This column can be configured only when the type is payload(9).
Not	Whether the matching condition is opposite	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Matching condition is not opposite (default)</li> <li>1—Matching condition is opposite</li> </ul>	This column can be configured only when the type is payload(9).

## LB/LinkGenericMatchRules

This table contains information about link generic match rule.

### XML structure

```

<LB>
  <LinkGenericMatchRules>
    <LinkGenericMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
      <ReferClass></ReferClass>
      <AclNum></AclNum>
      <AclName></AclName>
      <ISP></ISP>
      <AppGroup></AppGroup>
      <DstIpv4Address></DstIpv4Address>
      <DstIpv4PrefixLength></DstIpv4PrefixLength>
      <DstIpv6Address></DstIpv6Address>
      <DstIpv6PrefixLength></DstIpv6PrefixLength>
      <DstDomain></DstDomain>
      <User></User>
      <UserGroup></UserGroup>
      <IdentityDomain></IdentityDomain>

```



```

    <InterfaceName></InterfaceName>
  </LinkGenericMatchRule>
</LinkGenericMatchRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkGenericMatchRules
Table type	Multi-instance table
Row name	LinkGenericMatchRule
Restrictions	Only link generic match rule can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Class.</li> <li>3—IPv4 ACL.</li> <li>4—IPv6 ACL.</li> <li>5—ISP.</li> <li>6—Application group.</li> <li>7—Destination IPv4.</li> <li>8—Destination IPv6.</li> <li>9—Destination domain.</li> <li>10—User.</li> <li>11—User group.</li> <li>12—Interface.</li> </ul>	N/A
Srclpv4Address	Match rule of Source IPv4.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	This column can be configured only when the type is Source IPv4(0).
Srclpv4Prefix	Mask length of	N/A	Unsigned integer.	This column can be

Column name	Column description	Column type	Data type and restrictions	Remarks
Length	the source IPv4 address.		Value range: 0 to 32. By default, the value is 32.	configured only when IPv4 address is configured.
SrcIpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	This column can be configured only when the type is Source IPv6 (1).
SrcIpv6PrefixLength	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	This column can be configured only when IPv6 address is configured.
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column can be configured only when the type is Class (2).
AcNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999. By default, no ACL number is specified.	AcNum and AcName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (3) or IPv6 ACL (4).
AcName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ACL name is specified.	AcNum and AcName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (3) or IPv6 ACL (4).
ISP	Name of the ISP.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ISP name is specified.	This column can be configured only when the type is ISP (5).
AppGroup	Name of the application group.	N/A	String. Length: 1 to 63 characters. By default, no application group name is specified.	This column can be configured only when the type is application group (6).
DstIpv4Address	Match rule of destination IPv4.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	This column can be configured only when the type is destination IPv4(7).
DstIpv4PrefixLength	Mask length of the destination IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	This column can be configured only when destination IPv4 address is configured.
DstIpv6Address	Match rule of destination IPv6.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	This column can be configured only when the type is destination IPv6 (8).
DstIpv6PrefixLength	Prefix length of the destination	N/A	Unsigned integer.	This column can be configured only when

Column name	Column description	Column type	Data type and restrictions	Remarks
	IPv6 address.		Value range: 0 to 128. By default, the value is 128.	destination IPv6 address is configured.
DstDomain	Match rule of destination domain	N/A	String, case-insensitive. Length: 1 to 253 characters.	<p>The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.).</p> <p>The domain name supports wildcards including question marks (?) and asterisks (*).</p> <p>The following rules apply when you use wildcards:</p> <p>Use a question mark (?) to replace one character, except the dot (.).</p> <p>Multiple question marks can appear in the domain name.</p> <p>Use an asterisk (*) to replace multiple characters, except the dot (.).</p> <p>Multiple asterisks can appear in the domain name.</p> <p>Question marks and asterisks can appear in the domain name at the same time.</p>
User	Name of the user.	N/A	String, case-sensitive.. Length: 1 to 55 characters. By default, no user name is specified.	This column can be configured only when the type is user (10).
UserGroup	Name of the user group.	N/A	String, case-insensitive.. Length: 1 to 32 characters. By default, no user group name is specified.	This column can be configured only when the type is user group (11).
IdentityDomain	The domain name of the user or user group.	N/A	String, case-insensitive.. Length: 1 to 255 characters. By default, no domain name is specified.	<p>This column can be configured only when the type is user or user group (10 or 11).</p> <p>The name cannot contain question marks (?).</p>
InterfaceName	Name of the interface.	N/A	String, case-insensitive.. Length: 1 to 47 characters. By default, no interface name is specified.	This column can be configured only when the type is interface (12).

## LB/DNSMatchRules

This table contains information about DNS match rule.

## XML structure

```
<LB>
  <DNSMatchRules>
    <DNSMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
      <DstIpv4Address></DstIpv4Address>
      <DstIpv4PrefixLength></DstIpv4PrefixLength>
      <DstIpv6Address></DstIpv6Address>
      <DstIpv6PrefixLength></DstIpv6PrefixLength>
      <ReferClass></ReferClass>
      <AclNum></AclNum>
      <AclName></AclName>
      <Domain></Domain>
      <User></User>
      <UserGroup></UserGroup>
      <IdentityDomain></IdentityDomain>
      <InterfaceName></InterfaceName>
    </DNSMatchRule>
  </DNSMatchRules>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	DNSMatchRules
Table type	Multi-instance table
Row name	DNSMatchRule
Restrictions	Only DNS match rule can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 63 characters.	
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Source IPv4.</li> <li>• 1—Source IPv6.</li> <li>• 2—Destination IPv4.</li> <li>• 3—Destination IPv6.</li> <li>• 4—Class.</li> <li>• 5—IPv4 ACL.</li> <li>• 6—IPv6 ACL.</li> <li>• 7—Domain name.</li> <li>• 8—User.</li> <li>• 9—User group.</li> <li>• 10—Interface.</li> </ul>	N/A
SrcIpv4Address	Match rule of source IPv4.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	This column can be configured only when the type is Source IPv4(0).
SrcIpv4PrefixLength	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	This column can be configured only when IPv4 address is configured.
SrcIpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	This column can be configured only when the type is Source IPv6 (1).
SrcIpv6PrefixLength	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	This column can be configured only when IPv6 address is configured.
DstIpv4Address	Match rule of destination IPv4.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	This column can be configured only when the type is destination IPv4(2).
DstIpv4PrefixLength	Mask length of the destination IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	This column can be configured only when destination IPv4 address is configured.
DstIpv6Address	Match rule of destination IPv6.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	This column can be configured only when the type is destination IPv6 (3).
DstIpv6PrefixLength	Prefix length of the destination IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	This column can be configured only when destination IPv6 address is configured.
ReferClass	Name of the	N/A	String, case-insensitive.	This column can be

Column name	Column description referenced class.	Column type	Data type and restrictions Length: 1 to 63 characters.	Remarks configured only when the type is Class (4).
AclNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999. By default, no ACL number is specified.	AclNum and AclName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (5) or IPv6 ACL (6).
AclName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ACL name is specified.	AclNum and AclName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (5) or IPv6 ACL (6).
Domain	Domain for the DNS match rule	N/A	String, case-insensitive. Length: 1 to 253 characters.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.). The domain name supports wildcards including question marks (?) and asterisks (*). The following rules apply when you use wildcards: Use a question mark (?) to replace one character, except the dot (.). Multiple question marks can appear in the domain name. Use an asterisk (*) to replace multiple characters, except the dot (.). Multiple asterisks can appear in the domain name. Question marks and asterisks can appear in the domain name at the same time.
User	Name of the user.	N/A	String, case-sensitive.. Length: 1 to 55 characters. By default, no user name is specified.	This column can be configured only when the type is user (8).
UserGroup	Name of the user group.	N/A	String, case-insensitive.. Length: 1 to 32 characters. By default, no user group name is specified.	This column can be configured only when the type is user group (9).

Column name	Column description	Column type	Data type and restrictions	Remarks
IdentityDomain	The domain name of the user or user group.	N/A	String, case-insensitive.. Length: 1 to 255 characters. By default, no domain name is specified.	This column can be configured only when the type is user or user group (8 or 9). The name cannot contain question marks (?).
InterfaceName	Name of the interface.	N/A	String, case-insensitive.. Length: 1 to 47 characters. By default, no interface name is specified.	This column can be configured only when the type is interface (10).

## LB/HTTPMatchRules

This table contains information about HTTP match rule.

### XML structure

```

<LB>
  <HTTPMatchRules>
    <HTTPMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
      <ReferClass></ReferClass>
      <CookieName></CookieName>
      <CookieValue></CookieValue>
      <HeaderName></HeaderName>
      <HeaderValue></HeaderValue>
      <Method></Method>
      <ExtType></ExtType>
      <URL></URL>
      <ContentOffset></ContentOffset>
      <ContentExpression></ContentExpression>
      <AclNum></AclNum>
      <AclName></AclName>
      <User></User>
      <UserGroup></UserGroup>
      <IdentityDomain></IdentityDomain>
      <InterfaceName></InterfaceName>
    </HTTPMatchRule>
  </HTTPMatchRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPMatchRules
Table type	Multi-instance table
Row name	HTTPMatchRule
Restrictions	Only HTTP match rule can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range:1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Source IPv4.</li><li>• 1—Source IPv6.</li><li>• 2—Class.</li><li>• 3—Cookie.</li><li>• 4—HTTP Header.</li><li>• 5—Method.</li><li>• 6—URL.</li><li>• 7—Content.</li><li>• 8—IPv4 ACL.</li><li>• 9—IPv6 ACL.</li><li>• 11—User.</li><li>• 12—User group.</li><li>• 13—Interface.</li></ul>	N/A
Srclpv4Address	Match rule of Source IPv4.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	This column can be configured only when the type is Source IPv4(0).
Srclpv4PrefixLength	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	This column can be configured only when IPv4 address is configured.
Srclpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address	This column can be configured only when the type is Source IPv6(1).



Column name	Column description	Column type	Data type and restrictions	Remarks
			is specified.	
SrcIpv6Prefix Length	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	This column can be configured only when IPv6 address is configured.
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	This column can be configured only when the type is <b>Class</b> (2).
CookieName	Cookie name of the http message.	N/A	String. Length: 0 to 63 characters.	This column can be configured only when the type is Cookie (3).
CookieValue	Regular expression matched the cookie range.	N/A	String. Length: 0 to 255 characters.	This column can be configured only when the type is Cookie (3) and the CookieName has been configured.
HeaderName	Header name of the HTTP message.	N/A	String, case-insensitive. Length: 0 to 63 characters.	This column can be configured only when the type is HTTP Header (4).
HeaderValue	Regular expression matched the header range.	N/A	String. Length: 0 to 255 characters.	This column can be configured only when the type is HTTP Header (4) and the HeaderName has been configured.
Method	Name of the http request method.	N/A	String. Length: 0 to 63 characters.	This column can be configured only when the type is Method (5). When the ExtType is Nonuser-defined (0), Method can only be configured one of these methods:  GET, CONNECT, DELETE, HEAD, OPTIONS, TRACE, PUT, AND POST.
ExtType	Identification of the type for user-defined.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Nonuser-defined (default).</li> <li>1—User-defined.</li> </ul>	N/A
URL	Regular expression matched the URL.	N/A	String. Length: 0 to 255 characters.	This column can be configured only when the type is URL (6).
ContentOffset	Absolute offset of the HTTP content.	N/A	Unsigned integer. Value range: 0 to 1000. By default, the value is zero.	This column can be configured only when the type is Content (7).
ContentExpression	Regular expression matched the content.	N/A	String. Length: 0 to 255 characters.	This column can be configured only when the type is Content (7).

Column name	Column description	Column type	Data type and restrictions	Remarks
AcINum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999. By default, no ACL number is specified.	AcINum and AcIName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (8) or IPv6 ACL (9).
AcIName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ACL name is specified.	AcINum and AcIName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (8) or IPv6 ACL (9).
User	Name of the user.	N/A	String, case-sensitive.. Length: 1 to 55 characters. By default, no user name is specified.	This column can be configured only when the type is user (11).
UserGroup	Name of the user group.	N/A	String, case-insensitive.. Length: 1 to 32 characters. By default, no user group name is specified.	This column can be configured only when the type is user group (12).
IdentityDomain	The domain name of the user or user group.	N/A	String, case-insensitive.. Length: 1 to 255 characters. By default, no domain name is specified.	This column can be configured only when the type is user or user group (11 or 12). The name cannot contain question marks (?).
InterfaceName	Name of the interface.	N/A	String, case-insensitive.. Length: 1 to 47 characters. By default, no interface name is specified.	This column can be configured only when the type is interface (13).

## LB/RADIUSMatchRules

This table contains information about RADIUS match rule.

### XML structure

```

<LB>
  <RADIUSMatchRules>
    <RADIUSMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>

```

```

    <SrcIpv6Address></SrcIpv6Address>
    <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
    <ReferClass></ReferClass>
    <AclNum></AclNum>
    <AclName></AclName>
    <AttributeType></AttributeType>
    <AttributeExpression></AttributeExpression>
  </RADIUSMatchRule>
</RADIUSMatchRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RADIUSMatchRules
Table type	Multi-instance table
Row name	RADIUSMatchRule
Restrictions	Only RADIUS match rule can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Class.</li> <li>3—IPv4 ACL.</li> <li>4—IPv6 ACL.</li> <li>5—RADIUS.</li> </ul>	N/A
SrcIpv4Address	Match rule of Source IPv4.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	This column can be configured only when the type is Source IPv4(0).
SrcIpv4Prefix	Mask length of the source	N/A	Unsigned integer.	This column can be configured only when IPv4

Column name	Column description	Column type	Data type and restrictions	Remarks
Length	IPv4 address.		Value range: 0 to 32. By default, the value is 32.	address is configured.
SrcIpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	This column can be configured only when the type is Source IPv6 (1).
SrcIpv6PrefixLength	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	This column can be configured only when IPv6 address is configured.
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	This column can be configured only when the type is Class (2).
AcNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999. By default, no ACL number is specified.	AcNum and AcName are mutually exclusive and only one of them can be set in a single message. This column can only be configured when the type is IPv4 ACL (3) or IPv6 ACL (4).
AcName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ACL name is specified.	AcNum and AcName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (3) or IPv6 ACL (4).
AttributeType	Type of attribute	N/A	Unsigned integer. Value range: 1 to 255. By default, no AttributeType is specified.	This column can be configured only when the type is RADIUS (5).
AttributeExpression	Regular expression matched the attribute.	N/A	String. Length: 1 to 255 characters.	This column can be configured only when the type is RADIUS (5).

## LB/MySQLMatchRules

This table contains information about MySQL match rules.

### XML structure

```

<LB>
  <MySQLMatchRules>
    <MySQLMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>

```

```

<SrcIpv4Address></SrcIpv4Address>
<SrcIpv4PrefixLength></SrcIpv4PrefixLength>
<SrcIpv6Address></SrcIpv6Address>
<SrcIpv6PrefixLength></SrcIpv6PrefixLength>
<ReferClass></ReferClass>
<AclNum></AclNum>
<AclName></AclName>
<SqlExpression></SqlExpression>
<CaseInsensitive></CaseInsensitive>
<Not></Not>
</MySQLMatchRule>
</MySQLMatchRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	MySQLMatchRules
Table type	Multi-instance table
Row name	MySQLMatchRule
Restrictions	Only MySQL match rule can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Class.</li> <li>3—IPv4 ACL.</li> <li>4—IPv6 ACL.</li> <li>5—SQL.</li> </ul>	N/A
SrcIpv4Address	Source IPv4 address to match.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	This column can be configured only when the type is Source IPv4(0).

Column name	Column description	Column type	Data type and restrictions	Remarks
Srclpv4Prefix Length	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	This column can be configured only when IPv4 address is configured.
Srclpv6Address	Source IPv6 address to match.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	This column can be configured only when the type is Source IPv6 (1).
Srclpv6Prefix Length	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	This column can be configured only when IPv6 address is configured.
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	This column can be configured only when the type is <b>Class</b> (2).
AclNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999. By default, no ACL number is specified.	AclNum and AclName are mutually exclusive and only one of them can be set in a single message. This column can only be configured when the type is IPv4 ACL (3) or IPv6 ACL (4).
AclName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ACL name is specified.	AclNum and AclName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (3) or IPv6 ACL (4).
SqlExpression	Regular expression used to match the SQL content.	N/A	String. Length: 1 to 255 characters	This column can be configured only when the type is sql(5).
CaseInsensitive	Whether the payload content expression is case insensitive	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Case sensitive (default)</li> <li>1—Case insensitive</li> </ul>	This column can be configured only when the type is sql(5).
Not	Whether the matching condition is opposite	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Matching condition is not opposite (default)</li> <li>1—Matching condition is opposite</li> </ul>	This column can be configured only when the type is sql(5).

## LB/ISPs

This table contains information about ISP.

## XML structure

```
<LB>
  <ISPs>
    <ISP>
      <Name></Name>
      <Description></Description>
    </ISP>
  </ISPs>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ISPs
Table type	Multi-instance table
Row name	ISP
Restrictions	Only manual ISP can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the ISP.	N/A	String. Length: 1 to 127 characters.	N/A

## LB/ISPFile

This table contains information about ISP file.

## XML structure

```
<LB>
  <ISPFile>
    <FileName></FileName>
  </ISPFile>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ISPFile
Table type	Single-instance table
Row name	N/A
Restrictions	Only ISP file can be configured by this table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the ISP file.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## LB/FlowMode

This table contains information about flow mode.

## XML structure

```
<LB>
  <FlowMode>
    <ModeType></ModeType>
  </FlowMode>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	FlowMode
Table type	Single-instance table
Row name	N/A
Restrictions	Only flow mode can be configured by this table.
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModeType	Type of flow mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—One failover-group.</li><li>2—Share failover-group (default).</li></ul>	N/A

## LB/Ipv4ISPAddressGroups

This table contains information about IPv4 ISP address groups.

## XML structure

```
<LB>
  <Ipv4ISPAddressGroups>
    <Ipv4ISPAddressGroup>
      <Name></Name>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
    </Ipv4ISPAddressGroup>
  </Ipv4ISPAddressGroups>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	Ipv4ISPAddressGroups
Table type	Multi-instance table
Row name	Ipv4ISPAddressGroup
Restrictions	Only manual IPv4 ISP can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the ISP.	Index	String, case-insensitive. Length: 1 to 63	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation. By default, no IPv4 address is specified.	The value must be equal to the summation of the address and the mask. Example:1.1.1.0/24.
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range:1 to 32.	N/A

## LB/Ipv6ISPAddressGroups

This table contains information about IPv6 ISP address groups.

### XML structure

```

<LB>
  <Ipv6ISPAddressGroups>
    <Ipv6ISPAddressGroup>
      <Name></Name>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
    </Ipv6ISPAddressGroup>
  </Ipv6ISPAddressGroups>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	Ipv6ISPAddressGroups
Table type	Multi-instance table
Row name	Ipv6ISPAddressGroup
Restrictions	Only manual IPv6 ISP can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	The value must be equal to the summation of the address and the prefix. Example:195::/64.
Ipv6PrefixLength	IPv6 prefix length.	Index	Unsigned integer. Value range:1 to 128.	N/A

## LB/ProximityParameters

This table contains information about proximity parameter.

### XML structure

```

<LB>
  <ProximityParameters>
    <Ipv4PrefixLength></Ipv4PrefixLength>
    <Ipv6PrefixLength></Ipv6PrefixLength>
    <Timeout></Timeout>
    <RTTWeight></RTTWeight>
    <TTLWeight></TTLWeight>
    <InBandwidthWeight></InBandwidthWeight>
    <OutBandwidthWeight></OutBandwidthWeight>
    <CostWeight></CostWeight>
    <MaxNumber></MaxNumber>
    <DefaultProbeMode></DefaultProbeMode>
    <DefaultProbe></DefaultProbe>
  </ProximityParameters>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	ProximityParameters
Table type	Single-instance table
Row name	N/A
Restrictions	Only proximity parameter can be configured by this table.
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range:0 to 32. By default, the value is 24.	Zero means nature mask.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range:1 to 128. By default, the value is 96.	N/A
Timeout	The life time of proximity.	N/A	Unsigned integer. Value range:60 to 3600. By default, the value is 60.	N/A
RTTWeight	The weight of RTT.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
TTLWeight	The weight of TTL.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
InBandwidthWeight	The weight of inbound bandwidth.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
OutBandwidthWeight	The weight of outbound bandwidth.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
CostWeight	The weight of link cost.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
MaxNumber	Proximity entries upper limit number.	N/A	Unsigned integer. Value range:0 to 10000000. By default, the value is 0 which indicates the number of proximity entries is unlimited.	N/A
DefaultProbeMode	Default probe mode for the proximity.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NQA (default).</li> <li>1—LB.</li> </ul>	N/A
DefaultProbe	Default probe method for the	N/A	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	proximity.		Length: 1 to 32 characters. By default, no default probe is specified.	

## LB/VRFProximityParameters

This table contains information about proximity parameter.

### XML structure

```

<LB>
  <VRFProximityParameters>
    <VRFProximityParameter>
      <VRF></VRF>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <Timeout></Timeout>
      <RTTWeight></RTTWeight>
      <TTLWeight></TTLWeight>
      <InBandwidthWeight></InBandwidthWeight>
      <OutBandwidthWeight></OutBandwidthWeight>
      <CostWeight></CostWeight>
      <MaxNumber></MaxNumber>
      <DefaultProbeMode></DefaultProbeMode>
      <DefaultProbe></DefaultProbe>
    </VRFProximityParameter>
  </VRFProximityParameters>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	VRFProximityParameters
Table type	Multi-instance table
Row name	VRFProximityParameter
Restrictions	Only proximity parameter can be configured by this table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range:0 to 32. By default, the value is 24.	Zero means nature mask.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range:1 to 128. By default, the value is 96.	N/A
Timeout	The life time of proximity.	N/A	Unsigned integer. Value range:60 to 3600. By default, the value is 60.	N/A
RTTWeight	The weight of RTT.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
TTLWeight	The weight of TTL.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
InBandwidthWeight	The weight of inbound bandwidth.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
OutBandwidthWeight	The weight of outbound bandwidth.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
CostWeight	The weight of link cost.	N/A	Unsigned integer. Value range:0 to 255. By default, the value is 100.	N/A
MaxNumber	Proximity entries upper limit number.	N/A	Unsigned integer. Value range:0 to 10000000. By default, the value is 0 which indicates the number of proximity entries is unlimited.	N/A
DefaultProbeMode	Default probe mode for the proximity.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NQA (default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—LB.</li> </ul>	
DefaultProbe	Default probe method for the proximity.	N/A	String, case-insensitive. Length: 1 to 32 characters. By default, no default probe is specified.	N/A

## LB/ProximityProbeRules

This table contains information about probe of the proximity.

### XML structure

```

<LB>
  <ProximityProbeRules>
    <ProximityProbeRule>
      <ID></ID>
      <Type></Type>
      <ProbeMode></ProbeMode>
      <Probe></Probe>
    </ProximityProbeRule>
  </ProximityProbeRules>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	ProximityProbeRules
Table type	Multi-instance table
Row name	ProximityProbeRule
Restrictions	Only proximity probe can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the probe rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	rule.		<ul style="list-style-type: none"> <li>0—TCP.</li> </ul>	
ProbeMode	Mode of the match probe.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NQA (default).</li> <li>1—LB.</li> </ul>	N/A
Probe	Name of the match probe.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/VRFPproximityProbeRules

This table contains information about probe of the proximity.

### XML structure

```

<LB>
  <VRFPproximityProbeRules>
    <VRFPproximityProbeRule>
      <VRF></VRF>
      <ID></ID>
      <Type></Type>
      <ProbeMode></ProbeMode>
      <Probe></Probe>
    </VRFPproximityProbeRule>
  </VRFPproximityProbeRules>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	VRFPproximityProbeRules
Table type	Multi-instance table
Row name	VRFPproximityProbeRule
Restrictions	Only proximity probe can be configured by this table.
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
ID	ID of the probe rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the rule.	N/A	Enumeration: • 0—TCP.	N/A
ProbeMode	Mode of the match probe.	N/A	Enumeration: • 0—NQA (default). • 1—LB.	N/A
Probe	Name of the match probe.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/ALG

This table contains information about ALG.

## XML structure

```

<LB>
  <ALG>
    <DnsEnable></DnsEnable>
    <FtpEnable></FtpEnable>
    <H323Enable></H323Enable>
    <IcmpEnable></IcmpEnable>
    <IlsEnable></IlsEnable>
    <MgcpEnable></MgcpEnable>
    <NbtEnable></NbtEnable>
    <PptpEnable></PptpEnable>
    <RshEnable></RshEnable>
    <RtspEnable></RtspEnable>
    <SccpEnable></SccpEnable>
    <SipEnable></SipEnable>
    <SqlnetEnable></SqlnetEnable>
    <TftpEnable></TftpEnable>
    <XdmcpEnable></XdmcpEnable>
  </ALG>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ALG
Table type	Single-instance table
Row name	N/A
Restrictions	Only ALG can be configured by this table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DnsEnable	Enable the DNS protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable (default).</li> </ul>	N/A
FtpEnable	Enable the FTP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable (default).</li> </ul>	N/A
H323Enable	Enable the H323 protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
IcmpEnable	Enable the ICMP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable (default).</li> </ul>	N/A
IlsEnable	Enable the ILS protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
MgcpEnable	Enable the MGCP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
NbtEnable	Enable the NBT protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
PptpEnable	Enable the PPTP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable (default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RshEnable	Enable the RSH protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RtspEnable	Enable the RTSP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable (default).</li> </ul>	N/A
SccpEnable	Enable the SCCP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
SipEnable	Enable the SIP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
SqlnetEnable	Enable the SQLNET protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
TftpEnable	Enable the TFTP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
XdmcpEnable	Enable the XDMCP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/LimitPolicies

This table contains information about limit policies.

### XML structure

```

<LB>
  <LimitPolicies>
    <LimitPolicy>
      <Name></Name>
      <Description></Description>
    </LimitPolicy>
  </LimitPolicies>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LimitPolicies
Table type	Multi-instance table
Row name	LimitPolicy
Restrictions	Only limit policy can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the limit policy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description information for the policy.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.

## LB/LimitRules

This table contains information about limit policy rules.

## XML structure

```
<LB>
  <LimitRules>
    <LimitRule>
      <Name></Name>
      <ID></ID>
      <AclVersion></AclVersion>
      <AclNum></AclNum>
      <AclName></AclName>
      <PerDestination></PerDestination>
      <PerSource></PerSource>
      <PerService></PerService>
      <ThresholdHigh></ThresholdHigh>
      <ThresholdLow></ThresholdLow>
    </LimitRule>
  </LimitRules>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	LimitRules
Table type	Multi-instance table
Row name	LimitRule
Restrictions	Only limit policy rule can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the limit policy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the limit policy rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
AcIVersion	Version of ACL	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
AcINum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999. By default, no ACL number is specified.	AcINum and AcIName are mutually exclusive and only one of them can be set in a single message.
AcIName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ACL name is specified.	AcINum and AcIName are mutually exclusive and only one of them can be set in a single message.
PerDestination	Enable the per-destination connection limit.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
PerSource	Enable the per-source connection limit.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
PerService	Enable the per-service connection limit.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
ThresholdHigh	High threshold of the connections.	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . By default, the column is not configured.	ThresholdHigh must be greater or equal than ThresholdLow.

Column name	Column description	Column type	Data type and restrictions	Remarks
ThresholdLow	Low threshold of the connections.	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ . By default, the column is not configured.	ThresholdHigh must be greater or equal than ThresholdLow.

## LB/Links

This table contains information about link.

## XML structure

```

<LB>
  <Links>
    <Link>
      <Name></Name>
      <Description></Description>
      <RouterType></RouterType>
      <RouterInterface></RouterInterface>
      <RouterIpv4Address></RouterIpv4Address>
      <RouterIpv6Address></RouterIpv6Address>
      <Weight></Weight>
      <Priority></Priority>
      <Cost></Cost>
      <LinkGroup></LinkGroup>
      <Shutdown></Shutdown>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitBandwidth></RateLimitBandwidth>
      <InRateLimitBandwidth></InRateLimitBandwidth>
      <OutRateLimitBandwidth></OutRateLimitBandwidth>
      <BandwidthBusyRatio></BandwidthBusyRatio>
      <InBandwidthBusyRatio></InBandwidthBusyRatio>
      <OutBandwidthBusyRatio></OutBandwidthBusyRatio>
      <BandwidthBusyRecoverRatio></BandwidthBusyRecoverRatio>
      <InBandwidthBusyRecoverRatio></InBandwidthBusyRecoverRatio>
      <OutBandwidthBusyRecoverRatio></OutBandwidthBusyRecoverRatio>
      <MaxBandwidth></MaxBandwidth>
      <InMaxBandwidth></InMaxBandwidth>
      <OutMaxBandwidth></OutMaxBandwidth>
      <VRF></VRF>
      <InheritVPN></InheritVPN>
    </Link>
  </Links>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Links
Table type	Multi-instance table
Row name	Link
Restrictions	Only link can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the link.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
RouterType	The type of router.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Configure.</li> <li>1—Auto.</li> </ul>	N/A
RouterInterface	Name of the router interface.	N/A	String, case-insensitive. Length: 1 to 47 characters. By default, no interface name is specified.	This column can be configured only when the type is Auto (1).
RouterIPv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses are not supported, and address such as 0.x.x.x are not supported either. This column can be configured only when the type is Configure (0).
RouterIPv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link local addresses are not supported. This column can be configured only when the type is Configure (0).
Weight	Weight of the link.	N/A	Unsigned integer. Value range: 1 to 255.	A larger value means a higher weight.

Column name	Column description	Column type	Data type and restrictions	Remarks
			By default, the value is 100.	
Priority	Priority of the link.	N/A	Unsigned integer. Value range: 1 to 8. By default, the value is 4.	A larger value means a higher priority.
Cost	The cost of link bandwidth.	NA	Unsigned integer. Value range: 0 to 10240. By default, the value is 0 which indicates that cost factor can be ignore when calculate proximities.	N/A
LinkGroup	Name of the link group.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no link group is specified.	N/A
Shutdown	Shutdown state for the link.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Not configured (default).</li> <li>• 1—Shutdown.</li> <li>• 2—Slow-shutdown.</li> </ul>	N/A
ProbeSuccessCriteria	Probe success criteria for the link.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates that probe success criteria is all.	N/A
MaxConnectionLimit	Maximum connections limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates no preset limit.	N/A
RateLimitConnection	Maximum connections rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0 which indicates no preset limit.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			By default, the value is 0 KB/s which indicates no preset limit.	
InRateLimitBandwidth	Inbound maximum bandwidth rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s which indicate no preset inbound limit.	N/A
OutRateLimitBandwidth	Outbound maximum bandwidth rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s which indicate no preset outbound limit.	N/A
BandwidthBusyRatio	Total bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 70.	N/A
InBandwidthBusyRatio	Inbound bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 70.	N/A
OutBandwidthBusyRatio	Outbound bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 70.	N/A
BandwidthBusyRecoverRatio	Total bound bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
InBandwidthBusyRecoverRatio	Inbound bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
OutBandwidthBusyRecoverRatio	Outbandwidth busy recovery	N/A	Unsigned integer. Value range: 1 to 100.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
verRatio	ratio.		By default, the value is 60.  The busy rate must be greater than or equal to the recovery rate.	
MaxBandwidth	Max bandwidth.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
InMaxBandwidth	Max inbound bandwidth.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutMaxBandwidth	Max outbound bandwidth.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates public network.
InheritVPN	Inherit the VPN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable inherit the VPN.</li> <li>1—Enable inherit the VPN (default).</li> </ul>	N/A

## LB/LinkProbes

This table contains information about link probe that only uses NQA template..

### XML structure

```

<LB>
  <LinkProbes>
    <LinkProbe>
      <Link></Link>
      <Probe></Probe>
    </LinkProbe>
  </LinkProbes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkProbes
Table type	Multi-instance table
Row name	LinkProbe
Restrictions	Only Link probe can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Link	Name of the link.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the link.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/LinkGroups

This table contains information about link group.

## XML structure

```
<LB>
  <LinkGroups>
    <LinkGroup>
      <Name></Name>
      <Description></Description>
      <Predictor></Predictor>
      <HashIpv4PrefixLength></HashIpv4PrefixLength>
      <HashIpv6PrefixLength></HashIpv6PrefixLength>
      <SelectLinkMinNumber></SelectLinkMinNumber>
      <SelectLinkMaxNumber></SelectLinkMaxNumber>
      <SlowOnlineEnable></SlowOnlineEnable>
      <SlowOnlineStandbyTime></SlowOnlineStandbyTime>
      <SlowOnlineRampUpTime></SlowOnlineRampUpTime>
      <Transparent></Transparent>
      <ActivateLower></ActivateLower>
      <ActivateUpper></ActivateUpper>
      <SNATPool></SNATPool>
      <FailAction></FailAction>
```

```

    <ProbeSuccessCriteria></ProbeSuccessCriteria>
    <ProximityEnable></ProximityEnable>
  </LinkGroup>
</LinkGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkGroups
Table type	Multi-instance table
Row name	LinkGroup
Restrictions	Only link group can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the link group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Predictor	Predictor algorithm for LB to select a link to forward packet.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Round-robin (default).</li> <li>1—Random.</li> <li>2—Least-connection.</li> <li>3—Hash source address.</li> <li>4—Hash source port.</li> <li>5—Hash destination address.</li> <li>6—Bandwidth.</li> <li>7—Inbound bandwidth.</li> <li>8—Outbound bandwidth.</li> <li>9—Max bandwidth.</li> <li>10—Max inbound</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			bandwidth. <ul style="list-style-type: none"> <li>11—Max outbound bandwidth.</li> </ul>	
HashIpv4PrefixLength	Length of IPv4 address mask for hash algorithm.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column can only be configured when the Predictor is hash source address (3), hash source port (4) and hash destination address (5).
HashIpv6PrefixLength	Length of IPv6 address prefix for hash algorithm.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column can only be configured when the Predictor hash source address (3), hash source port (4) and hash destination address (5).
SelectLinkMinNumber	Minimum number of the active link in the link group.	N/A	Unsigned integer. Value range: 1 to 1000. By default, the column is not configured which indicates only the real server of highest priority can be dispatched.	If one of SelectLinkMinNumber and SelectLinkMaxNumber is not configured, the other cannot be configured. The value of SelectLinkMaxNumber must be greater or equal than SelectLinkMinNumber.
SelectLinkMaxNumber	Maximum number of the active link in the link group.	N/A	Unsigned integer. Value range: 1 to 1000. By default, the column is not configured.	If one of SelectLinkMinNumber and SelectLinkMaxNumber is not configured, the other cannot be configured. The value of SelectLinkMaxNumber must be greater or equal than SelectLinkMinNumber.
SlowOnlineEnable	Enable the link group slow online.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	If the column is 0, SlowOnlineStandbyTime and SlowOnlineRampUpTime cannot be configured without default value.
SlowOnlineStandbyTime	Standby time of the slow online.	N/A	Unsigned integer. Value range: 0 to 600. Unit: second. By default, the value is 5.	N/A
SlowOnlineRampUpTime	Ramp up time of the slow online.	N/A	Unsigned integer. Value range: 3 to 600. Unit: second. By default, the value is 5.	N/A
Transparent	Disable NAT for the server farm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
ActivateLower	The status of main link group will be changed from	N/A	Unsigned integer. Value range: 1 to 99. By default, the column	If one of ActivateLower and ActivateUpper is not configured, the other cannot be configured. The value of ActivateUpper must be

Column name	Column description	Column type	Data type and restrictions	Remarks
	in use to backup when the ratio of the available links in main link group becomes smaller than this value.		is not configured which indicates if one real server is active, the server farm is active.	greater or equal than ActivateLower.
ActivateUpper	The status of main server farm will be changed from backup to in use when the ratio of the available links in main link group reaches or over this value.		Unsigned integer. Value range: 1 to 99. By default, the column is not configured.	If one of ActivateLower and ActivateUpper is not configured, the other cannot be configured. The value of ActivateUpper must be greater or equal than ActivateLower.
SNATPool	SNAT pool for the link group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
FailAction	Specify the action that the LB takes with respect to connections if any link fails in a link group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Keep (default).</li> <li>1—Reset.</li> <li>2—Reschedule.</li> </ul>	N/A
ProbeSuccessCriteria	The condition that link is available through probes.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0.	By default, indicates that when real server is available, all results of probes must be success.
ProximityEnable	Enable the proximity.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—disable (default).</li> <li>1—enable.</li> </ul>	N/A

## LB/LinkGroupProbes

This table contains information about Link Group Probe that only uses NQA template.

### XML structure

```

<LB>
  <LinkGroupProbes>
    <LinkGroupProbe>
      <LinkGroup></LinkGroup>
    </LinkGroupProbe>
  </LinkGroupProbes>
</LB>

```

```

    <Probe></Probe>
  </LinkGroupProbe>
</LinkGroupProbes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkGroupProbes
Table type	Multi-instance table
Row name	LinkGroupProbe
Restrictions	Only link group probe can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LinkGroup	Name of the link group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the link group	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/Regions

This table contains information about region.

## XML structure

```

<LB>
  <Regions>
    <Region>
      <Name></Name>
    </Region>
  </Regions>
</LB>

```

## Table description

Item	Description
Feature name	LB

Table name	Regions
Table type	Multi-instance table
Row name	Region
Restrictions	Only region can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## LB/RegionISPs

This table contains information about region ISP.

## XML structure

```

<LB>
  <RegionISPs>
    <RegionISP>
      <Region></Region>
      <ISP></ISP>
    </RegionISP>
  </RegionISPs>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RegionISPs
Table type	Multi-instance table
Row name	RegionISP
Restrictions	Only Region ISP can be configured by this table.
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Region	Name of the region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ISP	ISP for the region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## LB/TopolgyRegions

This table contains information about topolgy region.

## XML structure

```
<LB>
  <TopolgyRegions>
    <TopolgyRegion>
      <RegionName></RegionName>
      <Ipv4Address></Ipv4Address>
      <Ipv4MaskLength></Ipv4MaskLength>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <Weight></Weight>
    </TopolgyRegion>
  </TopolgyRegions>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	TopolgyRegions
Table type	Multi-instance table
Row name	TopolgyRegion
Restrictions	Only TopolgyRegion can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RegionName	Name of the topology region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
Ipv4MaskLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column cannot be configured if no IPv4 address is configured.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link local addresses are not supported.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column cannot be configured if no IPv6 address is configured.
Weight	Weight of the topology region.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.

## LB/TopologyRegionIPv4s

This table contains information about an IPv4 topology region.

## XML structure

```

<LB>
  <TopologyRegionIPv4s>
    <TopologyRegionIPv4>
      <RegionName></RegionName>
      <IPv4Address></IPv4Address>
      <IPv4MaskLength></IPv4MaskLength>
      <Weight></Weight>
    </TopologyRegionIPv4>
  </TopologyRegionIPv4s>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	TopolgyRegionIPv4s
Table type	Multi-instance table
Row name	TopolgyRegionIPv4
Restrictions	Only TopolgyRegionIPv4 can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RegionName	Name of the topolgy region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPv4Addresses	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
IPv4MaskLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column cannot be configured if no IPv4 address is configured.
Weight	Weight of the topolgy region.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.

## LB/TopolgyRegionIPv6s

This table contains information about an IPv6 topolgy region.

## XML structure

```
<LB>
  <TopolgyRegionIPv6s>
    <TopolgyRegionIPv6>
      <RegionName></RegionName>
      <IPv6Address></IPv6Address>
      <IPv6PrefixLength></IPv6PrefixLength>
      <Weight></Weight>
```

```

    </TopolgyRegionIPv6>
  </TopolgyRegionIPv6s>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	TopolgyRegion IPv6s
Table type	Multi-instance table
Row name	TopolgyRegion IPv6
Restrictions	Only TopolgyRegion IPv6 can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RegionName	Name of the topolgy region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPv6Addresses	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses, and link local addresses are not supported.
IPv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column cannot be configured if no IPv6 address is configured.
Weight	Weight of the topolgy region.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.

## LB/DNSListeners

This table contains information about a DNS listener.

## XML structure

```

<LB>
  <DNSListeners>
    <DNSListener>
      <Name></Name>
    </DNSListener>
  </DNSListeners>
</LB>

```

```

    <VRF></VRF>
    <Ipv4Address></Ipv4Address>
    <Ipv6Address></Ipv6Address>
    <PortNumber></PortNumber>
    <IPv6PortNumber></IPv6PortNumber>
    <ServiceEnable></ServiceEnable>
    <Fallback></Fallback>
  </DNSListener>
</DNSListeners>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSListeners
Table type	Multi-instance table
Row name	DNSListener
Restrictions	Only DNS Listener can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS listener.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses and broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link local addresses are not supported.
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 1 to 65535. By default, the value	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			is 53.	
IPv6PortNumber	Number of IPv6 port.	N/A	Unsigned integer. Value range: 1 to 65535. By default, the value is 53.	N/A
ServiceEnable	Enable the DNS listener.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
Fallback	Fallback action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—No-response.</li> <li>1—Reject(default).</li> <li>2—Dns proxy.</li> </ul>	N/A

## LB/DNSProxies

This table contains information about DNS proxies.

### XML structure

```

<LB>
  <DNSProxies>
    <DNSProxy>
      <Name></Name>
      <Type></Type>
      <VRF></VRF>
      <PortNumber></PortNumber>
      <ServiceEnable></ServiceEnable>
      <DefaultDNSServerPool></DefaultDNSServerPool>
      <Policy></Policy>
      <BusyProtectEnable></BusyProtectEnable>
      <ConnSynEnable></ConnSynEnable>
      <StickySynEnable></StickySynEnable>
      <StickySyncType></StickySyncType>
      <StickyGroup></StickyGroup>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
    </DNSProxy>
  </DNSProxies>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSProxies
Table type	Multi-instance table
Row name	DNSProxy
Restrictions	Only DNS proxy can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS proxy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates public network.
Type	Type of the DNS proxy	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—UDP</li> </ul>	When a DNS proxy is created, the column must be specified. Once created, this column cannot be changed.
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 1 to 65535. By default, the value is 53.	N/A
ServiceEnable	Enable the DNS proxy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
DefaultDNS ServerPool	Name of the default DNS server pool.	N/A	String, case-insensitive. <ul style="list-style-type: none"> <li>Length: 1 to 63 characters.</li> </ul>	N/A
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
BusyProtect Enable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
ConnSynEnable	Enable the connection synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
StickySynEnable	Enable the sticky synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
StickySyncType	Sticky synchronization type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	This column can only be configured when the StickySynEnable is Enable (1).
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the DefaultDNSServerPool is not configured.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	The column cannot be configured if no IPv4 address is configured.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link-local addresses are not supported.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column cannot be configured if no IPv6 address is configured.

## LB/DNSServers

This table contains information about DNS server.

### XML structure

```

<LB>
  <DNSServers>
    <DNSServer>
      <Name></Name>
    
```



```

<Description></Description>
<AutoAllocAddress></AutoAllocAddress>
<Ipv4Address></Ipv4Address>
<Ipv6Address></Ipv6Address>
<PortNumber></PortNumber>
<DNSServerPool></DNSServerPool>
<Link></Link>
<Weight></Weight>
<Priority></Priority>
<ProbeSuccessCriteria></ProbeSuccessCriteria>
</DNSServer>
</DNSServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSServers
Table type	Multi-instance table
Row name	DNSServer
Restrictions	Only DNS server can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the DNS server.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
AutoAllocAddress	Automatic allocable address for DNS server. Include IPv4 address and IPv6 address.	N/A	enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	This column cannot be configured with Ipv4Address or Ipv6Address at the same time.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses are not supported, and address such as 0.x.x.x are not supported either. This column cannot be configured

Column name	Column description	Column type	Data type and restrictions	Remarks
				with AutoAllocAddress at the same time.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback address, multicast address, link local address and 0::0 address are not supported. This column cannot be configured with AutoAllocAddress at the same time.
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 0 to 65535. By default, the value is 0.	N/A
DNSServerPool	Name of the DNS server pool.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no DNS server pool is specified.	N/A
Link	Name of the Link.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Weight	Weight of the DNS server.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.
Priority	Priority of the DNS server.	N/A	Unsigned integer. Value range: 1 to 8. By default, the value is 4.	A larger value means a higher priority.
ProbeSuccessCriteria	Probe success criteria for the real server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates that probe success criteria is all.	N/A

## LB/DNSServerProbes

This table contains information about DNS server probe that only uses NQA template.

### XML structure

```
<LB>
  <DNSServerProbes>
```

```

    <DNSServerProbe>
      <DNSServer></DNSServer>
      <Probe></Probe>
    </DNSServerProbe>
  </DNSServerProbes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerProbes
Table type	Multi-instance table
Row name	DNSServerProbe
Restrictions	Only DNS server probe can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSServer	Name of the DNS server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the DNS server.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/DNSServerPools

This table contains information about DNS server pool.

## XML structure

```

<LB>
  <DNSServerPools>
    <DNSServerPool>
      <Name></Name>
      <Description></Description>
      <Predictor></Predictor>
      <HashIpv4PrefixLength></HashIpv4PrefixLength>
      <HashIpv6PrefixLength></HashIpv6PrefixLength>
      <SelectServerMinNumber></SelectServerMinNumber>
      <SelectServerMaxNumber></SelectServerMaxNumber>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
    </DNSServerPool>
  </DNSServerPools>
</LB>

```

```

    </DNSServerPool>
  </DNSServerPools>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerPools
Table type	Multi-instance table
Row name	DNSServerPool
Restrictions	Only DNS server pool can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the DNS server pool.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
Predictor	Predictor algorithm for LB to select a DNS server to a DNS request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Round-robin (default).</li> <li>1—Random.</li> <li>2—Bandwidth.</li> <li>3—Inbound bandwidth.</li> <li>4—Outbound bandwidth.</li> <li>5—Max bandwidth.</li> <li>6—Max inbound bandwidth.</li> <li>7—Max outbound bandwidth.</li> <li>8—Hash source address.</li> <li>9—Hash source port.</li> <li>10—Hash destination address.</li> </ul>	N/A
HashIpv4Pr	Length of IPv4 address mask	N/A	Unsigned integer.	The column can only be configured when the Predictor is hash source

Column name	Column description	Column type	Data type and restrictions	Remarks
efixLength	for hash algorithm.		Value range: 0 to 32. By default, the value is 32.	address (3), hash source port (4) and hash destination address (5).
HashIpv6PrefixLength	Length of IPv6 address prefix for hash algorithm.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	The column can only be configured when the Predictor hash source address (3), hash source port (4) and hash destination address (5).
SelectServerMinNumber	Minimum number of the active DNS server in the DNS server pool.	N/A	Unsigned integer. Value range: 1 to 1000. By default, the column is not configured which indicates only the real server of highest priority can be dispatched.	If one of SelectServerMinNumber and SelectServerMaxNumber is not configured, the other cannot be configured. The value of SelectServerMaxNumber must be greater or equal than SelectServerMinNumber.
SelectServerMaxNumber	Maximum number of the active DNS server in the DNS server pool.	N/A	Unsigned integer. Value range: 1 to 1000. By default, the column is not configured.	If one of SelectServerMinNumber and SelectServerMaxNumber is not configured, the other cannot be configured. The value of SelectServerMaxNumber must be greater or equal than SelectServerMinNumber.
ProbeSuccessCriteria	The condition that DNS server is available through probes.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0.	By default, indicates that when DNS server is available, all results of probes must be success.

## LB/DNSServerPoolProbes

This table contains information about DNS server pool probe that only uses NQA template.

### XML structure

```

<LB>
  <DNSServerPoolProbes>
    <DNSServerPoolProbe>
      <DNSServerPool></DNSServerPool>
      <Probe></Probe>
    </DNSServerPoolProbe>
  </DNSServerPoolProbes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerPoolProbes
Table type	Multi-instance table
Row name	DNSServerPoolProbe
Restrictions	Only DNS server pool probe can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSServerPool	Name of the DNS server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the DNS server pool.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/Log

This table contains information about LB logs.

## XML structure

```
<LB>
  <Log>
    <BaseEnable></BaseEnable>
    <NatEnable></NatEnable>
    <BandwidthBusyEnable></BandwidthBusyEnable>
  </Log>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	Log
Table type	Single-instance table
Row name	N/A
Restrictions	Only log can be gotten by this table.

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BaseEnable	Enable the base log of LB.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable (default).</li> </ul>	N/A
NatEnable	Enable the NAT log of LB.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
BandwidthBusyEnable	Enable the bandwidth busy log of LB.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/ServerFarmMembers

This table contains information about server farm member.

## XML structure

```

<LB>
  <ServerFarmMembers>
    <ServerFarmMember>
      <ServerFarm></ServerFarm>
      <RealServer></RealServer>
      <PortNumber></PortNumber>
      <Description></Description>
      <Weight></Weight>
      <Priority></Priority>
      <Shutdown></Shutdown>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitHTTPRequest></RateLimitHTTPRequest>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <ProbeList>
        <Probe></Probe>
        <NQADefaultPortEnable></NQADefaultPortEnable>
      </ProbeList>
    </ServerFarmMember>
  </ServerFarmMembers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ServerFarmMembers
Table type	Multi-instance table
Row name	ServerFarmMember
Restrictions	Only server farm member can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerFarm	Name of the server farm.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RealServer	Name of the server farm member.	Index	String, case-insensitive. Length: 1 to 63 characters.	The server farm member must also be created in real server view.
PortNumber	Number of port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Description	Description of the server farm member.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Weight	Weight of the server farm member.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.
Priority	Priority of the server farm member.	N/A	Unsigned integer. Value range: 1 to 8. By default, the value is 4.	A larger value means a higher priority.
Shutdown	Shutdown state for the server farm member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not configured (default).</li> <li>1—Shutdown.</li> <li>2—Slow-shutdown.</li> </ul>	N/A
MaxConnectionLimit	Maximum connections limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			By default, the value is 0 which indicates no preset limit.	
RateLimitConnection	Maximum connections rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0 which indicates no preset limit.	N/A
RateLimitHTTPRequest	Maximum HTTP request rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: qps. By default, the value is 0, which indicates the rate is not limit.	N/A
ProbeSuccessCriteria	Probe success criteria for the server farm member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates that probe success criteria is all.	N/A
ProbeList	Probe method list for the server farm member.	Data structure	Members include: <ul style="list-style-type: none"> <li>Probe.</li> </ul>	N/A
Probe	Probe method for the server farm member.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
NQADefaultPortEnable	Enable detection using the default port of the NQA template.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

## LB/LinkGroupMembers

This table contains information about link group member.

### XML structure

```

<LB>
  <LinkGroupMembers>
    <LinkGroupMember>
      <LinkGroup></LinkGroup>

```

```

<Link></Link>
<Description></Description>
<Weight></Weight>
<Priority></Priority>
<Shutdown></Shutdown>
<MaxConnectionLimit></MaxConnectionLimit>
<RateLimitConnection></RateLimitConnection>
<ProbeSuccessCriteria></ProbeSuccessCriteria>
<ProbeList>
  <Probe></Probe>
</ProbeList>
</LinkGroupMember>
</LinkGroupMembers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkGroupMembers
Table type	Multi-instance table
Row name	LinkGroupMember
Restrictions	Only link group member can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LinkGroup	Name of the link group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Link	Name of the link group member.	Index	String, case-insensitive. Length: 1 to 63 characters.	The link group member must also be created in link view.
Description	Description of the link group member.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Weight	Weight of the link group member.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.
Priority	Priority of the link group	N/A	Unsigned integer.	A larger value means a higher priority.

Column name	Column description	Column type	Data type and restrictions	Remarks
	member.		Value range: 1 to 8. By default, the value is 4.	
Shutdown	Shutdown state for the link group member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not configured (default).</li> <li>1—Shutdown.</li> <li>2—Slow-shutdown.</li> </ul>	N/A
MaxConnectionLimit	Maximum connections limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates no preset limit.	N/A
RateLimitConnection	Maximum connections rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0 which indicates no preset limit.	N/A
ProbeSuccessCriteria	Probe success criteria for the link group member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates that probe success criteria is all.	N/A
ProbeList	Probe method list for the link group member.	Data structure	Members include: <ul style="list-style-type: none"> <li>Probe.</li> </ul>	N/A
Probe	Probe method for the link group member.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/DNSServerPoolMembers

This table contains information about DNS server pool member.

### XML structure

```

<LB>
  <DNSServerPoolMembers>
    <DNSServerPoolMember>
      <DNSServerPool></DNSServerPool>

```

```

    <DNSServer></DNSServer>
    <PortNumber></PortNumber>
    <Description></Description>
    <Weight></Weight>
    <Priority></Priority>
    <ProbeSuccessCriteria></ProbeSuccessCriteria>
    <ProbeList>
      <Probe></Probe>
    </ProbeList>
  </DNSServerPoolMember>
</DNSServerPoolMembers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerPoolMembers
Table type	Multi-instance table
Row name	DNSServerPoolMember
Restrictions	Only DNS server pool member can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSServerPool	Name of the DNS server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
DNSServer	Name of the DNS server pool member.	Index	String, case-insensitive. Length: 1 to 63 characters.	The DNS server pool member must also be created in DNS server view.
PortNumber	Number of port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Description	Description of the DNS server pool member.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Weight	Weight of the DNS server pool member.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.

Column name	Column description	Column type	Data type and restrictions	Remarks
Priority	Priority of the DNS server pool member.	N/A	Unsigned integer. Value range: 1 to 8. By default, the value is 4.	A larger value means a higher priority.
ProbeSuccessCriteria	Probe success criteria for the DNS server pool member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates that probe success criteria is all.	N/A
ProbeList	Probe method list for the DNS server pool member.	Data structure	Members include: <ul style="list-style-type: none"> <li>Probe.</li> </ul>	N/A
Probe	Probe method for the DNS server pool member.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/SnatArpInterfaces

This table contains information about SNAT interfaces.

### XML structure

```

<LB>
  <SnatArpInterfaces>
    <SnatArpInterface>
      <SnatName></SnatName>
      <IfList>
        <IfIndex></IfIndex>
      </IfList>
    </SnatArpInterface>
  </SnatArpInterfaces>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	SnatArpInterfaces
Table type	Multi-instance table
Row name	SnatArpInterface
Restrictions	Only SNAT interfaces can be configured by this table.

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SnatName	Name of the SNAT pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IfList	Interface index list	Data structure	Members include: <ul style="list-style-type: none"> <li>IfIndex.</li> </ul>	N/A
IfIndex	Interface index	N/A	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## LB/VServerArpInterfaces

This table contains information about virtual server interfaces.

## XML structure

```

<LB>
  <VServerArpInterfaces>
    <VServerArpInterface>
      <VServerName></VServerName>
      <IfList>
        <IfIndex></IfIndex>
      </IfList>
    </VServerArpInterface>
  </VServerArpInterfaces>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	VServerArpInterfaces
Table type	Multi-instance table
Row name	VServerArpInterface
Restrictions	Only virtual server interfaces can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VServerName	Name of the virtual server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IfList	Interface index list	Data structure	Members include: <ul style="list-style-type: none"><li>IfIndex.</li></ul>	N/A
IfIndex	Interface index	N/A	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## LB/ProbeTemplate

This table contains information about probe template that is used for proximity.

## XML structure

```
<LB>
  <ProbeTemplates>
    <ProbeTemplate>
      <Name></Name>
      <Description></Description>
      <Type></Type>
      <Frequency></Frequency>
      <Timeout></Timeout>
    </ProbeTemplate>
  </ProbeTemplates>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ProbeTemplate
Table type	Multi-instance table
Row name	N/A
Restrictions	Only probe template can be gotten by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description information for the probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Type	Type of the probe template.	N/A	Enumeration: • 0—ICMP.	When a probe template is created, the column must be specified.
Frequency	Frequency of the probe template.	N/A	Unsigned integer. Value range: 5 to 604800. Unit: second. By default, the value is 300s.	N/A
Timeout	Timeout time of the probe template.	N/A	Unsigned integer. Value range: 1 to 60. Unit: second. By default, the value is 3s.	N/A

## LB/ISPWhoisMntners

This table contains information about ISP whois-mntnr.

## XML structure

```

<LB>
  <ISPWhoisMntners>
    <ISPWhoisMntner>
      <ISPName></ISPName>
      <WhoisMntner></WhoisMntner>
    </ISPWhoisMntner>
  </ISPWhoisMntners>
</LB>

```

## Table description

Item	Description
Feature name	LB



Table name	ISPWhoisMntner
Table type	Multi-instance table
Row name	ISPWhoisMntner
Restrictions	Only ISP whois-mntner can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ISPName	Name of the ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
WhoisMntner	Name of the whois-mntner.	Index	String, case-sensitive. Length: 1 to 63 characters.	Number of mntner objects in the ISP cannot exceed the limit 10. A whois-mntner object only can be configured by one ISP.

## LB/ISPUpdate

This table contains information about ISP update.

## XML structure

```

<LB>
  <ISPUpdate>
    <Enable></Enable>
    <Frequency></Frequency>
    <Type></Type>
    <Domain></Domain>
    <Ipv4Address></Ipv4Address>
  </ISPUpdate>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ISPUpdate
Table type	Single-instance table
Row name	N/A

Restrictions	Only ISP update can be configured by this table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enable the ISP update.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
Frequency	Frequency of ISP update.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Per-day.</li> <li>1—Per-week (default).</li> <li>2—Per-month.</li> </ul>	N/A
Type	Type of the whois server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Domain.</li> <li>1—IPv4 address.</li> </ul>	N/A
Domain	Domain of the maintainer.	N/A	String, case-insensitive. Length: 1 to 253 characters. By default, no domain is specified.	The string can contain letters, numbers, hyphens (-), underscores (_), and dots (.). This column can be configured only when the type is Domain(0).
Ipv4Address	Address of the maintainer.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x are not supported. This column can be configured only when the type is IPv4 address(1).

## LB/DNSCachesGlobalCfg

This table contains information about DNS global configuration.

## XML structure

```

<LB>
  <DNSCachesGlobalCfg>
    <Timeout></Timeout>
  </DNSCachesGlobalCfg>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSCachesCfg
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Timeout	Aging time of DNS cache.	Index	Unsigned integer. Value range: 1 to 1440. Unit: minute	N/A

## LB/RSTProbeTemplate

This table contains information about RST probe template.

## XML structure

```
<LB>
  <RSTProbeTemplates>
    <RSTProbeTemplate>
      <Name></Name>
      <Description></Description>
      <TimeInterval></TimeInterval>
      <PacketLimit></PacketLimit>
      <ProtectAction></ProtectAction>
      <BusyTimeout></BusyTimeout>
      <RetryTimes></RetryTimes>
    </RSTProbeTemplate>
  </RSTProbeTemplates>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	RSTProbeTemplates
Table type	Multi-instance table

Row name	RSTProbeTemplate
Restrictions	Only RST probe template can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the RST probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description information for the RST probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
TimeInterval	Monitor time interval.	N/A	Unsigned integer. Value range: 5 to 255. By default, the value is 10. Unit: second.	N/A
PacketLimit	Packet limit of RST probe template.	N/A	Unsigned integer: Value range: 1 to 4294967295. By default, the value is 1000000.	N/A.
ProtectAction	Protection action of RST probe template.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Busy (default).</li> <li>1—Auto-shutdown.</li> </ul>	N/A
BusyTimeout	Busy time of real server.	N/A	Unsigned integer. Value range: 5 to 3600. By default, the value is 30. Unit: second.	The busy type protection action is valid.
RetryTimes	Busy protection times.	N/A	Unsigned integer. Value range: 0 to 255. By default, the value is 0.	The busy type protection action is valid and value 0 means keep retrying.

## LB/ZeroWindowProbeTemplate

This table contains information about Zero Window probe template.

## XML structure

```
<LB>
  <ZeroWindowProbeTemplates>
    <ZeroWindowProbeTemplate>
      <Name></Name>
      <Description></Description>
      <TimeInterval></TimeInterval>
      <RatioLimit></RatioLimit>
      <ProtectAction></ProtectAction>
      <BusyTimeout></BusyTimeout>
      <RetryTimes></RetryTimes>
    </ZeroWindowProbeTemplate>
  </ZeroWindowProbeTemplates>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ZeroWindowProbeTemplates
Table type	Multi-instance table
Row name	ZeroWindowProbeTemplate
Restrictions	Only zero window probe template can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the zero window probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description information for the zero window probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
TimeInterval	Monitor time interval.	N/A	Unsigned integer. Value range: 5 to 255. By default, the value is 10. Unit: second.	N/A
RatioLimit	Ratio limit of zero window	N/A	Unsigned integer: Value range: 1 to 100.	N/A.

Column name	Column description	Column type	Data type and restrictions	Remarks
	probe template.		By default, the value is 40. Unit: %	
ProtectAction	Protection action of zero window probe.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Busy (default).</li> <li>1—Auto-shutdown.</li> </ul>	N/A.
BusyTimeout	Busy time of real server.	N/A	Unsigned integer. Value range: 5 to 3600. By default, the value is 30. Unit: second.	The busy type protection action is valid.
RetryTimes	Busy protection times.	N/A	Unsigned integer. Value range: 0 to 255. By default, the value is 0	The busy type protection action is valid and value 0 means keep retrying.

## LB/ProbeTemplate

This table contains information about probe template that is used for proximity.

## XML structure

```

<LB>
  <ProbeTemplates>
    <ProbeTemplate>
      <Name></Name>
      <Description></Description>
      <Type></Type>
      <Frequency></Frequency>
      <Timeout></Timeout>
    </ProbeTemplate>
  </ProbeTemplates>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ProbeTemplate
Table type	Multi-instance table
Row name	N/A

Restrictions	Only probe template can be gotten by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description information for the probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Type	Type of the probe template.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—ICMP.</li> </ul>	When a probe template is created, the column must be specified.
Frequency	Frequency of the probe template.	N/A	Unsigned integer. Value range: 1 to 604800. Unit: second. By default, the value is 300s.	N/A
Timeout	Timeout time of the probe template.	N/A	Unsigned integer. Value range: 1 to 60. Unit: second. By default, the value is 3s.	N/A

## LB/HTTPPassiveProbeTemplate

This table contains information about an HTTP passive probe template.

## XML structure

```

<LB>
  <HTTPPassiveProbeTemplates>
    <HTTPPassiveProbeTemplate>
      <Name></Name>
      <Description></Description>
      <MonitorInterval></MonitorInterval>
      <URLThreshold></URLThreshold>
      <Timeout></Timeout>
      <URLList>
        <CheckUrl></CheckUrl>
      </URLList>
    </HTTPPassiveProbeTemplate>
  </HTTPPassiveProbeTemplates>
</LB>

```

```

<StatusCodeList>
  <StatusCode></StatusCode>
</StatusCodeList>
</HTTPPassiveProbeTemplate>
</HTTPPassiveProbeTemplates>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPPassiveProbeTemplates
Table type	Multi-instance table
Row name	HTTPPassiveProbeTemplate
Restrictions	Only HTTP passive probe template can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the HTTP passive probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description for the HTTP passive probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
MonitorInterval	Monitor time interval.	N/A	Unsigned integer. Value range: 1 to 5. By default, the value is 1. Unit: second.	N/A
URLThreshold	URL threshold of the HTTP passive probe template.	N/A	Unsigned integer: Value range: 1 to 4294967295. By default, the value is 10000.	N/A.
Timeout	Response timeout of the HTTP passive probe template.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 5. Unit: second.	N/A
URLList	URL list for the HTTP passive	Data structure	Members include:	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	probe template.		URL.	
CheckUrl	URL for the HTTP passive probe template.	N/A	String, Length: 1 to 255 characters.	A URL list can contain a maximum of 10 URLs.
StatusCodeList	Status code list for the HTTP passive probe template.	Data structure	Members include: StatusCode.	N/A
StatusCode	Status code for the HTTP passive probe template.	N/A	Unsigned integer.	A status code list can contain a maximum of 10 status codes.

## LB/HTTPStatsParameterObjectGroups

This table contains information about object group of HTTP statistics parameter.

### XML structure

```

<LB>
  <HTTPStatsParameterObjectGroups>
    <HTTPStatsParameterObjectGroup>
      <ParameterName></ParameterName>
      <ObjectGroupName></ObjectGroupName>
    </HTTPStatsParameterObjectGroup>
  </HTTPStatsParameterObjectGroups>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPStatsParameterObjectGroups
Table type	Multi-instance table
Row name	HTTPStatsParameterObjectGroup
Restrictions	Only object group of HTTP statistics parameter can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ObjectGroupName	Name of the object group.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A

## LB/HTTPStatsParameterNodes

This table contains information about HTTP statistics parameter node.

## XML structure

```
<LB>
  <HTTPStatsParameterNodes>
    <HTTPStatsParameterNode>
      <ParameterName></ParameterName>
      <NodeName></NodeName>
      <Description></Description>
    </HTTPStatsParameterNode>
  </HTTPStatsParameterNodes>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	HTTPStatsParameterNodes
Table type	Multi-instance table
Row name	HTTPStatsParameterNode
Restrictions	Only HTTP statistics parameter node can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
NodeName	Name of the node.	Index	String. Length: 1 to 63 characters.	N/A
Description	Description of the node profile.	N/A	String. Length: 0 to 127 characters.	N/A

## LB/HTTPStatsParameterNodeRules

This table contains information about match rule of HTTP statistics parameter node.

### XML structure

```

<LB>
  <HTTPStatsParameterNodeRules>
    <HTTPStatsParameterNodeRule>
      <ParameterName></ParameterName>
      <NodeName></NodeName>
      <ID></ID>
      <Type></Type>
      <URL></URL>
    </HTTPStatsParameterNodeRule>
  </HTTPStatsParameterNodeRules>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPStatsParameterNodeRules
Table type	Multi-instance table
Row name	HTTPStatsParameterNodeRule
Restrictions	Only rule of HTTP statistics parameter node can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
NodeName	Name of the node.	Index	String. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the statistics match rule.	Index	Unsigned integer. Value range: 1 to 256.	N/A
Type	Type of the statistics match rule.	N/A	Enumeration: • 0—URL.	N/A
URL	Regular expression used to match URLs.	N/A	String. Length: 1 to 255 characters.	This column can only be configured when the Type is URL(0).

## LB/HTTPStatsParameterNodeRuleLists

This table contains batching information about match rules of HTTP statistics parameter node.

### XML structure

```

<LB>
  <HTTPStatsParameterNodeRuleLists>
    <HTTPStatsParameterNodeRuleList>
      <ParameterName></ParameterName>
      <NodeName></NodeName>
      <IsIncrement></IsIncrement>
      <RuleList>
        <ID></ID>
        <Type></Type>
        <URL></URL>
      </RuleList>
    </HTTPStatsParameterNodeRuleList>
  </HTTPStatsParameterNodeRuleLists>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPStatsParameterNodeRuleLists
Table type	Multi-instance table
Row name	HTTPStatsParameterNodeRuleList
Restrictions	Only rule of HTTP statistics parameter node can be configured by this table.

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
NodeName	Name of the node.	Index	String. Length: 1 to 63 characters.	N/A
IsIncrement	Whether to increment the data.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
RuleList	List of rule.	Data structure	Members include: <ul style="list-style-type: none"> <li>ID</li> <li>Type</li> <li>URL</li> </ul>	N/A
ID	ID of the statistics match rule.	N/A	Unsigned integer. Value range: 1 to 256.	N/A
Type	Type of the statistics match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—URL.</li> </ul>	N/A
URL	Regular expression used to match URLs.	N/A	String. Length: 1 to 255 characters.	This column can only be configured when the Type is URL(0).

## LB/TCPParameterOptions

This table contains information about TCP options.

## XML structure

```

<LB>
  <TCPParameterOptions>
    <TCPParameterOption>
      <Parameter></Parameter>
      <Number></Number>
      <Type></Type>
      <ValueType></ValueType>
    </TCPParameterOption>
  </TCPParameterOptions>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	TCPPParameterOptions
Table type	Multi-instance table
Row name	TCPPParameterOption
Restrictions	Only TCP parameter option can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Parameter	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Number	Number of the TCP option.	Index	Unsigned integer. Value range: 2 to 254.	Value range is 6、7、9-18、22-254,when the Type is Option Insert.
Type	Type of the option process.	Index	Enumeration: <ul style="list-style-type: none"><li>0—Option Remove.</li><li>1—Option Insert.</li></ul>	N/A
ValueType	Type of the insert value.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Src addr.</li></ul>	This column has validity in Option Insert process. You cannot configure this column if the type is not Option Insert.

# Contents

LB.....	1
LB/HTTPVirtualServers .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
LB/GenericVirtualServers .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
LB/RADIUSVirtualServers .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
LB/SIPVirtualServers .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
LB/MySQLVirtualServers .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
LB/VirtualServerSummaries .....	24
XML structure .....	24
Table description .....	25
Columns .....	25
LB/VirtualServerStats .....	26
XML structure .....	26
Table description .....	27
Columns .....	27
LB/RealServers .....	29
XML structure .....	30
Table description .....	30
Columns .....	31
LB/RealServerProbes .....	33
XML structure .....	33
Table description .....	34
Columns .....	34
LB/RealServerStats .....	34
XML structure .....	34
Table description .....	35
Columns .....	35
LB/ServerFarms .....	37
XML structure .....	38
Table description .....	38
Columns .....	39
LB/ServerFarmProbes .....	43
XML structure .....	43
Table description .....	43
Columns .....	43
LB/ServerFarmStats .....	43
XML structure .....	44
Table description .....	44
Columns .....	44
LB/SNATPools .....	46
XML structure .....	46
Table description .....	46
Columns .....	47

LB/NewSNATPools .....	47
XML structure .....	47
Table description .....	47
Columns .....	48
LB/SNATPoolsIpsv4Infos .....	48
XML structure .....	48
Table description .....	48
Columns .....	49
LB/SNATPoolsIpsv6Infos .....	49
XML structure .....	49
Table description .....	49
Columns .....	49
LB/IPParameters .....	50
XML structure .....	50
Table description .....	50
Columns .....	50
LB/TCPParameters .....	51
XML structure .....	51
Table description .....	51
Columns .....	52
LB/HTTPParameters .....	53
XML structure .....	53
Table description .....	53
Columns .....	54
LB/HTTPCompressionParameters .....	55
XML structure .....	55
Table description .....	56
Columns .....	56
LB/HTTPStatisticsParameter .....	57
XML structure .....	57
Table description .....	57
Columns .....	58
LB/OneConnectParameters .....	58
XML structure .....	58
Table description .....	58
Columns .....	59
LB/MySQLParameters .....	59
XML structure .....	59
Table description .....	60
Columns .....	60
LB/ HTTPCompressionParameterRules .....	61
XML structure .....	61
Table description .....	61
Columns .....	61
LB/ParameterSummaries .....	62
XML structure .....	62
Table description .....	62
Columns .....	63
LB/AddressPortStickyGroups .....	63
XML structure .....	63
Table description .....	63
Columns .....	64
LB/RADIUSStickyGroups .....	65
XML structure .....	65
Table description .....	65
Columns .....	66
LB/PayloadStickyGroups .....	66
XML structure .....	66
Table description .....	67
Columns .....	67
LB/HTTPContentStickyGroups .....	68
XML structure .....	68



Table description .....	68
Columns .....	68
LB/HTTPCookieStickyGroups .....	69
XML structure .....	69
Table description .....	70
Columns .....	70
LB/HTTPHeaderStickyGroups .....	71
XML structure .....	71
Table description .....	72
Columns .....	72
LB/SSLStickyGroups .....	73
XML structure .....	73
Table description .....	73
Columns .....	74
LB/SIPStickyGroups .....	74
XML structure .....	74
Table description .....	75
Columns .....	75
LB/StickyGroupSummaries .....	75
XML structure .....	75
Table description .....	76
Columns .....	76
LB/Policies .....	76
XML structure .....	76
Table description .....	77
Columns .....	77
LB/ClassActions .....	77
XML structure .....	78
Table description .....	78
Columns .....	78
LB/GenericActions .....	78
XML structure .....	79
Table description .....	79
Columns .....	79
LB/RADIUSActions .....	80
XML structure .....	80
Table description .....	81
Columns .....	81
LB/LinkGenericActions .....	82
XML structure .....	82
Table description .....	82
Columns .....	82
LB/DNSActions .....	83
XML structure .....	83
Table description .....	84
Columns .....	84
LB/HTTPActions .....	85
XML structure .....	85
Table description .....	85
Columns .....	86
LB/HTTPActionResponseFiles .....	88
XML structure .....	88
Table description .....	88
Columns .....	88
LB/HTTPActionRewriteURLs .....	89
XML structure .....	89
Table description .....	89
Columns .....	89
LB/HTTPActionSSLURLs .....	90
XML structure .....	90
Table description .....	90
Columns .....	91

LB/HTTPActionHeaders .....	91
XML structure .....	91
Table description .....	91
Columns .....	92
LB/ActionSummaries .....	92
XML structure .....	92
Table description .....	93
Columns .....	93
LB/Classes .....	93
XML structure .....	93
Table description .....	94
Columns .....	94
LB/GenericMatchRules .....	94
XML structure .....	94
Table description .....	95
Columns .....	95
LB/LinkGenericMatchRules .....	97
XML structure .....	97
Table description .....	97
Columns .....	98
LB/DNSMatchRules .....	99
XML structure .....	99
Table description .....	100
Columns .....	100
LB/HTTPMatchRules .....	102
XML structure .....	102
Table description .....	103
Columns .....	103
LB/RADIUSMatchRules .....	105
XML structure .....	105
Table description .....	105
Columns .....	106
LB/MySQLMatchRules .....	107
XML structure .....	107
Table description .....	107
Columns .....	107
LB/ISPs .....	109
XML structure .....	109
Table description .....	109
Columns .....	109
LB/ISPFile .....	110
XML structure .....	110
Table description .....	110
Columns .....	110
LB/FlowMode .....	111
XML structure .....	111
Table description .....	111
Columns .....	111
LB/Ipv4ISPAddressGroups .....	111
XML structure .....	111
Table description .....	112
Columns .....	112
LB/Ipv6ISPAddressGroups .....	112
XML structure .....	112
Table description .....	113
Columns .....	113
LB/ProximityParameters .....	113
XML structure .....	114
Table description .....	114
Columns .....	114
LB/VRFProximityParameters .....	115
XML structure .....	115

Table description.....	115
Columns.....	116
LB/ProximityProbeRules.....	116
XML structure.....	117
Table description.....	117
Columns.....	117
LB/VRFProximityProbeRules.....	117
XML structure.....	118
Table description.....	118
Columns.....	118
LB/Ipv4ProximityTables.....	119
XML structure.....	119
Table description.....	119
Columns.....	119
LB/Ipv6ProximityTables.....	120
XML structure.....	120
Table description.....	121
Columns.....	121
LB/Ipv4ProximityNodes.....	122
XML structure.....	122
Table description.....	123
Columns.....	123
LB/Ipv6ProximityNodes.....	124
XML structure.....	124
Table description.....	124
Columns.....	125
LB/Specifications.....	125
XML structure.....	125
Table description.....	126
Columns.....	126
LB/ALG.....	126
XML structure.....	126
Table description.....	127
Columns.....	127
LB/ProximityStats.....	128
XML structure.....	128
Table description.....	129
Columns.....	129
LB/LimitPolicies.....	130
XML structure.....	130
Table description.....	130
Columns.....	130
LB/LimitRules.....	130
XML structure.....	130
Table description.....	131
Columns.....	131
LB/Links.....	132
XML structure.....	132
Table description.....	133
Columns.....	133
LB/LinkProbes.....	137
XML structure.....	137
Table description.....	138
Columns.....	138
LB/LinkStats.....	138
XML structure.....	138
Table description.....	139
Columns.....	139
LB/LinkOutInterfaces.....	141
XML structure.....	141
Table description.....	141
Columns.....	142

LB/LinkGroups .....	142
XML structure .....	142
Table description .....	143
Columns .....	143
LB/LinkGroupProbes .....	145
XML structure .....	145
Table description .....	146
Columns .....	146
LB/LinkGroupStats .....	146
XML structure .....	146
Table description .....	147
Columns .....	147
LB/Regions .....	148
XML structure .....	148
Table description .....	148
Columns .....	149
LB/RegionISPs .....	149
XML structure .....	149
Table description .....	149
Columns .....	149
LB/TopologyRegions .....	150
XML structure .....	150
Table description .....	150
Columns .....	150
LB/TopologyRegionIPv4s .....	151
XML structure .....	151
Table description .....	151
Columns .....	152
LB/TopologyRegionIPv6s .....	152
XML structure .....	152
Table description .....	152
Columns .....	153
LB/DNSListeners .....	153
XML structure .....	153
Table description .....	154
Columns .....	154
LB/DNSListenerStats .....	155
XML structure .....	155
Table description .....	155
Columns .....	155
LB/DNSListenerTypeStats .....	156
XML structure .....	156
Table description .....	157
Columns .....	157
LB/DNSProxies .....	158
XML structure .....	158
Table description .....	159
Columns .....	159
LB/DNSProxyStats .....	160
XML structure .....	160
Table description .....	161
Columns .....	161
LB/DNSServers .....	162
XML structure .....	162
Table description .....	162
Columns .....	163
LB/DNSServerProbes .....	164
XML structure .....	164
Table description .....	164
Columns .....	164
LB/DNSServerStats .....	164
XML structure .....	165

Table description .....	165
Columns .....	165
LB/DNSServerPools .....	166
XML structure .....	166
Table description .....	167
Columns .....	167
LB/DNSServerPoolProbes .....	168
XML structure .....	168
Table description .....	169
Columns .....	169
LB/DNSServerPoolStats .....	169
XML structure .....	169
Table description .....	170
Columns .....	170
LB/Log .....	171
XML structure .....	171
Table description .....	171
Columns .....	171
LB/ServerFarmMembers .....	172
XML structure .....	172
Table description .....	172
Columns .....	173
LB/LinkGroupMembers .....	174
XML structure .....	174
Table description .....	175
Columns .....	175
LB/DNSServerPoolMembers .....	178
XML structure .....	178
Table description .....	178
Columns .....	178
LB/ServerFarmMemberStats .....	180
XML structure .....	180
Table description .....	181
Columns .....	181
LB/LinkGroupMemberStats .....	184
XML structure .....	184
Table description .....	185
Columns .....	185
LB/DNSServerPoolMemberStats .....	187
XML structure .....	187
Table description .....	188
Columns .....	188
LB/SnatArpInterfaces .....	189
XML structure .....	189
Table description .....	189
Columns .....	190
LB/VServerArpInterfaces .....	190
XML structure .....	190
Table description .....	190
Columns .....	191
LB/ProbeTemplate .....	191
XML structure .....	191
Table description .....	191
Columns .....	192
LB/ISPWhoisMntners .....	192
XML structure .....	192
Table description .....	192
Columns .....	193
LB/ISPUpdate .....	193
XML structure .....	193
Table description .....	194
Columns .....	194

LB/DNSCachesGlobalCfg .....	195
XML structure .....	195
Table description .....	195
Columns .....	195
LB/RSTProbeTemplate .....	195
XML structure .....	195
Table description .....	196
Columns .....	196
LB/ZeroWindowProbeTemplate .....	197
XML structure .....	197
Table description .....	197
Columns .....	198
LB/ProbeTemplateSummaries .....	198
XML structure .....	198
Table description .....	199
Columns .....	199
LB/ProbeTemplate .....	199
XML structure .....	199
Table description .....	200
Columns .....	200
LB/HTTPPassiveProbeTemplate .....	200
XML structure .....	201
Table description .....	201
Columns .....	201
LB/HTTPStatsParameterObjectGroups .....	202
XML structure .....	202
Table description .....	203
Columns .....	203
LB/HTTPStatsParameterNodes .....	203
XML structure .....	203
Table description .....	203
Columns .....	204
LB/HTTPStatsParameterNodeRules .....	204
XML structure .....	204
Table description .....	204
Columns .....	205
LB/HTTPStatsParameterNodeRuleLists .....	205
XML structure .....	205
Table description .....	206
Columns .....	206
LB/TCPPParameterOptions .....	206
XML structure .....	206
Table description .....	207
Columns .....	207
LB/VRPInfo .....	207
XML structure .....	207
Table description .....	208
Columns .....	208

# LB

## LB/HTTPVirtualServers

This table contains information about HTTP and fast HTTP virtual servers.

### XML structure

```
<LB>
  <HTTPVirtualServers>
    <HTTPVirtualServer>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <DefaultServerFarm></DefaultServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <Policy></Policy>
      <IPParameter></IPParameter>
      <TCPParameter></TCPParameter>
      <HTTPParameter></HTTPParameter>
      <TCPParameterClientSide></TCPParameterClientSide>
      <TCPParameterServerSide></TCPParameterServerSide>
      <HTTPStatsParameter></HTTPStatsParameter>
      <OneConnectParameter></OneConnectParameter>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitBandwidth></RateLimitBandwidth>
      <SSLServerPolicy></SSLServerPolicy>
      <SSLClientPolicy></SSLClientPolicy>
      <RedirectRelocation></RedirectRelocation>
      <RedirectReturnCode></RedirectReturnCode>
      <ServiceEnable></ServiceEnable>
      <RateLimitInBandwidth></RateLimitInBandwidth>
      <RateLimitOutBandwidth></RateLimitOutBandwidth>
      <State></State>
      <ServerFarmInUse></ServerFarmInUse>
      <BusyProtectEnable></BusyProtectEnable>
      <RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
      <ConnSynEnable></ConnSynEnable>
      <StickySynEnable></StickySynEnable>
      <StickySyncType></StickySyncType>
```

```

    <RedundancyGroup></RedundancyGroup>
    <VrrpVrid></VrrpVrid>
    <VrrpIfIndex></VrrpIfIndex>
<HTTPCompressionParameter></HTTPCompressionParameter>
    <LimitPolicy></LimitPolicy>
    <RouteAdvertisementEnable></RouteAdvertisementEnable>
    <CachePolicy></CachePolicy>
  </HTTPVirtualServer>
</HTTPVirtualServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPVirtualServers
Table type	Multi-instance table
Row name	HTTPVirtualServer
Restrictions	Only HTTP and FASTHTTP virtual servers can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Type of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—HTTP.</li> <li>1—FASTHTTP</li> </ul>	N/A
Description	Description for the virtual server.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
VRF	VRF name.	N/A	String. Length: 0 to 31 characters.	The null string indicates a public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
PortNumber	Number of the port.	N/A	Unsigned integer. Value range: 1 to	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			65535.	
DefaultServerFarm	Name of the default server farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
BackupServerFarm	Name of the backup server farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
TCPParameter	Parameter profile whose type is TCP for the virtual server.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
HTTPParameter	Parameter profile whose type is HTTP for the virtual server.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
TCPParameterClientSide	Client-side tcp parameter	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
TCPParameterServerSide	Server-side tcp parameter	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
HTTPStatsParameter	Parameter whose type is HTTP statistics for the virtual server.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
OneConnectParameter	Parameter profile whose type is OneConnect for the virtual	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
	server.			
MaxConnect ionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
RateLimitCo nnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
RateLimitBa ndwidth	Maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit : KB/s.	N/A
SSLServerP olicy	Name of the SSL server policy.	N/A	String, case-insensitive. Length: 0 to 31 characters.	The null string indicates the label is not configured.
SSLClientP olicy	Name of the SSL client policy.	N/A	String, case-insensitive. Length: 0 to 31 characters.	The null string indicates the label is not configured.
RedirectRel ocation	Redirection URL.	N/A	String. Length: 0 to 63 characters.	The null string indicates the label is not configured.
RedirectRet urnCode	Redirection condition code.	N/A	Enumeration: <ul style="list-style-type: none"> <li>301—The requested resource has been permanently moved.</li> <li>302—The requested resource has been temporarily moved.</li> </ul>	N/A
ServiceEna ble	Enable the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RateLimitIn Bandwidth	Inbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit : KB/s.	N/A
RateLimitOu tBandwidth	Outbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit : KB/s.	N/A
State	State of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Available.</li> <li>2—Disable.</li> </ul>	
ServerFarmInUse	Name of the server farm in use.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default sever farm.</li> <li>1—Backup server farm.</li> <li>2—No server farm.</li> </ul>	N/A
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics that are used for bandwidth protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics.</li> <li>1—Using interface bandwidth statistics.</li> </ul>	N/A
ConnSynEnable	Enable connection synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
StickySynEnable	Enable sticky synchronization.	N/A	<ul style="list-style-type: none"> <li>Enumeration:</li> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
StickySyncType	Sticky synchronization type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	This column can only be configured when the StickySynEnable is Enable (1).
Redundancy Group	Name of redundancy group for virtual server flow-redirect.	N/A	String, case-insensitive. Length: 1 to 15 characters.	N/A
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
VrrpIfIndex	Interface index of VRRP.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.  VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
HTTPCompr	Parameter	N/A	String,	This column can be configured only

Column name	Column description	Column type	Data type and restrictions	Remarks
SessionParameter	profile whose type is HTTP compression for the virtual server.		case-insensitive. Length: 1 to 63 characters.	when the Type is HTTP (0).
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
CachePolicy	Name of the cache policy	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## LB/GenericVirtualServers

This table contains information about IP, TCP and UDP virtual servers.

### XML structure

```

<LB>
  <GenericVirtualServers>
    <GenericVirtualServer>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <PortNumber></PortNumber>
      <PortNumberList></PortNumberList>
      <DefaultServerFarm></DefaultServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <DefaultLinkGroup></DefaultLinkGroup>
      <BackupLinkGroup></BackupLinkGroup>
      <StickyGroup></StickyGroup>
      <Policy></Policy>
      <IPParameter></IPParameter>
      <TCPParameter></TCPParameter>
      <TCPAppParameter></TCPAppParameter>
      <SSLServerPolicy></SSLServerPolicy>
      <MaxConnectionLimit></MaxConnectionLimit>

```

```

    <RateLimitConnection></RateLimitConnection>
    <RateLimitBandwidth></RateLimitBandwidth>
    <UDPPerPacket></UDPPerPacket>
    <ServiceEnable></ServiceEnable>
    <RateLimitInBandwidth></RateLimitInBandwidth>
    <RateLimitOutBandwidth></RateLimitOutBandwidth>
    <State></State>
    <ServerFarmInUse></ServerFarmInUse>
    <LinkGroupInUse></LinkGroupInUse>
    <BusyProtectEnable></BusyProtectEnable>
    <RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
    <ConnSynEnable></ConnSynEnable>
    <StickySynEnable></StickySynEnable>
    <StickySyncType></StickySyncType>
    <RedundancyGroup></RedundancyGroup>
    <VrrpVrid></VrrpVrid>
    <VrrpIfIndex></VrrpIfIndex>    <LimitPolicy></LimitPolicy>
    <RouteAdvertisementEnable></RouteAdvertisementEnable>
    <ApplicationMode></ApplicationMode>
  </GenericVirtualServer>
</GenericVirtualServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	GenericVirtualServers
Table type	Multi-instance table
Row name	GenericVirtualServer
Restrictions	Only IP, TCP , UDP and LINK-IP virtual servers can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Type of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—IP.</li> <li>1—TCP.</li> <li>2—UDP.</li> <li>3—LINK-IP.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Description	Description for the virtual server.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
VRF	VRF name.	N/A	String, Length: 0 to 31 characters.	The null string indicates a public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
PortNumber	Number of the port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PortNumber List	List of port numbers	N/A	Number string.  It is a comma-separated list of ports. An item can be an individual port or a port range. Use a hyphen (-) to separate the start and end port of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	N/A
DefaultServerFarm	Name of the default server farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
BackupServerFarm	Name of the backup server farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
DefaultLink Group	Name of the default link group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
BackupLink Group	Name of the backup link group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 0 to 63 characters	The null string indicates the label is not configured.
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	String, case-insensitive. Length: 0 to 63 characters	The null string indicates the label is not configured.
TCPParameter	Parameter profile whose type is TCP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
TCPAppParameter	Parameter profile whose type is TCP-Application for the virtual server	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
SSLServerPolicy	Name of the SSL server policy.	N/A	String, case-insensitive. Length: 0 to 31 characters.	The null string indicates the label is not configured.
MaxConnectionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
RateLimitConnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s	N/A
UDPPerPacket	Enable UDP per-packet load balancing.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ServiceEnable	Enable the service of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit: KB/s	
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s	N/A
State	State of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Disable.</li> </ul>	N/A
ServerFarmInUse	Name of the server farm in use.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default sever farm.</li> <li>1—Backup server farm.</li> <li>2—No server farm.</li> </ul>	N/A
LinkGroupInUse	Name of the in use link group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default link group.</li> <li>1—Backup link group.</li> <li>2—No link group.</li> </ul>	N/A
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics that are used for bandwidth protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics.</li> <li>1—Using interface bandwidth.</li> </ul>	N/A
ConnSynEnable	Enable connection synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
StickySynEnable	Enable sticky synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
StickySyncType	Sticky synchronization type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	This column can only be configured when the StickySynEnable is Enable (1).
RedundancyGroup	Name of redundancy group for	N/A	String, case-insensitive. Length: 1 to 15	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	virtual server flow-redirect.		characters.	
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrplfIndex are mutually dependent and both of them should be set in a single message.
VrrplfIndex	Interface index of VRRP.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference. VrrpVrid and VrrplfIndex are mutually dependent and both of them should be set in a single message.
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
Application Mode	Enable TCP layer7 load balancing.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—TCP layer4 (default).</li> <li>1—TCP layer7.</li> </ul>	N/A

## LB/RADIUSVirtualServers

This table contains information about RADIUS virtual servers.

### XML structure

```

<LB>
  <RADIUSVirtualServers>
    <RADIUSVirtualServer>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumberList></PortNumberList>
      <DefaultServerFarm></DefaultServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <Policy></Policy>

```

```

<IPParameter></IPParameter>
<MaxConnectionLimit></MaxConnectionLimit>
<RateLimitConnection></RateLimitConnection>
<RateLimitBandwidth></RateLimitBandwidth>
<UDPPerPacket></UDPPerPacket>
<ServiceEnable></ServiceEnable>
<RateLimitInBandwidth></RateLimitInBandwidth>
<RateLimitOutBandwidth></RateLimitOutBandwidth>
<State></State>
<ServerFarmInUse></ServerFarmInUse>
<BusyProtectEnable></BusyProtectEnable>
<RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
<ConnSynEnable></ConnSynEnable>
<StickySynEnable></StickySynEnable>
<VrrpVrid></VrrpVrid>
<VrrpIfIndex></VrrpIfIndex>      <LimitPolicy></LimitPolicy>
<RouteAdvertisementEnable></RouteAdvertisementEnable>
</RADIUSVirtualServer>
</RADIUSVirtualServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RADIUSVirtualServers
Table type	Multi-instance table
Row name	RADIUSVirtualServer
Restrictions	Only RADIUS virtual servers can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Type of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—IP.</li> <li>1—TCP.</li> <li>2—UDP.</li> <li>3—LINK-IP.</li> </ul>	N/A
Description	Description for the virtual server.	N/A	String. Length: 0 to 127	The null string indicates the label is not configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
VRF	VRF name.	N/A	String, Length: 0 to 31 characters.	The null string indicates a public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
PortNumber List	List of port numbers	N/A	Number string. It is a comma-separated list of ports. An item can be an individual port or a port range. Use a hyphen (-) to separate the start and end port of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	N/A
DefaultServerFarm	Name of the default server farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
BackupServerFarm	Name of the backup server farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 0 to 63 characters	The null string indicates the label is not configured.
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	String, case-insensitive. Length: 0 to 63 characters	The null string indicates the label is not configured.
MaxConnectionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
RateLimitConnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit: cps.	
RateLimitBandwidth	Maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s	N/A
UDPPerPacket	Enable UDP per-packet load balancing.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ServiceEnable	Enable the service of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s	N/A
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s	N/A
State	State of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Disable.</li> </ul>	N/A
ServerFarmInUse	Name of the server farm in use.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default sever farm.</li> <li>1—Backup server farm.</li> <li>2—No server farm.</li> </ul>	N/A
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics that are used for bandwidth protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics.</li> <li>1—Using interface bandwidth.</li> </ul>	N/A
ConnSynEnable	Enable connection synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
StickySynEnable	Enable sticky synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrplfIndex are mutually dependent and both of them should be set in a single message.
VrrplfIndex	Interface index of VRRP.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.  VrrpVrid and VrrplfIndex are mutually dependent and both of them should be set in a single message.
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## LB/SIPVirtualServers

This table contains information about SIPUDP and SIPTCP virtual servers.

### XML structure

```

<LB>
  <SIPVirtualServers>
    <SIPVirtualServer>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <DefaultServerFarm></DefaultServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <Policy></Policy>
      <IPParameter></IPParameter>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitBandwidth></RateLimitBandwidth>
      <UDPPerPacket></UDPPerPacket>
      <ServiceEnable></ServiceEnable>

```

```

<RateLimitInBandwidth></RateLimitInBandwidth>
<RateLimitOutBandwidth></RateLimitOutBandwidth>
<State></State>
<ServerFarmInUse></ServerFarmInUse>
<BusyProtectEnable></BusyProtectEnable>
<RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
<ConnSynEnable></ConnSynEnable>
<StickySynEnable></StickySynEnable>
<StickySyncType></StickySyncType>
<RedundancyGroup></RedundancyGroup>
<VrrpVrid></VrrpVrid>
<VrrpIfIndex></VrrpIfIndex>      <LimitPolicy></LimitPolicy>
<RouteAdvertisementEnable></RouteAdvertisementEnable>
</SIPVirtualServer>
</SIPVirtualServers >
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	SIPVirtualServers
Table type	Multi-instance table
Row name	SIPVirtualServer
Restrictions	Only SIP UDP and SIP TCP virtual servers can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—SIP-UDP.</li> <li>1—SIP-TCP.</li> </ul>	N/A
Description	Description for the virtual server.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
VRF	VRF name.	N/A	String. Length: 1 to 31 characters.	The null string indicates a public network.
Ipv4Address	IPv4 address.	N/A	String.	Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
			Dotted decimal notation.	
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
PortNumber	Number of the port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DefaultServerFarm	Name of the default server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
BackupServerFarm	Name of the backup server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 1 to 63 characters	The null string indicates the label is not configured.
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters	The null string indicates the label is not configured.
MaxConnectionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
RateLimitConnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s	N/A
UDPPerPacket	Enable UDP per-packet load balancing.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ServiceEnable	Enable the service of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum	N/A	Unsigned integer. Value range: 0 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	bandwidth rate limit.		$2^{32}-1$ . Unit: KB/s	
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s	N/A
State	State of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> </ul>	N/A
ServerFarmInUse	Name of the server farm in use.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default sever farm.</li> <li>1—Backup server farm.</li> <li>2—No server farm.</li> </ul>	N/A
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics that are used for bandwidth protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics.</li> <li>1—Using interface bandwidth statistics.</li> </ul>	N/A
ConnSynEnable	Enable connection synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
StickySynEnable	Enable sticky synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
StickySyncType	Sticky synchronization type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	This column can only be configured when the StickySynEnable is Enable (1).
RedundancyGroup	Name of redundancy group for virtual server flow-redirect.	N/A	String, case-insensitive. Length: 1 to 15 characters.	N/A
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
VrrpIfIndex	Interface index	N/A	Unsigned integer.	Some versions support interface



Column name	Column description	Column type	Data type and restrictions	Remarks
	of VRRP.			name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.  VrrpVrid and VrrplfIndex are mutually dependent and both of them should be set in a single message.
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## LB/MySQLVirtualServers

This table contains information about MySQL virtual servers.

### XML structure

```

<LB>
  <MySQLVirtualServers>
    <MySQLVirtualServer>
      <Name></Name>
      <Description></Description>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <DefaultServerFarm></DefaultServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <Policy></Policy>
      <IPParameter></IPParameter>
      <TCPParameter></TCPParameter>
      <TCPParameterClientSide></TCPParameterClientSide>
      <TCPParameterServerSide></TCPParameterServerSide>
      <MySQLParameter></MySQLParameter>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitBandwidth></RateLimitBandwidth>
      <ServiceEnable></ServiceEnable>
      <RateLimitInBandwidth></RateLimitInBandwidth>
      <RateLimitOutBandwidth></RateLimitOutBandwidth>

```

```

<BusyProtectEnable></BusyProtectEnable>
<RSBandwidthProtectOrigin></RSBandwidthProtectOrigin>
<StickySynEnable></StickySynEnable>
<StickySyncType></StickySyncType>
<LimitPolicy></LimitPolicy>
<RouteAdvertisementEnable></RouteAdvertisementEnable>
<Version></Version>
<ReadServerFarm></ReadServerFarm>
<ReadStickyGroup></ReadStickyGroup>
<WriteServerFarm></WriteServerFarm>
<WriteStickyGroup></WriteStickyGroup>
<RedundancyGroup></RedundancyGroup>
<VrrpVrid></VrrpVrid>
<VrrpIfIndex></VrrpIfIndex>      <State></State>
<ServerFarmInUse></ServerFarmInUse>
<UserList>
  <UserName></UserName>
</UserList>
</MySQLVirtualServer>
</MySQLVirtualServers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	MySQLVirtualServers
Table type	Multi-instance table
Row name	MySQLVirtualServer
Restrictions	Only MySQL virtual server can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description for the virtual server.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
VRF	VRF name.	N/A	String,	The null string indicates a public

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 0 to 31 characters. By default, no VRF is specified.	network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses, broadcast addresses, and addresses such as 0.x.x.x with mask length 32 are not supported.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link local addresses are not supported.
PortNumber	Port number.	N/A	Unsigned integer. Value range: 1 to 65535. By default, the value is 3306.	N/A
DefaultServerFarm	Name of the default server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
BackupServerFarm	Name of the backup server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the default server farm is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPParameter	Parameter profile whose type is IP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
TCPParameter	Parameter profile whose type is TCP for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
TCPParameterClientSide	Client-side tcp parameter	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
TCPParameter	Server-side	N/A	String,	The null string indicates the label is

Column name	Column description	Column type	Data type and restrictions	Remarks
terServerSide	tcp parameter		case-insensitive. Length: 1 to 63 characters.	not configured.
MySQLParameter	Parameter profile whose type is MySQL for the virtual server.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
MaxConnectionLimit	Maximum connection limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0, which indicates no limit.	N/A
RateLimitConnection	Maximum connection rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no limit.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s. By default, the value is 0 KB/s, which indicates no limit.	N/A
ServiceEnable	Enable the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no inbound limit.	N/A
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0, which indicates no outbound limit.	N/A
BusyProtectEnable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
RSBandwidthProtectOrigin	Origin of real server bandwidth statistics that are used for bandwidth protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using LB bandwidth statistics (default).</li> <li>1—Using interface bandwidth statistics.</li> </ul>	N/A
StickySynEnable	Enable sticky entry synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
LimitPolicy	Name of the limit policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
StickySyncType	Sticky synchronization type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	This column can only be configured when the StickySynEnable is Enable (1).
RouteAdvertisementEnable	Enable route advertisement.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
Version	MySQL version info.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—5.0.</li> <li>1—5.1.</li> <li>2—5.5.</li> <li>3—5.6.</li> <li>4—5.7.</li> <li>By default, 3 is configured.</li> </ul>	N/A
RedundancyGroup	Name of redundancy group for virtual server flow-redirect.	N/A	String, case-insensitive. Length: 1 to 15 characters.	N/A
VrrpVrid	Identifier of the virtual router.	N/A	Unsigned integer. Value range: 1 to 255.	VrrpVrid and VrrpIfIndex are mutually dependent and both of them should be set in a single message.
VrrpIfIndex	Interface index of VRRP.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
				VrrpVrid and VrrplfIndex are mutually dependent and both of them should be set in a single message.
State	State of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Disable.</li> </ul>	N/A
ServerFarmInUse	Name of the server farm in use.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default sever farm.</li> <li>1—Backup server farm.</li> <li>2—Read/Write server farm.</li> <li>3—No server farm.</li> </ul>	N/A
UserList	MySQL database user list.	Data structure	Members include: <ul style="list-style-type: none"> <li>UserName.</li> <li>Password.</li> </ul>	Max user info count is 100.
UserName	MySQL database login username.	N/A	String, Length: 1 to 63 characters.	N/A
ReadServerFarm	MySQL read server farm name for read/write separation	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ReadStickyGroup	Name of the sticky group for read server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the read server farm is not configured.
WriteServerFarm	MySQL write server farm name for read/write separation	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
WriteStickyGroup	Name of the sticky group for write server farm.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column cannot be configured if the write server farm is not configured.

## LB/VirtualServerSummaries

This table contains summary information about virtual server.

### XML structure

<LB>

```

<VirtualServerSummaries>
  <VirtualServerSummary>
    <Name></Name>
    <Type></Type>
    <VRF></VRF>
    <Ipv4Address></Ipv4Address>
    <Ipv4PrefixLength></Ipv4PrefixLength>
    <Ipv6Address></Ipv6Address>
    <Ipv6PrefixLength></Ipv6PrefixLength>
    <PortNumber></PortNumber>
    <ServiceEnable></ServiceEnable>
    <State></State>
    <BusyProtectEnable></BusyProtectEnables>
    <RSBandwidthProtectOrigin></RSBandwidthProtectOrigins>
  </VirtualServerSummary>
</VirtualServerSummaries>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	VirtualServerSummaries
Table type	Multi-instance table
Row name	VirtualServerSummary
Restrictions	Only summaries of virtual server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Type of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—IP.</li> <li>1—TCP.</li> <li>2—UDP.</li> <li>3—HTTP.</li> <li>4—FASTHTTP.</li> <li>5—LINK-IP.</li> <li>8—SIP-UDP.</li> <li>9—SIP-TCP.</li> <li>10—MySQL.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	N/A	String. Length: 0 to 31 characters.	The null string indicates public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ServiceEnable	Enable the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
State	State of the virtual server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> </ul>	N/A
BusyProtectEnable	State of the busy protect.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> </ul>	N/A
RSBandwidthProtectOrigin	Source of the virtual server bandwidth	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—LB.</li> <li>0—interface.</li> </ul>	N/A

## LB/VirtualServerStats

This table contains stat information about virtual server.

### XML structure

```

<LB>
  <VirtualServerStats>
    <VirtualServerStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <TotalConnections></TotalConnections>

```



```

    <ActiveConnections></ActiveConnections>
    <MaxConnections></MaxConnections>
    <ConnectionsPerSec></ConnectionsPerSec>
    <MaxConnectionPerSec></MaxConnectionPerSec>
    <ClientSidePKTsIn></ClientSidePKTsIn>
    <ClientSidePKTSOut></ClientSidePKTSOut>
    <DroppedPackets></DroppedPackets>
    <ClientSideBytesIn></ClientSideBytesIn>
    <ClientSideBytesOut></ClientSideBytesOut>
    <Bandwidth></Bandwidth>
    <MaxBandwidth></MaxBandwidth>
    <ReceivedRequests></ReceivedRequests>
    <DroppedRequests></DroppedRequests>
    <SentResponses></SentResponses>
    <DroppedResponses></DroppedResponses>
    <InBandwidth></InBandwidth>
    <OutBandwidth></OutBandwidth>
    <InMaxBandwidth></InMaxBandwidth>
    <OutMaxBandwidth></OutMaxBandwidth>
  </VirtualServerStat>
</VirtualServerStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	VirtualServerStats
Table type	Multi-instance table
Row name	VirtualServerStat
Restrictions	Only stats of virtual server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the virtual server.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TotalConnections	Total connections that the virtual server received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ActiveConnections	Active connections that the virtual server received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
MaxConnections	Max connections that the virtual server received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ConnectionsPerSec	Connections per second that the virtual server received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
MaxConnectionPerSec	Max connections per second that the virtual server received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
ClientSidePKTsIn	Number of packets that the virtual server received from client.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ClientSidePKTsOut	Number of packets that the virtual server sent to client.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedPackets	Number of packets that the virtual server dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ClientSideBytesIn	Number of bytes that the virtual server received from client.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
ClientSideBytesOut	Number of bytes that the virtual server sent to client.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Bandwidth	Bandwidth of the virtual server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
MaxBandwidth	Max bandwidth of the virtual server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
ReceivedRequests	Number of requests that the virtual server received from client.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedRequests	Number of requests that the virtual server dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
SentResponses	Number of responses that the virtual server sent to client.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedResponses	Number of responses that the virtual server dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
InBandwidth	Inbound Bandwidth of the virtual server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutBandwidth	Outbound Bandwidth of the virtual server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
InMaxBandwidth	Inbound Max bandwidth of the virtual server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutMaxBandwidth	Outbound Max bandwidth of the virtual server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A

## LB/RealServers

This table contains information about real server.

# XML structure

```
<LB>
  <RealServers>
    <RealServer>
      <Name></Name>
      <Description></Description>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <Weight></Weight>
      <Priority></Priority>
      <ServerFarm></ServerFarm>
      <Shutdown></Shutdown>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitHTTPRequest></RateLimitHTTPRequest>
      <RateLimitBandwidth></RateLimitBandwidth>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <State></State>
      <RateLimitInBandwidth></RateLimitInBandwidth>
      <RateLimitOutBandwidth></RateLimitOutBandwidth>
      <InBandwidthBusyRatio></InBandwidthBusyRatio>
      <OutBandwidthBusyRatio></OutBandwidthBusyRatio>
      <BandwidthBusyRatio></BandwidthBusyRatio>
      <InBandwidthBusyRecoverRatio></InBandwidthBusyRecoverRatio>
      <OutBandwidthBusyRecoverRatio></OutBandwidthBusyRecoverRatio>
      <BandwidthBusyRecoverRatio></BandwidthBusyRecoverRatio>
      <Cost></Cost>
      <MaxBandwidth></MaxBandwidth>
      <InMaxBandwidth></InMaxBandwidth>
      <OutMaxBandwidth></OutMaxBandwidth>
      <VRF></VRF>
      <InheritVPN></InheritVPN>
    </RealServer>
  </RealServers>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	RealServers
Table type	Multi-instance table
Row name	RealServer
Restrictions	Only Real server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the real server.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the real server.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Weight	Weight of the real server.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
Priority	Priority of the real server.	N/A	Unsigned integer. Value range: 1 to 8.	N/A
ServerFarm	Name of the server farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
Shutdown	Shutdown state for the real server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Shutdown.</li> <li>2—Slow-shutdown.</li> </ul>	N/A
MaxConnectionLimit	Maximum connections limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
RateLimitConnection	Maximum connections rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
RateLimitHTTPRequest	Maximum HTTP request rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: qps.	N/A
RateLimitBandwidth	Maximum bandwidth rate	N/A	Unsigned integer. Value range: 0 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	limit number.		$2^{32}-1$ . Unit: KB/s.	
ProbeSuccessCriteria	Probe success criteria for the real server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
State	State of the real server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Unavailable.</li> <li>• 1—Available.</li> <li>• 2—Slow-shutdown.</li> <li>• 3—Shutdown.</li> <li>• 4—Probe-failed.</li> <li>• 5—Standby.</li> <li>• 6—Ramp.</li> <li>• 8—Busy.</li> <li>• 9—Unknown.</li> </ul>	N/A
RateLimitInBandwidth	Inbound maximum bandwidth rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
RateLimitOutBandwidth	Outbound maximum bandwidth rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
InBandwidthBusyRatio	Inbound bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100.	N/A
OutBandwidthBusyRatio	Outbound bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100.	N/A
BandwidthBusyRatio	Total bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100.	N/A
InBandwidthBusyRecoveryRatio	Inbound bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
OutBandwidthBusyRecoveryRatio	Outbound bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			rate.	
BandwidthBusyRecoverRatio	Total bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
Cost	The cost of link bandwidth.	NA	Unsigned integer. Value range: 0 to 10240.	N/A
MaxBandwidth	Max bandwidth.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
InMaxBandwidth	Max inbound bandwidth.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutMaxBandwidth	Max outbound bandwidth.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
VRF	VRF name	N/A	String, case-insensitive. Length: 0 to 31 characters.	N/A
InheritVPN	Inherit the VPN of virtual server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable inherit the VPN (default).</li> <li>1—Enable inherit the VPN.</li> </ul>	N/A

## LB/RealServerProbes

This table contains information about Real Server Probe that only uses NQA template.

### XML structure

```

<LB>
  <RealServerProbes>
    <RealServerProbe>
      <RealServer></RealServer>
      <Probe></Probe>
      <NQADefaultPortEnable></NQADefaultPortEnable>

```

```

        <State></State>
    </RealServerProbe>
</RealServerProbes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RealServerProbes
Table type	Multi-instance table
Row name	RealServerProbe
Restrictions	Only Real server probe can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RealServer	Name of the real server.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Probe	Probe method for the real server.	Index	String, case-insensitive. Length: 0 to 32 characters.	N/A
NQADefaultPortEnable	Enable detection using the default port of the NQA template.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
State	State of the real server probe.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not exist.</li> <li>1—Success.</li> <li>2—Failed.</li> <li>3—In the process.</li> </ul>	N/A

## LB/RealServerStats

This table contains stat information about real server.

## XML structure

```

<LB>
  <RealServerStats>
    <RealServerStat>
      <Name></Name>
    </RealServerStat>
  </RealServerStats>
</LB>

```



```

    <ChassisID></ChassisID>
    <SlotID></SlotID>
    <CPUID></CPUID>
    <TotalConnections></TotalConnections>
    <ActiveConnections></ActiveConnections>
    <MaxConnections></MaxConnections>
    <ConnectionsPerSec></ConnectionsPerSec>
    <MaxConnectionPerSec></MaxConnectionPerSec>
    <ServerSidePKTsIn></ServerSidePKTsIn>
    <ServerSidePKTsOut></ServerSidePKTsOut>
    <DroppedPackets></DroppedPackets>
    <ServerSideBytesIn></ServerSideBytesIn>
    <ServerSideBytesOut></ServerSideBytesOut>
    <Bandwidth></Bandwidth>
    <MaxBandwidth></MaxBandwidth>
    <ReceivedRequests></ReceivedRequests>
    <DroppedRequests></DroppedRequests>
    <SentResponses></SentResponses>
    <DroppedResponses></DroppedResponses>
    <InBandwidth></InBandwidth>
    <OutBandwidth></OutBandwidth>
    <InMaxBandwidth></InMaxBandwidth>
    <OutMaxBandwidth></OutMaxBandwidth>
  </RealServerStat>
</RealServerStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RealServerStats
Table type	Multi-instance table
Row name	RealServerStat
Restrictions	Only stats of real server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the real server.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
ChassisID	ID of the	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	device that holds the card.		Value range: 0 to 255.	
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TotalConnections	Total connections that the real server received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ActiveConnections	Active connections that the real server received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
MaxConnections	Max connections that the real server received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ConnectionsPerSec	Connections per second that the real server received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
MaxConnectionPerSec	Max connections per second that the real server received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
ServerSidePKTsIn	Number of packets that the real server received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ServerSidePKTsOut	Number of packets that the real server sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedPackets	Number of packets that the real server dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ServerSideBytesIn	Number of bytes that the real server received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
ServerSideBytesOut	Number of bytes that the	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	real server sent.		Value range: 0 to $2^{64}-1$ . Unit: Byte.	
Bandwidth	Bandwidth of the real server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
MaxBandwidth	Max bandwidth of the real server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
ReceivedRequests	Number of requests that the real server received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedRequests	Number of requests that the real server dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
SentResponses	Number of responses that the real server sent to device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedResponses	Number of responses that the real server dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
InBandwidth	Inbound Bandwidth of the real server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutBandwidth	Outbound Bandwidth of the real server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
InMaxBandwidth	Inbound Max bandwidth of the real server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutMaxBandwidth	Outbound Max bandwidth of the real server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A

## LB/ServerFarms

This table contains information about server farm.

## XML structure

```
<LB>
  <ServerFarms>
    <ServerFarm>
      <Name></Name>
      <Description></Description>
      <Predictor></Predictor>
      <HashIpv4PrefixLength></HashIpv4PrefixLength>
      <HashIpv6PrefixLength></HashIpv6PrefixLength>
      <SelectServerMinNumber></SelectServerMinNumber>
      <SelectServerMaxNumber></SelectServerMaxNumber>
      <SlowOnlineEnable></SlowOnlineEnable>
      <SlowOnlineStandbyTime></SlowOnlineStandbyTime>
      <SlowOnlineRampUpTime></SlowOnlineRampUpTime>
      <Transparent></Transparent>
      <ActivateLower></ActivateLower>
      <ActivateUpper></ActivateUpper>
      <SNATPool></SNATPool>
      <FailAction></FailAction>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <TotalRealServer></TotalRealServer>
      <ActiveRealServer></ActiveRealServer>
      <State></State>
      <ProximityEnable></ProximityEnable>
      <Offset></Offset>
      <Length></Length>
      <Start></Start>
      <End></End>
      <BusyAction></BusyAction>
      <QueueLength></QueueLength>
      <QueueTimeout></QueueTimeout>
      <RSTProbe></RSTProbe>
      <ZeroWindowProbe></ZeroWindowProbe>
      <RecoverTimeInterval></RecoverTimeInterval>
      <HTTPPassiveProbe></HTTPPassiveProbe>
    </ServerFarm>
  </ServerFarms>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ServerFarms
Table type	Multi-instance table

Row name	ServerFarm
Restrictions	Only server farm can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the server farm.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the server farm.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Predictor	Predictor algorithm for LB to select a real server to serve a client request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Round-robin.</li> <li>• 1—Random.</li> <li>• 2—Least-connection.</li> <li>• 3—Hash source address.</li> <li>• 4—Hash source port.</li> <li>• 5—Hash destination address.</li> <li>• 6—Bandwidth.</li> <li>• 7—Inbound bandwidth.</li> <li>• 8—Outbound bandwidth.</li> <li>• 9—Max bandwidth.</li> <li>• 10—Max inbound bandwidth.</li> <li>• 11—Max Outbound bandwidth.</li> <li>• 12—Least time.</li> <li>• 13—Dynamic round-robin.</li> <li>• 14—Hash HTTP.</li> <li>• 15—CARP HTTP.</li> <li>• 16—CARP source address.</li> <li>• 17—CARP source port.</li> <li>• 18—CARP destination address.</li> <li>• 19—Least-connection.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			ction member. • 20—Least time member.	
HashIpv4PrefixLength	Length of IPv4 address mask for hash or CARP algorithm.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
HashIpv6PrefixLength	Length of IPv6 address prefix for hash or CARP algorithm.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
SelectServerMinNumber	Minimum number of the active real server in the server farm.	N/A	Unsigned integer. Value range: 1 to 1000.	N/A
SelectServerMaxNumber	Maximum number of the active real server in the server farm.	N/A	Unsigned integer. Value range: 1 to 1000.	N/A
SlowOnlineEnable	Enable the server farm slow online.	N/A	Enumeration: • 0—Disable. • 1—Enable.	N/A
SlowOnlineStandbyTime	Standby time of the slow online.	N/A	Unsigned integer. Value range: 0 to 600. Unit: second.	N/A
SlowOnlineRampUpTime	Ramp up time of the slow online.	N/A	Unsigned integer. Value range: 3 to 600. Unit: second.	N/A
Transparent	Disable NAT for the server farm.	N/A	Enumeration: • 0—Disable. • 1—Enable	N/A
ActivateLower	The status of main server farm will be changed from in use to backup when the ratio of the available real servers in main server farm becomes smaller than this value.	N/A	Unsigned integer. Value range: 1 to 99.	N/A
ActivateUpper	The status of main server farm will be changed from		Unsigned integer. Value range: 1 to 99.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	backup to in use when the ratio of the available real servers in main server farm reaches or over this value.			
SNATPool	SNAT pool for the server farm.	N/A	String, case-insensitive. Length: 0 to 63 characters.	N/A
FailAction	Specify the action that the LB takes with respect to connections if any real server fails in a server farm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Keep.</li> <li>1—Reset.</li> <li>2—Reschedule.</li> </ul>	N/A
ProbeSuccessCriteria	The condition that real server is available through probes.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
TotalRealServer	Total number of real servers in the server farm.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ActiveRealServer	Active number of real servers in the server farm.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
State	State of the server farm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> </ul>	N/A
ProximityEnable	Enable the proximity.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
Offset	Offset to the first byte of the payload.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
Length	Length of the payload portion.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
Start	Beginning pattern for CARP.	N/A	String. Length: 0 to 127 characters.	N/A
End	Ending pattern for CARP.	N/A	String. Length: 0 to 127	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
BusyAction	Busy protection policies for server nodes	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Drop(default).</li> <li>1—Enqueue.</li> <li>2—Force.</li> </ul>	N/A
QueueLength	Queue length for aging	N/A	Unsigned integer.  Value range: 1 to 100000.  By default, the column is not configured.	The column can only be configured when the BusyAction enqueue (1).
QueueTimeout	Node aging time	N/A	Unsigned integer.  Value range: 0 to 60.  Unit: second.  By default, the column is not configured.	The column can only be configured when the BusyAction enqueue (1).
RSTProbe	RST type probe template.	N/A	String, case-insensitive.  Length: 1 to 32 characters.	Only one template can be configured for each type.
ZeroWindowProbe	Zero-Window type probe template.	N/A	String, case-insensitive.  Length: 1 to 32 characters.	Only one template can be configured for each type.
RecoverTimeInterval	Auto recover time interval	N/A	Unsigned integer.  Value range: 0 to 15300.  Unit:minute.  By default, the value is 0.	N/A
HTTPPassiveProbe	HTTP passive probe template.	N/A	String, case-insensitive.  Length: 1 to 32 characters.	Only one template can be configured for each probe type.



# LB/ServerFarmProbes

This table contains information about Server Farm Probe that only uses NQA template.

## XML structure

```
<LB>
  <ServerFarmProbes>
    <ServerFarmProbe>
      <ServerFarm></ServerFarm>
      <Probe></Probe>
      <NQADefaultPortEnable></NQADefaultPortEnable>
    </ServerFarmProbe>
  </ServerFarmProbes>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ServerFarmProbes
Table type	Multi-instance table
Row name	ServerFarmProbe
Restrictions	Only server farm probe can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerFarm	Name of the server farm.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Probe	Probe method for the server farm.	Index	String, case-insensitive. Length: 0 to 32 characters.	N/A
NQADefaultPortEnable	Enable detection using the default port of the NQA template.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable (default).</li><li>1—Enable.</li></ul>	N/A

# LB/ServerFarmStats

This table contains stat information about server farm.

## XML structure

```
<LB>
  <ServerFarmStats>
    <ServerFarmStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <TotalConnections></TotalConnections>
      <ActiveConnections></ActiveConnections>
      <ConnectionsPerSec></ConnectionsPerSec>
      <ServerSidePKTsIn></ServerSidePKTsIn>
      <ServerSidePKTsOut></ServerSidePKTsOut>
      <DroppedPackets></DroppedPackets>
      <ServerSideBytesIn></ServerSideBytesIn>
      <ServerSideBytesOut></ServerSideBytesOut>
      <Bandwidth></Bandwidth>
      <ReceivedRequests></ReceivedRequests>
      <DroppedRequests></DroppedRequests>
      <SentResponses></SentResponses>
      <DroppedResponses></DroppedResponses>
    </ServerFarmStat>
  </ServerFarmStats>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	RealServerStats
Table type	Multi-instance table
Row name	RealServerStat
Restrictions	Only stats of real server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the server farm.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
ChassisID	ID of the device that	Index	Unsigned integer. Value range: 0 to 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	holds the card.			
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TotalConnections	Total connections that the server farm received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ActiveConnections	Active connections that the server farm received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ConnectionsPerSec	Connections per second that the server farm received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
ServerSidePKTsIn	Number of packets that the server farm received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ServerSidePKTsOut	Number of packets that the server farm sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedPackets	Number of packets that the server farm dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ServerSideBytesIn	Number of bytes that the server farm received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
ServerSideBytesOut	Number of bytes that the server farm sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
Bandwidth	Bandwidth of the server farm.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
ReceivedRequests	Number of requests that the server farm received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedRe	Number of	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
quests	requests that the server farm dropped.		Value range: 0 to $2^{64}-1$ .	
SentResponses	Number of responses that the server farm sent to device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedResponses	Number of responses that the server farm dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/SNAT Pools

This table contains information about SNAT pool.

### XML structure

```

<LB>
  <SNATPools>
    <SNATPool>
      <Name></Name>
      <Description></Description>
      <Ipv4AddressStart></Ipv4AddressStart>
      <Ipv4AddressEnd></Ipv4AddressEnd>
      <Ipv6AddressStart></Ipv6AddressStart>
      <Ipv6AddressEnd></Ipv6AddressEnd>
    </SNATPool>
  </SNATPools>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	SNATPools
Table type	Multi-instance table
Row name	SNATPool
Restrictions	Only SNAT pool can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the SNAT Pool.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the SNAT Pool.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Ipv4Address Start	Start IPv4 address of the SNAT pool.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv4Address End	End IPv4 address of the SNAT pool.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address Start	Start IPv6 address of the SNAT pool.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
Ipv6Address End	End IPv6 address of the SNAT pool.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.

## LB/NewSNATPools

This table contains LB SNAT pool information.

## XML structure

```
<LB>
  <NewSNATPools>
    <NewSNATPool>
      <SNATPoolName></SNATPoolName>
      <Description></Description>
    </NewSNATPool>
  </NewSNATPools>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	NewSNATPools
Table type	Multi-instance table
Row name	NewSNATPool

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SNATPoolName	Name of SNAT pool.	Index	String. Case-insensitive. Length: 1 to 63 characters.	N/A.
Description	SNAT pool description.	N/A	String: Case-sensitive Length: No more than 127 characters	N/A

## LB/SNATPoolsIpsv4Infos

This table contains information about IPv4 addresses in an LB SNAT pool.

## XML structure

```

<LB>
  <SNATPoolsIpsv4Infos>
    <SNATPoolsIpsv4Info>
      <Name></Name>
      <Ipsv4AddressStart></Ipsv4AddressStart>
      <Ipsv4AddressEnd></Ipsv4AddressEnd>
    </SNATPoolsIpsv4Info>
  </SNATPoolsIpsv4Infos>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	SNATPoolsIpsv4Infos
Table type	Multi-instance table
Row name	SNATPoolsIpsv4Info
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of SNAT pool	Index	String.Case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4AddressStart	Start IP address	Index	IPv4: String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4AddressEnd	End IP address	Index	IPv4: String, dotted decimal notation.	Example: 1.1.1.1.

## LB/SNATPoolsIpv6Infos

This table contains information about IPv6 addresses in an LB SNAT pool.

## XML structure

```
<LB>
  <SNATPoolsIpv6Infos>
    <SNATPoolsIpv6Info>
      <Name></Name>
      <Ipv6AddressStart></Ipv6AddressStart>
      <Ipv6AddressEnd></Ipv6AddressEnd>
    </SNATPoolsIpv6Info>
  </SNATPoolsIpv6Infos>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	SNATPoolsIpv6Infos
Table type	Multi-instance table
Row name	SNATPoolsIpv6Info
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of SNAT pool	Index	String.Case-insensitive. Length: 1 to 63 characters.	N/A

Ipv6AddressStart	Start IPv6 address	Index	IPv6: Hexadecimal string, colon-separated.	Example: 2::2.
Ipv6AddressEnd	End IPv6 address	Index	IPv6: Hexadecimal string, colon-separated.	Example: 2::2.

## LB/IPParameters

This table contains information about IP parameter profile.

### XML structure

```

<LB>
  <IPParameters>
    <IPParameter>
      <Name></Name>
      <Description></Description>
      <IPToS></IPToS>
    </IPParameter>
  </IPParameters>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	IPParameters
Table type	Multi-instance table
Row name	IPParameter
Restrictions	Only IP parameter profile information can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description information of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
IPToS	ToS number of the IP packet	N/A	Unsigned integer. Value range: 0 to 255.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	sent to client.			

## LB/TCPParameters

This table contains information about TCP parameter profile.

### XML structure

```

<LB>
  <TCPParameters>
    <TCPParameter>
      <Name></Name>
      <Description></Description>
      <ExceedMSS></ExceedMSS>
      <WindowSize></WindowSize>
      <TimeWaitTime></TimeWaitTime>
      <IdleTimeout></IdleTimeout>
      <MSS></MSS>
      <SynRetransTime></SynRetransTime>
      <KeepAliveTime></KeepAliveTime>
      <KeepAliveInterval></KeepAliveInterval>
      <KeepAliveCount></KeepAliveCount>
      <FinWait1Time></FinWait1Time>
      <FinWait2Time></FinWait2Time>
    </TCPParameter>
  </TCPParameters>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	TCPParameters
Table type	Multi-instance table
Row name	TCPParameter
Restrictions	Only TCP parameter profile information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
ExceedMSS	Processing method when segments exceed the maximum segment size of TCP segment.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Permit.</li> <li>1—Drop.</li> </ul>	N/A
WindowSize	Starting value of the receive window size.	N/A	Unsigned integer. Value range: 8192 to 65535.	N/A
TimeWaitTime	The time of TCP time-wait	N/A	Unsigned integer. Value range: 1 to 65535. Unit: second.	N/A
IdleTimeout	Timeout time of idle connections.	N/A	Unsigned integer. Value range: 10 to 86400. Unit: second.	The 0 indicates the label is not configured.
MSS	Maximum segment size of TCP segments.	N/A	Unsigned integer. Value range: 128 to 1460.	The 0 indicates the label is not configured.
SynRetransTime	Timeout time for syn retransmission	N/A	Unsigned integer. Value range: 1 to 75. Unit: second.	N/A
KeepAliveTime	Timeout time of keep-alive	N/A	Unsigned integer. Value range: 1 to 65535. Unit: second.	N/A
KeepAliveInterval	Interval time of keep-alive retransmission	N/A	Unsigned integer. Value range: 1 to 65535. Unit: second.	N/A
KeepAliveCount	Number of times of keep-alive retransmission	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
FinWait1Time	Timeout time	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
e	of FIN-WAIT1		Value range: 1 to 65535. Unit: second.	
FinWait2Time	Timeout time of FIN-WAIT2	N/A	Unsigned integer. Value range: 1 to 65535. Unit: second.	N/A

## LB/HTTPParameters

This table contains information about HTTP parameter profile.

### XML structure

```
<LB>
  <HTTPParameters>
    <HTTPParameter>
      <Name></Name>
      <Description></Description>
      <RebalancePerRequest></RebalancePerRequest>
      <ServerConnectionReuse></ServerConnectionReuse>
      <CaseInsensitive></CaseInsensitive>
      <HeaderModifyPerRequest></HeaderModifyPerRequest>
      <HeaderMaxParseLength></HeaderMaxParseLength>
      <ContentMaxParseLength></ContentMaxParseLength>
      <SecondaryCookieDelimiters></SecondaryCookieDelimiters>
      <SecondaryCookieStart></SecondaryCookieStart>
      <ExceedLength></ExceedLength>
    </HTTPParameter>
  </HTTPParameters>
</LB>
```

### Table description

Item	Description
Feature name	LB
Table name	HTTPParameters
Table type	Multi-instance table
Row name	HTTPParameter
Restrictions	Only HTTP parameter profile information can be gotten by this table.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
RebalancePerRequest	Enable implement load balancing for each HTTP request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ServerConnectionReuse	Enable connections to persist and be reused by multiple client connections.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
CaseInsensitive	Disable case-sensitivity matching for HTTP.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
HeaderModifyPerRequest	Enable modify the HTTP header of every HTTP request or response.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
HeaderMaxParseLength	Maximum number of bytes to parse for cookies, HTTP headers, and URL.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
ContentMaxParseLength	Maximum number of bytes to parse for HTTP content.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
SecondaryCookieDelimiters	The delimiters used to separate secondary cookies.	N/A	String. Length: 1 to 4 characters.	Delimiter characters are defined to be one of the following: <pre> "! " "" "# " "; " "&lt; " "&gt; " "?" " "[" "\ " "]" "^ " "` " " " ". " "@ " "&amp; " "\$ " "+" "*" "" "(" ")" "," "/" </pre> can be used for secondary cookies delimiters. And < should be transferred meaning by &lt;; > should be transferred meaning by &gt;; ' should be

Column name	Column description	Column type	Data type and restrictions	Remarks
				transferred meaning by &apos;, " should be transferred meaning by &quot;.
SecondaryCookieStart	Starting character of secondary cookies.	N/A	String. Length: 1 to 2 characters.	Delimiter characters are defined to be one of the following: "! " "" "# " ; " "< " "> " "?" " " [" " \" " "]" " ^ " " "   can be used for secondary cookies delimiters. And < should be transferred meaning by &lt;, > should be transferred meaning by &gt;, ' should be transferred meaning by &apos;, " should be transferred meaning by &quot;.
ExceedLength	Processing method for HTTP requests or responses that exceed the maximum parse length.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Keep.</li> <li>1—Drop.</li> </ul>	N/A

## LB/HTTPCompressionParameters

This table contains information about HTTP compression parameter profile.

### XML structure

```

<LB>
  <HTTPCompressionParameters>
    <HTTPCompressionParameter>
      <Name></Name>
      <Level></Level>
      <Description></Description>
      <PreferMethod></PreferMethod>
      <ContentLengthThreshold></ContentLengthThreshold>
      <InsertVary></InsertVary>
      <RequestVersion></RequestVersion>
      <DeleteAcceptEncoding></DeleteAcceptEncoding>
      <MemorySize></MemorySize>
      <WindowSize></WindowSize>
    </HTTPCompressionParameter>
  </HTTPCompressionParameters>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPCompressionParameters
Table type	Multi-instance table
Row name	HTTPCompressionParameter
Restrictions	Only HTTP compression parameter profile can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Level	Level of compress packet.	N/A	Unsigned integer: Value range: 1 to 9	N/A
PreferMethod	Prefer method of compression	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Gzip.</li> <li>2—Deflate</li> </ul>	N/A
ContentLengthThreshold	Minimum number of bytes to compress the response packet.	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ .	N/A
InsertVary	Enable insert vary header in HTTP response packet.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RequestVersion	Enable compress the HTTP response of version 1.0.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
DeleteAcceptEncoding	Enable delete accept-encoding header in HTTP request packet.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MemorySize	Memory size of compression.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—1KB.</li> <li>• 2—2KB.</li> <li>• 4—4KB.</li> <li>• 8—8KB.</li> <li>• 16—16KB.</li> <li>• 32—32KB.</li> <li>• 64—64KB.</li> </ul>	N/A
WindowSize	Window size of compression.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—1KB.</li> <li>• 2—2KB.</li> <li>• 4—4KB.</li> <li>• 8—8KB.</li> <li>• 16—16KB.</li> <li>• 32—32KB.</li> </ul>	N/A

## LB/HTTPStatisticsParameter

This table contains information about HTTP statistics parameter profile.

### XML structure

```

<LB>
  <HTTPStatisticsParameters>
    <HTTPStatisticsParameter>
      <Name></Name>
      <Description></Description>
    </HTTPStatisticsParameter>
  </HTTPStatisticsParameters>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPStatisticsParameters
Table type	Multi-instance table
Row name	HTTPStatisticsParameter
Restrictions	Only HTTP statistics parameter profile can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.

## LB/OneConnectParameters

This table contains information about the OneConnect parameter profile.

## XML structure

```
<LB>
  <OneConnectParameters>
    <OneConnectParameter>
      <Name></Name>
      <Description></Description>
      <MaxReuse></MaxReuse>
      <IdleTime></IdleTime>
      <Masktype></MaskType>
      <SourceMask></SourceMask>
    </OneConnectParameter>
  </OneConnectParameters>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	OneConnectParameters
Table type	Multi-instance table
Row name	OneConnectParameter
Restrictions	Only OneConnect parameter profile can be configured by this table.
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	N/A
MaxReuse	Maximum reuse number	N/A	Unsigned integer. Value range: 1 to 4294967295. By default, the number is 1000.	N/A
IdleTime	Idle connection expiration time	N/A	Unsigned integer. Value range: 1 to 4294967295. By default, the time length is 86400.	N/A
MaskType	Type of source mask	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4</li> <li>1—IPv6</li> </ul>	N/A
SourceMask	Source mask to determine its eligibility for reuse.	N/A	Unsigned integer. IPv4 value range: 0 to 32. IPv6 value range: 0 to 128. By default, the value is 0.	N/A

## LB/MySQLParameters

This table contains information about a MySQL parameter profile.

## XML structure

```

<LB>
  <MySQLParameters>
    <MySQLParameter>
      <Name></Name>
      <Description></Description>
      <PoolSize></PoolSize>
      <ServerConnectionReuse></ServerConnectionReuse>
      <MaxReuse></MaxReuse>
      <IdleTime></IdleTime>
      <IPv4SourceMask></IPv4SourceMask>
      <IPv6SourceMask></IPv6SourceMask>

```

```

        </MySQLParameter>
    </MySQLParameters>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	MySQLParameters
Table type	Multi-instance table
Row name	MySQLParameter
Restrictions	Only MySQL parameter profile can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	N/A
PoolSize	Max cache connection count.	N/A	Unsigned integer. Value range: 1 to 64000. By default, the count is 1024.	N/A
ServerConnectionReuse	Enable connections to persist and be reused by multiple client connections.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A
MaxReuse	Maximum reuse number	N/A	Unsigned integer. Value range: 1 to 4294967295. By default, the number is 1000.	N/A
IdleTime	Idle connection expiration time	N/A	Unsigned integer. Value range: 1 to 4294967295. By default, the time length is 86400.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4SourceMask	IPv4 source mask to determine its eligibility for reuse.	N/A	Unsigned integer. Value range: 0 to 32. <ul style="list-style-type: none"> <li>By default, the value is 0.</li> </ul>	N/A
IPv6SourceMask	IPv6 source mask to determine its eligibility for reuse.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 0.	N/A

## LB/ HTTPCompressionParameterRules

This table contains information about HTTP compression parameter rule.

### XML structure

```

<LB>
  <HTTPCompressionParameterRules>
    <HTTPCompressionParameterRule>
      <Name></Name>
      <ID></ID>
      <Type></Type>
      <FilterType></FilterType>
      <Expression></Expression>
    </HTTPCompressionParameterRule>
  </HTTPCompressionParameterRules>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPCompressionParameterRules
Table type	Multi-instance table
Row name	HTTPCompressionParameterRule
Restrictions	Only HTTP compression parameter rule can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range:1 to 65535.	N/A
Type	Type of the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Permit.</li> <li>1—Deny.</li> </ul>	N/A
FilterType	Filter type of the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—URL.</li> <li>1—Content.</li> </ul>	N/A.
Expression	Regular expression matched the filter type.	N/A	String. Length: 0 to 255 characters.	N/A

## LB/ParameterSummaries

This table contains summary information about parameter profile.

### XML structure

```

<LB>
  <ParameterSummaries>
    <ParameterSummary>
      <Name></Name>
      <Type></Type>
      <Description></Description>
    </ParameterSummary>
  </ParameterSummaries>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	ParameterSummaries
Table type	Multi-instance table
Row name	ParameterSummary
Restrictions	Only parameter profile summary information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the parameter profile.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Type of parameter profile.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—IP.</li> <li>1—TCP.</li> <li>2—HTTP.</li> <li>3—HTTP Compression Parameter.</li> </ul>	N/A
Description	Description of the parameter profile.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.

## LB/AddressPortStickyGroups

This table contains information about address-port sticky groups.

## XML structure

```

<LB>
  <AddressPortStickyGroups>
    <AddressPortStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <Ipv4MethodType></Ipv4MethodType>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Ipv6MethodType></Ipv6MethodType>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </AddressPortStickyGroup>
  </AddressPortStickyGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	AddressPortStickyGroups

Table type	Multi-instance table
Row name	AddressPortStickyGroup
Restrictions	Only address-port sticky groups information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second	N/A
Ipv4MethodType	IPv4 sticky method of the address-port sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Source IP stickiness.</li> <li>2—Source IP port stickiness.</li> <li>3—Destination IP stickiness.</li> <li>4—Destination IP port stickiness.</li> <li>5—Source IP and destination IP stickiness.</li> <li>6—Source IP port and destination IP port stickiness.</li> </ul>	N/A
Ipv4PrefixLength	IPv4 mask for IPv4 sticky method.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
Ipv6MethodType	IPv6 sticky method of the address-port sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Source IPv6 stickiness.</li> <li>2—Source IPv6 port stickiness.</li> <li>3—Destination IPv6 stickiness.</li> <li>4—Destination IPv6 port stickiness.</li> <li>5—Source IPv6 and destination IPv6 stickiness.</li> <li>6—Source IPv6 port and destination IPv6</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			port stickiness.	
Ipv6PrefixLength	IPv6 prefix for IPv6 sticky method.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## LB/RADIUSStickyGroups

This table contains information about RADIUS sticky groups.

### XML structure

```

<LB>
  <RADIUSStickyGroups>
    <RADIUSStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <AttributeCode></AttributeCode>
      <OverrideLimit></OverrideLimit>
    </RADIUSStickyGroup>
  </RADIUSStickyGroups>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	RADIUSStickyGroups
Table type	Multi-instance table
Row name	RADIUSStickyGroup
Restrictions	Only RADIUS sticky groups can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second.	N/A
AttributeCode	code of attribute	N/A	Unsigned integer. Value range: 1 to 255.	N/A
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	N/A

## LB/PayloadStickyGroups

This table contains information about payload sticky groups.

## XML structure

```
<LB>
  <PayloadStickyGroups>
    <PayloadStickyGroup>
      <Name></Name>
      <Description></Description>
      <Type></Type>
      <Timeout></Timeout>
      <Offset></Offset>
      <Length></Length>
      <Start></Start>
      <End></End>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </PayloadStickyGroup>
  </PayloadStickyGroups>
</LB>
```



## Table description

Item	Description
Feature name	LB
Table name	PayloadStickyGroups
Table type	Multi-instance table
Row name	PayloadStickyGroup
Restrictions	Only HTTP payload sticky groups can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Type	Sticky method of the payload sticky group.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—None.</li><li>1—Payload stickiness.</li></ul>	N/A
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second.	N/A
Offset	Offset to the first byte of the payload.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
Length	Length of the payload portion.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
Start	Beginning pattern for the payload stickiness.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
End	Ending pattern for the payload stickiness.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	N/A

# LB/HTTPContentStickyGroups

This table contains information about HTTP content sticky groups.

## XML structure

```
<LB>
  <HTTPContentStickyGroups>
    <HTTPContentStickyGroup>
      <Name></Name>
      <Description></Description>
      <Type></Type>
      <Timeout></Timeout>
      <Offset></Offset>
      <Length></Length>
      <Start></Start>
      <End></End>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </HTTPContentStickyGroup>
  </HTTPContentStickyGroups>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	HTTPContentStickyGroups
Table type	Multi-instance table
Row name	HTTPContentStickyGroup
Restrictions	Only HTTP content sticky groups information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Type	Sticky method	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	of the HTTP content sticky group.		<ul style="list-style-type: none"> <li>0—None.</li> <li>1—Content stickiness.</li> </ul>	
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second	N/A
Offset	Offset to the first byte of the HTTP content.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
Length	Length of the HTTP content.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
Start	Beginning pattern for the HTTP content stickiness.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
End	Ending pattern for the HTTP content stickiness.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## LB/HTTPCookieStickyGroups

This table contains information about HTTP cookie sticky groups.

### XML structure

```

<LB>
  <HTTPCookieStickyGroups>
    <HTTPCookieStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <Type></Type>
      <CookieName></CookieName>
      <Offset></Offset>
      <Length></Length>
      <Start></Start>
      <End></End>
      <CookieSecondary></CookieSecondary>

```

```

    <CheckAll></CheckAll>
    <OverrideLimit></OverrideLimit>
    <PriorBusyEnable></PriorBusyEnable>
  </HTTPCookieStickyGroup>
</HTTPCookieStickyGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPCookieStickyGroups
Table type	Multi-instance table
Row name	HTTPCookieStickyGroup
Restrictions	Only HTTP cookie sticky groups information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description information for the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 0 to 31536000. Unit: second	N/A
Type	Sticky method of the HTTP cookie sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Cookie insert stickiness.</li> <li>2—Cookie rewrite stickiness</li> <li>3—Cookie get stickiness</li> </ul>	N/A
CookieName	Name of the cookie.	N/A	String, case-insensitive. Length: 0 to 63 characters.	N/A
Offset	Offset to the first byte of the HTTP cookie.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
Length	Length of the HTTP cookie	N/A	Unsigned integer. Value range: 0 to 1000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Start	Beginning pattern for the HTTP cookie stickiness	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
End	Ending pattern for the HTTP cookie stickiness.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
CookieSecondary	Name of the secondary cookie.	N/A	String. Length: 0 to 63 characters.	N/A
CheckAll	Enable the check option for an HTTP cookie type persistence group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## LB/HTTPHeaderStickyGroups

This table contains information about HTTP header sticky groups.

### XML structure

```

<LB>
  <HTTPHeaderStickyGroups>
    <HTTPHeaderStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <Type></Type>
      <HeaderName></HeaderName>
      <Offset></Offset>
      <Length></Length>
      <Start></Start>
      <End></End>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </HTTPHeaderStickyGroup>
  </HTTPHeaderStickyGroups>

```

</LB>

## Table description

Item	Description
Feature name	LB
Table name	HTTPHeaderStickyGroups
Table type	Multi-instance table
Row name	HTTPHeaderStickyGroup
Restrictions	Only HTTP header sticky groups information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description information for the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second	N/A
Type	Sticky method of the HTTP header sticky group.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—None.</li><li>• 1—URL stickiness.</li><li>• 2—Host stickiness</li><li>• 3—Method stickiness</li><li>• 4—Version stickiness</li><li>• 5—Name stickiness</li></ul>	N/A
HeaderName	Header name.	N/A	String, case-insensitive. Length: 0 to 63 characters.	N/A
Offset	Offset to the first byte of the HTTP header value.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
Length	Length of the HTTP header value.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
Start	Beginning pattern for the HTTP header	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
	value.			
End	Ending pattern for the HTTP header value.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## LB/SSLStickyGroups

This table contains information about SSL sticky groups.

### XML structure

```

<LB>
  <SSLStickyGroups>
    <SSLStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <Type></Type>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </SSLStickyGroup>
  </SSLStickyGroups>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	SSLStickyGroups
Table type	Multi-instance table
Row name	SSLStickyGroup
Restrictions	Only SSL sticky groups information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description information for the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. Unit: second	N/A
Type	Sticky method of the SSL sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—SSL Session-ID stickiness.</li> </ul>	N/A
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## LB/SIPStickyGroups

This table contains information about SIP sticky groups.

## XML structure

```

<LB>
  <SIPStickyGroups>
    <SIPStickyGroup>
      <Name></Name>
      <Description></Description>
      <Timeout></Timeout>
      <Type></Type>
      <OverrideLimit></OverrideLimit>
      <PriorBusyEnable></PriorBusyEnable>
    </SIPStickyGroup>
  </SIPStickyGroups>
</LB>

```



## Table description

Item	Description
Feature name	LB
Table name	SIPStickyGroups
Table type	Multi-instance table
Row name	SIPStickyGroup
Restrictions	Only SIP sticky groups information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description information for the sticky group.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
Timeout	Timeout time of the sticky group.	N/A	Unsigned integer. Value range: 10 to 604800. unit: second	N/A
Type	Sticky method of the SIP sticky group.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—None.</li><li>1—SIP Call-ID stickiness.</li></ul>	N/A
OverrideLimit	Ignore the limits for sessions that match sticky entries.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	N/A
PriorBusyEnable	Prior to busy action	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	N/A

## LB/StickyGroupSummaries

This table contains summary information about sticky group.

## XML structure

```
<LB>
  <StickyGroupSummaries>
```

```

<StickyGroupSummary>
  <Name></Name>
  <Type></Type>
  <Description></Description>
</StickyGroupSummary>
</StickyGroupSummaries>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	StickyGroupSummaries
Table type	Multi-instance table
Row name	StickyGroupSummary
Restrictions	Only sticky group summary information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the sticky group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Stickiness method of sticky group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Address-Port.</li> <li>2—Payload.</li> <li>3—HTTP-Content</li> <li>4—HTTP-Cookie</li> <li>5—HTTP-Header</li> <li>6—SSL</li> <li>7—Radius</li> <li>8—SIP</li> </ul>	N/A
Description	Description information for the sticky group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.

## LB/Policies

This table contains information about policies.

## XML structure

```
<LB>
```

```

<Policies>
  <Policy>
    <Name></Name>
    <Type></Type>
    <Description></Description>
    <DefaultClassAction></DefaultClassAction>
  </Policy>
</Policies>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	Only policy can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the policy.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Type for the policy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Generic.</li> <li>1—HTTP.</li> <li>2—Link-generic.</li> <li>3—DNS.</li> <li>4—RADIUS.</li> <li>5—MySQL.</li> </ul>	N/A
Description	Description of the policy.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
DefaultClassAction	Action for the default class of the policy.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.

## LB/ClassActions

This table contains information about policy rules.

## XML structure

```
<LB>
  <ClassActions>
    <ClassAction>
      <Policy></Policy>
      <Class></Class>
      <Action></Action>
      <BeforeClass></BeforeClass>
    </ClassAction>
  </ClassActions>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ClassActions
Table type	Multi-instance table
Row name	ClassAction
Restrictions	Only policy rules can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	Name of the policy.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Class	Name of the class.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Action	Name of the action for the class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
BeforeClass	Name of the class that the row will be inserted before.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.

## LB/GenericActions

This table contains information about IP, TCP and UDP action.

## XML structure

```
<LB>
  <GenericActions>
    <GenericAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <ServerFarm></ServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <IPToS></IPToS>
      <ServerFarmInUse></ServerFarmInUse>
      <Fallback></Fallback>
      <TCPDropType></TCPDropType>
    </GenericAction>
  </GenericActions>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	GenericActions
Table type	Multi-instance table
Row name	GenericAction
Restrictions	Only IP, TCP and UDP action can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
ForwardType	Forward mode of the action.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Drop.</li><li>2—Forward all.</li><li>3—Server farm.</li></ul>	N/A
ServerFarm	Name of the sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
BackupServerFarm	Name of the backup sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
StickyGroup	Name of the sticky group farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
IPToS	ToS number of IP packet sent to server.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
ServerFarmInUse	Name of the in use sever farm for the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default sever farm.</li> <li>1—Backup server farm.</li> <li>2—No server farm.</li> </ul>	N/A
Fallback	Fallback action when real server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Match next class.</li> <li>3—Fin close.</li> <li>4—Rst close.</li> </ul>	N/A
TCPDropType	Type of closing TCP connection	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Fin close(default).</li> <li>1—Rst close</li> </ul>	N/A

## LB/RADIUSActions

This table contains information about RADIUS action.

### XML structure

```

<LB>
  <RADIUSActions>
    <RADIUSAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <ServerFarm></ServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <IPToS></IPToS>
      <ServerFarmInUse></ServerFarmInUse>
      <Fallback></Fallback>
    </RADIUSAction>
  </RADIUSActions>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RADIUSActions
Table type	Multi-instance table
Row name	RADIUSAction
Restrictions	Only RADIUS action can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
ForwardType	Forward mode of the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Drop.</li> <li>2—Forward all.</li> <li>3—Server farm.</li> </ul>	N/A
ServerFarm	Name of the sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
BackupServer Farm	Name of the backup sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
StickyGroup	Name of the sticky group for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
IPToS	ToS number of IP packet sent to server.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
ServerFarmIn Use	Name of the in use sever farm for the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default sever farm.</li> <li>1—Backup server farm.</li> <li>2—No server farm.</li> </ul>	N/A
Fallback	Fallback action when real server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Match next class.</li> </ul>	N/A

# LB/LinkGenericActions

This table contains information about Link-generic action.

## XML structure

```
<LB>
  <LinkGenericActions>
    <LinkGenericAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <LinkGroup></LinkGroup >
      <BackupLinkGroup></BackupLinkGroup>
      <StickyGroup></StickyGroup>
      <IPToS></IPToS>
      <LinkGroupInUse></LinkGroupInUse>
      <Fallback></Fallback>
      <BusyFallback></BusyFallback>
    </LinkGenericAction>
  </LinkGenericActions>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	LinkGenericActions
Table type	Multi-instance table
Row name	LinkGenericAction
Restrictions	Only Link-generic action can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
ForwardType	Forward mode	N/A	Enumeration:	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	of the action.		<ul style="list-style-type: none"> <li>1—Drop.</li> <li>2—Forward all.</li> <li>3—Server farm.</li> </ul>	
LinkGroup	Name of the link group for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	When the column is configured, ForwardType becomes link group (3).
BackupLinkGroup	Name of the backup link group for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when LinkGroup is not configured.
StickyGroup	Name of the sticky group farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The column cannot be configured when LinkGroup is not configured.
IPToS	ToS number of IP packet sent to server.	N/A	Unsigned integer. Value range: 0 to 255. By default, no IPToS is specified.	N/A
LinkGroupInUse	Name of the in use link group for the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default link group.</li> <li>1—Backup link group.</li> <li>2—No link group.</li> </ul>	N/A
Fallback	Fallback action when real server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Match next class.</li> </ul>	N/A
BusyFallback	Fallback action when real server all busy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Match next class.</li> </ul>	N/A

## LB/DNSActions

This table contains information about DNS action.

## XML structure

```

<LB>
  <DNSActions>
    <DNSAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <DNSServerPool></DNSServerPool>
      <IPToS></IPToS>
      <Fallback></Fallback>
      <StickyGroup></StickyGroup>
      <BusyFallback></BusyFallback>

```

```

    </DNSAction>
  </DNSActions>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSActions
Table type	Multi-instance table
Row name	DNSAction
Restrictions	Only DNS action can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
ForwardType	Forward mode of the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Drop.</li> <li>2—Forward all.</li> <li>3—DNS server pool.</li> <li>4—Skip current DNS proxy.</li> </ul>	N/A
DNSServerPool	Name of the DNS server pool for the action.	N/A	String, case-insensitive. Length: 1 to 63 characters.	When the column is configured, ForwardType becomes DNS server pool (3).
IPToS	ToS number of IP packet sent to server.	N/A	Unsigned integer. Value range: 0 to 255. By default, no IPToS is specified.	N/A
Fallback	Fallback action when DNS server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Match next class.</li> </ul>	N/A
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
BusyFallback	Fallback action when real server all busy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Match next class.</li> </ul>	N/A

# LB/HTTPActions

This table contains information about action of HTTP type.

## XML structure

```
<LB>
  <HTTPActions>
    <HTTPAction>
      <Name></Name>
      <Description></Description>
      <ForwardType></ForwardType>
      <ServerFarm></ServerFarm>
      <BackupServerFarm></BackupServerFarm>
      <StickyGroup></StickyGroup>
      <SSLClientPolicy></SSLClientPolicy>
      <IPToS></IPToS>
      <ServerFarmInUse></ServerFarmInUse>
      <Fallback></Fallback>
      <RewriteValue></RewriteValue>
      <ReplaceValue></ReplaceValue>
      <Redirect></Redirect>
      <ReturnCode></ReturnCode>
      <ZipFileWorkpath></ZipFileWorkpath>
      <ResponseZipFile></ResponseZipFile>
      <FallbackResponseRawFile></FallbackResponseRawFile>
      <TCPPDropType></TCPPDropType>
    </HTTPAction>
  </HTTPActions>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	HTTPActions
Table type	Multi-instance table
Row name	HTTPAction
Restrictions	Only action of HTTP type can be gotten by this table.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the action.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
ForwardType	Forward mode of the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Drop.</li> <li>3—Server farm.</li> <li>8—Redirect</li> <li>9—Response</li> </ul>	N/A
ServerFarm	Name of the sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
BackupServer Farm	Name of the backup sever farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
StickyGroup	Name of the sticky group farm for the action.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
SSLClientPolicy	Name of the SSL client policy.	N/A	String, case-insensitive. Length: 0 to 31 characters.	The null string indicates the label is not configured.
IPToS	ToS number of IP packet for the action sent to server.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
ServerFarmIn Use	Name of the in use sever farm for the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default sever farm.</li> <li>1—Backup server farm.</li> <li>2—No server farm.</li> </ul>	N/A
Fallback	Fallback action when real server select failed.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Match next class.</li> <li>2—Response.</li> <li>3—Fin close.</li> <li>4—Rst close.</li> </ul>	N/A
RewriteValue	Content value need to be replaced in response.	N/A	String. Length: 1 to 127 characters.	This column and the column of ReplaceValue must be configured together.
ReplaceValue	New content value after replaced in response.	N/A	String. Length: 1 to 127 characters.	Some special applications and constraints as below: %i: insert source IPv4 address or source IPv6 address into header of the

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>message.</p> <p>%ps: insert source port into header of the message.</p> <p>%id: insert destination IPv4 address or IPv6 address into header of the message.</p> <p>%pd: insert destination port into header of the message.</p> <p>To the above-mentioned applications, some situations, like only %, ps, id, pd can behind %, must be constrained unless those serial % are not odd number.</p>
Redirect	Redirection URL.	N/A	String. Length: 0 to 255 characters.	A null string indicates the label is not configured.
ReturnCode	Status code in the returned redirection packets.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>301—The requested resource has been permanently deleted.</li> <li>302—The requested resource has been temporarily deleted.</li> </ul>	N/A
ZipFileWorkpath	Work path of zip file for the response	N/A	String. Length: 1 to 255 characters.	<p>If the column is not '/', it must start with /, and cannot end with /.</p> <p>The null string indicates the label is not configured.</p>
ResponseZipFile	<p>Full path and name of the zip file for the response.</p> <p>Example:</p> <ul style="list-style-type: none"> <li>flash:/lb/1.html</li> <li>chassis3#slot1#flash:/lb/1.html</li> </ul>	N/A	String, case-insensitive. Length: 1 to 255 characters.	<p>The column can be configured when ForwardType is Response (9) or there is no ForwardType column.</p> <p>When the column is configured, ForwardType becomes Resposne (9).</p> <p>The column cannot be configured when ZipFileWorkpath is not configured.</p>
FallbackResponseRawFile	<p>Full path and name of the raw file for the fallback action response.</p> <p>Example:</p> <ul style="list-style-type: none"> <li>flash:/lb/1.html</li> </ul>	N/A	String, case-insensitive. Length: 1 to 255 characters.	The column can be configured when Fallback is Response(2).

Column name	Column description	Column type	Data type and restrictions	Remarks
	<ul style="list-style-type: none"> <li>chassis3#s lot1#flash:/l b/1.html</li> </ul>			
TCPDropType	Type of closing TCP connection	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Fin close(default).</li> <li>1—Rst close</li> </ul>	N/A

## LB/HTTPActionResponseFiles

This table contains information about HTTP action response file.

### XML structure

```

<LB>
  <HTTPActionResponseFiles>
    <HTTPActionResponseFile>
      <Action></Action>
      <URL></URL>
      <FileName></FileName>
    </HTTPActionResponseFile>
  </HTTPActionResponseFiles>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPActionResponseFiles
Table type	Multi-instance table
Row name	HTTPActionResponseFile
Restrictions	Only HTTP action response file can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Name of the action.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
URL	URL of file for the action response.	Index	String. Length: 1 to 255 characters.	The column must start with /. When the column is

Column name	Column description	Column type	Data type and restrictions	Remarks
				configured, ForwardType becomes Resposne (9).
FileName	Full path and name of the file for the action response. Example: <ul style="list-style-type: none"> <li>flash:/lb/1.html</li> <li>chassis3#slot1#flash:/lb/1.html</li> </ul>	N/A	String, case-insensitive. Length: 1 to 255 characters.	The column must start witch device name.

## LB/HTTPActionRewriteURLs

This table contains information about HTTP action rewrite URL.

### XML structure

```

<LB>
  <HTTPActionRewriteURLs>
    <HTTPActionRewriteURL>
      <LocationURL></LocationURL>
      <Replace></Replace>
      <Encode></Encode>
    </HTTPActionRewriteURL>
  </HTTPActionRewriteURLs>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPActionRewriteURLs
Table type	Multi-instance table
Row name	HTTPActionURL
Restrictions	Only HTTP action rewrite URL can be configured by this table.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocationURL	URL of location value for the HTTP request line.	Index	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Replace	Replaced string that method of URL rewrite process.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Encode	Encode type of URL rewrite.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—URL.</li> <li>2—Base64</li> </ul>	

## LB/HTTPActionSSLURLs

This table contains information about HTTP action SSLURL.

### XML structure

```

<LB>
  <HTTPActionSSLURLs>
    <HTTPActionSSLURL>
      <Name></Name>
      <LocationURL></LocationURL>
      <ClearPort></ClearPort>
      <SSLPort></SSLPort>
    </HTTPActionSSLURL>
  </HTTPActionSSLURLs>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	HTTPActionSSLURLs
Table type	Multi-instance table
Row name	HTTPActionSSLURL
Restrictions	Only HTTP action SSL URL can be gotten by this table.



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the action.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
LocationURL	URL of location value for the HTTP header.	Index	String. Length: 0 to 63 characters.	N/A
ClearPort	HTTP port of Location for rewriting redirection message.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
SSLPort	SSL port of the LB device.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

## LB/HTTPActionHeaders

This table contains information about HTTP action header.

## XML structure

```

<LB>
  <HTTPActionHeaders>
    <HTTPActionHeader>
      <Action></Action>
      <Type></Type>
      <Direction></Direction>
      <HeaderName></HeaderName>
      <HeaderValue></HeaderValue>
      <HeaderExpress></HeaderExpress>
      <Replace></Replace>
      <Encode></Encode>
    </HTTPActionHeader>
  </HTTPActionHeaders>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPActionHeaders
Table type	Multi-instance table
Row name	HTTPActionHeader

Restrictions	Only HTTP action header can be gotten by this table.
--------------	--

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Name of the action.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Type of the header process.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Header Delete.</li> <li>1—Header Insert.</li> <li>2—Header Rewrite.</li> </ul>	N/A
Direction	Process direction.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Request and Response.</li> <li>1—Request.</li> <li>2—Response.</li> </ul>	N/A
HeaderName	Name of the header.	Index	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
HeaderValue	Header value that method of Header Insert process.	N/A	String. Length: 0 to 255 characters.	The null string indicates the label is not configured.
HeaderExpress	Header value that method of Header Rewrite process.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Replace	Replaced string that method of Header Rewrite process.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Encode	Encode type of URL rewrite.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—URL.</li> <li>2—Base64</li> </ul>	Encode

## LB/ActionSummaries

This table contains information about action summary.

## XML structure

```

<LB>
  <ActionSummaries>
    <ActionSummary>
      <Name></Name>
    
```

```

        <Type></Type>
        <Description></Description>
    </ActionSummary>
</ActionSummaries>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Classes
Table type	Multi-instance table
Row name	Class
Restrictions	Only action summary can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the action.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Type of the action.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Generic.</li> <li>1—HTTP.</li> </ul>	N/A
Description	Description of the action.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.

## LB/Classes

This table contains information about classes.

## XML structure

```

<LB>
  <Classes>
    <Class>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <MatchCondition></MatchCondition>
    </Class>
  </Classes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Classes
Table type	Multi-instance table
Row name	Class
Restrictions	Only class can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Type	Type of the class.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Generic.</li><li>• 1—HTTP.</li><li>• 2—Link-generic.</li><li>• 3—DNS.</li><li>• 4—RADIUS.</li><li>• 5—MySQL.</li></ul>	N/A
Description	Description of the class.	N/A	String. Length: 0 to 127 characters.	N/A
MatchCondition	The rule matched class.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Match any.</li><li>• 1—Match all.</li></ul>	N/A

## LB/GenericMatchRules

This table contains information about generic match rule.

## XML structure

```
<LB>
  <GenericMatchRules>
    <GenericMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
```

```

    <ReferClass></ReferClass>
    <AclNum></AclNum>
    <AclName></AclName>
    <ISP></ISP>
    <User></User>
    <UserGroup></UserGroup>
    <IdentityDomain></IdentityDomain>
    <InterfaceName></InterfaceName>
    <PayloadExpression></PayloadExpression>
    <CaseInsensitive></CaseInsensitive>
    <Not></Not>
    <MatchedTimes></MatchedTimes>
  </GenericMatchRule>
</GenericMatchRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	GenericMatchRules
Table type	Multi-instance table
Row name	GenericMatchRule
Restrictions	Only generic match rule can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Class.</li> <li>3—IPv4 ACL.</li> <li>4—IPv6 ACL.</li> <li>5—ISP.</li> <li>6—User.</li> <li>7—User group.</li> <li>8—Interface.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIpv4Address	Match rule of Source IPv4.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
SrcIpv4PrefixLength	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
SrcIpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
SrcIpv6PrefixLength	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	N/A
AclNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
AclName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
ISP	Name of the ISP.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
User	Name of the user.	N/A	String, case-sensitive. Length: 1 to 55 characters.	N/A
UserGroup	Name of the user group.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
IdentityDomain	The domain name of the user or user group.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The null string indicates the label is not configured.
InterfaceName	Name of the interface.	N/A	String, case-insensitive. Length: 1 to 47 characters.	N/A
PayloadExpression	Regular expression matched the payload content.	N/A	String. Length: 0 to 255 characters	This column can be configured only when the type is payload (9).
CaseInsensitive	Whether the payload content expression is case insensitive	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Case sensitive (default)</li> <li>1—Case insensitive</li> </ul>	This column can be configured only when the type is payload(9).
Not	Whether the matching condition is opposite	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Matching condition is not opposite (default)</li> <li>1—Matching condition is opposite</li> </ul>	This column can be configured only when the type is payload(9).
MatchedTime	Number of	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
s	times the rule was matched.		Value range: 0 to $2^{64}-1$ .	

## LB/LinkGenericMatchRules

This table contains information about link generic match rule.

### XML structure

```

<LB>
  <LinkGenericMatchRules>
    <LinkGenericMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
      <ReferClass></ReferClass>
      <AclNum></AclNum>
      <AclName></AclName>
      <ISP></ISP>
      <AppGroup></AppGroup>
      <DstIpv4Address></DstIpv4Address>
      <DstIpv4PrefixLength></DstIpv4PrefixLength>
      <DstIpv6Address></DstIpv6Address>
      <DstIpv6PrefixLength></DstIpv6PrefixLength>
      <DstDomain></DstDomain>
      <User></User>
      <UserGroup></UserGroup>
      <IdentityDomain></IdentityDomain>
      <InterfaceName></InterfaceName>
      <MatchedTimes></MatchedTimes>
    </LinkGenericMatchRule>
  </LinkGenericMatchRules>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	LinkGenericMatchRules
Table type	Multi-instance table

Row name	LinkGenericMatchRule
Restrictions	Only link generic match rule can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Class.</li> <li>3—IPv4 ACL.</li> <li>4—IPv6 ACL.</li> <li>5—ISP.</li> <li>6—Application group.</li> <li>7—Destination IPv4.</li> <li>8—Destination IPv6.</li> <li>9—Destination domain.</li> <li>10—User.</li> <li>11—User group.</li> <li>12—Interface.</li> </ul>	N/A
SrcIpv4Address	Match rule of Source IPv4.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
SrcIpv4PrefixLength	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
SrcIpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
SrcIpv6PrefixLength	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
AclNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
AclName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
ISP	Name of the ISP.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.



Column name	Column description	Column type	Data type and restrictions	Remarks
AppGroup	Name of the application group.	N/A	String. Length: 1 to 63 characters.	The null string indicates the label is not configured.
DstIpv4Address	Match rule of destination IPv4.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
DstIpv4PrefixLength	Mask length of the destination IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
DstIpv6Address	Match rule of destination IPv6.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
DstIpv6PrefixLength	Prefix length of the destination IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
DstDomain	Match rule of destination domain	N/A	String, case-insensitive. Length: 1 to 253 characters.	The null string indicates the label is not configured.
User	Name of the user.	N/A	String, case-sensitive. Length: 1 to 55 characters.	N/A
UserGroup	Name of the user group.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
IdentityDomain	The domain name of the user or user group.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The null string indicates the label is not configured.
InterfaceName	Name of the interface.	N/A	String, case-insensitive. Length: 1 to 47 characters.	N/A
MatchedTimes	Number of times the rule was matched.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/DNSMatchRules

This table contains information about DNS match rule.

### XML structure

```

<LB>
  <DNSMatchRules>
    <DNSMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>

```

```

<SrcIpv4Address></SrcIpv4Address>
<SrcIpv4PrefixLength></SrcIpv4PrefixLength>
<SrcIpv6Address></SrcIpv6Address>
<SrcIpv6PrefixLength></SrcIpv6PrefixLength>
<DstIpv4Address></DstIpv4Address>
<DstIpv4PrefixLength></DstIpv4PrefixLength>
<DstIpv6Address></DstIpv6Address>
<DstIpv6PrefixLength></DstIpv6PrefixLength>
<ReferClass></ReferClass>
<AclNum></AclNum>
<AclName></AclName>
<Domain></Domain>
<User></User>
<UserGroup></UserGroup>
<IdentityDomain></IdentityDomain>
<InterfaceName></InterfaceName>
<MatchedTimes></MatchedTimes>
</DNSMatchRule>
</DNSMatchRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSMatchRules
Table type	Multi-instance table
Row name	DNSMatchRule
Restrictions	Only DNS match rule can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Destination IPv4.</li> <li>3—Destination IPv6.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>4—Class.</li> <li>5—IPv4 ACL.</li> <li>6—IPv6 ACL.</li> <li>7—Domain name.</li> <li>8—User.</li> <li>9—User group.</li> <li>10—Interface.</li> </ul>	
SrcIpv4Address	Match rule of source IPv4.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
SrcIpv4PrefixLength	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
SrcIpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
SrcIpv6PrefixLength	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
DstIpv4Address	Match rule of destination IPv4.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
DstIpv4PrefixLength	Mask length of the destination IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
DstIpv6Address	Match rule of destination IPv6.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
DstIpv6PrefixLength	Prefix length of the destination IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
AclNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
AclName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
Domain	Domain for the DNS match rule	N/A	String, case-insensitive. Length: 1 to 253 characters.	The null string indicates the label is not configured.
User	Name of the user.	N/A	String, case-sensitive. Length: 1 to 55 characters.	N/A
UserGroup	Name of the user group.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
IdentityDomain	The domain name of the	N/A	String, case-insensitive. Length: 1 to 255 characters.	The null string indicates the label is not configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
	user or user group.			
InterfaceName	Name of the interface.	N/A	String, case-insensitive. Length: 1 to 47 characters.	N/A
MatchedTimes	Number of times the rule was matched.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/HTTPMatchRules

This table contains information about HTTP match rule.

### XML structure

```

<LB>
  <HTTPMatchRules>
    <HTTPMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
      <ReferClass></ReferClass>
      <CookieName></CookieName>
      <CookieValue></CookieValue>
      <HeaderName></HeaderName>
      <HeaderValue></HeaderValue>
      <Method></Method>
      <ExtType></ExtType>
      <URL></URL>
      <ContentOffset></ContentOffset>
      <ContentExpression></ContentExpression>
      <AclNum></AclNum>
      <AclName></AclName>
      <User></User>
      <UserGroup></UserGroup>
      <IdentityDomain></IdentityDomain>
      <InterfaceName></InterfaceName>
      <MatchedTimes></MatchedTimes>
    </HTTPMatchRule>
  </HTTPMatchRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPMatchRules
Table type	Multi-instance table
Row name	HTTPMatchRule
Restrictions	Only HTTP match rule can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Class.</li> <li>3—Cookie.</li> <li>4—HTTP Header.</li> <li>5—Method.</li> <li>6—URL.</li> <li>7—Content.</li> <li>8—IPv4 ACL.</li> <li>9—IPv6 ACL.</li> <li>11—User.</li> <li>12—User group.</li> <li>13—Interface.</li> </ul>	N/A
SrcIpv4Address	Match rule of Source IPv4.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
SrcIpv4PrefixLength	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
SrcIpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
SrcIpv6PrefixLength	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
CookieName	Cookie name of the http message.	N/A	String. Length: 0 to 63 characters.	The null string indicates the label is not configured.
CookieValue	Regular expression matched the cookie range.	N/A	String. Length: 0 to 255 characters.	N/A
HeaderName	Header name of the HTTP message.	N/A	String, case-insensitive. Length: 0 to 63 characters.	N/A
HeaderValue	Regular expression matched the header range.	N/A	String. Length: 0 to 255 characters.	N/A
Method	Name of the http request method.	N/A	String. Length: 0 to 63 characters.	N/A
ExtType	Identification of the type for user-defined.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Nonuser-defined.</li> <li>1—User-defined.</li> </ul>	N/A
URL	Regular expression matched the URL.	N/A	String. Length: 0 to 255 characters.	N/A
ContentOffset	Absolute offset of the HTTP content.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
ContentExpression	Regular expression matched the content.	N/A	String. Length: 0 to 255 characters.	N/A
AclNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
AclName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
User	Name of the user.	N/A	String, case-sensitive. Length: 1 to 55 characters.	N/A
UserGroup	Name of the user group.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
IdentityDomain	The domain name of the user or user group.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The null string indicates the label is not configured.
InterfaceName	Name of the interface.	N/A	String, case-insensitive. Length: 1 to 47 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MatchedTimes	Number of times the rule was matched.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/RADIUSMatchRules

This table contains information about RADIUS match rule.

### XML structure

```

<LB>
  <RADIUSMatchRules>
    <RADIUSMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
      <ReferClass></ReferClass>
      <AclNum></AclNum>
      <AclName></AclName>
      <AttributeType></AttributeType>
      <AttributeExpression></AttributeExpression>
      <MatchedTimes></MatchedTimes>
    </RADIUSMatchRule>
  </RADIUSMatchRules>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	RADIUSMatchRules
Table type	Multi-instance table
Row name	RADIUSMatchRule
Restrictions	Only RADIUS match rule can be configured by this table.
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Class.</li> <li>3—IPv4 ACL.</li> <li>4—IPv6 ACL.</li> <li>5—RADIUS.</li> </ul>	N/A
SrcIpv4Address	Match rule of Source IPv4.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
SrcIpv4PrefixLength	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
SrcIpv6Address	Match rule of source IPv6.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
SrcIpv6PrefixLength	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
AclNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
AclName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
AttributeType	Type of attribute	N/A	Unsigned integer. Value range: 1 to 255. By default, no AttributeType is specified.	N/A
AttributeExpression	Regular expression matched the attribute.	N/A	String. Length: 1 to 255 characters.	N/A
MatchedTimes	Number of times the rule was matched.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A



# LB/MySQLMatchRules

This table contains information about MySQL match rules.

## XML structure

```
<LB>
  <MySQLMatchRules>
    <MySQLMatchRule>
      <Class></Class>
      <ID></ID>
      <Type></Type>
      <SrcIpv4Address></SrcIpv4Address>
      <SrcIpv4PrefixLength></SrcIpv4PrefixLength>
      <SrcIpv6Address></SrcIpv6Address>
      <SrcIpv6PrefixLength></SrcIpv6PrefixLength>
      <ReferClass></ReferClass>
      <AclNum></AclNum>
      <AclName></AclName>
      <SqlExpression></SqlExpression>
      <CaseInsensitive></CaseInsensitive>
      <Not></Not>
    </MySQLMatchRule>
  </MySQLMatchRules>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	MySQLMatchRules
Table type	Multi-instance table
Row name	MySQLMatchRule
Restrictions	Only MySQL match rule can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Class	Name of the class.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the match rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the match rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Source IPv4.</li> <li>1—Source IPv6.</li> <li>2—Class.</li> <li>3—IPv4 ACL.</li> <li>4—IPv6 ACL.</li> <li>5—SQL.</li> </ul>	N/A
SrcIpv4Address	Source IPv4 address to match.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
SrcIpv4PrefixLength	Mask length of the source IPv4 address.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
SrcIpv6Address	Source IPv6 address to match.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
SrcIpv6PrefixLength	Prefix length of the source IPv6 address.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
ReferClass	Name of the referenced class.	N/A	String, case-insensitive. Length: 0 to 63 characters.	This column can be configured only when the type is <b>Class</b> (2).
AcNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999. By default, no ACL number is specified.	AcNum and AcName are mutually exclusive and only one of them can be set in a single message. This column can only be configured when the type is IPv4 ACL (3) or IPv6 ACL (4).
AcName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters. By default, no ACL name is specified.	AcNum and AcName are mutually exclusive and only one of them can be set in a single message. This column can be configured only when the type is IPv4 ACL (3) or IPv6 ACL (4).
SqlExpression	Regular expression used to match the SQL content.	N/A	String. Length: 1 to 255 characters	This column can be configured only when the type is sql(5).
CaseInsensitive	Whether the payload content	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Case sensitive</li> </ul>	This column can be configured only when the type is sql(5).

Column name	Column description	Column type	Data type and restrictions	Remarks
	expression is case insensitive		(default) <ul style="list-style-type: none"> <li>1—Case insensitive</li> </ul>	
Not	Whether the matching condition is opposite	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Matching condition is not opposite (default)</li> <li>1—Matching condition is opposite</li> </ul>	This column can be configured only when the type is sql(5).

## LB/ISPs

This table contains information about ISP.

## XML structure

```

<LB>
  <ISPs>
    <ISP>
      <Name></Name>
      <Description></Description>
      <Origin></Origin>
    </ISP>
  </ISPs>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ISPs
Table type	Multi-instance table
Row name	ISP
Restrictions	Only ISP can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Description	Description of the ISP.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
Origin	Origin of the ISP.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Import.</li> <li>2—Manual.</li> <li>3—Import and manual.</li> </ul>	N/A

## LB/ISPFile

This table contains information about ISP file.

## XML structure

```

<LB>
  <ISPFile>
    <FileName></FileName>
  </ISPFile>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ISPFile
Table type	Single-instance table
Row name	N/A
Restrictions	Only ISP file can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the ISP file.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

# LB/FlowMode

This table contains information about flow mode.

## XML structure

```
<LB>
  <FlowMode>
    <ModeType></ModeType>
  </FlowMode>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	FlowMode
Table type	Single-instance table
Row name	N/A
Restrictions	Only flow mode can be configured by this table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModeType	Type of flow mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—One failover-group.</li><li>2—Share failover-group</li></ul>	N/A

# LB/Ipv4ISPAddressGroups

This table contains information about IPv4 ISP address groups.

## XML structure

```
<LB>
  <Ipv4ISPAddressGroups>
    <Ipv4ISPAddressGroup>
      <Name></Name>
      <Ipv4Address></Ipv4Address>
    </Ipv4ISPAddressGroup>
  </Ipv4ISPAddressGroups>
</LB>
```

```

    <Ipv4PrefixLength></Ipv4PrefixLength>
    <Origin></Origin>
  </Ipv4ISPAddressGroup>
</Ipv4ISPAddressGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Ipv4ISPAddressGroups
Table type	Multi-instance table
Row name	Ipv4ISPAddressGroup
Restrictions	Only IPv4 ISP can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	IPv4 address.	Index	String, Dotted decimal notation.	The value must be equal to the summation of the address and the mask. Example:1.1.1.0/24.
Ipv4PrefixLength	IPv4 mask length	Index	Unsigned integer. Value range: 1 to 32.	N/A
Origin	Origin of IPv4 address.	N/A	Each bit represents a origin. Values: <ul style="list-style-type: none"> <li>1—Import.</li> <li>2—Manual.</li> <li>4—Update.</li> </ul>	N/A

## LB/Ipv6ISPAddressGroups

This table contains information about IPv6 ISP address groups.

## XML structure

```

<LB>
  <Ipv6ISPAddressGroups>
    <Ipv6ISPAddressGroup>

```

```

<Name></Name>
<Ipv6Address></Ipv6Address>
<Ipv6PrefixLength></Ipv6PrefixLength>
<Origin></Origin>
</Ipv6ISPAddressGroup>
</Ipv6ISPAddressGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Ipv6ISPAddressGroups
Table type	Multi-instance table
Row name	Ipv6ISPAddressGroup
Restrictions	Only IPv6 ISP can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	The value must be equal to the summation of the address and the prefix. Example:195::/64.
Ipv6PrefixLength	IPv6 prefix length	Index	Unsigned integer. Value range: 1 to 128.	N/A
Origin	Origin of IPv6 address.	N/A	Each bit represents a origin. Values: <ul style="list-style-type: none"> <li>1—Import.</li> <li>2—Manual.</li> <li></li> <li>4—Update.</li> </ul>	N/A

## LB/ProximityParameters

This table contains information about proximity parameter.

## XML structure

```
<LB>
  <ProximityParameters>
    <Ipv4PrefixLength></Ipv4PrefixLength>
    <Ipv6PrefixLength></Ipv6PrefixLength>
    <Timeout></Timeout>
    <RTTWeight></RTTWeight>
    <TTLWeight></TTLWeight>
    <InBandwidthWeight></InBandwidthWeight>
    <OutBandwidthWeight></OutBandwidthWeight>
    <CostWeight></CostWeight>
    <MaxNumber></MaxNumber>
    <DefaultProbeMode></DefaultProbeMode>
    <DefaultProbe></DefaultProbe>
  </ProximityParameters>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ProximityParameters
Table type	Single-instance table
Row name	N/A
Restrictions	Only proximity parameter can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32.	Zero means nature mask.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 1 to 128.	N/A
Timeout	The life time of proximity.	N/A	Unsigned integer. Value range: 60 to 3600.	N/A
RTTWeight	The weight of RTT.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TTLWeight	The weight of TTL.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
InBandwidthWeight	The weight of inbound bandwidth.	N/A	Unsigned integer. Value range: 0 to 255.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
OutBandwidthWeight	The weight of outbound bandwidth.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
CostWeight	The weight of link cost.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
MaxNumber	Proximity entries upper limit number.	N/A	Unsigned integer. Value range: 0 to 10000000.	N/A
DefaultProbeMode	Default probe mode for the proximity.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NQA.</li> <li>1—LB.</li> </ul>	N/A
DefaultProbe	Default probe method for the proximity.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/VRFProximityParameters

This table contains information about proximity parameter.

### XML structure

```

<LB>
  <VRFProximityParameters>
    <VRFProximityParameter>
      <VRF></VRF>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <Timeout></Timeout>
      <RTTWeight></RTTWeight>
      <TTLWeight></TTLWeight>
      <InBandwidthWeight></InBandwidthWeight>
      <OutBandwidthWeight></OutBandwidthWeight>
      <CostWeight></CostWeight>
      <MaxNumber></MaxNumber>
      <DefaultProbeMode></DefaultProbeMode>
      <DefaultProbe></DefaultProbe>
    </VRFProximityParameter>
  </VRFProximityParameters>
</LB>

```

### Table description

Item	Description
Feature name	LB

Table name	VRFPximityParameters
Table type	Multi-instance table
Row name	VRFPximityParameter
Restrictions	Only proximity parameter can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32.	Zero means nature mask.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 1 to 128.	N/A
Timeout	The life time of proximity.	N/A	Unsigned integer. Value range: 60 to 3600.	N/A
RTTWeight	The weight of RTT.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TTLWeight	The weight of TTL.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
InBandwidthWeight	The weight of inbound bandwidth.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
OutBandwidthWeight	The weight of outbound bandwidth.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
CostWeight	The weight of link cost.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
MaxNumber	Proximity entries upper limit number.	N/A	Unsigned integer. Value range: 0 to 10000000.	N/A
DefaultProbeMode	Default probe mode for the proximity.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NQA.</li> <li>1—LB.</li> </ul>	N/A
DefaultProbe	Default probe method for the proximity.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/ProximityProbeRules

This table contains information about probe of the proximity.

## XML structure

```
<LB>
  <ProximityProbeRules>
    <ProximityProbeRule>
      <ID></ID>
      <Type></Type>
      <ProbeMode></ProbeMode>
      <Probe></Probe>
    </ProximityProbeRule>
  </ProximityProbeRules>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ProximityProbeRules
Table type	Multi-instance table
Row name	ProximityProbeRule
Restrictions	Only proximity probe can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the probe rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the rule.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—TCP.</li></ul>	N/A
ProbeMode	Mode of the match probe.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—NQA.</li><li>1—LB.</li></ul>	N/A
Probe	Name of the match probe.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/VRFProximityProbeRules

This table contains information about probe of the proximity.

## XML structure

```
<LB>
  <VRFProximityProbeRules>
    <VRFProximityProbeRule>
      <VRF></VRF>
      <ID></ID>
      <Type></Type>
      <ProbeMode></ProbeMode>
      <Probe></Probe>
    </VRFProximityProbeRule>
  </VRFProximityProbeRules>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	VRFProximityProbeRules
Table type	Multi-instance table
Row name	VRFProximityProbeRule
Restrictions	Only proximity probe can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
ID	ID of the probe rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Type	Type of the rule.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—TCP.</li></ul>	N/A
ProbeMode	Mode of the match probe.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—NQA.</li><li>1—LB.</li></ul>	N/A
Probe	Name of the match probe.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

# LB/Ipv4ProximityTables

This table contains information about ipv4 proximity item.

## XML structure

```
<LB>
  <Ipv4ProximityTables>
    <Ipv4ProximityTable>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Lifetime></Lifetime>
      <BestLinkType></BestLinkType>
      <BestRealServer></BestRealServer>
      <BestLink></BestLink>
      <TimesUsed></TimesUsed>
    </Ipv4ProximityTable>
  </Ipv4ProximityTables>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	Ipv4ProximityTables
Table type	Multi-instance table
Row name	Ipv4ProximityTable
Restrictions	Only IPv4 proximity items can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation.	N/A
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range: 0 to 32.	N/A
Lifetime	Lifetime of proximity items.	N/A	Unsigned integer. Value range: 0 to 3600.	N/A
BestLinkType	Type of the best link.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Real server.</li> <li>2—Link.</li> </ul>	N/A
BestRealServer	The best real server name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
BestLink	The best link name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
TimesUsed	Number of times the proximity entry was used.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/Ipv6ProximityTables

This table contains information about ipv6 proximity item.

### XML structure

```

<LB>
  <Ipv6ProximityTables>
    <Ipv6ProximityTable>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <VRF></VRF>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <Lifetime></Lifetime>

```

```

    <BestLinkType></BestLinkType>
    <BestRealServer></BestRealServer>
    <BestLink></BestLink>
    <TimesUsed></TimesUsed>
  </Ipv6ProximityTable>
</Ipv6ProximityTables>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Ipv6ProximityTables
Table type	Multi-instance table
Row name	Ipv6ProximityTable
Restrictions	Only IPv6 proximity items can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Ipv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A
Ipv6PrefixLength	IPv6 prefix length.	Index	Unsigned integer. Value range: 1 to 128.	N/A
Lifetime	Lifetime of proximity items.	N/A	Unsigned integer. Value range: 0 to 3600.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
BestLinkType	Type of the best link.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Real server.</li> <li>2—Link.</li> </ul>	N/A
BestRealServer	The best real server name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
BestLink	The best link name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
TimesUsed	Number of times the proximity entry was used.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/Ipv4ProximityNodes

This table contains information about the real servers of ipv4 proximity item.

### XML structure

```

<LB>
  <Ipv4ProximityNodes>
    <Ipv4ProximityNode>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Priority></Priority>
      <LinkType></LinkType>
      <RealServer></RealServer>
      <Link></Link>
      <RTT></RTT>
      <TTL></TTL>
    </Ipv4ProximityNode>
  </Ipv4ProximityNodes>
</LB>

```



## Table description

Item	Description
Feature name	LB
Table name	Ipv4ProximityNodes
Table type	Multi-instance table
Row name	Ipv4ProximityNode
Restrictions	Only IPv4 proximity node can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Ipv4Address	IPv4 address.	Index	String. Dotted decimal notation.	N/A
Ipv4PrefixLength	IPv4 mask length.	Index	Unsigned integer. Value range: 0 to 32.	N/A
Priority	Priority.	Index	Unsigned integer. Value range: 1 to $2^{32}-1$ .	N/A
LinkType	Type of the link.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Real server.</li><li>• 2—Link.</li></ul>	N/A
RealServer	Real server name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Link	Link name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RTT	Roundtrip time of the	N/A	Unsigned integer. Value range: 0 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	proximity probe.		86400000. Unit: millisecond	
TTL	Time to live of the proximity probe.	N/A	Unsigned integer. Value range: 0 to 256.	N/A

## LB/Ipv6ProximityNodes

This table contains information about the real servers of ipv6 proximity item.

### XML structure

```

<LB>
  <Ipv6ProximityNodes>
    <Ipv6ProximityNode>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <VRF></VRF>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <Priority></Priority>
      <LinkType></LinkType>
      <RealServer></RealServer>
      <Link></Link>
      <RTT></RTT>
      <TTL></TTL>
    </Ipv6ProximityNode>
  </Ipv6ProximityNodes>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	Ipv6ProximityNodes
Table type	Multi-instance table
Row name	Ipv6ProximityNode
Restrictions	Only IPv6 proximity node can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
Ipv6Address	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A
Ipv6PrefixLength	IPv6 prefix length.	Index	Unsigned integer. Value range: 1 to 128.	N/A
Priority	Priority.	Index	Unsigned integer. Value range: 1 to $2^{32}-1$ .	N/A
LinkType	Type of the link.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Real server.</li><li>• 2—Link.</li></ul>	N/A
RealServer	Real server name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Link	Link name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
RTT	Roundtrip time of the proximity probe.	N/A	Unsigned integer. Value range: 0 to 86400000. Unit: millisecond	N/A
TTL	Time to live of the proximity probe.	N/A	Unsigned integer. Value range: 0 to 256.	N/A

## LB/Specifications

This table contains information about the LB function specification.

## XML structure

<LB>

```

<Specifications>
  <SupportHotbackup></SupportHotbackup>
  <SupportSLB></SupportSLB>
  <SupportLBControllerType></SupportLBControllerType>
  <SupportCachePolicy></SupportCachePolicy> </Specifications>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Specifications
Table type	Single-instance table
Row name	N/A
Restrictions	Only LB function specification can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportHotbackup	Hot backup function is supported or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Supported.</li> <li>false—Not supported.</li> </ul>	N/A
SupportSLB	SLB function is supported or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Supported.</li> <li>false—Not supported.</li> </ul>	N/A
SupportLBControllerType	Controller function is supported or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Supported.</li> <li>false—Not supported.</li> </ul>	N/A
SupportCachePolicy	Cache policy function is supported or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Supported.</li> <li>false—Not supported.</li> </ul>	N/A

## LB/ALG

This table contains information about ALG.

## XML structure

```
<LB>
```

```

<ALG>
  <DnsEnable></DnsEnable>
  <FtpEnable></FtpEnable>
  <H323Enable></H323Enable>
  <IcmpEnable></IcmpEnable>
  <IlsEnable></IlsEnable>
  <MgcpEnable></MgcpEnable>
  <NbtEnable></NbtEnable>
  <PptpEnable></PptpEnable>
  <RshEnable></RshEnable>
  <RtspEnable></RtspEnable>
  <SccpEnable></SccpEnable>
  <SipEnable></SipEnable>
  <SqlnetEnable></SqlnetEnable>
  <TftpEnable></TftpEnable>
  <XdmcpEnable></XdmcpEnable>
</ALG>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ALG
Table type	Single-instance table
Row name	N/A
Restrictions	Only ALG can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DnsEnable	Enable the DNS protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
FtpEnable	Enable the FTP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
H323Enable	Enable the H323 protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
IcmpEnable	Enable the ICMP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
IlsEnable	Enable the ILS	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	protocol service.		<ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	
MgcpEnable	Enable the MGCP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
NbtEnable	Enable the NBT protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
PtpEnable	Enable the PPTP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RshEnable	Enable the RSH protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
RtspEnable	Enable the RTSP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
SccpEnable	Enable the SCCP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
SipEnable	Enable the SIP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
SqlnetEnable	Enable the SQLNET protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
TftpEnable	Enable the TFTP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
XdmcpEnable	Enable the XDMCP protocol service.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## LB/ProximityStats

This table contains information about proximity entries.

### XML structure

```

<LB>
  <ProximityStats>
    <ProximityStat>
      <ChassisID></ChassisID>
    </ProximityStat>
  </ProximityStats>
</LB>

```

```

    <SlotID></SlotID>
    <CPUID></CPUID>
    <VRF></VRF>
    <TotalCount></TotalCount>
    <Ipv4Count></Ipv4Count>
    <Ipv6Count></Ipv6Count>
  </ProximityStat>
</ProximityStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ProximityStats
Table type	Multi-instance table
Row name	ProximityStat
Restrictions	Only proximity can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	The null string indicates public network.
TotalCount	The number of total proximity entries.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
Ipv4Count	The number of IPv4 proximity entries.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
Ipv6Count	The number of IPv6 proximity entries.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

# LB/LimitPolicies

This table contains information about limit policies.

## XML structure

```
<LB>
  <LimitPolicies>
    <LimitPolicy>
      <Name></Name>
      <Description></Description>
    </LimitPolicy>
  </LimitPolicies>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	LimitPolicies
Table type	Multi-instance table
Row name	LimitPolicy
Restrictions	Only limit policy can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the limit policy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description information for the policy.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.

# LB/LimitRules

This table contains information about limit policy rules.

## XML structure

```
<LB>
  <LimitRules>
    <LimitRule>
```



```

<Name></Name>
<ID></ID>
<AclVersion></AclVersion>
<AclNum></AclNum>
<AclName></AclName>
<PerDestination></PerDestination>
<PerSource></PerSource>
<PerService></PerService>
<ThresholdHigh></ThresholdHigh>
<ThresholdLow></ThresholdLow>
</LimitRule>
</LimitRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LimitRules
Table type	Multi-instance table
Row name	LimitRule
Restrictions	Only limit policy rule can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the limit policy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ID	ID of the limit policy rule.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
AclVersion	Version of ACL	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
AclNum	ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	AclNum and AclName are mutual exclusive and only one of them can be set in a single message.
AclName	Name of the ACL.	N/A	String, case-insensitive. Length: 1 to 63 characters.	AclNum and AclName are mutual exclusive and only one of them can be set in a single message.
PerDestination	Enable the per-destination connection	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	limit.		<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
PerSource	Enable the per-source connection limit.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
PerService	Enable the per-service connection limit.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ThresholdHigh	High threshold of the connections.	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ .	ThresholdHigh must be greater or equal than ThresholdLow.
ThresholdLow	Low threshold of the connections.	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ .	ThresholdHigh must be greater or equal than ThresholdLow.

## LB/Links

This table contains information about link.

## XML structure

```

<LB>
  <Links>
    <Link>
      <Name></Name>
      <Description></Description>
      <RouterType></RouterType>
      <RouterInterface></RouterInterface>
      <RouterIpv4Address></RouterIpv4Address>
      <RouterIpv6Address></RouterIpv6Address>
      <Weight></Weight>
      <Priority></Priority>
      <Cost></Cost>
      <LinkGroup></LinkGroup>
      <Shutdown></Shutdown>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitBandwidth></RateLimitBandwidth>
      <InRateLimitBandwidth></InRateLimitBandwidth>
      <OutRateLimitBandwidth></OutRateLimitBandwidth>
      <BandwidthBusyRatio></BandwidthBusyRatio>
      <InBandwidthBusyRatio></InBandwidthBusyRatio>
      <OutBandwidthBusyRatio></OutBandwidthBusyRatio>
      <BandwidthBusyRecoverRatio></BandwidthBusyRecoverRatio>
      <InBandwidthBusyRecoverRatio></InBandwidthBusyRecoverRatio>

```

```

<OutBandwidthBusyRecoverRatio></OutBandwidthBusyRecoverRatio>
<MaxBandwidth></MaxBandwidth>
<InMaxBandwidth></InMaxBandwidth>
<OutMaxBandwidth></OutMaxBandwidth>
<VRF></VRF>
<InheritVPN></InheritVPN>
<State></State>
</Link>
</Links>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Links
Table type	Multi-instance table
Row name	Link
Restrictions	Only link can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link.	Index	String, case-insensitive.  Length: 1 to 63 characters.	N/A
Description	Description of the link.	N/A	String.  Length: 0 to 127 characters.	The null string indicates the label is not configured.
RouterType	The type of router.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Configure.</li> <li>1—Auto.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RouterInterface	Name of the router interface.	N/A	String. Case insensitive. Length: 1 to 47 characters.	N/A
RouterIPv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1.  Loopback addresses, multicast addresses, broadcast addresses are not supported, and address such as 0.x.x.x are not supported either.
RouterIPv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2.  Loopback addresses, multicast addresses and link local addresses are not supported.
Weight	Weight of the link.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
Priority	Priority of the link.	N/A	Unsigned integer. Value range: 1 to 8.	N/A
Cost	The cost of link bandwidth.	NA	Unsigned integer. Value range: 0 to 10240.	N/A
LinkGroup	Name of the link group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
Shutdown	Shutdown state for the link.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Shutdown.</li> <li>2—Slow-shutdown.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ProbeSuccessCriteria	Probe success criteria for the real server.	N/A	Unsigned integer.  Value range: 0 to $2^{32}-1$ .  By default, the value is 0 which indicates that probe success criteria is all.	N/A
MaxConnectionLimit	Maximum connections limit number.	N/A	Unsigned integer.  Value range: 0 to $2^{32}-1$ .	N/A
RateLimitConnection	Maximum connections rate limit number.	N/A	Unsigned integer.  Value range: 0 to $2^{32}-1$ .  Unit: cps.	N/A
RateLimitBandwidth	Maximum bandwidth rate limit number.	N/A	Unsigned integer.  Value range: 0 to $2^{32}-1$ .  Unit: KB/s.	N/A
InRateLimitBandwidth	Inbound maximum bandwidth rate limit number.	N/A	Unsigned integer.  Value range: 0 to $2^{32}-1$ .  Unit: KB/s.	N/A
OutRateLimitBandwidth	Outbound maximum bandwidth rate limit number.	N/A	Unsigned integer.  Value range: 0 to $2^{32}-1$ .  Unit: KB/s.	N/A
BandwidthBusyRatio	Total bandwidth busy ratio.	N/A	Unsigned integer.  Value range: 1 to 100.  By default, the value	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			is 70.	
InBandwidthBusyRatio	Inbound bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 70.	N/A
OutBandwidthBusyRatio	Outbound bandwidth busy ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 70.	N/A
BandwidthBusyRecoverRatio	Total bound bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
InBandwidthBusyRecoverRatio	Inbound bandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
OutBandwidthBusyRecoverRatio	Outbandwidth busy recovery ratio.	N/A	Unsigned integer. Value range: 1 to 100. By default, the value is 60. The busy rate must be greater than or equal to the recovery rate.	N/A
MaxBandwidth	Max bandwidth.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Unit: KB/s.	
InMaxBandwidth	Max inbound bandwidth.	N/A	Unsigned integer.  Value range: 0 to $2^{32}-1$ .  Unit: KB/s.	N/A
OutMaxBandwidth	Max outbound bandwidth.	N/A	Unsigned integer.  Value range: 0 to $2^{32}-1$ .  Unit: KB/s.	N/A
State	State of the link.	N/A	Enumeration:  <ul style="list-style-type: none"> <li>• 0—Unavailable.</li> <li>• 1—Available.</li> <li>• 2—Slow-shutdown.</li> <li>• 3—Shutdown.</li> <li>• 4—Probe-failed.</li> <li>• 5—Standby.</li> <li>• 6—Ramp.</li> <li>• 8—Busy.</li> <li>• 9—Unknown.</li> </ul>	N/A
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates public network.
InheritVPN	Inherit the VPN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Disable inherit the VPN</li> <li>• 1—Enable inherit the VPN.</li> </ul>	N/A

## LB/LinkProbes

This table contains information about link probe that only uses NQA template.

### XML structure

```
<LB>
  <LinkProbes>
```

```

<LinkProbe>
  <Link></Link>
  <Probe></Probe>
  <State></State>
</LinkProbe>
</LinkProbes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkProbes
Table type	Multi-instance table
Row name	LinkProbe
Restrictions	Only Link probe can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Link	Name of the link.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the link.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
State	State of the real server probe.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not exist.</li> <li>1—Success.</li> <li>2—Failed.</li> <li>3—In the process.</li> </ul>	N/A

## LB/LinkStats

This table contains stat information about link.

## XML structure

```

<LB>
  <LinkStats>
    <LinkStat>
      <Name></Name>

```



```

<ChassisID></ChassisID>
<SlotID></SlotID>
<CPUID></CPUID>
<TotalConnections></TotalConnections>
<ActiveConnections></ActiveConnections>
<MaxConnections></MaxConnections>
<ConnectionsPerSec></ConnectionsPerSec>
<MaxConnectionPerSec></MaxConnectionPerSec>
<DownstreamPKTs></DownstreamPKTs>
<UpstreamPKTs></UpstreamPKTs>
<DroppedPackets></DroppedPackets>
<DownstreamTraffic></DownstreamTraffic>
<UpstreamTraffic></UpstreamTraffic>
<Bandwidth></Bandwidth>
<MaxBandwidth></MaxBandwidth>
<InBandwidth></InBandwidth>
<OutBandwidth></OutBandwidth>
<InMaxBandwidth></InMaxBandwidth>
<OutMaxBandwidth></OutMaxBandwidth>
</LinkStat>
</LinkStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkStats
Table type	Multi-instance table
Row name	LinkStat
Restrictions	Only stats of link can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TotalConnections	Total connections that the link received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ActiveConnections	Active connections that the link received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
MaxConnections	Max connections that the link received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ConnectionsPerSec	Connections per second that the link received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
MaxConnectionPerSec	Max connections per second that the link received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
DownstreamPKTs	Number of packets that the link received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
UpstreamPKTs	Number of packets that the link sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedPackets	Number of packets that the link dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DownstreamTraffic	Number of bytes that the link received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
UpstreamTraffic	Number of bytes that the link sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
Bandwidth	Bandwidth of the link.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
MaxBandwidth	Max bandwidth of	N/A	Unsigned integer. Value range: 0 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the link.		$2^{32}-1$ . Unit: KB/s.	
InBandwidth	Inbound Bandwidth of the link.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutBandwidth	Outbound Bandwidth of the link.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
InMaxBandwidth	Inbound Max bandwidth of the link.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutMaxBandwidth	Outbound Max bandwidth of the link.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A

## LB/LinkOutInterfaces

This table contains out-interface rate stat information about link.

### XML structure

```

<LB>
  <LinkOutInterfaces>
    <LinkOutInterface>
      <Name></Name>
      <InputRate></InputRate>
      <OutputRate></OutputRate>
    </LinkOutInterface>
  </LinkOutInterfaces>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	LinkOutInterfaces
Table type	Multi-instance table
Row name	LinkOutInterface
Restrictions	Only out-interface rate stats of link can be gotten by this

	table.
--	--------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
InputRate	Input rate of the link out interface.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Bytes/s.	N/A
OutputRate	Output rate of the link out interface.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Bytes/s.	N/A

## LB/LinkGroups

This table contains information about link group.

## XML structure

```

<LB>
  <LinkGroups>
    <LinkGroup>
      <Name></Name>
      <Description></Description>
      <Predictor></Predictor>
      <HashIpv4PrefixLength></HashIpv4PrefixLength>
      <HashIpv6PrefixLength></HashIpv6PrefixLength>
      <SelectLinkMinNumber></SelectLinkMinNumber>
      <SelectLinkMaxNumber></SelectLinkMaxNumber>
      <SlowOnlineEnable></SlowOnlineEnable>
      <SlowOnlineStandbyTime></SlowOnlineStandbyTime>
      <SlowOnlineRampUpTime></SlowOnlineRampUpTime>
      <Transparent></Transparent>
      <ActivateLower></ActivateLower>
      <ActivateUpper></ActivateUpper>
      <SNATPool></SNATPool>
      <FailAction></FailAction>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <TotalLink></TotalLink>
      <ActiveLink></ActiveLink>
      <State></State>
    </LinkGroup>
  </LinkGroups>
</LB>

```

```

        <ProximityEnable></ProximityEnable>
    </LinkGroup>
</LinkGroups>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkGroups
Table type	Multi-instance table
Row name	LinkGroup
Restrictions	Only link group can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Description	Description of the link group.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Predictor	Predictor algorithm for LB to select a link to forward packet.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Round-robin.</li> <li>• 1—Random.</li> <li>• 2—Least-connection.</li> <li>• 3—Hash source address.</li> <li>• 4—Hash source port.</li> <li>• 5—Hash destination address.</li> <li>• 6—Bandwidth.</li> <li>• 7—Inbound bandwidth.</li> <li>• 8—Outbound bandwidth.</li> <li>• 9—Max bandwidth.</li> <li>• 10—Max inbound bandwidth.</li> <li>• 11—Max Outbound</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			bandwidth.	
HashIpv4PrefixLength	Length of IPv4 address mask for hash algorithm.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
HashIpv6PrefixLength	Length of IPv6 address prefix for hash algorithm.	N/A	Unsigned integer. Value range: 0 to 128.	N/A
SelectLinkMinNumber	Minimum number of the active link in the link group.	N/A	Unsigned integer. Value range: 1 to 1000.	N/A
SelectLinkMaxNumber	Maximum number of the active link in the link group.	N/A	Unsigned integer. Value range: 1 to 1000.	N/A
SlowOnlineEnable	Enable the link group slow online.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
SlowOnlineStandbyTime	Standby time of the slow online.	N/A	Unsigned integer. Value range: 0 to 600. Unit: second.	N/A
SlowOnlineRampUpTime	Ramp up time of the slow online.	N/A	Unsigned integer. Value range: 3 to 600. Unit: second.	N/A
Transparent	Disable NAT for the server farm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ActivateLower	The status of main link group will be changed from in use to backup when the ratio of the available links in main link group becomes smaller than this value.	N/A	Unsigned integer. Value range: 1 to 99.	N/A
ActivateUpper	The status of main link group will be changed from backup to in use when the ratio of the available links in main link group reaches		Unsigned integer. Value range: 1 to 99.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	or over this value.			
SNATPool	SNAT pool for the link group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	N/A
FailAction	Specify the action that the LB takes with respect to connections if any link fails in a link group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Keep.</li> <li>1—Reset.</li> <li>2—Reschedule.</li> </ul>	N/A
ProbeSuccessCriteria	The condition that link is available through probes.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
TotalLink	Total number of links in the link group.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ActiveLink	Active number of links in the link group.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
State	State of the link group.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> </ul>	N/A
ProximityEnabled	Enable the proximity.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A

## LB/LinkGroupProbes

This table contains information about Link Group Probe that only uses NQA template.

### XML structure

```

<LB>
  <LinkGroupProbes>
    <LinkGroupProbe>
      <LinkGroup></LinkGroup>
      <Probe></Probe>
    </LinkGroupProbe>
  </LinkGroupProbes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkGroupProbes
Table type	Multi-instance table
Row name	LinkGroupProbe
Restrictions	Only link group probe can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LinkGroup	Name of the link group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Probe	Probe method for the link group.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/LinkGroupStats

This table contains stat information about link group.

## XML structure

```
<LB>
  <LinkGroupStats>
    <LinkGroupStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <TotalConnections></TotalConnections>
      <ActiveConnections></ActiveConnections>
      <ConnectionsPerSec></ConnectionsPerSec>
      <DownstreamPKTs></DownstreamPKTs>
      <UpstreamPKTs></UpstreamPKTs>
      <DroppedPackets></DroppedPackets>
      <DownstreamTraffic></DownstreamTraffic>
      <UpstreamTraffic></UpstreamTraffic>
      <Bandwidth></Bandwidth>
    </LinkGroupStat>
  </LinkGroupStats>
```



</LB>

## Table description

Item	Description
Feature name	LB
Table name	LinkGroupStats
Table type	Multi-instance table
Row name	LinkGroupStat
Restrictions	Only stats of link group can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TotalConnections	Total connections that the link group received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ActiveConnections	Active connections that the link group received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ConnectionsPerSec	Connections per second that the link group received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
DownstreamPKTs	Number of packets that the link group received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
UpstreamP	Number of packets that	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
KTs	the link group sent.		Value range: 0 to $2^{64}-1$ .	
DroppedPackets	Number of packets that the link group dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DownstreamTraffic	Number of bytes that the link group received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
UpstreamTraffic	Number of bytes that the link group sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
Bandwidth	Bandwidth of the link group.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A

## LB/Regions

This table contains information about region.

## XML structure

```

<LB>
  <Regions>
    <Region>
      <Name></Name>
    </Region>
  </Regions>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Regions
Table type	Multi-instance table
Row name	Region
Restrictions	Only region can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the link.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## LB/RegionISPs

This table contains information about region ISP.

## XML structure

```
<LB>
  <RegionISPs>
    <RegionISP>
      <Region></Region>
      <ISP></ISP>
    </RegionISP>
  </RegionISPs>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	RegionISPs
Table type	Multi-instance table
Row name	RegionISP
Restrictions	Only Region ISP can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Region	Name of the region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ISP	ISP for the region.	Index	String, case-insensitive. Length: 1 to 63	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	

## LB/TopologyRegions

This table contains information about topology region.

### XML structure

```

<LB>
  <TopologyRegions>
    <TopologyRegion>
      <RegionName></RegionName>
      <Ipv4Address></Ipv4Address>
      <Ipv4MaskLength></Ipv4MaskLength>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <Weight></Weight>
    </TopologyRegion>
  </TopologyRegions>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	TopologyRegions
Table type	Multi-instance table
Row name	TopologyRegion
Restrictions	Only TopologyRegion can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RegionName	Name of the topology region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4	Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
			address is specified.	
Ipv4MaskLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	N/A
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	N/A
Weight	Weight of the topology region.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.

## LB/TopologyRegionIPv4s

This table contains information about an IPv4 topology region.

### XML structure

```

<LB>
  <TopologyRegionIPv4s>
    <TopologyRegionIPv4>
      <RegionName></RegionName>
      <IPv4Address></IPv4Address>
      <IPv4MaskLength></IPv4MaskLength>
      <Weight></Weight>
    </TopologyRegionIPv4>
  </TopologyRegionIPv4s>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	TopologyRegionIPv4s
Table type	Multi-instance table
Row name	TopologyRegion
Restrictions	Only TopologyRegionIPv4 can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RegionName	Name of the topology region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPv4Addresses	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1.
IPv4MaskLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32. By default, the value is 32.	N/A
Weight	Weight of the topology region.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.

## LB/TopologyRegionIPv6s

This table contains information about an IPv6 topology region.

## XML structure

```
<LB>
  <TopologyRegionIPv6s>
    <TopologyRegionIPv6>
      <RegionName></RegionName>
      <IPv6Address></IPv6Address>
      <IPv6PrefixLength></IPv6PrefixLength>
      <Weight></Weight>
    </TopologyRegionIPv6>
  </TopologyRegionIPv6s>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	TopologyRegionIPv6s
Table type	Multi-instance table

Row name	TopologyRegion
Restrictions	Only TopologyRegionIPv6 can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RegionName	Name of the topology region.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
IPv6Addresses	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2.
IPv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 0 to 128. By default, the value is 128.	N/A
Weight	Weight of the topology region.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	A larger value means a higher weight.

## LB/DNSListeners

This table contains information about a DNS listener.

## XML structure

```

<LB>
  <DNSListeners>
    <DNSListener>
      <Name></Name>
      <VRF></VRF>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <IPv6PortNumber></IPv6PortNumber>
      <ServiceEnable></ServiceEnable>
      <Fallback></Fallback>
    </DNSListener>
  </DNSListeners>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSListeners
Table type	Multi-instance table
Row name	DNSListener
Restrictions	Only DNS Listener can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS listener.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates public network.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation. By default, no IPv4 address is specified.	Example: 1.1.1.1. Loopback addresses, multicast addresses and broadcast addresses are not supported, and addresses such as 0.x.x.x are not supported either.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated. By default, no IPv6 address is specified.	Example: 2::2. Loopback addresses, multicast addresses and link local addresses are not supported.
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 1 to 65535. By default, the value is 53.	N/A
IPv6PortNumber	Number of IPv6 port.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
ServiceEnable	Enable the DNS listener.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	N/A
Fallback	Fallback action.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—No-response.</li><li>1—Reject.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—Dns proxy.</li> </ul>	

## LB/DNSListenerStats

This table contains stat information about DNS listener.

### XML structure

```

<LB>
  <DNSListenerStats>
    <DNSListenerStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <ReceivedRequests></ReceivedRequests>
      <ReceivedValidRequests></ReceivedValidRequests>
      <UnrespondedRequests></UnrespondedRequests>
      <RejectedRequests></RejectedRequests>
    </DNSListenerStat>
  </DNSListenerStats>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	DNSListenerStats
Table type	Multi-instance table
Row name	DNSListenerStat
Restrictions	Only stats of DNS listener can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS listener.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
ChassisID	ID of the device that	Index	Unsigned integer. Value range: 0 to 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	holds the card.			
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
ReceivedRequests	Number of requests that the DNS listener received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ReceivedValidRequests	Number of valid requests that the DNS listener received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
UnrespondedRequests	Number of unresponded requests that the DNS listener received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
RejectedRequests	Number of rejected requests that the DNS listener received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/DNSListenerTypeStats

This table contains different type stat information about DNS listener.

### XML structure

```

<LB>
  <DNSListenerTypeStats>
    <DNSListenerTypeStat>
      <Name></Name>
      <Type></Type>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <ReceivedRequests></ReceivedRequests>
      <ReceivedValidRequests></ReceivedValidRequests>
      <UnrespondedRequests></UnrespondedRequests>

```

```

    <RejectedRequests></RejectedRequests>
  </DNSListenerTypeStat>
</DNSListenerTypeStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSListenerTypeStats
Table type	Multi-instance table
Row name	DNSListenerTypeStat
Restrictions	Only different type stats of DNS listener can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS listener.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the DNS listener statistics.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—A.</li> <li>1—AAAA.</li> <li>2—CNAME.</li> <li>3—MX.</li> <li>4—NS.</li> <li>5—PTR.</li> <li>6—SOA.</li> <li>7—TXT.</li> <li>8—SRV.</li> </ul>	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
ReceivedRequests	Number of requests that the DNS listener received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ReceivedValidRequests	Number of valid requests that the DNS listener received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
UnrespondedRequests	Number of unresponded requests that the DNS listener received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
RejectedRequests	Number of rejected requests that the DNS listener received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/DNSProxies

This table contains information about DNS proxies.

### XML structure

```

<LB>
  <DNSProxies>
    <DNSProxy>
      <Name></Name>
      <Type></Type>
      <VRF></VRF>
      <PortNumber></PortNumber>
      <ServiceEnable></ServiceEnable>
      <DefaultDNSServerPool></DefaultDNSServerPool>
      <Policy></Policy>
      <BusyProtectEnable></BusyProtectEnable>
      <ConnSynEnable></ConnSynEnable>
      <State></State>
      <StickySynEnable></StickySynEnable>
      <StickySyncType></StickySyncType>
      <StickyGroup></StickyGroup>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
    </DNSProxy>
  </DNSProxies>
</LB>

```

```
</DNSProxies>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	DNSProxies
Table type	Multi-instance table
Row name	DNSProxy
Restrictions	Only DNS proxy can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS proxy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Type	Type of the DNS proxy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—UDP</li> </ul>	N/A
VRF	VRF name.	N/A	String, Length: 0 to 31 characters	The null string indicates public network.
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 1 to 65535	N/A
ServiceEnable	Enable the DNS proxy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
DefaultDNS ServerPool	Name of the default DNS server pool.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
Policy	Name of the policy.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
BusyProtect Enable	Enable link protection.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
ConnSynEn	Enable the	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
able	connection synchronization.		<ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	
State	State of the DNS proxy.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Disable.</li> </ul>	N/A
StickySynEnable	Enable the sticky synchronization.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
StickySyncType	Sticky synchronization type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Synchronize in failover group (default).</li> <li>1—Synchronize global.</li> </ul>	This column can only be configured when the StickySynEnable is Enable (1).
StickyGroup	Name of the sticky group.	N/A	String, case-insensitive. Length: 0 to 63 characters.	The null string indicates the label is not configured.
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	IPv4 mask length.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
Ipv6PrefixLength	IPv6 prefix length.	N/A	Unsigned integer. Value range: 0 to 128.	N/A

## LB/DNSProxyStats

This table contains stat information about DNS proxy.

### XML structure

```

<LB>
  <DNSProxyStats>
    <DNSProxyStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <ReceivedRequests></ReceivedRequests>
      <DroppedRequests></DroppedRequests>
      <ReceivedResponses></ReceivedResponses>
    </DNSProxyStat>
  </DNSProxyStats>
</LB>

```

```

        <DroppedResponses></DroppedResponses>
        <SentResponses></SentResponses>
    </DNSProxyStat>
</DNSProxyStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSProxyStats
Table type	Multi-instance table
Row name	DNSProxyStat
Restrictions	Only stats of DNS proxy can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS proxy.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
ReceivedRequests	Number of DNS requests that the DNS proxy has received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedRequests	Number of DNS requests that the DNS proxy has dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ReceivedResponses	Number of DNS responses that the DNS proxy has received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedResponses	Number of DNS	N/A	Unsigned integer. Value range: 0 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	responses that the DNS proxy has dropped.		$2^{64}-1$ .	
SentResponses	Number of DNS responses that the DNS proxy has sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/DNSServers

This table contains information about DNS server.

### XML structure

```

<LB>
  <DNSServers>
    <DNSServer>
      <Name></Name>
      <Description></Description>
      <AutoAllocAddress></AutoAllocAddress>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <DNSServerPool></DNSServerPool>
      <Link></Link>
      <Weight></Weight>
      <Priority></Priority>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <State></State>
    </DNSServer>
  </DNSServers>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	DNSServers
Table type	Multi-instance table
Row name	DNSServer
Restrictions	Only DNS server can be gotten by this table.



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the real server.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
AutoAllocAddress	Automatic allocable address for DNS server. Include IPv4 address and IPv6 address.	N/A	Numeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
PortNumber	Number of port.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DNSServerPool	Name of the DNS server pool.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
Link	Name of the link.	N/A	String, case-insensitive. Length: 1 to 63 characters.	The null string indicates the label is not configured.
Weight	Weight of the DNS server.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
Priority	Priority of the DNS server.	N/A	Unsigned integer. Value range: 1 to 8.	N/A
ProbeSuccessCriteria	Probe success criteria for the DNS server.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
State	State of the DNS server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Probe-failed.</li> <li>3—Busy.</li> <li>4—Unknow.</li> </ul>	N/A

# LB/DNSServerProbes

This table contains information about DNS server probe that only uses NQA template.

## XML structure

```
<LB>
  <DNSServerProbes>
    <DNSServerProbe>
      <DNSServer></DNSServer>
      <Probe></Probe>
      <State></State>
    </DNSServerProbe>
  </DNSServerProbes>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerProbes
Table type	Multi-instance table
Row name	DNSServerProbe
Restrictions	Only DNS server probe can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSServer	Name of the DNS server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the DNS server.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
State	State of the DNS server probe.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Not exist.</li><li>1—Success.</li><li>2—Failed.</li><li>3—In the process.</li></ul>	N/A

# LB/DNSServerStats

This table contains stat information about DNS server.

## XML structure

```
<LB>
  <DNSServerStats>
    <DNSServerStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <ReceivedRequests></ReceivedRequests>
      <DroppedRequests></DroppedRequests>
      <ReceivedResponses></ReceivedResponses>
      <DroppedResponses></DroppedResponses>
      <SentResponses></SentResponses>
    </DNSServerStat>
  </DNSServerStats>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerStats
Table type	Multi-instance table
Row name	DNSServerStat
Restrictions	Only stats of DNS server can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS server.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
ReceivedRequests	Number of DNS requests	N/A	Unsigned integer. Value range: 0 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	that the DNS server has received.		$2^{64}-1$ .	
DroppedRequests	Number of DNS requests that the DNS server has dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ReceivedResponses	Number of DNS responses that the DNS server has received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedResponses	Number of DNS responses that the DNS server has dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
SentResponses	Number of DNS responses that the DNS server has sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/DNSServerPools

This table contains information about DNS server pool.

### XML structure

```

<LB>
  <DNSServerPools>
    <DNSServerPool>
      <Name></Name>
      <Description></Description>
      <Predictor></Predictor>
      <HashIpv4PrefixLength></HashIpv4PrefixLength>
      <HashIpv6PrefixLength></HashIpv6PrefixLength>
      <SelectServerMinNumber></SelectServerMinNumber>
      <SelectServerMaxNumber></SelectServerMaxNumber>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <TotalDNSServer></TotalDNSServer>
      <ActiveDNSServer></ActiveDNSServer>
      <State></State>
    </DNSServerPool>
  </DNSServerPools>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerPools
Table type	Multi-instance table
Row name	DNSServerPool
Restrictions	Only DNS server pool can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the DNS server pool.	N/A	String. Length: 1 to 127 characters.	The null string indicates the label is not configured.
Predictor	Predictor algorithm for LB to select a DNS server to serve a DNS request.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Round-robin (default).</li> <li>1—Random.</li> <li>2—Bandwidth.</li> <li>3—Inbound bandwidth.</li> <li>4—Outbound bandwidth.</li> <li>5—Max bandwidth.</li> <li>6—Max inbound bandwidth.</li> <li>7—Max outbound bandwidth.</li> <li>8—Hash source address.</li> <li>9—Hash source port.</li> <li>10—Hash destination address.</li> </ul>	N/A
HashIpv4PrefixLength	Length of IPv4 address mask for hash algorithm.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
HashIpv6PrefixLength	Length of IPv6 address prefix	N/A	Unsigned integer. Value range: 0 to 128.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	for hash algorithm.			
SelectServerMinNumber	Minimum number of the active real server in the server farm.	N/A	Unsigned integer. Value range: 1 to 1000.	N/A
SelectServerMaxNumber	Maximum number of the active real server in the server farm.	N/A	Unsigned integer. Value range: 1 to 1000.	N/A
ProbeSuccessCriteria	The condition that real server is available through probes.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
TotalDNSServer	Total number of DNS servers in the DNS server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ActiveDNSServer	Active number of DNS servers in the DNS server pool.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
State	State of the DNS server pool.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> </ul>	N/A

## LB/DNSServerPoolProbes

This table contains information about DNS server pool probe that only uses NQA template.

### XML structure

```

<LB>
  <DNSServerPoolProbes>
    <DNSServerPoolProbe>
      <DNSServerPool></DNSServerPool>
      <Probe></Probe>
    </DNSServerPoolProbe>
  </DNSServerPoolProbes>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerPoolProbes
Table type	Multi-instance table
Row name	DNSServerPoolProbe
Restrictions	Only DNS server pool probe can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSServerPool	Name of the DNS server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Probe	Probe method for the DNS server pool.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## LB/DNSServerPoolStats

This table contains stat information about DNS server pool.

## XML structure

```
<LB>
  <DNSServerPoolStats>
    <DNSServerPoolStat>
      <Name></Name>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <ReceivedRequests></ReceivedRequests>
      <DroppedRequests></DroppedRequests>
      <ReceivedResponses></ReceivedResponses>
      <DroppedResponses></DroppedResponses>
      <SentResponses></SentResponses>
    </DNSServerPoolStat>
  </DNSServerPoolStats>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerPoolStats
Table type	Multi-instance table
Row name	DNSServerPoolStat
Restrictions	Only stats of DNS server pool can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the DNS server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
ReceivedRequests	Number of DNS requests that the DNS server pool has received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedRequests	Number of DNS requests that the DNS server pool has dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ReceivedResponses	Number of DNS responses that the DNS server pool has received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedResponses	Number of DNS responses that the DNS server pool has dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
SentResponse	Number of	N/A	Unsigned integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
ses	DNS responses that the DNS server pool has sent.		Value range: 0 to $2^{64}-1$ .	

## LB/Log

This table contains information about LB logs.

## XML structure

```

<LB>
  <Log>
    <BaseEnable></BaseEnable>
    <NatEnable></NatEnable>
    <BandwidthBusyEnable></BandwidthBusyEnable>
  </Log>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	Log
Table type	Single-instance table
Row name	N/A
Restrictions	Only log can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BaseEnable	Enable the base log of LB.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
NatEnable	Enable the NAT log of LB.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
BandwidthBusyEnable	Enable the bandwidth busy log of LB.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable (default).</li> <li>1—Enable.</li> </ul>	N/A

# LB/ServerFarmMembers

This table contains information about server farm member.

## XML structure

```
<LB>
  <ServerFarmMembers>
    <ServerFarmMember>
      <ServerFarm></ServerFarm>
      <RealServer></RealServer>
      <PortNumber></PortNumber>
      <Description></Description>
      <Weight></Weight>
      <Priority></Priority>
      <Shutdown></Shutdown>
      <MaxConnectionLimit></MaxConnectionLimit>
      <RateLimitConnection></RateLimitConnection>
      <RateLimitHTTPRequest></RateLimitHTTPRequest>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <State></State>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <VRF></VRF>
      <ProbeList>
        <Probe></Probe>
        <NQADefaultPortEnable></NQADefaultPortEnable>
        <ProbeState></ProbeState>
      </ProbeList>
    </ServerFarmMember>
  </ServerFarmMembers>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ServerFarmMembers
Table type	Multi-instance table
Row name	ServerFarmMember
Restrictions	Only server farm member can be configured by this table.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerFarm	Name of the server farm.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RealServer	Name of the server farm member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
PortNumber	Number of port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Description	Description of the server farm member.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Weight	Weight of the server farm member.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
Priority	Priority of the server farm member.	N/A	Unsigned integer. Value range: 1 to 8.	N/A
Shutdown	Shutdown state for the server farm member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Shutdown.</li> <li>2—Slow-shutdown.</li> </ul>	N/A
MaxConnectionLimit	Maximum connections limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
RateLimitConnection	Maximum connections rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
RateLimitHTTPRequest	Maximum HTTP request rate limit.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: qps.	N/A
ProbeSuccessCriteria	Probe success criteria for the server farm member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
State	State of the server farm member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Slow-shutdown. <ul style="list-style-type: none"> <li>• 3—Shutdown.</li> <li>• 4—Probe-failed.</li> <li>• 5—Standby.</li> <li>• 6—Ramp.</li> <li>• 8—Busy.</li> <li>• 9—Unknown.</li> <li>• 10—Auto-shutdown</li> </ul>	
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
VRF	VRF name	N/A	String, case-insensitive. Length: 0 to 31 characters.	The null string indicates public network.
ProbeList	Probe method list for the server farm member.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Probe.</li> <li>• ProbeState.</li> </ul>	N/A
Probe	Probe method for the server farm member.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
NQADefaultPortEnable	Enable detection using the default port of the NQA template.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Disable (default).</li> <li>• 1—Enable.</li> </ul>	N/A
ProbeState	State of the server farm member probe.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Not exist.</li> <li>• 1—Success.</li> <li>• 2—Failed.</li> <li>• 3—In the process.</li> </ul>	N/A

## LB/LinkGroupMembers

This table contains information about link group member.

### XML structure

```

<LB>
  <LinkGroupMembers>
    <LinkGroupMember>

```

```

<LinkGroup></LinkGroup>
<Link></Link>
<Description></Description>
<Weight></Weight>
<Priority></Priority>
<Shutdown></Shutdown>
<MaxConnectionLimit></MaxConnectionLimit>
<RateLimitConnection></RateLimitConnection>
<ProbeSuccessCriteria></ProbeSuccessCriteria>
<State></State>
<RouterType></RouterType>
<RouterInterface></RouterInterface>
<RouterIpv4Address></RouterIpv4Address>
<RouterIpv6Address></RouterIpv6Address>
<VRF></VRF>
<ProbeList>
  <Probe></Probe>
  <ProbeState></ProbeState>
</ProbeList>
</LinkGroupMember>
</LinkGroupMembers>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkGroupMembers
Table type	Multi-instance table
Row name	LinkGroupMember
Restrictions	Only link group member can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LinkGroup	Name of the link group.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Link	Name of the link group member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description	Description of the link group	N/A	String.	The null string indicates the label is

Column name	Column description	Column type	Data type and restrictions	Remarks
	member.		Length: 0 to 127 characters.	not configured.
Weight	Weight of the link group member.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	N/A
Priority	Priority of the link group member.	N/A	Unsigned integer. Value range: 1 to 8. By default, the value is 4.	N/A
Shutdown	Shutdown state for the link group member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Not configured (default).</li> <li>• 1—Shutdown.</li> <li>• 2—Slow-shutdown.</li> </ul>	N/A
MaxConnectionLimit	Maximum connections limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates no preset limit.	N/A
RateLimitConnection	Maximum connections rate limit number.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps. By default, the value is 0 which indicates no preset limit.	N/A
ProbeSuccessCriteria	Probe success criteria for the link group member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates that probe success criteria is all.	N/A
State	State of the link group member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Unavailable.</li> <li>• 1—Available.</li> <li>• 2—Slow-shutdown.</li> <li>• 3—Shutdown.</li> <li>• 4—Probe-failed.</li> <li>• 5—Standby.</li> <li>• 6—Ramp.</li> <li>• 8—Busy.</li> <li>• 9—Unknown.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RouterType	Type of router	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Configure</li> <li>1—Auto</li> </ul>	N/A
RouterInterface	Name of the interface	N/A	String. case-insensitive. Length: 1 to 47 characters. By default, no interface name is specified.	This column can be configured only when the type is Auto (1).
RouterIpv4Address	IPv4 address.	N/A	String.  Dotted decimal notation.  By default, no IPv4 address is specified.	Example: 1.1.1.1.  Loopback addresses, multicast addresses, broadcast addresses are not supported, and address such as 0.x.x.x are not supported either. If the router interface is configured,the IPV4 is not supported.
RouterIpv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.  By default, no IPv6 address is specified.	Example: 2::2.  Loopback addresses, multicast addresses and link local addresses are not supported. If the router interface is configured,the IPV6 is not supported.
VRF	VRF name.	N/A	String, Length: 0 to 31 characters. By default, no VRF is specified.	The null string indicates public network.
ProbeList	Probe method list for the link group member.	Data structure	Members include: <ul style="list-style-type: none"> <li>Probe.</li> <li>ProbeState.</li> </ul>	N/A
Probe	Probe method for the link group member.	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProbeState	State of the link group member probe.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not exist.</li> <li>1—Success.</li> <li>2—Failed.</li> <li>3—In the process.</li> </ul>	N/A

# LB/DNSServerPoolMembers

This table contains information about DNS server pool member.

## XML structure

```
<LB>
  <DNSServerPoolMembers>
    <DNSServerPoolMember>
      <DNSServerPool></DNSServerPool>
      <DNSServer></DNSServer>
      <PortNumber></PortNumber>
      <Description></Description>
      <Weight></Weight>
      <Priority></Priority>
      <ProbeSuccessCriteria></ProbeSuccessCriteria>
      <State></State>
      <Ipv4Address ></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <ProbeList>
        <Probe></Probe>
        <ProbeState></ProbeState>
      </ProbeList>
    </DNSServerPoolMember>
  </DNSServerPoolMembers>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerPoolMembers
Table type	Multi-instance table
Row name	DNSServerPoolMember
Restrictions	Only DNS server pool member can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSServer Pool	Name of the DNS server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
DNSServer	Name of the DNS server pool member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
PortNumber	Number of port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Description	Description of the DNS server pool member.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Weight	Weight of the DNS server pool member.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 100.	N/A
Priority	Priority of the DNS server pool member.	N/A	Unsigned integer. Value range: 1 to 8. By default, the value is 4.	N/A
ProbeSuccessCriteria	Probe success criteria for the DNS server pool member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . By default, the value is 0 which indicates that probe success criteria is all.	N/A
State	State of the DNS server pool member.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Probe-failed.</li> <li>3—Busy.</li> <li>4—Unknown.</li> </ul>	N/A
Ipv4Address	IPv4 address.	N/A	String. Dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address	IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2::2.
ProbeList	Probe method list for the DNS server pool member.	Data structure	Members include: <ul style="list-style-type: none"> <li>Probe.</li> <li>ProbeState.</li> </ul>	N/A
Probe	Probe method for the DNS server pool member.s	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProbeState	State of the DNS server pool member	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not exist.</li> <li>1—Success.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	probe.		<ul style="list-style-type: none"> <li>2—Failed.</li> <li>3—In the process.</li> </ul>	

## LB/ServerFarmMemberStats

This table contains stat information about server farm member.

### XML structure

```

<LB>
  <ServerFarmMemberStats>
    <ServerFarmMemberStat>
      <ServerFarm></ServerFarm>
      <RealServer></RealServer>
      <PortNumber></PortNumber>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <TotalConnections></TotalConnections>
      <ActiveConnections></ActiveConnections>
      <MaxConnections></MaxConnections>
      <ConnectionsPerSec></ConnectionsPerSec>
      <MaxConnectionPerSec></MaxConnectionPerSec>
      <ServerSidePKTsIn></ServerSidePKTsIn>
      <ServerSidePKTsOut></ServerSidePKTsOut>
      <DroppedPackets></DroppedPackets>
      <ServerSideBytesIn></ServerSideBytesIn>
      <ServerSideBytesOut></ServerSideBytesOut>
      <Bandwidth></Bandwidth>
      <MaxBandwidth></MaxBandwidth>
      <ReceivedRequests></ReceivedRequests>
      <DroppedRequests></DroppedRequests>
      <SentResponses></SentResponses>
      <DroppedResponses></DroppedResponses>
      <InBandwidth></InBandwidth>
      <OutBandwidth></OutBandwidth>
      <InMaxBandwidth></InMaxBandwidth>
      <OutMaxBandwidth></OutMaxBandwidth>
      <RstPackets></RstPackets>
      <MaxRstPackets></MaxRstPackets>
      <RstProtectRetryTimes></RstProtectRetryTimes>
      <MaxRstProtectRetryTimes></MaxRstProtectRetryTimes>
      <ZeroWindowPackets></ZeroWindowPackets>
      <MaxZeroWindowPackets></MaxZeroWindowPackets>
      <ZeroWindowProtectRetryTimes></ZeroWindowProtectRetryTimes>

```

```

    <MaxZeroWindowProtectRetryTimes></MaxZeroWindowProtectRetryTimes>
    <AbnormalURLTimes></AbnormalURLTimes>
    <MaxAbnormalURLTimes></MaxAbnormalURLTimes>
  </ServerFarmMemberStat>
</ServerFarmMemberStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ServerFarmMemberStats
Table type	Multi-instance table
Row name	ServerFarmMemberStat
Restrictions	Only stats of server farm member can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerFarm	Name of the server farm.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
RealServer	Name of the server farm member.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
PortNumber	Number of port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TotalConnections	Total connections that the server farm member received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ActiveConnections	Active connections	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	that the server farm member received.		Value range: 0 to $2^{32}-1$ .	
MaxConnections	Max connections that the server farm member received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
ConnectionsPerSec	Connections per second that the server farm member received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
MaxConnectionPerSec	Max connections per second that the server farm member received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
ServerSidePKTIn	Number of packets that the server farm member received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ServerSidePKTOut	Number of packets that the server farm member sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedPackets	Number of packets that the server farm member dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ServerSideBytesIn	Number of bytes that the server farm member received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
ServerSideBytesOut	Number of bytes that the server farm member sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
Bandwidth	Bandwidth of the server farm member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
MaxBandwidth	Max bandwidth of the server farm member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ReceivedRequests	Number of requests that the server farm member received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedRequests	Number of requests that the server farm member dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
SentResponses	Number of responses that the server farm member sent to device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedResponses	Number of responses that the server farm member dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
InBandwidth	Inbound Bandwidth of the server farm member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutBandwidth	Outbound Bandwidth of the server farm member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
InMaxBandwidth	Inbound Max bandwidth of the server farm member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutMaxBandwidth	Outbound Max bandwidth of the server farm member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
RstPackets	RST packets	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
MaxRstPackets	Maximum number of RST packets	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
RstProtectRetryTimes	RST protection times	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
MaxRstProtectRetryTimes	Maximum RST protection times	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ZeroWindowPackets	Zero-window packets	N/A	Unsigned integer. Value range: 0 to 100. Unit: %	N/A
MaxZeroWindowPackets	Maximum number of zero-window packets	N/A	Unsigned integer. Value range: 0 to 100. Unit: %	N/A
ZeroWindowProtectRetryTimes	Zero-window protection times	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
MaxZeroWindowProtectRetryTimes	Maximum zero-window protection times	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
AbnormalURLTimes	Times of abnormal URLs	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
MaxAbnormalURLTimes	Maximum times of abnormal URLs	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A

## LB/LinkGroupMemberStats

This table contains stat information about link group member.

### XML structure

```

<LB>
  <LinkGroupMemberStats>
    <LinkGroupMemberStat>
      <LinkGroup></LinkGroup>
      <Link></Link>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <TotalConnections></TotalConnections>
      <ActiveConnections></ActiveConnections>
      <MaxConnections></MaxConnections>
      <ConnectionsPerSec></ConnectionsPerSec>
      <MaxConnectionPerSec></MaxConnectionPerSec>
      <DownstreamPKTs></DownstreamPKTs>
      <UpstreamPKTs></UpstreamPKTs>
      <DroppedPackets></DroppedPackets>
      <DownstreamTraffic></DownstreamTraffic>
      <UpstreamTraffic></UpstreamTraffic>

```

```

    <Bandwidth></Bandwidth>
    <MaxBandwidth></MaxBandwidth>
    <InBandwidth></InBandwidth>
    <OutBandwidth></OutBandwidth>
    <InMaxBandwidth></InMaxBandwidth>
    <OutMaxBandwidth></OutMaxBandwidth>
  </LinkGroupMemberStat>
</LinkGroupMemberStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	LinkGroupMemberStats
Table type	Multi-instance table
Row name	LinkGroupMemberStat
Restrictions	Only stats of link group member can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LinkGroup	Name of the link group.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
Link	Name of the link group member.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
TotalConnections	Total connections that the link group member received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ActiveConnections	Active connections	N/A	Unsigned integer. Value range: 0 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	that the link group member received.		$2^{32}-1$ .	
MaxConnections	Max connections that the link group member received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
Connections PerSec	Connections per second that the link group member received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
MaxConnectionPerSec	Max connections per second that the link group member received.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: cps.	N/A
Downstream PKTs	Number of packets that the link group member received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
UpstreamPKTs	Number of packets that the link group member sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedPackets	Number of packets that the link group member dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
Downstream Traffic	Number of bytes that the link group member received from device.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
UpstreamTraffic	Number of bytes that the link group member sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ . Unit: Byte.	N/A
Bandwidth	Bandwidth of the link group member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
MaxBandwidth	Max bandwidth of the link group member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
InBandwidth	Inbound Bandwidth of the link group member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutBandwidth	Outbound Bandwidth of the link group member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
InMaxBandwidth	Inbound Max bandwidth of the link group member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A
OutMaxBandwidth	Outbound Max bandwidth of the link group member.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ . Unit: KB/s.	N/A

## LB/DNSServerPoolMemberStats

This table contains stat information about DNS server pool member.

### XML structure

```

<LB>
  <DNSServerPoolMemberStats>
    <DNSServerPoolMemberStat>
      <DNSServerPool></DNSServerPool>
      <DNSServer></DNSServer>
      <PortNumber></PortNumber>
      <ChassisID></ChassisID>
      <SlotID></SlotID>
      <CPUID></CPUID>
      <ReceivedRequests></ReceivedRequests>
      <DroppedRequests></DroppedRequests>
      <ReceivedResponses></ReceivedResponses>
      <DroppedResponses></DroppedResponses>
      <SentResponses></SentResponses>
    </DNSServerPoolMemberStat>
  </DNSServerPoolMemberStats>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	DNSServerPoolMemberStats
Table type	Multi-instance table
Row name	DNSServerPoolMemberStat
Restrictions	Only stats of DNS server pool member can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DNSServerPool	Name of the DNS server pool.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
DNSServer	Name of the DNS server pool member.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
PortNumber	Number of port.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ChassisID	ID of the device that holds the card.	Index	Unsigned integer. Value range: 0 to 255.	N/A
SlotID	Member ID of the card on device.	Index	Unsigned integer. Value range: 0 to 255.	N/A
CPUID	ID of the CPU on the card.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
ReceivedRequests	Number of DNS requests that the DNS server pool member has received.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
DroppedRequests	Number of DNS requests that the DNS server pool member has dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
ReceivedResponses	Number of DNS responses that	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the DNS server pool member has received.			
DroppedResponses	Number of DNS responses that the DNS server pool member has dropped.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
SentResponses	Number of DNS responses that the DNS server pool member has sent.	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

## LB/SnatArpInterfaces

This table contains information about SNAT interfaces.

### XML structure

```

<LB>
  <SnatArpInterfaces>
    <SnatArpInterface>
      <SnatName></SnatName>
      <IfList>
        <IfIndex></IfIndex>
      </IfList>
    </SnatArpInterface>
  </SnatArpInterfaces>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	SnatArpInterfaces
Table type	Multi-instance table
Row name	SnatArpInterface
Restrictions	Only SNAT interfaces can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SnatName	Name of the SNAT pool.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
IfList	Interface index list	Data structure	Members include: <ul style="list-style-type: none"><li>IfIndex.</li></ul>	N/A
IfIndex	Interface index	N/A	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## LB/VServerArpInterfaces

This table contains information about virtual server interfaces.

## XML structure

```
<LB>
  <VServerArpInterfaces>
    <VServerArpInterface>
      <VServerName></VServerName>
      <IfList>
        <IfIndex></IfIndex>
      </IfList>
    </VServerArpInterface>
  </VServerArpInterfaces>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	VServerArpInterfaces
Table type	Multi-instance table
Row name	VServerArpInterface
Restrictions	Only virtual server interfaces can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VServerName	Name of the virtual server.	Index	String, case-insensitive. Length: 0 to 63 characters.	N/A
IfList	Interface index list	Data structure	Members include: <ul style="list-style-type: none"><li>IfIndex.</li></ul>	N/A
IfIndex	Interface index	N/A	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## LB/ProbeTemplate

This table contains information about probe template that is used for proximity.

## XML structure

```
<LB>
  <ProbeTemplates>
    <ProbeTemplate>
      <Name></Name>
      <Description></Description>
      <Type></Type>
      <Frequency></Frequency>
      <Timeout></Timeout>
    </ProbeTemplate>
  </ProbeTemplates>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ProbeTemplate
Table type	Multi-instance table
Row name	N/A
Restrictions	Only probe template can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description information for the RST probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Type	Type of the probe template .	N/A	Enumeration: <ul style="list-style-type: none"><li>0—ICMP.</li></ul>	N/A
Frequency	Frequency of the probe template.	N/A	Unsigned integer. Value range: 5 to 604800. Unit: second.	N/A
Timeout	Timeout time of the probe template.	N/A	Unsigned integer. Value range: 1 to 60. Unit: second.	N/A

## LB/ISPWhoisMntners

This table contains information about ISP maintainer objects.

### XML structure

```
<LB>
  <ISPWhoisMntners>
    <ISPWhoisMntner>
      <ISPName></ISPName>
      <WhoisMntner></WhoisMntner>
      <Origin></Origin>
    </ISPWhoisMntner>
  </ISPWhoisMntners>
</LB>
```

### Table description

Item	Description
Feature name	LB
Table name	ISPWhoisMntners
Table type	Multi-instance table

Row name	ISPWhoisMntner
Restrictions	Only ISP whois maintainer objects can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ISPName	Name of the ISP.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
WhoisMntner	Name of the whois maintainer object.	Index	String, case-sensitive. Length: 1 to 63 characters.	N/A
Origin	Origin of ISP whois maintainer object.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Import.</li> <li>• 2—Manual.</li> <li>• 3—Manual and import.</li> </ul>	N/A

## LB/ISPUpdate

This table contains information about ISP update.

## XML structure

```

<LB>
  <ISPUpdate>
    <Enable></Enable>
    <Frequency></Frequency>
    <Type></Type>
    <Domain></Domain>
    <Ipv4Address></Ipv4Address>
    <SuccessUpdateTime></SuccessUpdateTime>
    <UpdateTime></UpdateTime>
    <UpdateCount></UpdateCount>
    <UpdateResult></UpdateResult>
  </ISPUpdate>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ISPUdate
Table type	Single-instance table
Row name	N/A
Restrictions	Only ISP update can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enable ISP update.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	N/A
Frequency	Frequency of ISP update.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Per-day.</li><li>1—Per-week.</li><li>2—Per-month.</li></ul>	N/A
Type	Type of the whois server.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Domain.</li><li>1—IPv4 address.</li></ul>	N/A
Domain	Domain of the maintainer object.	N/A	String, case-insensitive. Length: 1 to 253 characters.	The null string indicates the label is not configured.
Ipv4Address	Address of the maintainer object.	N/A	String. Dotted decimal notation.	The null string indicates the label is not configured.
SuccessUpdateTime	Last successful update time.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
UpdateTime	Last update time.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
UpdateCount	Update count.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .	N/A
UpdateResult	Result of ISP update.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Success.</li><li>1—Connection error.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—Connection abort.</li> <li>3—DNS error.</li> <li>4—Initial.</li> </ul>	

## LB/DNSCachesGlobalCfg

This table contains information about DNS global configuration.

### XML structure

```
<LB>
  <DNSCachesGlobalCfg>
    <Timeout></Timeout>
  </DNSCachesGlobalCfg>
</LB>
```

### Table description

Item	Description
Feature name	LB
Table name	DNSCachesCfg
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Timeout	Aging time of DNS cache.	Index	Unsigned integer. Value range: 1 to 1440. Unit: minute	N/A

## LB/RSTProbeTemplate

This table contains information about RST probe template.

### XML structure

```
<LB>
```

```

<RSTProbeTemplates>
  <RSTProbeTemplate>
    <Name></Name>
    <Description></Description>
    <TimeInterval></TimeInterval>
    <PacketLimit></PacketLimit>
    <ProtectAction></ProtectAction>
    <BusyTimeout></BusyTimeout>
    <RetryTimes></RetryTimes>
  </RSTProbeTemplate>
</RSTProbeTemplates>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	RSTProbeTemplates
Table type	Multi-instance table
Row name	RSTProbeTemplate
Restrictions	Only RST probe template can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the RST probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description information for the RST probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
TimeInterval	Monitor time interval.	N/A	Unsigned integer. Value range: 5 to 255. By default, the value is 10. Unit: second.	N/A
PacketLimit	Packet limit of RST probe template.	N/A	Unsigned integer: Value range: 1 to 4294967295. By default, the value is 1000000.	N/A.
ProtectAction	Protect action of RST probe template.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Busy</li> </ul>	N/A.

Column name	Column description	Column type	Data type and restrictions	Remarks
			(default). • 1—Auto-shutdown.	
BusyTimeout	Busy time of real server.	N/A	Unsigned integer. Value range: 5 to 3600. By default, the value is 30. Unit: second.	N/A.
RetryTimes	Busy protection times.	N/A	Unsigned integer. Value range: 0 to 255. By default, the value is 0.	N/A.

## LB/ZeroWindowProbeTemplate

This table contains information about Zero Window probe template.

### XML structure

```

<LB>
  <ZeroWindowProbeTemplates>
    <ZeroWindowProbeTemplate>
      <Name></Name>
      <Description></Description>
      <TimeInterval></TimeInterval>
      <RatioLimit></RatioLimit>
      <ProtectAction></ProtectAction>
      <BusyTimeout></BusyTimeout>
      <RetryTimes></RetryTimes>
    </ZeroWindowProbeTemplate>
  </ZeroWindowProbeTemplates>
</LB>

```

### Table description

Item	Description
Feature name	LB
Table name	ZeroWindowProbeTemplates
Table type	Multi-instance table
Row name	ZeroWindowProbeTemplate
Restrictions	Only zero window probe template can be configured by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the zero window probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description information for the zero window probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
TimeInterval	Monitor time interval.	N/A	Unsigned integer. Value range: 5 to 255. By default, the value is 10. Unit: second.	N/A
RatioLimit	Ratio limit of zero window probe template.	N/A	Unsigned integer: Value range: 1 to 100. By default, the value is 40. Unit: %.	N/A.
Protection	Protection action of zero window probe.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Busy (default).</li> <li>1—Auto-shutdown.</li> </ul>	N/A.
BusyTimeout	Busy time of real server.	N/A	Unsigned integer. Value range: 5 to 3600. By default, the value is 30. Unit: second.	N/A.
RetryTimes	Busy protection times.	N/A	Unsigned integer. Value range: 0 to 255. By default, the value is 0.	N/A.

## LB/ProbeTemplateSummaries

This table contains summary information about probe template.

### XML structure

```

<LB>
  <ProbeTemplateSummaries>
    <ProbeTemplateSummary>

```

```

    <Name></Name>
    <Type></Type>
  </ProbeTemplateSummary>
</ProbeTemplateSummaries>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	ProbeTemplateSummaries
Table type	Multi-instance table
Row name	ProbeTemplateSummary
Restrictions	Only probe template summary information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Type	Type of probe template.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—ICMP.</li> <li>1—RST.</li> <li>2—ZEROWINDOW.</li> <li>3—HTTPPASSIVE</li> </ul>	N/A

## LB/ProbeTemplate

This table contains information about probe template that is used for proximity.

## XML structure

```

<LB>
  <ProbeTemplates>
    <ProbeTemplate>
      <Name></Name>
      <Description></Description>
      <Type></Type>
      <Frequency></Frequency>
      <Timeout></Timeout>
    </ProbeTemplate>
  </ProbeTemplates>
</LB>

```

```
</ProbeTemplates>  
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	ProbeTemplate
Table type	Multi-instance table
Row name	N/A
Restrictions	Only probe template can be gotten by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description information for the probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
Type	Type of the probe template.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—ICMP.</li></ul>	When a probe template is created, the column must be specified.
Frequency	Frequency of the probe template.	N/A	Unsigned integer. Value range: 1 to 604800. Unit: second. By default, the value is 300s.	N/A
Timeout	Timeout time of the probe template.	N/A	Unsigned integer. Value range: 1 to 60. Unit: second. By default, the value is 3s.	N/A

## LB/HTTPPassiveProbeTemplate

This table contains information about an HTTP passive probe template.

## XML structure

```
<LB>
  <HTTPPassiveProbeTemplates>
    <HTTPPassiveProbeTemplate>
      <Name></Name>
      <Description></Description>
      <MonitorInterval></MonitorInterval>
      <URLThreshold></URLThreshold>
      <Timeout></Timeout>
      <URLList>
        <CheckUrl></CheckUrl>
      </URLList>
      <StatusCodeList>
        <StatusCode></StatusCode>
      </StatusCodeList>
    </HTTPPassiveProbeTemplate>
  </HTTPPassiveProbeTemplates>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	HTTPPassiveProbeTemplates
Table type	Multi-instance table
Row name	HTTPPassiveProbeTemplate
Restrictions	Only HTTP passive probe template can be configured by this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the HTTP passive probe template.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Description	Description information for the HTTP passive probe template.	N/A	String. Length: 0 to 127 characters.	The null string indicates the label is not configured.
MonitorInterval	Monitor time interval.	N/A	Unsigned integer. Value range: 1 to 5.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			By default, the value is 1. Unit: second.	
URLThreshold	URL threshold of the HTTP passive probe template.	N/A	Unsigned integer: Value range: 1 to 4294967295. By default, the value is 10000.	N/A.
Timeout	Response timeout of the HTTP passive probe template.	N/A	Unsigned integer. Value range: 1 to 255. By default, the value is 5. Unit: second.	N/A
URLList	URL list for the HTTP passive probe template.	Data structure	Members include: URL.	N/A
CheckUrl	URL for the HTTP passive probe template.	N/A	String. Length: 1 to 255 characters.	A URL list can contain a maximum of 10 URLs.
StatusCodeList	Status code list for the HTTP passive probe template.	Data structure	Members include: StatusCode.	N/A
StatusCode	Status code for the HTTP passive probe template.	N/A	Unsigned integer.	A status code list can contain a maximum of 10 status codes.

## LB/HTTPStatsParameterObjectGroups

This table contains information about object group of HTTP statistics parameter.

### XML structure

```

<LB>
  <HTTPStatsParameterObjectGroups>
    <HTTPStatsParameterObjectGroup>
      <ParameterName></ParameterName>
      <ObjectGroupName></ObjectGroupName>
    </HTTPStatsParameterObjectGroup>
  </HTTPStatsParameterObjectGroups>
</LB>

```



## Table description

Item	Description
Feature name	LB
Table name	HTTPStatsParameterObjectGroups
Table type	Multi-instance table
Row name	HTTPStatsParameterObjectGroup
Restrictions	Only object group of HTTP statistics parameter can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
ObjectGroupName	Name of the object group.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A

## LB/HTTPStatsParameterNodes

This table contains information about HTTP statistics parameter node.

## XML structure

```
<LB>
  <HTTPStatsParameterNodes>
    <HTTPStatsParameterNode>
      <ParameterName></ParameterName>
      <NodeName></NodeName>
      <Description></Description>
      <RuleCount></RuleCount>
    </HTTPStatsParameterNode>
  </HTTPStatsParameterNodes>
</LB>
```

## Table description

Item	Description
Feature name	LB
Table name	HTTPStatsParameterNodes

Table type	Multi-instance table
Row name	HTTPStatsParameterNode
Restrictions	Only HTTP statistics parameter node can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
NodeName	Name of the node.	Index	String. Length: 1 to 63 characters.	N/A
Description	Description of the node profile.	N/A	String. Length: 0 to 127 characters.	N/A
RuleCount	Rule counts of the node.	N/A	Unsigned integer. Value range: 0 to 256.	N/A

## LB/HTTPStatsParameterNodeRules

This table contains information about rule of HTTP statistics parameter node.

## XML structure

```

<LB>
  <HTTPStatsParameterNodeRules>
    <HTTPStatsParameterNodeRule>
      <ParameterName></ParameterName>
      <NodeName></NodeName>
      <ID></ID>
      <Type></Type>
      <URL></URL>
    </HTTPStatsParameterNodeRule>
  </HTTPStatsParameterNodeRules>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPStatsParameterNodeRules
Table type	Multi-instance table
Row name	HTTPStatsParameterNodeRule

Restrictions	Only rule of HTTP statistics parameter node can be gotten by this table.
--------------	--

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
NodeName	Name of the node.	Index	String. Length: 1 to 63 characters.	N/A
ID	ID of the statistics match rule.	Index	Unsigned integer. Value range: 1 to 256.	N/A
Type	Type of the statistics match rule.	N/A	Enumeration: • 0—URL.	N/A
URL	Regular expression used to match URLs.	N/A	String. Length: 1 to 255 characters.	This column can only be gotten when the Type is URL(0).

## LB/HTTPStatsParameterNodeRuleLists

This table contains batching information about match rules of HTTP statistics parameter node.

## XML structure

```

<LB>
  <HTTPStatsParameterNodeRuleLists>
    <HTTPStatsParameterNodeRuleList>
      <ParameterName></ParameterName>
      <NodeName></NodeName>
      <RuleList>
        <ID></ID>
        <Type></Type>
        <URL></URL>
      </RuleList>
    </HTTPStatsParameterNodeRuleList>
  </HTTPStatsParameterNodeRuleLists>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	HTTPStatsParameterNodeRuleLists
Table type	Multi-instance table
Row name	HTTPStatsParameterNodeRuleList
Restrictions	Only rule of HTTP statistics parameter node can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParameterName	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
NodeName	Name of the node.	Index	String. Length: 1 to 63 characters.	N/A
RuleList	List of rule.	Data structure	Members include: <ul style="list-style-type: none"><li>ID</li><li>Type</li><li>URL</li></ul>	N/A
ID	ID of the statistics match rule.	N/A	Unsigned integer. Value range: 1 to 256.	N/A
Type	Type of the statistics match rule.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—URL.</li></ul>	N/A
URL	Regular expression used to match URLs.	N/A	String. Length: 1 to 255 characters.	This column can only be gotten when the Type is URL(0).

## LB/TCPParameterOptions

This table contains information about TCP options.

## XML structure

```
<LB>
  <TCPParameterOptions>
    <TCPParameterOption>
```

```

    <Parameter></Parameter>
    <Number></Number>
    <Type></Type>
    <ValueType></ValueType>
  </TCPParameterOption>
</TCPParameterOptions>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	TCPParameterOptions
Table type	Multi-instance table
Row name	TCPParameterOption
Restrictions	Only TCP parameter option can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Parameter	Name of the parameter.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Number	Number of the TCP option.	Index	Unsigned integer. Value range: 2 to 254.	N/A
Type	Type of the option process.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Option Remove.</li> <li>1—Option Insert.</li> </ul>	N/A
ValueType	Type of the insert value.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Src addr.</li> </ul>	0 indicates the label is not configured.

## LB/VRRPInfo

This table contains information about VRRP configuration.

## XML structure

```

<LB>
  <VRRPInfos>
    <VRRPInfo>
      <VrrpID></VrrpID>
    </VRRPInfo>
  </VRRPInfos>
</LB>

```

```

    <IfIndex></IfIndex>
    <Status></Status>
  </VRRPInfo>
</VRRPInfos>
</LB>

```

## Table description

Item	Description
Feature name	LB
Table name	VRRPInfos
Table type	Multi-instance table
Row name	VRRPInfo
Restrictions	Only VRRP information can be gotten by this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrrplD	Identifier of the virtual router.	Index	Unsigned integer. Value range: 1 to 255.	N/A
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Status	Status of the VRRP.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Standby.</li> <li>1—Active.</li> </ul>	N/A

# Contents

LB.....	1
LB/HTTPVirtualServers .....	1
LB/GenericVirtualServers .....	1
LB/RADIUSVirtualServers .....	2
LB/SIPVirtualServers .....	2
LB/MySQLVirtualServers .....	3
LB/RealServers .....	3
LB/RealServerProbes .....	3
LB/ServerFarms .....	4
LB/ServerFarmProbes .....	4
LB/SNATPools .....	4
LB/SNATPoolsIpv4Infos .....	4
LB/SNATPoolsIpv6Infos .....	5
LB/IPParameters .....	5
LB/TCPParameters .....	5
LB/TCPAppParameters .....	6
LB/HTTPParameters .....	6
LB/HTTPCompressionParameters .....	6
LB/HTTPStatisticsParameters .....	7
LB/OneConnectParameters .....	7
LB/MySQLParameters .....	7
LB/ HTTPCompressionParameterRules .....	7
LB/AddressPortStickyGroups .....	8
LB/PayloadStickyGroups .....	8
LB/HTTPContentStickyGroups .....	8
LB/HTTPCookieStickyGroups .....	9
LB/HTTPHeaderStickyGroups .....	9
LB/SSLStickyGroups .....	9
LB/SIPStickyGroups .....	9
LB/TCPPayloadStickyGroups .....	10
LB/HTTPPassiveStickyGroups .....	10
LB/HTTPPassiveStickyMethodGroups .....	10
LB/UDPPassiveStickyGroups .....	11
LB/Policies .....	11
LB/ClassActions .....	11
LB/GenericActions .....	12
LB/RADIUSActions .....	12
LB/LinkGenericActions .....	12
LB/DNSActions .....	12
LB/HTTPActions .....	13
LB/HTTPActionResponseFiles .....	13
LB/HTTPActionRewriteURLs .....	13
LB/HTTPActionSSLURLs .....	13
LB/HTTPActionHeaders .....	14
LB/Classes .....	14
LB/GenericMatchRules .....	14
LB/DNSProxies .....	14
LB/DNSServers .....	15
LB/Links .....	15
LB/HTTPMatchRules .....	15
LB/RADIUSMatchRules .....	15
LB/MySQLMatchRules .....	15
LB/ServerFarmMembers .....	16
LB/RSTProbeTemplate .....	16
LB/ZeroWindowProbeTemplate .....	16
LB/ProbeTemplate .....	16
LB/HTTPPassiveProbeTemplate .....	17

LB/HTTPStatsParameterObjectGroups .....	17
LB/HTTPStatsParameterNodes .....	17
LB/HTTPStatsParameterNodeRules .....	17
LB/HTTPStatsParameterNodeRuleLists .....	18
LB/TCPPParameterOptions .....	18



# LB

## LB/HTTPVirtualServers

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The virtual server name has been used. 虚服务器名称与已存在的其他类型虚服务器重名。	The virtual server name has been used. 虚服务器名称与已存在的其他类型虚服务器重名。
Conflicts with the IP address configured for another object. 与其他对象的地址冲突。	Conflicts with the IP address configured for another object. 与其他对象的地址冲突。
The port number or IP address is not compatible with the SSL policy. 端口或地址与SSL策略不兼容。	The port number or IP address is not compatible with the SSL policy. 端口或地址与 SSL 策略不兼容。
The redundancy group is already used by another virtual server. 该冗余组已被其他虚服务器引用。	The redundancy group is already used by another virtual server. 该冗余组已被其他虚服务器引用。

## LB/GenericVirtualServers

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
Conflicts with the IP address configured for another object. 与其他对象的地址冲突。	Conflicts with the IP address configured for another object. 与其他对象的地址冲突。
The port number or IP address is not compatible with the SSL policy. 端口或地址与SSL策略不兼容。	The port number or IP address is not compatible with the SSL policy. 端口或地址与 SSL 策略不兼容。
The virtual server name has been used. 虚服务器名称与已存在的其他类型虚服务	The virtual server name has been used.

Message	Explanation
器重名。	虚服务器名称与已存在的其他类型虚服务器重名。
The redundancy group is already used. 该冗余组已被其他虚服务器引用。	The redundancy group is already used. 该冗余组已被其他虚服务器引用。

## LB/RADIUSVirtualServers

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The virtual server name has been used. 虚服务器名称与已存在的其他类型虚服务器重名。	The virtual server name has been used. 虚服务器名称与已存在的其他类型虚服务器重名。
Conflicts with the IP address configured for another object. 与其他对象的地址冲突。	Conflicts with the IP address configured for another object. 与其他对象的地址冲突。

## LB/SIPVirtualServers

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The redundancy group is already used by another virtual server. 该冗余组已被其他虚服务器引用。	The redundancy group is already used by another virtual server. 该冗余组已被其他虚服务器引用。
The virtual server name has been used. 虚服务器名称与已存在的其他类型虚服务器重名。	The virtual server name has been used. 虚服务器名称与已存在的其他类型虚服务器重名。
Conflicts with the IP address configured for another object. 与其他对象的地址冲突。	Conflicts with the IP address configured for another object. 与其他对象的地址冲突。

## LB/MySQLVirtualServers

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The virtual server name has been used. 虚服务器名称与已存在的其他类型虚服务器重名。	The virtual server name has been used. 虚服务器名称与已存在的其他类型虚服务器重名。
The redundancy group is already used by another virtual server. 该冗余组已被其他虚服务器引用。	The redundancy group is already used by another virtual server. 该冗余组已被其他虚服务器引用。
Conflicts with the IP address configured for another object. 与其他对象的地址冲突。	Conflicts with the IP address configured for another object. 与其他对象的地址冲突。

## LB/RealServers

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The real server member already exists in the server farm view. 实服务组成员已存在于实服务组视图下。	The real server member already exists in the server farm view. 实服务组成员已存在于实服务组视图下。

## LB/RealServerProbes

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/ServerFarms

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The LB probe template name has been used. 负载均衡探测模板名称与已存在的其他类型探测模板重名。	The LB probe template name has been used. 负载均衡探测模板名称与已存在的其他类型探测模板重名。

## LB/ServerFarmProbes

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/SNATPools

Message	Explanation
The specified SNAT pool member can't overlap with an existing member in another SNAT pool. SNAT地址池中所指定的地址与其他已存在的SNAT地址池发生地址重叠。	The specified SNAT pool member can't overlap with an existing member in another SNAT pool. SNAT 地址池中所指定的地址与其他已存在的 SNAT 地址池发生地址重叠。

## LB/SNATPoolsIpv4Infos

Message	Explanation
The specified SNAT pool member can't overlap with an existing member in another SNAT pool. SNAT地址池中所指定的地址与其他已存在的SNAT地址池发生地址重叠。	The specified SNAT pool member can't overlap with an existing member in another SNAT pool. SNAT 地址池中所指定的地址与其他已存在的 SNAT 地址池发生地址重叠。

Message	Explanation
Maximum number of addresses (10000) allowed in the SNAT address pool already reached. SNAT地址池中的地址数超过最大总数 10000。	Maximum number of addresses (10000) allowed in the SNAT address pool already reached. SNAT 地址池中的地址数超过最大总数 10000。

## LB/SNATPoolsIpv6Infos

Message	Explanation
The specified SNAT pool member can't overlap with an existing member in another SNAT pool. SNAT地址池中所指定的地址与其他已存在的SNAT地址池发生地址重叠。	The specified SNAT pool member can't overlap with an existing member in another SNAT pool. SNAT 地址池中所指定的地址与其他已存在的 SNAT 地址池发生地址重叠。
Maximum number of addresses (10000) allowed in the SNAT address pool already reached. SNAT地址池中的地址数超过最大总数 10000。	Maximum number of addresses (10000) allowed in the SNAT address pool already reached. SNAT 地址池中的地址数超过最大总数 10000。

## LB/IPParameters

Message	Explanation
The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。	The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。

## LB/TCPParameters

Message	Explanation
The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。	The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。
The number of TCP parameter profiles that can include timeout parameter configuration exceeded the limit. 允许配置超时参数的TCP参数模板数量超	The number of TCP parameter profiles that can include timeout parameter configuration exceeded the limit.

Message	Explanation
出限制。	允许配置超时参数的 TCP 参数模板数量超出限制。

## LB/TCPAppParameters

Message	Explanation
The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。	The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。

## LB/HTTPParameters

Message	Explanation
The parameter profile name has been used. 模板名称与已存在的其他类型模板重名	The parameter profile name has been used. 模板名称与已存在的其他类型模板重名
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/HTTPCompressionParameters

Message	Explanation
The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。	The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/HTTPStatisticsParameters

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。	The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。
The name can't include the string -node-. HTTP-Statistics参数模板名字中不能包含-node-。	The name can't include the string -node-. HTTP-Statistics 参数模板名字中不能包含-node-。

## LB/OneConnectParameters

Message	Explanation
The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。	The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。

## LB/MySQLParameters

Message	Explanation
The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。	The parameter profile name has been used. 模板名称与已存在的其他类型模板重名。
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/ HTTPCompressionParameterRules

Message	Explanation
The command is not supported, because	The command is not supported, because the license

Message	Explanation
the license for server load balancing is not available. 因缺少License，不支持配置本参数。	for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/AddressPortStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。

## LB/PayloadStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。

## LB/HTTPContentStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。



## LB/HTTPCookieStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。

## LB/HTTPHeaderStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。

## LB/SSLStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。

## LB/SIPStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is	The command is not supported, because the license for server load balancing is not available.

Message	Explanation
not available. 因缺少License，不支持配置本参数。	因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。

## LB/TCPPayloadStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。

## LB/HTTPPassiveStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。
Invalid regular expression 正则表达式错误。	Invalid regular expression 正则表达式错误。

## LB/HTTPPassiveStickyMethodGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

Message	Explanation
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。
Invalid regular expression 正则表达式错误。	Invalid regular expression 正则表达式错误。

## LB/UDPPassiveStickyGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。	The sticky group name has been used. 持续性组名称与已存在的其他类型的持续性组重名。

## LB/Policies

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The LB policy name has been used. 负载均衡策略名称与已存在的其他类型策略重名。	The LB policy name has been used. 负载均衡策略名称与已存在的其他类型策略重名。

## LB/ClassActions

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/GenericActions

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。	The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。

## LB/RADIUSActions

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。	The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。

## LB/LinkGenericActions

Message	Explanation
The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。	The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。

## LB/DNSActions

Message	Explanation
The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。	The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。

## LB/HTTPActions

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。	The LB action name has been used. 该负载均衡动作名称与已存在的其他类型动作重名。

## LB/HTTPActionResponseFiles

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/HTTPActionRewriteURLs

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/HTTPActionSSLURLs

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/HTTPActionHeaders

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/Classes

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
The LB class name has been used. 负载均衡类名称与已存在的其他类型的类重名。	The LB class name has been used. 负载均衡类名称与已存在的其他类型的类重名。

## LB/GenericMatchRules

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/DNSProxies

Message	Explanation
Conflicts with the IP address configured for another object. 与其他对象的地址冲突。	Conflicts with the IP address configured for another object. 与其他对象的地址冲突。

## LB/DNSServers

Message	Explanation
The DNS server member already exists in the DNS server pool view. DNS服务器池成员已存在于DNS服务器池视图下。	The DNS server member already exists in the DNS server pool view. DNS 服务器池成员已存在于 DNS 服务器池视图下。

## LB/Links

Message	Explanation
The link member already exists in the link group view. 链路组成员已存在于链路组视图下。	The link member already exists in the link group view. 链路组成员已存在于链路组视图下。

## LB/HTTPMatchRules

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/RADIUSMatchRules

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/MySQLMatchRules

Message	Explanation
The command is not supported, because the license for server load balancing is	The command is not supported, because the license

Message	Explanation
not available. 因缺少License，不支持配置本参数。	for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/ServerFarmMembers

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/RSTProbeTemplate

Message	Explanation
The LB probe template name has been used. 负载均衡探测模板名称与已存在的其他类型探测模板重名。	The LB probe template name has been used. 负载均衡探测模板名称与已存在的其他类型探测模板重名。

## LB/ZeroWindowProbeTemplate

Message	Explanation
The LB probe template name has been used. 负载均衡探测模板名称与已存在的其他类型探测模板重名。	The LB probe template name has been used. 负载均衡探测模板名称与已存在的其他类型探测模板重名。

## LB/ProbeTemplate

Message	Explanation
The LB probe template name has been used. 负载均衡探测模板名称与已存在的其他类型探测模板重名。	The LB probe template name has been used. 负载均衡探测模板名称与已存在的其他类型探测模板重名。



## LB/HTTPPassiveProbeTemplate

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/HTTPStatsParameterObjectGroups

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/HTTPStatsParameterNodes

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

## LB/HTTPStatsParameterNodeRules

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
Invalid URL regular expression. URL正则表达式非法。	Invalid URL regular expression. URL 正则表达式非法。

## LB/HTTPStatsParameterNodeRuleLists

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。
Maximum number of match criteria already reached. 流量统计的匹配规则数量已达到上限。	Maximum number of match criteria already reached. 流量统计的匹配规则数量已达到上限。

## LB/TCPParameterOptions

Message	Explanation
The command is not supported, because the license for server load balancing is not available. 因缺少License，不支持配置本参数。	The command is not supported, because the license for server load balancing is not available. 因缺少 License，不支持配置本参数。

# Contents

LB.....	1
ServerFarmMemberStatus event.....	1
XML structure for event subscription.....	1
XML structure for event report.....	2
LinkGroupMemberStatus event.....	3
XML structure for event subscription.....	3
XML structure for event report.....	4
DNSServerPoolMemberStatus event .....	5
XML structure for event subscription.....	5
XML structure for event report.....	6

# LB

## ServerFarmMemberStatus event

This event is used to report server farm member status information.

### XML structure for event subscription

```
<ServerFarmMemberStatusEvent>
  <ServerFarmMember>
    <ServerFarm></ServerFarm>
    <RealServer></RealServer>
    <PortNumber></PortNumber>
  </ServerFarmMember>
</ServerFarmMemberStatusEvent>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>LB</stream>
    <filter type="subtree">
      <ServerFarmMemberStatusEvent xmlns="http://www.h3c.com/netconf/event:1.0/LB:1.0">
        <ServerFarmMember>
          <ServerFarm></ServerFarm>
          <RealServer></RealServer>
          <PortNumber></PortNumber>
        </ServerFarmMember>
      </ServerFarmMemberStatusEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	MemberStatus
Event name	ServerFarmMemberStatusEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/LB:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
ServerFarm	Name of the server farm.	String, case insensitive. Length: 1 to 63 characters.	No

Column name	Column description	Data type and restrictions	Support for extended queries
RealServer	Name of the server farm member.	String, case insensitive. Length: 1 to 63 characters.	No
PortNumber	Number of the port.	Unsigned integer. Value range: 0 to 65535.	No

## XML structure for event report

```

<ServerFarmMemberStatusEvent>
  <ServerFarmMember>
    <ServerFarm></ServerFarm>
    <RealServer></RealServer>
    <PortNumber></PortNumber>
    <State></State>
  </ServerFarmMember>
</ServerFarmMemberStatusEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <ServerFarmMemberStatusEvent xmlns="http://www.h3c.com/netconf/event:1.0/LB:1.0">
    <ServerFarmMember>
      <ServerFarm></ServerFarm>
      <RealServer></RealServer>
      <PortNumber></PortNumber>
      <State></State>
    </ServerFarmMember>
  </ServerFarmMemberStatusEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
ServerFarm	Name of the server farm.	String, case insensitive. Length: 1 to 63 characters.	No
RealServer	Name of the server farm member.	String, case insensitive. Length: 1 to 63 characters.	No
PortNumber	Number of the port.	Unsigned integer. Value range: 0 to 65535.	No
State	State of the server farm member.	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Slow-shutdown.</li> <li>3—Shutdown.</li> <li>4—Probe-failed.</li> <li>5—Standby.</li> </ul>	No

Column name	Column description	Data type and restrictions	Support for extended queries
		<ul style="list-style-type: none"> <li>6—Ramp.</li> <li>8—Busy.</li> <li>9—Unknown.</li> <li>10—Auto-shutdown</li> </ul>	

## LinkGroupMemberStatus event

This event is used to report link group member status information.

### XML structure for event subscription

```
<LinkGroupMemberStatusEvent>
  <LinkGroupMember>
    <LinkGroup></LinkGroup>
    <Link></Link>
  </LinkGroupMember>
</LinkGroupMemberStatusEvent>
```

#### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>LB</stream>
    <filter type="subtree">
      <LinkGroupMemberStatusEvent xmlns="http://www.h3c.com/netconf/event:1.0/LB:1.0">
        <LinkGroupMember>
          <LinkGroup></LinkGroup>
          <Link></Link>
        </LinkGroupMember>
      </LinkGroupMemberStatusEvent>
    </filter>
  </create-subscription>
</rpc>
```

#### Table description

Item	Description
Event stream name	MemberStatus
Event name	LinkGroupMemberStatusEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/LB:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
LinkGroup	Name of the link group.	String, case insensitive. Length: 1 to 63 characters.	No
Link	Name of the link group member.	String, case insensitive. Length: 1 to 63 characters.	No

## XML structure for event report

```

<LinkGroupMemberStatusEvent>
  <LinkGroupMember>
    <LinkGroup></LinkGroup>
    <Link></Link>
    <State></State>
  </LinkGroupMember>
</LinkGroupMemberStatusEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <LinkGroupMemberStatusEvent xmlns="http://www.h3c.com/netconf/event:1.0/LB:1.0">
    <LinkGroupMember>
      <LinkGroup></LinkGroup>
      <Link></Link>
      <State></State>
    </LinkGroupMember>
  </LinkGroupMemberStatusEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
LinkGroup	Name of the link group.	String, case insensitive. Length: 1 to 63 characters.	No
Link	Name of the link group member.	String, case insensitive. Length: 1 to 63 characters.	No
State	State of the link group member.	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> <li>2—Slow-shutdown.</li> <li>3—Shutdown.</li> <li>4—Probe-failed.</li> <li>5—Standby.</li> <li>6—Ramp.</li> <li>8—Busy.</li> <li>9—Unknown.</li> </ul>	No

Column name	Column description	Data type and restrictions	Support for extended queries
		<ul style="list-style-type: none"> <li>10—Auto-shutdown</li> </ul>	

## DNSServerPoolMemberStatus event

This event is used to report DNS server pool member status information.

### XML structure for event subscription

```
<DNSServerPoolMemberStatusEvent>
  <DNSServerPoolMember>
    <DNSServerPool></DNSServerPool>
    <DNSServer></DNSServer>
    <PortNumber></PortNumber>
  </DNSServerPoolMember>
</DNSServerPoolMemberStatusEvent>
```

#### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>LB</stream>
    <filter type="subtree">
      <DNSServerPoolMemberStatusEvent
        xmlns="http://www.h3c.com/netconf/event:1.0/LB:1.0">
        <DNSServerPoolMember>
          <DNSServerPool></DNSServerPool>
          <DNSServer></DNSServer>
          <PortNumber></PortNumber>
        </DNSServerPoolMember>
      </DNSServerPoolMemberStatusEvent>
    </filter>
  </create-subscription>
</rpc>
```

#### Table description

Item	Description
Event stream name	MemberStatus
Event name	DNSServerPoolMemberStatusEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/LB:1.0
Support for extended query	No



## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
DNSServerPool	Name of the DNS server pool.	String, case insensitive. Length: 1 to 63 characters.	No
DNSServer	Name of the DNS server pool member.	String, case insensitive. Length: 1 to 63 characters.	No
PortNumber	Number of the port.	Unsigned integer. Value range: 0 to 65535.	No

## XML structure for event report

```

<DNSServerPoolMemberStatusEvent>
  <DNSServerPoolMember>
    <DNSServerPool></DNSServerPool>
    <DNSServer></DNSServer >
    <PortNumber></PortNumber>
    <State></State>
  </DNSServerPoolMember>
</DNSServerPoolMemberStatusEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <ServerFarmMemberStatusEvent xmlns="http://www.h3c.com/netconf/event:1.0/LB:1.0">
    <DNSServerPoolMember>
      <DNSServerPool></DNSServerPool>
      <DNSServer></DNSServer>
      <PortNumber></PortNumber>
      <State></State>
    </DNSServerPoolMember>
  </ServerFarmMemberStatusEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
DNSServerPool	Name of the DNS server pool.	String, case insensitive. Length: 1 to 63 characters.	No
DNSServer	Name of the DNS server pool member.	String, case insensitive. Length: 1 to 63 characters.	No
PortNumber	Number of the port.	Unsigned integer. Value range: 0 to 65535.	No
State	State of the DNS server pool member.	Enumeration: <ul style="list-style-type: none"> <li>0—Unavailable.</li> <li>1—Available.</li> </ul>	No

Column name	Column description	Data type and restrictions	Support for extended queries
		<ul style="list-style-type: none"> <li>• 2—Probe-failed.</li> <li>• 3—Busy.</li> <li>• 4—Unknown.</li> </ul>	

# Contents

LBSTATS .....	1
LBSTATS/URLStatsCharts .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
LBSTATS/URLStatsTops .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
LBSTATS/URLStatsTrends .....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# LBSTATS

## LBSTATS/URLStatsCharts

This table contains URL statistical information about an HTTP virtual server.

### XML structure

```
<LBSTATS>
  <URLStatsCharts>
    <URLStatsChart>
      <UserID></UserID>
      <RowNum></RowNum>
      <FilterType></FilterType>
      <VirtualServerName></VirtualServerName>
      <NodeName></NodeName>
      <Visitor></Visitor>
      <VisitCounts></VisitCounts>
      <TotalCounts></TotalCounts>
      <RowCounts></RowCounts>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
    </URLStatsChart>
  </URLStatsCharts>
</LBSTATS>
```

### Table description

Item	Description
Feature name	LBSTATS
Table name	URLStatsCharts
Table type	Multi-instance table
Row name	URLStatsChart
Restrictions	Only URL statistics can be gotten by this table.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserID	ID of user who gets the	Index	Unsigned integer. Value range: 0 to $2^{32}$ -	The first time you get data, you must specify user ID 0. A user ID other

Column name	Column description	Column type	Data type and restrictions	Remarks
	information by this table.		1.	than 0 is returned and can be used in consequent get-bulk operation before it expires.
RowNum	The sequence number of current row in all rows that exist.	Index	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
FilterType	The kind of statistical information required.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—information of virtual servers.</li> <li>1—information of nodes for specified virtual server.</li> <li>2—information of visitors for specified node and virtual server.</li> </ul>	FilterType must be specified.
VirtualServerName	Name of virtual server.	N/A	String. Length: 0 to 63 characters.	VirtualServerName must be specified when FilterType value is 1 or 2.
NodeName	Representation of the URL visited.	N/A	String. Length: 0 to 63 characters.	<ul style="list-style-type: none"> <li>NodeName must be null when FilterType value is 0 or 1.</li> <li>NodeName must be specified when FilterType value is 2.</li> </ul>
Visitor	Representation of the URL visitor address.	N/A	String. Length: 0 to 46 characters.	N/A
VisitCounts	Visit counts of the current row.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
TotalCounts	Total visit counts of the whole table.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
RowCounts	Total rows that exist.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
TimeFilter	The time range within which the statistical information is gotten.	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start time.	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.	StartTime must be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
EndTime	End time.	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.	<ul style="list-style-type: none"> <li>EndTime must be specified.</li> <li>EndTime must be later than the StartTime.</li> </ul>

## LBSTATS/URLStatsTops

This table contains information about top N visited URLs for an HTTP virtual server.

### XML structure

```

<LBSTATS>
  <URLStatsTops>
    <URLStatsTop>
      <UserID></UserID>
      <RowNum></RowNum>
      <TopNumber></TopNumber>
      <FilterType></FilterType>
      <VirtualServerName></VirtualServerName>
      <NodeName></NodeName>
      <Visitor></Visitor>
      <VisitCounts></VisitCounts>
      <TotalCounts></TotalCounts>
      <RowCounts></RowCounts>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
    </URLStatsTop>
  </URLStatsTops>
</LBSTATS>

```

### Table description

Item	Description
Feature name	LBSTATS
Table name	URLStatsTops
Table type	Multi-instance table
Row name	URLStatsTop
Restrictions	Only URL top statistics can be gotten by this table, and only get operation is supported.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserID	ID of user who gets the information by this table.	Index	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	The first time you get data, you must specify user ID 0. A user ID other than 0 is returned and can be used in consequent get-bulk operation before it expires.
RowNum	The sequence number of current row in all rows that exist.	Index	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
TopNumber	The number of tops required.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
FilterType	The kind of statistical information required.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—information of virtual servers.</li> <li>1—information of nodes for specified virtual server.</li> <li>2—information of visitors for specified node and virtual server.</li> </ul>	FilterType must be specified.
VirtualServerName	Name of virtual server.	N/A	String. Length: 0 to 63 characters.	VirtualServerName must be specified when FilterType value is 1 or 2.
NodeName	Representation of the URL visited.	N/A	String. Length: 0 to 63 characters.	<ul style="list-style-type: none"> <li>NodeName must be null when FilterType value is 0 or 1.</li> <li>NodeName must be specified when FilterType value is 2.</li> </ul>
Visitor	Representation of the URL visitor address.	N/A	String. Length: 0 to 46 characters.	N/A
VisitCounts	Visit counts of the current row.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
TotalCounts	Total visit counts of the whole table.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
RowCounts	Total rows that exist.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
TimeFilter	The time range within which the statistical	Data structure	Members include: Interval.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	information is gotten.			
StartTime	Start time.	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.	StartTime must be specified.
EndTime	End time.	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.	<ul style="list-style-type: none"> <li>EndTime must be specified.</li> <li>EndTime must be later than the StartTime.</li> </ul>

## LBSTATS/URLStatsTrends

This table contains URL visit count information during a time period for an HTTP virtual server.

### XML structure

```

<LBSTATS>
  <URLStatsTrends>
    <URLStatsTrend>
      <UserID></UserID>
      <RowNum></RowNum>
      <FilterType></FilterType>
      <VirtualServerName></VirtualServerName>
      <NodeName></NodeName>
      <Visitor></Visitor>
      <VisitCounts></VisitCounts>
      <TotalCounts></TotalCounts>
      <Time></Time>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
    </URLStatsTrend>
  </URLStatsTrends>
</LBSTATS>

```

### Table description

Item	Description
Feature name	LBSTATS
Table name	URLStatsTrends
Table type	Multi-instance table
Row name	URLStatsTrend



Restrictions	Only URL statistics with time can be gotten by this table, and this table only supports get-bulk operation.
--------------	---

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserID	ID of user who gets the information by this table.	Index	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	The first time you get data, you must specify user ID 0. A user ID other than 0 is returned and can be used in consequent get-bulk operation before it expires.
RowNum	The sequence number of current row in all rows that exist.	Index	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
FilterType	The kind of statistical information required.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—information of specified virtual server.</li> <li>1—information of specified node and virtual server.</li> <li>2—information of specified visitor, node and virtual server.</li> </ul>	N/A
VirtualServerName	Name of virtual server.	N/A	String. Length: 0 to 63 characters.	VirtualServerName must be specified.
NodeName	Representation of the URL visited.	N/A	String. Length: 0 to 63 characters.	NodeName must be specified when FilterType value is 1 or 2.
Visitor	Representation of the URL visitor address.	N/A	String. Length: 0 to 46 characters.	<ul style="list-style-type: none"> <li>Visitor must be null when FilterType value is 0 or 1.</li> <li>Visitor must be specified when FilterType value is 2.</li> </ul>
VisitCounts	Visit counts of the current row.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
TotalCounts	Total visit counts of the whole table.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Time	Time when the statistics information generated.	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.	N/A
TimeFilter	The time range within which	Data structure	Members include: Interval.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the statistical information is gotten.			
StartTime	Start time.	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.	StartTime must be specified.
EndTime	End time.	N/A	DateTime. Format: YYYY-MM-DDTHH:M M:SS.	<ul style="list-style-type: none"> <li>End time must be specified.</li> <li>EndTime must be later than the StartTime.</li> </ul>

# Contents

Ldap.....	1
Ldap/Schemes .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Ldap/Servers .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
Ldap/AttributeMaps .....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# Ldap

## Ldap/Schemes

LDAP scheme information table.

### XML structure

```
<Ldap>
  <Schemes>
    <Scheme>
      <SchemeName></SchemeName>
      <ServerName></ServerName>
      <MapInstanceName></MapInstanceName>
    </Scheme>
  </Schemes>
</Ldap>
```

### Table description

Item	Description
Feature name	Ldap
Table name	Schemes
Table type	Multi-instance table
Row name	Scheme
Restrictions	A maximum of 16 LDAP schemes are supported.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
SchemeName	LDAP scheme name.	Index	String, case-insensitive. Length: 1 to 32 characters.
ServerName	LDAP authentication server name.	N/A	String, case-insensitive. Length: 1 to 64 characters.
MapInstanceName	LDAP attribute map name.	N/A	String, case-insensitive. Length: 1 to 31 characters.

# Ldap/Servers

LDAP server information table.

## XML structure

```
<Ldap>
  <Servers>
    <Server>
      <ServerName></ServerName>
      <VRF></VRF>
      <IpType></IpType>
      <Host></Host>
      <Port></Port>
      <TimeOut></TimeOut>
      <ProtocolVersion></ProtocolVersion>
      <LoginDn></LoginDn>
      <LoginPassword></LoginPassword>
      <SearchScope></SearchScope>
      <SearchBaseDn></SearchBaseDn>
      <UserParas>
        <NameType></NameType>
        <NameFormat></NameFormat>
        <NameAttribute></NameAttribute>
        <ObjClassName></ObjClassName>
      </UserParas>
      <GroupFilter></GroupFilter>
    </Server>
  </Servers>
</Ldap>
```

## Table description

Item	Description
Feature name	Ldap
Table name	Servers
Table type	Multi-instance table
Row name	Server
Restrictions	A maximum of 16 LDAP servers are supported.

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	LDAP server name.	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
VRF	The VPN to which the LDAP server belongs.	N/A	String, case-sensitive. Length: 1 to 31 characters.	The value in this column is valid when both the IpType and Host values are available. If either the IpType value or the Host value is unavailable, the system reports an error.
IpType	Type of the LDAP server address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the Host value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	LDAP server.	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	If the IpType value is 0, this column represents the IPv4 address of the server. If the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	TCP port number of the LDAP server.	N/A	Unsigned integer. Value range: 1 to 65535.	Default: 389. The value in this column is valid when both the IpType and Host values are available. If either the IpType value or the Host value is unavailable, the system reports an error.
TimeOut	LDAP server	N/A	Unsigned integer.	Default: 10 seconds.

Column name	Column description	Column type	Data type and restrictions	Remarks
	timeout period, the maximum time that the device waits for an LDAP response.		Value range: 5 to 20, in seconds.	
ProtocolVersion	LDAP protocol version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 2—LDAPv2.</li> <li>• 3—LDAPv3.</li> </ul>	Default: 3.
LoginDn	Administrator DN.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
LoginPassword	Administrator password.	N/A	String. Length: 1 to 128 characters.	N/A
SearchScope	User search scope.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—All subdirectories of the base DN.</li> <li>• 1—Next lower level of subdirectories under the base DN.</li> </ul>	Default: 0.
SearchBaseDn	User search base DN.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
UserParas	LDAP user attributes.	Data structure	Members include: <ul style="list-style-type: none"> <li>• NameType.</li> <li>• NameFormat.</li> <li>• NameAttribute.</li> <li>• ObjClassName.</li> </ul>	N/A
NameType	User name attribute type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—The value in the NameAttribute column.</li> <li>• 2—The common name.</li> <li>• 3—The user ID.</li> </ul>	Default: 2.
NameFormat	Format of user names to be sent to LDAP servers.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—with-domain.</li> <li>• 1—without-domain.</li> </ul>	Default: 1
NameAttribute	The value that represents a type of user name attribute.	N/A	String, case-insensitive. Length: 1 to 64 characters.	<p>This column is created only when the value of the NameType column is 1. If this column doesn't appear when the NameType value is 1, the system reports an error.</p> <p>The NameAttribute column must be deleted together with the NameType column. However, the NameType column can be deleted without the NameAttribute column.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
ObjClassName	User object class.	N/A	String, case-insensitive. Length: 1 to 64 characters.	N/A
GroupFilter	Filter condition for exporting user groups.	N/A	String, case-insensitive. Length: 1 to 127 characters.	Default: "(objectclass=group)"

## Ldap/AttributeMaps

LDAP attribute map information table.

### XML structure

```

<Ldap>
  <AttributeMaps>
    <AttributeMap>
      <MapName></MapName>
      <LdapAttrName></LdapAttrName>
      <Prefix></Prefix>
      <Delimiter></Delimiter>
      <AaaAttrType></AaaAttrType>
    </AttributeMap>
  </AttributeMaps>
</Ldap>

```

### Table description

Item	Description
Feature name	Ldap
Table name	AttributeMaps
Table type	Multi-instance table
Row name	AttributeMap
Restrictions	A maximum of 16 LDAP attribute maps are supported.
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions
MapName	LDAP attribute map name.	Index	String, case-insensitive. Length: 1 to 31 characters.
LdapAttrName	LDAP attribute name.	Index	String, case-insensitive. Length: 1 to 63 characters.
Prefix	LDAP attribute prefix.	N/A	String, case-insensitive. Length: 0 to 7 characters.
Delimiter	LDAP attribute delimiter.	N/A	String, case-insensitive. Length: 0 to 1 characters.
AaaAttrType	AAA attribute type.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—user-group.</li><li>• 2—user-profile.</li></ul>

# Contents

Ldap.....	1
Ldap/Schemes .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Ldap/Servers .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
Ldap/AttributeMaps .....	5
XML structure .....	5
Table description .....	5
Columns .....	5

# Ldap

## Ldap/Schemes

LDAP scheme information table.

### XML structure

```
<Ldap>
  <Schemes>
    <Scheme>
      <SchemeName></SchemeName>
      <ServerName></ServerName>
      <MapInstanceName></MapInstanceName>
    </Scheme>
  </Schemes>
</Ldap>
```

### Table description

Item	Description
Feature name	Ldap
Table name	Schemes
Table type	Multi-instance table
Row name	Scheme
Restrictions	A maximum of 16 LDAP schemes are supported.

### Columns

Column name	Column description	Column type	Data type and restrictions
SchemeName	LDAP scheme name.	Index	String, case-insensitive. Length: 1 to 32 characters.
ServerName	LDAP authentication server name.	N/A	String, case-insensitive. Length: 1 to 64 characters.
MapInstanceName	LDAP attribute map name.	N/A	String, case-insensitive. Length: 1 to 31 characters.

# Ldap/Servers

LDAP server information table.

## XML structure

```
<Ldap>
  <Servers>
    <Server>
      <ServerName></ServerName>
      <VRF></VRF>
      <IpType></IpType>
      <Host></Host>
      <Port></Port>
      <TimeOut></TimeOut>
      <ProtocolVersion></ProtocolVersion>
      <LoginDn></LoginDn>
      <SearchScope></SearchScope>
      <SearchBaseDn></SearchBaseDn>
      <UserParas>
        <NameType></NameType>
        <NameFormat></NameFormat>
        <NameAttribute></NameAttribute>
        <ObjClassName></ObjClassName>
      </UserParas>
      <GroupFilter></GroupFilter>
    </Server>
  </Servers>
</Ldap>
```

## Table description

Item	Description
Feature name	Ldap
Table name	Servers
Table type	Multi-instance table
Row name	Server
Restrictions	A maximum of 16 LDAP servers are supported.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	LDAP server name.	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
VRF	The VPN to which the LDAP server belongs.	N/A	String, case-sensitive. Length: 1 to 31 characters.	The value in this column is valid when both the IpType and Host values are available. If either the IpType value or the Host value is unavailable, the system reports an error.
IpType	Type of the LDAP server address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the Host value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	LDAP server.	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	If the IpType value is 0, this column represents the IPv4 address of the server. If the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	TCP port number of the LDAP server.	N/A	Unsigned integer. Value range: 1 to 65535.	Default: 389. The value in this column is valid only when both the IpType and Host values are available. When the server IP address is unavailable, the port number is not displayed.
TimeOut	LDAP server timeout period, the maximum time that the device waits for	N/A	Unsigned integer. Value range: 5 to 20, in seconds.	Default: 10 seconds.

Column name	Column description	Column type	Data type and restrictions	Remarks
	an LDAP response.			
ProtocolVersion	LDAP protocol version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 2—LDAPv2.</li> <li>• 3—LDAPv3.</li> </ul>	Default: 3.
LoginDn	Administrator DN.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
SearchScope	User search scope.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—All subdirectories of the base DN.</li> <li>• 1—Next lower level of subdirectories under the base DN.</li> </ul>	Default: 0.
SearchBaseDn	User search base DN.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
UserParas	LDAP user attributes.	Data structure	Members include: <ul style="list-style-type: none"> <li>• NameType.</li> <li>• NameFormat.</li> <li>• NameAttribute.</li> <li>• ObjClassName.</li> </ul>	N/A
NameType	User name attribute type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—The value in the NameAttribute column.</li> <li>• 2—The common name.</li> <li>• 3—The user ID.</li> </ul>	Default: 2.
NameFormat	Format of user names to be sent to LDAP servers.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—with-domain.</li> <li>• 1—without domain.</li> </ul>	Default: 1.
NameAttribute	The value that represents a type of user name attribute.	N/A	String, case-insensitive. Length: 1 to 64 characters.	This column is created only when the value of the NameType column is 1. If this column doesn't appear when the NameType value is 1, the system reports an error.  The NameAttribute column must be deleted together with the NameType column. However, the NameType column can be deleted without the NameAttribute column.
ObjClassName	User object class.	N/A	String, case-insensitive. Length: 1 to 64 characters.	N/A
GroupFilter	Filter condition for exporting user groups.	N/A	String, case-insensitive. Length: 1 to 127 characters.	Default: "(objectclass=group)"

# Ldap/AttributeMaps

LDAP attribute map information table.

## XML structure

```
<Ldap>
  <AttributeMaps>
    <AttributeMap>
      <MapName></MapName>
      <LdapAttrName></LdapAttrName>
      <Prefix></Prefix>
      <Delimiter></Delimiter>
      <AaaAttrType></AaaAttrType>
    </AttributeMap>
  </AttributeMaps>
</Ldap>
```

## Table description

Item	Description
Feature name	Ldap
Table name	AttributeMaps
Table type	Multi-instance table
Row name	AttributeMap
Restrictions	A maximum of 16 LDAP attribute maps are supported.

## Columns

Column name	Column description	Column type	Data type and restrictions
MapName	LDAP attribute map name.	Index	String, case-insensitive. Length: 1 to 31 characters.
LdapAttrName	LDAP attribute name.	Index	String, case-insensitive. Length: 1 to 63 characters.
Prefix	LDAP attribute prefix.	N/A	String, case-insensitive. Length: 0 to 7 characters.
Delimiter	LDAP attribute delimiter.	N/A	String, case-insensitive. Length: 0 to 1 characters.
AaaAttrType	AAA attribute	N/A	Enumeration:

Column name	Column description	Column type	Data type and restrictions
	type.		<ul style="list-style-type: none"> <li>• <b>1</b>—user-group.</li> <li>• <b>2</b>—user-profile.</li> </ul>



# Contents

- Ldap.....2
  - Ldap/Scheme.....2
  - Ldap/Servers .....2

# Ldap

## Ldap/Scheme

Message	Explanation
Maximum number of LDAP schemes already reached. LDAP方案的数目已经达到上限。	Maximum number of LDAP schemes already reached. LDAP方案的数目已经达到上限
The LDAP scheme doesn't exist. 指定的LDAP方案不存在。	The LDAP scheme doesn't exist. 指定的LDAP方案不存在。
Operation failed due to system errors. 系统错误，操作失败。	Operation failed due to system errors. 系统错误，操作失败。

## Ldap/Servers

Message	Explanation
Operation failed due to system errors. 系统错误，操作失败。	Operation failed due to system errors. 系统错误，操作失败。
Maximum number of LDAP servers already reached. LDAP服务器的数目已经达到上限。	Maximum number of LDAP servers already reached. LDAP服务器的数目已经达到上限。
The LDAP server doesn't exist. 指定的LDAP服务器不存在。	The LDAP server doesn't exist. 指定的LDAP服务器不存在。
Invalid IP address. 指定的IP地址非法。	Invalid IP address. 指定的IP地址非法。

# Contents

- LDP.....1
  - LDP/ResetAllLDPs .....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# LDP

## LDP/ResetAllLDPs

This table is used to reset all LDP sessions.

### XML structure

```
<LDP>
  <ResetAllLDPs>
    <Reset></Reset>
  </ResetAllLDPs>
</LDP>
```

### Table description

Item	Description
Feature name	LDP
Table name	ResetAllLDPs
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Reset	Reset all LDP sessions	N/A	This column must be empty.	N/A

# Contents

LDP.....	1
LDP/Base.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
LDP/Interfaces .....	1
XML structure.....	2
Table description.....	2
Columns.....	2

# LDP

## LDP/Base

This table contains global LDP information.

### XML structure

```
<LDP>
  <Base>
    <Enable></Enable>
    <LSPTrigger></LSPTrigger>
  </Base>
</LDP>
```

### Table description

Item	Description
Feature name	LDP
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations. You must enable LDP first before other LDP configuration.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether LDP feature is enabled globally	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled(default).</li></ul>	N/A
LSPTrigger	Egress LSP trigger policy	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Default policy(default).</li><li>2—ALL.</li><li>3—Mapping.</li></ul>	N/A

## LDP/Interfaces

This table contains LDP interface information.

## XML structure

```
<LDP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </Interface>
  </Interfaces>
</LDP>
```

## Table description

Item	Description
Feature name	LDP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only L3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enable	Enable LDP for the interface.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled.</li><li>false—Disabled(default).</li></ul>	N/A

# Contents

LDP.....	1
LDP/Base.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
LDP/Interfaces .....	1
XML structure.....	2
Table description.....	2
Columns.....	2



# LDP

## LDP/Base

This table contains global LDP information.

### XML structure

```
<LDP>
  <Base>
    <Enable></Enable>
    <LSPTrigger></LSPTrigger>
  </Base>
</LDP>
```

### Table description

Item	Description
Feature name	LDP
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	N/A

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether LDP feature is enabled globally	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>	N/A
LSPTrigger	Egress LSP trigger policy	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Default policy(default).</li><li>• 2—ALL.</li><li>• 3—Mapping.</li><li>• 4—Prefix-list.</li></ul>	You can not get detail information when the type is Prefix-list.

## LDP/Interfaces

This table contains LDP interface information.

## XML structure

```
<LDP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </Interface>
  </Interfaces>
</LDP>
```

## Table description

Item	Description
Feature name	LDP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only L3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enable	Enable LDP for the interface	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

# Contents

- License .....1
  - License/Operations .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# License

## License/Operations

This table describes the actions that use to install or uninstall feature.

### XML structure

```
<License>
  <Operations>
    <Operation>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <OpType></OpType>
      <OpTarget>
        <ActivationFile></ActivationFile>
        <ActivationKey></ActivationKey>
        <LicenseKey></LicenseKey>
      </OpTarget>
    </Operation>
  </Operations>
</License>
```

### Table description

Item	Description
Feature name	License
Table name	Operations
Table type	Multi-instance table
Row name	Operation
Restrictions	The objects of OpTarget are mutual exclusion.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Position information of the device Node.	Data structure	Members include: <ul style="list-style-type: none"><li>• <b>Chassis.</b></li><li>• <b>Slot.</b></li><li>• <b>CPUID.</b></li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides. Specifies the member ID of an IRF member device. (Distributed devices—In IRF mode.)	Index	Unsigned integer. Value range: 0 to 65535.	N/A.
Slot	Slot number of the entity. Specifies the slot number of an MPU. (Distributed devices—In standalone mode.) Specifies the member ID of an IRF member device. (Centralized IRF devices.)	Index	Unsigned integer. Value range: 0 to 65535.	If there is no slot number, return 65535. When the InstallType of License/Systems is 2, the Slot is the member of local active MPU.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	If there is no CPU number, return 65535. When the InstallType of License/systems is 2 or 3, the CPUID is 65535.
OpType	Operation type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Install license.</li> <li>2—Uninstall license.</li> <li>3—Compress.</li> <li>4—Delete the special license.</li> </ul>	When the value is 1, 2 or 4, only one object of OpTarget can be carried. When the value is 3, anyone of OpTarget can't be carried.
OpTarget	Operation target.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>ActivationFile.</b></li> <li>ActivationKey.</li> <li>LicenseKey.</li> </ul>	N/A
ActivationFile	An activation file with the full path.	N/A	String. Length: 1 to 255 characters.	N/A
ActivationKey	Activation key.	N/A	String. Length: 1 to 254 characters. Format: XXXX-XXXX-...-XXXX.	N/A
LicenseKey	License key.	N/A	String. Length: 1 to 255 characters. Format: Every group is made	Due to historical reasons, the length of the authorization code for each group is not

Column name	Column description	Column type	Data type and restrictions	Remarks
			up of several characters, and during the groups use "-" as a delimiter.	uniform.

# Contents

- License .....1
  - License/Systems .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....2
  - License/Summaries .....3
    - XML structure .....3
    - Table description .....4
    - Columns .....4
  - License/Features .....7
    - XML structure .....7
    - Table description .....7
    - Columns .....7

# License

## License/Systems

This table contains license system information.

### XML structure

```
<License>
  <Systems>
    <System>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <SerialNumber></SerialNumber>
      <DeviceIDType></DeviceIDType>
      <DeviceID></DeviceID>
      <HardwareInfo></HardwareInfo>
      <Max></Max>
      <Used></Used>
      <Recyclable></Recyclable>
      <InstallType></InstallType>
      <ActivationFileStoragePath></ActivationFileStoragePath>
    </System>
  </Systems>
</License>
```

### Table description

Item	Description
Feature name	License
Table name	Systems
Table type	Multi-instance table
Row name	System
Restrictions	None



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Position information of the device Node.	Data structure	Members include: <ul style="list-style-type: none"> <li>• <b>Chassis.</b></li> <li>• <b>Slot.</b></li> <li>• <b>CPUID.</b></li> </ul>	N/A
Chassis	ID of the member where the entity resides. Specifies the member ID of an IRF member device. (Distributed devices—In IRF mode.)	Index	Unsigned integer. Value range: 0 to 65535.	N/A.
Slot	Slot number of the entity. Specifies the slot number of an MPU. (Distributed devices—In standalone mode.) Specifies the member ID of an IRF member device. (Centralized IRF devices.)	Index	Unsigned integer. Value range: 0 to 65535.	If there is no slot number, return 65535. When the InstallType of License/Systems is 2, the Slot is the member of local active MPU.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	If there is no CPU number, return 65535. When the InstallType of License/systems is 2 or 3, the CPUID is 65535.
SerialNumber	The serial number of the device.	N/A	String. Length: 1 to 255 characters.	N/A
DeviceIDType	The types of device ID.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—invalid.</li> <li>• <b>2</b>—keyString.</li> <li>• <b>3</b>—file.</li> </ul>	N/A
DeviceID	A string represents the device ID.	N/A	String. Length: 1 to 255 characters.	If the value of DeviceIDType is 1, DeviceID does not exist.  If the value of DeviceIDType is 3, DeviceID is the file name with the full path.
HardwareInfo	The information of the hardware.	N/A	String. Length: 1 to 255 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Max	The max number of licenses that can be installed in device.	N/A	Unsigned integer.	N/A
Used	The number of installed licenses.	N/A	Unsigned integer.	N/A
Recyclable	The number of recyclable licenses.	N/A	Unsigned integer.	N/A
InstallType	The install-Type of license.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—invalid.</li> <li>• 2—installInChassis.</li> <li>• 3—installInSlot.</li> <li>• 4—installInCPU.</li> </ul>	N/A
ActivationFileStoragePath	The storage path of the installed license files.	N/A	String. Length: 1 to 255 characters.	N/A

## License/Summaries

This table contains the summary information of installed license.

## XML structure

```

<License>
  <Summaries>
    <Summary>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <Index></Index>
      <Feature></Feature>
      <ProductDescr></ProductDescr>
      <FileDescr></FileDescr>
      <State></State>
      <Installed>
        <ActivationFile></ActivationFile>
        <ActivationKey></ActivationKey>
        <LicenseKey></LicenseKey>
      </Installed>
      <Uninstalled>
        <UninstActivationFile></UninstActivationFile>
        <UninstActivationKey></UninstActivationKey>
      </Uninstalled>
    </Summary>
  </Summaries>
</License>

```

```

</Uninstalled>
<Type></Type>
<InstalledTime></InstalledTime>
<UninstalledTime></UninstalledTime>
<DaysLeft></DaysLeft>
<DaysLeftWarning></DaysLeftWarning>
<ValidityStart></ValidityStart>
<ValidityEnd></ValidityEnd>
<ExpiredDays></ExpiredDays>
<Count></Count>
</Summary>
</Summaries>
</License>

```

## Table description

Item	Description
Feature name	License
Table name	Summaries
Table type	Multi-instance table
Row name	Summary
Restrictions	Installed group and uninstalled group are related with license state, and the members in installed group are mutual exclusion.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Position information of the device Node.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>Chassis.</b></li> <li><b>Slot.</b></li> <li><b>CPUID.</b></li> </ul>	N/A
Chassis	ID of the member where the entity resides. Specifies the member ID of an IRF member device. (Distributed devices–In IRF mode.)	Index	Unsigned integer. Value range: 0 to 65535.	N/A.
Slot	Slot number of the entity. Specifies the slot number of an MPU. (Distributed devices–In	Index	Unsigned integer. Value range: 0 to 65535.	If there is no slot number, return 65535. When the InstallType of License/Systems is 2, the Slot is the member of local active MPU.

Column name	Column description	Column type	Data type and restrictions	Remarks
	standalone mode.) Specifies the member ID of an IRF member device. (Centralized IRF devices.)			
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	If there is no CPU number, return 65535. When the InstallType of License/systems is 2 or 3, the CPUID is 65535.
Index	License index.	Index	Unsigned integer.	After the compression operation, the uninstalled license index will be deleted; and the installed license index will remain unchanged.
Feature	The name of feature which have licensed.	N/A	String. Length: 0 to 1024 characters.	Here multiple feature names can be displayed with spaces as delimiters.
ProductDescr	The description of product BOM in activation file.	N/A	String. Length: 1 to 1024 characters.	N/A
FileDescr	The description of file in a license.	N/A	String. Length: 1 to 1024 characters.	N/A
State	The state of an installed license.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—invalid.</li> <li>2—inuse.</li> <li>3—usable.</li> <li>4—expired.</li> <li>5—uninstalled.</li> <li>6—unusable.</li> </ul>	N/A
Installed	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>ActivationFile.</li> <li>ActivationKey.</li> <li>LicenseKey.</li> </ul>	N/A
ActivationFile	Name of an installed activation file, with device name and file name.	N/A	String. Length: 1 to 255 characters.	N/A
ActivationKey	The activation key which has been installed.	N/A	String. Length: 1 to 254 characters. Format: XXXX-XXXX-...-XXXX.	N/A
LicenseKey	The license key which has been installed.	N/A	String. Length: 1 to 255 characters. Format: Every group is made	Due to historical reasons, the length of the authorization code for each group is not

Column name	Column description	Column type	Data type and restrictions	Remarks
			up of several characters, and during the groups use "-" as a delimiter.,	uniform.
Uninstalled	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>UninstActivationFile.</li> <li>UninstActivationKey.</li> </ul>	Only after uninstalling, the membership information in this group can be read.
UninstActivationFile	Name of an uninstalled activation file, with device name and file name.	N/A	String. Length: 1 to 255 characters.	N/A
UninstActivationKey	The activation key which has been uninstalled.	N/A	String. Length: 1 to 254 characters. Format: XXXX-XXXX-...-XXXX.	N/A
Type	License type by validity period.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—unknown.</li> <li>2—permanent.</li> <li>3—daysRestricted.</li> <li>4—trialDaysRestricted.</li> <li>5—dateRestricted.</li> <li>6—trialDateRestricted.</li> <li>7—countRestricted.</li> <li>8—trialCountRestricted.</li> </ul>	N/A
InstalledTime	Time when the license was installed.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
UninstalledTime	The time when the license was uninstalled.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	Only after uninstalling, it can be read.
DaysLeft	Remaining days of the license.	N/A	Unsigned integer.	When the value of Type is 3 or 4, this column is effective.
DaysLeftWarning	Whether the license will be expired.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>True</b></li> <li><b>false</b></li> </ul>	When the left days are below 10%, the value of this column is true.
ValidityStart	Start date for a date restricted license.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	When the value of Type is 5 or 6, this column is effective.
ValidityEnd	End date for a date restricted license.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	When the value of Type is 5 or 6, this column is effective. But if there is no time limit authorization, this column does not exist value.
ExpiredDays	The number of passed days after a license has been	N/A	Unsigned integer.	Only when the value of state is 4, this column is meaningful.

Column name	Column description	Column type	Data type and restrictions	Remarks
	expired.			
Count	The effective number of License.	N/A	Unsigned integer.	When the value of Type is 7 or 8, this column is effective.

## License/Features

This table contains information about the features.

## XML structure

```

<License>
  <Features>
    <Feature>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <Name></Name>
      <State></State>
    </Feature>
  </Features>
</License>

```

## Table description

Item	Description
Feature name	License
Table name	Features
Table type	Multi-instance table
Row name	Feature
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Position information of the device Node.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>Chassis.</b></li> <li><b>Slot.</b></li> <li><b>CPUID.</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides. Specifies the member ID of an IRF member device. (Distributed devices—In IRF mode.)	Index	Unsigned integer. Value range: 0 to 65535.	N/A.
Slot	Slot number of the entity. Specifies the slot number of an MPU. (Distributed devices—In standalone mode.) Specifies the member ID of an IRF member device. (Centralized IRF devices.)	Index	Unsigned integer. Value range: 0 to 65535.	If there is no slot number, return 65535. When the InstallType of License/Systems is 2, the Slot is the member of local active MPU.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	If there is no CPU number, return 65535. When the InstallType of License/systems is 2 or 3, the CPUID is 65535.
Name	Feature name.	Index	String. Length: 1 to 31 characters.	N/A
Status	Feature status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—No license has been installed.</li> <li>2—Trial license has been installed.</li> <li>3—Purchased license has been installed.</li> </ul>	N/A

# Contents

LICMGR.....	1
LICMGR/Switch.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
LICMGR/INEID.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
LICMGR/LICID.....	2
XML structure.....	2
Table description.....	2
Columns.....	3
LICMGR/Bandwidth.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
LICMGR/Key.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
LICMGR/X1Timer.....	4
XML structure.....	4
Table description.....	5
Columns.....	5
LICMGR/X2Timer.....	5
XML structure.....	5
Table description.....	5
Columns.....	6
LICMGR/X3Timer.....	6
XML structure.....	6
Table description.....	6
Columns.....	6
LICMGR/X3Service.....	7
XML structure.....	7
Table description.....	7
Columns.....	7
LICMGR/X1Connection.....	8
XML structure.....	8
Table description.....	8
Columns.....	8
LICMGR/X2Connection.....	9
XML structure.....	9
Table description.....	9
Columns.....	9
LICMGR/X3Connection.....	10
XML structure.....	10
Table description.....	10
Columns.....	11



# LICMGR

## LICMGR/Switch

This table contains state information about the lawful interception feature.

### XML structure

```
<LICMGR>
  <Switch>
    <Switch></Switch>
  </Switch>
</LICMGR>
```

### Table description

Item	Description
Feature name	LICMGR
Table name	Switch
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Switch	State of the lawful interception feature	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disabled.</li></ul>

## LICMGR/INEID

This table contains the INE ID.

### XML structure

```
<LICMGR>
  <INEID>
    <ID></ID>
  </INEID>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	INEID
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	INE ID	N/A	String, case sensitive. Length: 1 to 32 characters.

## LICMGR/LICID

This table contains the LIC ID.

## XML structure

```
<LICMGR>
  <LICID>
    <ID></ID>
  </LICID>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	LICID
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	LIC ID	N/A	String, case sensitive. Length: 1 to 32 characters.

## LICMGR/Bandwidth

This table contains X3 interface bandwidth information.

## XML structure

```
<LICMGR>
  <Bandwidth>
    <Bandwidth></Bandwidth>
  </Bandwidth>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	Bandwidth
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Bandwidth	X3 interface bandwidth	N/A	Unsigned integer. Value range: 8 to 1000000, in kbps.

## LICMGR/Key

This table contains lawful interception key information.

## XML structure

```
<LICMGR>
  <Key>
```

```

<Key>
  <Type></Type>
  <KI></KI>
  <Password></Password>
  <SqnGroup></SqnGroup>
</Key>
</Key>
</LICMGR>

```

## Table description

Item	Description
Feature name	LICMGR
Table name	Key
Table type	Multi-instance table
Row name	Key
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	Interface type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—X1.</li> <li>2—X2.</li> </ul>
KI	Key ID	N/A	String, case sensitive. Length: 16 characters.
Password	Password	N/A	String, case sensitive. Length: 16 characters.
SqnGroup	Sequence number group	N/A	Unsigned integer. Value range: 2 to 4294967295.

## LICMGR/X1Timer

This table contains information about the X1 no-message timer.

## XML structure

```

<LICMGR>
  <X1Timer>
    <NoMessage></NoMessage>
  </X1Timer>
</LICMGR>

```

## Table description

Item	Description
Feature name	LICMGR
Table name	X1Timer
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
NoMessage	No-message timer.	N/A	Unsigned integer. Value range: 180 to 1000, in seconds.

## LICMGR/X2Timer

This table contains information about X2 timers.

## XML structure

```
<LICMGR>
  <X2Timer>
    <KeepAlive></KeepAlive>
    <Normal></Normal>
  </X2Timer>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	X2Timer
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
KeepAlive	Keepalive timer	N/A	Unsigned integer. Value range: 180 to 1000, in seconds.
Normal	Normal timer	N/A	Unsigned integer. Value range: 1 to 30, in seconds.

## LICMGR/X3Timer

This table contains information about X3 timers.

## XML structure

```
<LICMGR>
  <X3Timer>
    <Timer>
      <ConnectionID></ConnectionID>
      <KeepAlive></KeepAlive>
      <Normal></Normal>
      <Retry></Retry>
    </Timer>
  </X3Timer>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	X3Timer
Table type	Multi-instance table
Row name	Timer
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ConnectionID	X3 connection ID	Index	Unsigned integer. Value range: 0 to 31.

Column name	Column description	Column type	Data type and restrictions
KeepAlive	Keepalive timer	N/A	Unsigned integer. Value range: 180 to 1000, in seconds.
Normal	Normal timer	N/A	Unsigned integer. Value range: 1 to 30, in seconds.
Retry	Retry timer	N/A	Unsigned integer. Value range: 1 to 1000, in seconds.

## LICMGR/X3Service

This table contains X3 service chassis and slot information.

### XML structure

```

<LICMGR>
  <X3Service>
    <Chassis></Chassis>
    <Slot></Slot>
  </X3Service>
</LICMGR>

```

### Table description

Item	Description
Feature name	LICMGR
Table name	X3Service
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Chassis number	N/A	Unsigned integer. Value range: 0 to 65534.
Slot	Slot number	N/A	Unsigned integer. Value range: 0 to 65534.

# LICMGR/X1Connection

This table contains information about the X1 connection.

## XML structure

```
<LICMGR>
  <X1Connection>
    <LICIPAddress></LICIPAddress>
    <LICIPv6Address></LICIPv6Address>
    <LocalIPAddress></LocalIPAddress>
    <LocalIPv6Address></LocalIPv6Address>
    <LocalPort></LocalPort>
  </X1Connection>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	X1Connection
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LICIPAddress	LIC IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column cannot be configured together with the LICIPv6Address column.
LICIPv6Address	LIC IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column cannot be configured together with the LICIPAddress column.
LocalIPAddress	Local IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column cannot be configured together with the LocalIPv6Address column.



Column name	Column description	Column type	Data type and restrictions	Remarks
LocalIPv6Address	Local IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column cannot be configured together with the LocalIPAddress column.
LocalPort	Local port	N/A	Unsigned integer. Value range: 1 to 65535.	Required.

## LICMGR/X2Connection

This table contains information about the X2 connection.

### XML structure

```

<LICMGR>
  <X2Connection>
    <LICIPAddress></LICIPAddress>
    <LICIPv6Address></LICIPv6Address>
    <LICPort></LICPort>
    <LocalIPAddress></LocalIPAddress>
    <LocalIPv6Address></LocalIPv6Address>
    <LocalPort></LocalPort>
  </X2Connection>
</LICMGR>

```

### Table description

Item	Description
Feature name	LICMGR
Table name	X2Connection
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LICIPAddress	LIC IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column cannot be configured together with the LICIPv6Address column.

Column name	Column description	Column type	Data type and restrictions	Remarks
LICIPv6Address	LIC IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column cannot be configured together with the LICIPAddress column.
LICPort	LIC port	N/A	Unsigned integer. Value range: 1 to 65535.	Required.
LocalIPAddress	Local IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column cannot be configured together with the LICIPv6Address column.
LocalIPv6Address	Local IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column cannot be configured together with the LICIPAddress column.
LocalPort	Local port	N/A	Unsigned integer. Value range: 1 to 65535.	Required.

## LICMGR/X3Connection

This table contains information about X3 connections.

### XML structure

```

<LICMGR>
  <X3Connection>
    <Connection>
      <ConnectionID></ConnectionID>
      <LICIPAddress></LICIPAddress>
      <LICIPv6Address></LICIPv6Address>
      <LICPort></LICPort>
      <LocalIPAddress></LocalIPAddress>
      <LocalIPv6Address></LocalIPv6Address>
      <LocalPort></LocalPort>
    </Connection>
  </X3Connection>
</LICMGR>

```

### Table description

Item	Description
Feature name	LICMGR
Table name	X3Connection
Table type	Multi-instance table
Row name	Connection

Item	Description
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ConnectionID	X3 connection ID	Index	Unsigned integer. Value range: 0 to 31.	N/A
LICIPAddress	LIC IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column cannot be configured together with the LICIPv6Address column.
LICIPv6Address	LIC IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column cannot be configured together with the LICIPAddress column.
LICPort	LIC port	N/A	Unsigned integer. Value range: 1 to 65535.	Required.
LocalIPAddress	Local IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1. This column cannot be configured together with the LocalIPv6Address column.
LocalIPv6Address	Local IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. This column cannot be configured together with the LocalIPAddress column.
LocalPort	Local port	N/A	Unsigned integer. Value range: 1 to 65535.	Required.

# Contents

LICMGR.....	1
LICMGR/Switch.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
LICMGR/INEID.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
LICMGR/LICID.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
LICMGR/Bandwidth.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
LICMGR/Key.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
LICMGR/X1Timer.....	4
XML structure.....	4
Table description.....	5
Columns.....	5
LICMGR/X2Timer.....	5
XML structure.....	5
Table description.....	5
Columns.....	6
LICMGR/X3Timer.....	6
XML structure.....	6
Table description.....	6
Columns.....	6
LICMGR/X3Service.....	7
XML structure.....	7
Table description.....	7
Columns.....	7
LICMGR/X1Connection.....	7
XML structure.....	8
Table description.....	8
Columns.....	8
LICMGR/X2Connection.....	8
XML structure.....	8
Table description.....	9
Columns.....	9
LICMGR/X3Connection.....	9
XML structure.....	9
Table description.....	10
Columns.....	10
LICMGR/PacketsStatistics.....	10
XML structure.....	10
Table description.....	11
Columns.....	11
LICMGR/X3PacketsStatistics.....	11
XML structure.....	11
Table description.....	12
Columns.....	12

LICMGR/IntervalStatistics .....	12
XML structure .....	13
Table description .....	13
Columns .....	13
LICMGR/ControlTargets .....	14
XML structure .....	14
Table description .....	15
Columns .....	15

# LICMGR

## LICMGR/Switch

This table contains state information about the lawful interception feature.

### XML structure

```
<LICMGR>
  <Switch>
    <Switch></Switch>
  </Switch>
</LICMGR>
```

### Table description

Item	Description
Feature name	LICMGR
Table name	Switch
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Switch	State of the lawful interception feature	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disabled.</li></ul>

## LICMGR/INEID

This table contains the INE ID.

### XML structure

```
<LICMGR>
  <INEID>
    <ID></ID>
  </INEID>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	INEID
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	INE ID	N/A	String, case sensitive. Length: 1 to 32 characters.

## LICMGR/LICID

This table contains the LIC ID.

## XML structure

```
<LICMGR>  
  <LICID>  
    <ID></ID>  
  </LICID>  
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	LICID
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	LIC ID	N/A	String, case sensitive. Length: 1 to 32 characters.

# LICMGR/Bandwidth

This table contains X3 interface bandwidth information.

## XML structure

```
<LICMGR>
  <Bandwidth>
    <Bandwidth></Bandwidth>
  </Bandwidth>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	Bandwidth
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Bandwidth	X3 interface bandwidth	N/A	Unsigned integer. Value range: 8 to 1000000, in kbps.

# LICMGR/Key

This table contains lawful interception key information.

## XML structure

```
<LICMGR>
  <Key>
    <Key>
      <Type></Type>
      <KI></KI>
      <Password></Password>
      <SqnGroup></SqnGroup>
    </Key>
  </Key>
</LICMGR>
```



</LICMGR>

## Table description

Item	Description
Feature name	LICMGR
Table name	Key
Table type	Multi-instance table
Row name	Key
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	Interface type	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—X1.</li><li>• 2—X2.</li></ul>
KI	Key ID	N/A	String, case sensitive. Length: 16 characters.
KIConfig	Whether the key ID is configured	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>true</b>—Key ID is configured.</li><li>• <b>false</b>—Key ID is not configured.</li></ul>
Password	Password	N/A	String, case sensitive. Length: 16 characters.
PasswordConfig	Whether the password is configured	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Password is configured.</li><li>• <b>false</b>—Password is not configured.</li></ul>
SqnGroup	Sequence number group	N/A	Unsigned integer. Value range: 2 to 4294967295.

## LICMGR/X1Timer

This table contains information about the X1 no-message timer.

## XML structure

```
<LICMGR>
  <X1Timer>
    <NoMessage></NoMessage>
  </X1Timer>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	X1Timer
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
NoMessage	No-message timer.	N/A	Unsigned integer. Value range: 180 to 1000, in seconds.

## LICMGR/X2Timer

This table contains information about X2 timers.

## XML structure

```
<LICMGR>
  <X2Timer>
    <KeepAlive></KeepAlive>
    <Normal></Normal>
  </X2Timer>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	X2Timer
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
KeepAlive	Keepalive timer	N/A	Unsigned integer. Value range: 180 to 1000, in seconds.
Normal	Normal timer	N/A	Unsigned integer. Value range: 1 to 30, in seconds.

## LICMGR/X3Timer

This table contains information about X3 timers.

## XML structure

```
<LICMGR>
  <X3Timer>
    <Timer>
      <ConnectionID></ConnectionID>
      <KeepAlive></KeepAlive>
      <Normal></Normal>
      <Retry></Retry>
    </Timer>
  </X3Timer>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	X3Timer
Table type	Mutil-instance table
Row name	Timer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ConnectionID	X3 connection ID	Index	Unsigned integer. Value range: 0 to 31.
KeepAlive	Keepalive timer	N/A	Unsigned integer. Value range: 180 to 1000, in

Column name	Column description	Column type	Data type and restrictions
			seconds.
Normal	Normal timer	N/A	Unsigned integer. Value range: 1 to 30, in seconds.
Retry	Retry timer	N/A	Unsigned integer. Value range: 1 to 1000, in seconds.

## LICMGR/X3Service

This table contains X3 service chassis and slot information.

### XML structure

```

<LICMGR>
  <X3Service>
    <Chassis></Chassis>
    <Slot></Slot>
  </X3Service>
</LICMGR>

```

### Table description

Item	Description
Feature name	LICMGR
Table name	X3Service
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Chassis	Chassis number	N/A	Unsigned integer. Value range: 0 to 65534.
Slot	Slot number	N/A	Unsigned integer. Value range: 0 to 65534.

## LICMGR/X1Connection

This table contains information about the X1 connection.

## XML structure

```
<LICMGR>
  <X1Connection>
    <LICIPAddress></LICIPAddress>
    <LICIPv6Address></LICIPv6Address>
    <LocalIPAddress></LocalIPAddress>
    <LocalIPv6Address></LocalIPv6Address>
    <LocalPort></LocalPort>
    <ConnectState></ConnectState>
  </X1Connection>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	X1Connection
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
LICIPAddress	LIC IPv4 address	N/A	String, dotted decimal notation.
LICIPv6Address	LIC IPv6 address	N/A	String, hexadecimal notation.
LocalIPAddress	Local IPv4 address	N/A	String, dotted decimal notation.
LocalIPv6Address	Local IPv6 address	N/A	String, hexadecimal notation.
LocalPort	Local port	N/A	Unsigned integer. Value range: 1 to 65535.
ConnectState	State of the TCP connection.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Connected.</li><li>• <b>false</b>—No connected.</li></ul>

## LICMGR/X2Connection

This table contains information about the X2 connection.

## XML structure

```
<LICMGR>
```

```

<X2Connection>
  <LICIPAddress></LICIPAddress>
  <LICIPv6Address></LICIPv6Address>
  <LICPort></LICPort>
  <LocalIPAddress></LocalIPAddress>
  <LocalIPv6Address></LocalIPv6Address>
  <LocalPort></LocalPort>
</X2Connection>
</LICMGR>

```

## Table description

Item	Description
Feature name	LICMGR
Table name	X2Connection
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
LICIPAddress	LIC IPv4 address	N/A	String, dotted decimal notation.
LICIPv6Address	LIC IPv6 address	N/A	String, hexadecimal notation.
LICPort	LIC port	N/A	Unsigned integer. Value range: 1 to 65535.
LocalIPAddress	Local IPv4 address	N/A	String, dotted decimal notation.
LocalIPv6Address	Local IPv6 address	N/A	String, hexadecimal notation.
LocalPort	Local port	N/A	Unsigned integer. Value range: 1 to 65535.

## LICMGR/X3Connection

This table contains information about X3 connections.

## XML structure

```

<LICMGR>
  <X3Connection>
    <Connection>
      <ConnectionID></ConnectionID>
      <LICIPAddress></LICIPAddress>

```

```

    <LICIPv6Address></LICIPv6Address>
    <LICPort></LICPort>
    <LocalIPAddress></LocalIPAddress>
    <LocalIPv6Address></LocalIPv6Address>
    <LocalPort></LocalPort>
  </Connection>
</X3Connection>
</LICMGR>

```

## Table description

Item	Description
Feature name	LICMGR
Table name	X3Connection
Table type	Multi-instance table
Row name	Connection
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ConnectionID	X3 connection ID	Index	Unsigned integer. Value range: 0 to 31.
LICIPAddress	LIC IPv4 address	N/A	String, dotted decimal notation
LICIPv6Address	LIC IPv6 address	N/A	String, hexadecimal notation.
LICPort	LIC port	N/A	Unsigned integer. Value range: 1 to 65535.
LocalIPAddress	Local IPv4 address	N/A	String, dotted decimal notation.
LocalIPv6Address	Local IPv6 address	N/A	String, hexadecimal notation.
LocalPort	Local port	N/A	Unsigned integer. Value range: 1 to 65535.

## LICMGR/PacketsStatistics

This table contains lawful interception packet statistics.

## XML structure

```

<LICMGR>
  <PacketsStatistics>
    <Statistic>
      <Type></Type>
    </Statistic>
  </PacketsStatistics>
</LICMGR>

```

```

    <PacketsIn></PacketsIn>
    <PacketsOut></PacketsOut>
    <BytesIn></BytesIn>
    <BytesOut></BytesOut>
  </Statistic>
</PacketsStatistics>
</LICMGR>

```

## Table description

Item	Description
Feature name	LICMGR
Table name	PacketsStatistics
Table type	Multi-instance table
Row name	Statistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	Interface type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—X1.</li> <li>2—X2.</li> <li>3—X3.</li> </ul>
PacketsIn	Incoming packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
PacketsOut	Outgoing packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
BytesIn	Incoming byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
BytesOut	Outgoing byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .

## LICMGR/X3PacketsStatistics

This table contains X3 packet statistics.

## XML structure

```

<LICMGR>
  <X3PacketsStatistics>
    <Statistic>
      <ConnectionID></ConnectionID>
    </Statistic>
  </X3PacketsStatistics>
</LICMGR>

```



```

    <PacketsIn></PacketsIn>
    <PacketsOut></PacketsOut>
    <BytesIn></BytesIn>
    <BytesOut></BytesOut>
    <Count></Count>
    <SuccessCount></SuccessCount>
  </Statistic>
</X3PacketsStatistics>
</LICMGR>

```

## Table description

Item	Description
Feature name	LICMGR
Table name	X3PacketsStatistics
Table type	Multi-instance table
Row name	Statistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ConnectionID	X3 connection ID	Index	Unsigned integer. Value range: 0 to 15.
PacketsIn	Incoming packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
PacketsOut	Outgoing packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
BytesIn	Incoming byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
BytesOut	Outgoing byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
Count	LIC channel creation count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
SuccessCount	LIC channel creation success count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .

## LICMGR/IntervalStatistics

This table contains periodically collected packet statistics.

# XML structure

```
<LICMGR>
  <IntervalStatistics>
    <Statistic>
      <ID></ID>
      <X1PacketsIn></X1PacketsIn>
      <X1PacketsOut></X1PacketsOut>
      <X1BytesIn></X1BytesIn>
      <X1BytesOut></X1BytesOut>
      <X2PacketsIn></X2PacketsIn>
      <X2PacketsOut></X2PacketsOut>
      <X2BytesIn></X2BytesIn>
      <X2BytesOut></X2BytesOut>
      <X3PacketsIn></X3PacketsIn>
      <X3PacketsOut></X3PacketsOut>
      <X3BytesIn></X3BytesIn>
      <X3BytesOut></X3BytesOut>
      <Time></Time>
    </Statistic>
  </IntervalStatistics>
</LICMGR>
```

## Table description

Item	Description
Feature name	LICMGR
Table name	IntervalStatistics
Table type	Multi-instance table
Row name	Statistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Sequence number of a statistics collection interval	Index	Unsigned integer.
X1PacketsIn	X1 incoming packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X1PacketsOut	X1 outgoing packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X1BytesIn	X1 incoming byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .

Column name	Column description	Column type	Data type and restrictions
X1BytesOut	X1 outgoing byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X2PacketsIn	X2 incoming packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X2PacketsOut	X2 outgoing packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X2BytesIn	X2 incoming byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X2BytesOut	X2 outgoing byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X3PacketsIn	X3 incoming packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X3PacketsOut	X3 outgoing packet count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X3BytesIn	X3 incoming byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
X3BytesOut	X3 outgoing byte count	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
Time	Time when the statistics were collected	N/A	String.

## LICMGR/ControlTargets

This table contains target information.

### XML structure

```

<LICMGR>
  <ControlTargets>
    <Target>
      <ID></ID>
      <Type></Type>
      <TargetIP></TargetIP>
      <TargetIPv6></TargetIPv6>
      <TargetMask></TargetMask>
      <TargetMaskSubnet></TargetMaskSubnet>
      <TargetPort></TargetPort>
      <TargetVRF></TargetVRF>
      <TargetVRFPort></TargetVRFPort>
      <VisitedIP></VisitedIP>
      <VisitedIPv6></VisitedIPv6>
      <VisitedMask></VisitedMask>
      <VisitedMaskSubnet></VisitedMaskSubnet>
    </Target>
  </ControlTargets>
</LICMGR>

```

```

    <VisitedPort></VisitedPort>
    <TransportPro></TransportPro>
    <ApplicationType></ApplicationType>
  </Target>
</ControlTargets>
</LICMGR>

```

## Table description

Item	Description
Feature name	LICMGR
Table name	ControlTargets
Table type	Multi-instance table
Row name	Target
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	ID of intercepted target	Index	Unsigned integer.
Type	Type of information that identifies the target	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—IP.</li> <li>• 2—IP_SUBNET.</li> <li>• 7—IP_PORT</li> <li>• 8—VRF.</li> <li>• 9—VRF_PORT.</li> </ul>
TargetIP	Target IPv4 address	N/A	String, dotted decimal notation.
TargetIPv6	Target IPv6 address	N/A	String, hexadecimal notation.
TargetMask	Target subnet mask	N/A	String, dotted decimal notation.
TargetMaskSubnet	Target subnet mask length	N/A	Unsigned integer.
TargetPort	Target port	N/A	Unsigned integer.
TargetVRF	Target VRF	N/A	String.
TargetVRFPort	Target VRF and port	N/A	Unsigned integer.
VisitedIP	Visited IPv4 address	N/A	String, dotted decimal notation.
VisitedIPv6	Visited IPv6 address	N/A	String, hexadecimal notation.
VisitedMask	Subnet mask of the visited IP address	N/A	String, dotted decimal notation.
VisitedMaskSubnet	Subnet mask length of the visited IP address	N/A	Unsigned integer.
VisitedPort	Visited port	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
TransportPro	Transport protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—All.</li> <li>2—TCP.</li> <li>3—UDP.</li> </ul>
ApplicationType	Application type	N/A	Unsigned integer.

# Contents

- LLDP ..... 1
  - LLDP/GlobalStatus ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1
  - LLDP/Interfaces ..... 2
    - XML structure ..... 2
    - Table description ..... 3
    - Columns ..... 3
  - LLDP/IfAgents ..... 4
    - XML structure ..... 4
    - Table description ..... 4
    - Columns ..... 5
  - LLDP/TLVSelects ..... 5
    - XML structure ..... 5
    - Table description ..... 6
    - Columns ..... 7
  - LLDP/ELINumbers ..... 9
    - XML structure ..... 9
    - Table description ..... 9
    - Columns ..... 10
  - LLDP/CivicAddresses ..... 10
    - XML structure ..... 10
    - Table description ..... 10
    - Columns ..... 11

# LLDP

## LLDP/GlobalStatus

This table contains LLDP global status information.

### XML structure

```
<LLDP>
  <GlobalStatus>
    <Enable></Enable>
    <CDP></CDP>
    <TxInterval></TxInterval>
    <FastInterval></FastInterval>
    <ReInitDelay></ReInitDelay>
    <NotifyInterval></NotifyInterval>
    <Mode></Mode>
    <MaxCredit></MaxCredit>
    <HoldMult></HoldMult>
    <FastCount></FastCount>
    <RxTimeout></RxTimeout>
  </GlobalStatus>
</LLDP>
```

### Table description

Item	Description
Feature name	LLDP
Table name	GlobalStatus
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Whether to enable LLDP globally.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable.</li><li><b>false</b>—Disable.</li></ul>

Column name	Column description	Column type	Data type and restrictions
CDP	Whether to enable CDP.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>
TxInterval	Transmission interval for LLDP frames.	N/A	Unsigned integer. Value range: 5 to 32768. Unit: second.
FastInterval	Fast transmission interval for LLDP frames.	N/A	Unsigned integer. Value range: 1 to 3600. Unit: second.
ReInitDelay	Re-initialization delay.	N/A	Unsigned integer. Value range: 1 to 10. Unit: second.
NotifyInterval	Notification interval for traps.	N/A	Unsigned integer. Value range: 5 to 3600. Unit: second.
Mode	Bridge mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Customer bridge mode.</li> <li><b>1</b>—Service bridge mode.</li> </ul>
MaxCredit	Token bucket size for sending LLDP frames.	N/A	Unsigned integer. Value range: 1 to 100.
HoldMult	TTL multiplier.	N/A	Unsigned integer. Value range: 2 to 10.
FastCount	Number of LLDP frames transmitted within a fast transmission interval.	N/A	Unsigned integer. Value range: 1 to 8.
RxTimeout	Set the timeout for receiving LLDPDUs.	N/A	Unsigned integer. Value range: 0, 30 to 32768. Unit: second.

## LLDP/Interfaces

This table contains LLDP interface information.

## XML structure

```

<LLDP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <CDP></CDP>
    </Interface>
  </Interfaces>
</LLDP>

```



```

    <MEDTopoChange></MEDTopoChange>
  </Interface>
</Interfaces>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	In certain versions, this column supports interface name-to-index conversion. See the product xsd before use. See Table 1 for the format.
Enable	Whether to enable the interface.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	
CDP	Whether to enable CDP compatibility.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable. CDP packets can be transmitted and received.</li> <li><b>false</b>—Disable.</li> </ul>	
MEDTopoChange	Whether to enable LLDP-MED trapping.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	

**Table 1 Interface operation status**

Value	Operation status	Remarks
1	Single interface index	<IfIndex>1</IfIndex>
2	Single interface	<IfIndex>GigabitEthernet 0/0/2</IfIndex>

	name	
3	Multiple interface names	<IfIndex>GigabitEthernet 0/0/2 to GigabitEthernet 0/0/3, GigabitEthernet 1/0/2 to GigabitEthernet 1/0/3, serial0/0/2</IfIndex>
4	Interface range name	<IfIndex>RangeName</IfIndex>
5	Mixture of interface range name and interface names	<IfIndex>RangeName ,GigabitEthernet 0/0/2 to GigabitEthernet 0/0/3, GigabitEthernet 1/0/2 to GigabitEthernet 1/0/3, serial0/0/2</IfIndex>

## LLDP/IfAgents

This table contains LLDP interface agent information.

### XML structure

```

<LLDP>
  <IfAgents>
    <IfAgent>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <AdminStatus>
        <Tx></Tx>
        <Rx></Rx>
      </AdminStatus>
      <CheckChangeInterval></CheckChangeInterval>
      <Encap></Encap>
      <AddressFormat></AddressFormat>
      <RemoteChange></RemoteChange>
    </IfAgent>
  </IfAgents>
</LLDP>

```

### Table description

Item	Description
Feature name	LLDP
Table name	IfAgents
Table type	Multi-instance table
Row name	IfAgent
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.
AgentID	LLDP agent ID.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Nearest bridge agent.</li><li>• 2—Nearest non-TPMR agent.</li><li>• 3—Nearest customer agent.</li></ul>
AdminStatus	LLDP operating mode of the interface.	Data structure	Members include: <ul style="list-style-type: none"><li>• Tx.</li><li>• Rx.</li></ul>
Tx	Whether to enable the LLDP agent to only send LLDP frames.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disable.</li></ul>
Rx	Whether to enable the LLDP agent to only receive LLDP frames.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disable.</li></ul>
CheckChangeInterval	LLDP polling interval.	N/A	Unsigned integer. Value range: 1 to 30. Unit: second.
Encap	LLDP frame format.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Ethernet II encapsulation.</li><li>• 1—SNAP encapsulation.</li></ul>
AddressFormat	Management address format.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Number.</li><li>• 1—String.</li></ul>
RemoteChange	Whether to enable LLDP trapping.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disable.</li></ul>

批注 [w07301-1]: Need confirmed by product

## LLDP/TLVSelects

This table contains LLDP TLV transmitting status information.

## XML structure

```
<LLDP>
  <TLVSelects>
    <TLV>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <PortDesc></PortDesc>
      <SysName></SysName>
      <SysDesc></SysDesc>
```

```

<SysCap></SysCap>
<ManageAddress>
  <SubType></SubType>
  <Address></Address>
  <Enable></Enable>
</ManageAddress>
<PVID></PVID>
<ProtocolVLAN>
  <VLANID></VLANID>
  <Enable></Enable>
</ProtocolVLAN>
<VLANName>
  <VLANID></VLANID>
  <Enable></Enable>
</VLANName>
<DCBX></DCBX>
<LinkAgg></LinkAgg>
<ManageVLAN>
  <VLANID></VLANID>
  <Enable></Enable>
</ManageVLAN>
<EVB></EVB>
<QCN></QCN>
<MACPHY></MACPHY>
<Power></Power>
<MaxFrame></MaxFrame>
<MEDCapability></MEDCapability>
<NetworkPolicy></NetworkPolicy>
<ExtPower></ExtPower>
<Inventory></Inventory>
</TLV>
</TLVSelects>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	TLVSelects
Table type	Multi-instance table
Row name	TLV
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer.
AgentID	LLDP agent ID.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Nearest bridge agent.</li> <li>2—Nearest non-TPMR agent.</li> <li>3—Nearest customer agent.</li> </ul>
PortDesc	Whether to transmit port description TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul>
SysName	Whether to transmit system name TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul>
SysDesc	Whether to transmit system description TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul>
SysCap	Whether to transmit system capability TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul>
ManageAddress	Management address TLV information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SubType.</li> <li>AddressValue.</li> <li>Enable.</li> </ul>
SubType	SubType of the management address.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>
Address	Management address.	N/A	Base64 Binary. Length: 1 to 31 octets. The format of data depends on the management address subtype.
Enable	Whether to transmit management address TLVs.		Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul>
PVID	Whether to transmit port VLAN ID TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul>
ProtocolVLAN	Port and protocol VLAN ID TLV information.	Data structure	Members include: <ul style="list-style-type: none"> <li>VLANID.</li> <li>Enable.</li> </ul>
VLANID	VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.

Column name	Column description	Column type	Data type and restrictions
Enable	Whether to transmit port and protocol VLAN ID TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
VLANName	VLAN name TLV information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• VLANID.</li> <li>• Enable.</li> </ul>
VLANID	VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.
Enable	Whether to transmit VLAN name TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
DCBX	Whether to transmit DCBX TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
LinkAgg	Whether to transmit link aggregation TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
ManageVLAN	Management VLAN TLV information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• VLANID.</li> <li>• Enable.</li> </ul>
VLANID	VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.
Enable	Whether to transmit management VLAN TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
EVB	Whether to transmit EVB TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
QCN	Whether to transmit QCN TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
MACPHY	Whether to transmit MAC/PHY configuration/status TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
Power	Whether to transmit power via MDI TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
MaxFrame	Whether to transmit max frame size TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
MEDCapability	Whether to transmit MED capability TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
NetworkPolicy	Whether to transmit network policy TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>
ExtPower	Whether to transmit extended power via MDI TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>
Inventory	Whether to transmit inventory TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>

## LLDP/ELINumbers

This table contains information about LLDP emergency location identification numbers.

### XML structure

```

<LLDP>
  <ELINumbers>
    <ELIN>
      <IfIndex></IfIndex>
      <ELINumber></ELINumber>
      <Enable></Enable>
    </ELIN>
  </ELINumbers>
</LLDP>

```

### Table description

Item	Description
Feature name	LLDP
Table name	ELINumbers
Table type	Multi-instance table
Row name	ELIN
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	In certain versions, this column supports interface name-to-index conversion. See the product xsd before use. See Table 1 for the format.
ELINumber	Emergency location identification number.	N/A	Numeric String. Length: 10 to 25 characters.	
Enable	Whether to transmit location ID TLVs.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Yes.</li><li><b>false</b>—No.</li></ul>	

## LLDP/CivicAddresses

This table contains information about LLDP civic addresses.

## XML structure

```
<LLDP>
  <CivicAddresses>
    <CivicAddress>
      <IfIndex></IfIndex>
      <DeviceType></DeviceType>
      <CountryCode></CountryCode>
      <CA>          <!-- Repeatable -->
        <Type></Type>
        <Value></Value>
      </CA>
      <Enable></Enable>
    </CivicAddress>
  </CivicAddresses>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	CivicAddresses
Table type	Multi-instance table
Row name	CivicAddress



Restrictions	The sequence of column attributes must be consistent with the table's definition.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	In certain versions, this column supports interface name-to-index conversion. See the product xsd before use. See Table 1 for the format.
DeviceType	Device type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—DHCP Server.</li> <li>1—Network device.</li> <li>2—MED endpoint.</li> </ul>	
CountryCode	Country code.	N/A	String. Length: 2 characters. Letters in the string should be uppercased.	
CA	Civic address information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type.</li> <li>Value.</li> </ul>	
Type	Civic address type.	N/A	Unsigned integer. Value range: 0 to 255.	
Value	Civic address.	N/A	String. Length: 1 to 250 characters.	
Enable	Whether to transmit location ID TLVs.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul>	

# Contents

- LLDP .....1
  - LLDP/LLDPNeighbors.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1
  - LLDP/CDPNeighbors.....2
    - XML structure.....2
    - Table description.....2
    - Columns.....2
  - LLDP/GlobalStatus.....3
    - XML structure.....3
    - Table description.....4
    - Columns.....4
  - LLDP/SysCaps.....5
    - XML structure.....6
    - Table description.....6
    - Columns.....7
  - LLDP/Inventory .....8
    - XML structure.....8
    - Table description.....8
    - Columns.....9
  - LLDP/GlobalStatistics .....9
    - XML structure.....9
    - Table description.....9
    - Columns.....10
  - LLDP/Interfaces.....10
    - XML structure.....10
    - Table description.....10
    - Columns.....11
  - LLDP/IfAgents.....11
    - XML structure.....11
    - Table description.....12
    - Columns.....12
  - LLDP/TLVSelects .....13
    - XML structure.....13
    - Table description.....14
    - Columns.....14
  - LLDP/ELINumbers .....17
    - XML structure.....17
    - Table description.....17
    - Columns.....17
  - LLDP/CivicAddresses .....18
    - XML structure.....18
    - Table description.....18
    - Columns.....18
  - LLDP/IfStatistics .....19
    - XML structure.....19
    - Table description.....19
    - Columns.....20
  - LLDP/NbBasicInfos .....21
    - XML structure.....21
    - Table description.....21
    - Columns.....21
  - LLDP/NbSysCaps .....23
    - XML structure.....23
    - Table description.....24
    - Columns.....24

LLDP/NbManageAddresses .....	25
XML structure .....	26
Table description .....	26
Columns .....	26
LLDP/NbDot1Infos .....	27
XML structure .....	27
Table description .....	28
Columns .....	28
LLDP/NbProtocolVLANs .....	29
XML structure .....	29
Table description .....	30
Columns .....	30
LLDP/NbVLANNames .....	30
XML structure .....	30
Table description .....	31
Columns .....	31
LLDP/NbDot3Infos .....	31
XML structure .....	31
Table description .....	32
Columns .....	32
LLDP/NbMEDInfos .....	34
XML structure .....	34
Table description .....	34
Columns .....	35
LLDP/NbELINumbers .....	36
XML structure .....	36
Table description .....	36
Columns .....	36
LLDP/NbCivicAddresses .....	37
XML structure .....	37
Table description .....	37
Columns .....	38
LLDP/NbNetworkPolicies .....	38
XML structure .....	38
Table description .....	39
Columns .....	39
LLDP/NbUnknownBasicTLVs .....	40
XML structure .....	40
Table description .....	40
Columns .....	41
LLDP/NbUnknownOrgTLVs .....	41
XML structure .....	41
Table description .....	42
Columns .....	42
LLDP/LocalBasicInfos .....	42
XML structure .....	42
Table description .....	43
Columns .....	43
LLDP/LocalManageAddresses .....	44
XML structure .....	44
Table description .....	44
Columns .....	44
LLDP/LocalDot1Infos .....	45
XML structure .....	45
Table description .....	46
Columns .....	46
LLDP/LocalDot3Infos .....	47
XML structure .....	47
Table description .....	48
Columns .....	48
LLDP/LocalMEDInfos .....	49
XML structure .....	49

Table description.....	50
Columns.....	50
LLDP/CustomizedFeature.....	51
XML structure.....	51
Table description.....	51
Columns.....	52

# LLDP

## LLDP/LLDPNeighbors

This table contains LLDP neighbor information.

### XML structure

```
<LLDP>
  <LLDPNeighbors>
    <LLDPNeighbor>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <NeighborIndex></NeighborIndex>
      <SystemName></SystemName>
      <ChassisId></ChassisId>
      <PortId></PortId>
    </LLDPNeighbor>
  </LLDPNeighbors>
</LLDP>
```

### Table description

Item	Description
Feature name	LLDP
Table name	LLDPNeighbors
Table type	Multi-instance table
Row name	LLDPNeighbor
Restrictions	This table supports only Ethernet interfaces that support LLDP.

### Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.
SystemName	System name	N/A	String. Length: 0 to 255 characters.

ChassisId	Chassis name	N/A	String. Length: 0 to 255 characters.
PortId	Neighbor port name	N/A	String. Length: 0 to 255 characters.

## LLDP/CDPNeighbors

This table contains CDP neighbor information.

### XML structure

```
<LLDP>
  <CDPNeighbors>
    <CDPNeighbor>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <NeighborIndex></NeighborIndex>
      <ChassisId></ChassisId>
      <PortId></PortId>
      <ManageAddress></ManageAddress>
      <SoftwareVersion></SoftwareVersion>
      <PlatformVersion></PlatformVersion>
      <Duplex></Duplex>
      <TTL></TTL>
    </CDPNeighbor>
  </CDPNeighbors>
</LLDP>
```

### Table description

Item	Description
Feature name	LLDP
Table name	CDPNeighbors
Table type	Multi-instance table
Row name	CDPNeighbor
Restrictions	This table supports only Ethernet interfaces that support CDP.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.	N/A
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.	N/A
ChassisId	Chassis name	N/A	String. Length: 0 to 255 characters.	N/A
PortId	Port name	N/A	String. Length: 0 to 255 characters.	N/A
ManageAddress	Management address	N/A	String. Length: 0 to 31 characters.	Only IPv4 addresses are supported.
SoftwareVersion	Software version	N/A	String. Length: 0 to 255 characters.	N/A
PlatformVersion	Platform version	N/A	String. Length: 0 to 255 characters.	N/A
Duplex	Duplex type	N/A	Unsigned integer. Length: 8 bits. Enumeration: <ul style="list-style-type: none"> <li>0—Half duplex.</li> <li>1—Full duplex.</li> <li>Others—Unknown.</li> </ul>	N/A
TTL	Time to live	N/A	Unsigned integer. Length: 8 bits.	N/A

## LLDP/GlobalStatus

This table contains LLDP global status information.

### XML structure

```

<LLDP>
  <GlobalStatus>
    <Enable></Enable>
    <CDP></CDP>
    <TxInterval></TxInterval>
    <FastInterval></FastInterval>
    <ReInitDelay></ReInitDelay>
    <NotifyInterval></NotifyInterval>
    <Mode></Mode>
    <MaxCredit></MaxCredit>
  </GlobalStatus>
</LLDP>

```

```

<HoldMult></HoldMult>
<FastCount></FastCount>
<RxTimeout></RxTimeout>
<ChassisID>
  <SubType></SubType>
  <ID></ID>
</ChassisID>
<SystemName></SystemName>
<SystemDesc></SystemDesc>
<DeviceClass></DeviceClass>
</GlobalStatus>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	GlobalStatus
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Whether LLDP is enabled globally.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
CDP	Whether CDP is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
TxInterval	Transmission interval for LLDP frames.	N/A	Unsigned integer. Value range: 5 to 32768. Unit: second.
FastInterval	Fast transmission interval for LLDP frames.	N/A	Unsigned integer. Value range: 1 to 3600. Unit: second.
ReInitDelay	Re-initialization delay.	N/A	Unsigned integer. Value range: 1 to 10. Unit: second.
NotifyInterval	Notification interval for traps.	N/A	Unsigned integer. Value range: 5 to 3600. Unit: second.



Column name	Column description	Column type	Data type and restrictions
Mode	Bridge mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Customer bridge mode.</li> <li>1—Service bridge mode.</li> </ul>
MaxCredit	Token bucket size for sending LLDP frames.	N/A	Unsigned integer. Value range: 1 to 100.
HoldMult	TTL multiplier.	N/A	Unsigned integer. Value range: 2 to 10.
FastCount	Number of fast transmitted LLDP frames.	N/A	Unsigned integer. Value range: 1 to 8.
RxTimeout	Set the timeout for receiving LLDPDUs.	N/A	Unsigned integer. Value range: 0, 30 to 32768. Unit: second.
ChassisID	Chassis identifier information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SubType.</li> <li>ID.</li> </ul>
SubType	Chassis ID subtype.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Reserved.</li> <li>1—Chassis component.</li> <li>2—Interface alias.</li> <li>3—Port component.</li> <li>4—MAC address.</li> <li>5—Network address.</li> <li>6—Interface name.</li> <li>7—Locally assigned.</li> </ul>
ID	Chassis ID.	N/A	Base64 Binary. Length: 1 to 255 octets. The format of data depends on the chassis ID subtype.
SystemName	System name.	N/A	String. Length: 0 to 255 characters.
SystemDesc	System description.	N/A	String. Length: 0 to 255 characters.
DeviceClass	MED device class.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Class I.</li> <li>2—Class II.</li> <li>3—Class III.</li> <li>4—Connectivity device.</li> </ul>

## LLDP/SysCaps

批注 [w07301-1]: Need confirmed by product.

This table contains LLDP system capability information.

## XML structure

```
<LLDP>
  <SysCaps>
    <Support>
      <Other></Other>
      <Repeater></Repeater>
      <Bridge></Bridge>
      <WLANAccessPoint></WLANAccessPoint>
      <Router></Router>
      <Telephone></Telephone>
      <DocsisCableDevice></DocsisCableDevice>
      <StationOnly></StationOnly>
      <CustomerBridge></CustomerBridge>
      <ServiceBridge></ServiceBridge>
      <TPMR></TPMR>
    </Support>
    <Enable>
      <Other></Other>
      <Repeater></Repeater>
      <Bridge></Bridge>
      <WLANAccessPoint></WLANAccessPoint>
      <Router></Router>
      <Telephone></Telephone>
      <DocsisCableDevice></DocsisCableDevice>
      <StationOnly></StationOnly>
      <CustomerBridge></CustomerBridge>
      <ServiceBridge></ServiceBridge>
      <TPMR></TPMR>
    </Enable>
  </SysCaps>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	SysCaps
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Support	Supported capabilities.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Other.</li> <li>• Repeater.</li> <li>• Bridge.</li> <li>• WlanAccessPoint.</li> <li>• Router.</li> <li>• Telephone.</li> <li>• DocsisCableDevice.</li> <li>• StationOnly.</li> <li>• Customer Bridge.</li> <li>• Service Bridge.</li> <li>• TPMR.</li> </ul>
Other	Whether capabilities out of the list are supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
Repeater	Whether repeater is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
Bridge	Whether bridge is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
WLANAccessPoint	Whether WLAN AP is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
Router	Whether router is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
Telephone	Whether telephone is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
DocsisCableDevice	Whether docsis cable device is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
StationOnly	Whether station only is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
CustomerBridge	Whether customer bridge is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
ServiceBridge	Whether service bridge is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
TPMR	Whether TPMR is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>
Enable	Enabled capabilities.	Data structure	Members include: <ul style="list-style-type: none"> <li>Other.</li> <li>Repeater.</li> <li>Bridge.</li> <li>WlanAccessPoint.</li> <li>Router.</li> <li>Telephone.</li> <li>DocsisCableDevice.</li> <li>StationOnly.</li> <li>Customer Bridge.</li> <li>Service Bridge.</li> <li>TPMR.</li> </ul>

## LLDP/Inventory

This table contains LLDP inventory information.

## XML structure

```

<LLDP>
  <Inventory>
    <HardwareRev></HardwareRev>
    <FirmwareRev></FirmwareRev>
    <SoftwareRev></SoftwareRev>
    <SerialNum></SerialNum>
    <Manufacturer></Manufacturer>
    <ModelName></ModelName>
    <AssetID></AssetID>
  </Inventory>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	Inventory
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
HardwareRev	Hardware revision	N/A	String. Length: 0 to 255 characters.
FirmwareRev	Firmware revision	N/A	String. Length: 0 to 255 characters.
SoftwareRev	Software revision	N/A	String. Length: 0 to 255 characters.
SerialNum	Serial number	N/A	String. Length: 0 to 255 characters.
Manufacturer	Manufacturer name	N/A	String. Length: 0 to 255 characters.
ModelName	Model name	N/A	String. Length: 0 to 255 characters.
AssetID	Asset identifier	N/A	String. Length: 0 to 255 characters.

## LLDP/GlobalStatistics

This table contains LLDP global statistics information.

## XML structure

```
<LLDP>
  <GlobalStatistics>
    <LastUpdate></LastUpdate>
    <NbAdd></NbAdd>
    <NbDelete></NbDelete>
    <NbDrop></NbDrop>
    <NbAged></NbAged>
  </GlobalStatistics>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	GlobalStatistics
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
LastUpdate	Time when the most recent neighbor was updated	N/A	Unsigned integer. Length: 32 bits. Unit: second.
NbAdd	Total number of added neighbors	N/A	Unsigned integer. Length: 32 bits.
NbDelete	Total number of deleted neighbors	N/A	Unsigned integer. Length: 32 bits.
NbDrop	Total number of dropped neighbors	N/A	Unsigned integer. Length: 32 bits.
NbAged	Total number of aged-out neighbors	N/A	Unsigned integer. Length: 32 bits.

## LLDP/Interfaces

This table contains LLDP interface information.

## XML structure

```
<LLDP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <CDP></CDP>
      <MEDTopoChange></MEDTopoChange>
    </Interface>
  </Interfaces>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
Enable	Whether the interface is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
CDP	Whether CDP compatibility is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled. CDP packets can be transmitted and received.</li> <li><b>false</b>—Disabled.</li> </ul>
MEDTopoChange	Whether LLDP-MED trapping is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

## LLDP/IfAgents

This table contains LLDP interface agent information.

## XML structure

```

<LLDP>
  <IfAgents>
    <IfAgent>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <AdminStatus>
        <Tx></Tx>
        <Rx></Rx>
      </AdminStatus>
      <CheckChangeInterval></CheckChangeInterval>
      <Encap></Encap>
      <AddressFormat></AddressFormat>
      <RemoteChange></RemoteChange>
      <LLDPNbNum></LLDPNbNum>
      <CDPNbNum></CDPNbNum>
      <MEDNbNum></MEDNbNum>
      <OptionalTLVNum></OptionalTLVNum>
      <UnknownTLVNum></UnknownTLVNum>
    </IfAgent>
  </IfAgents>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	IfAgents
Table type	Multi-instance table
Row name	IfAgent
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID.	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—Nearest bridge agent.</li><li>• <b>2</b>—Nearest non-TPMR agent.</li><li>• <b>3</b>—Nearest customer agent.</li></ul>
AdminStatus	LLDP operating mode of the interface.	Data structure	Members include: <ul style="list-style-type: none"><li>• Tx.</li><li>• Rx.</li></ul>
Tx	Whether an LLDP interface agent can only send LLDP frames.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>
Rx	Whether an LLDP interface agent can only receive LLDP frames.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>
CheckChangeInterval	LLDP polling interval.	N/A	Unsigned integer. Value range: 0 to 30. Unit: second.
Encap	LLDP frame format.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Ethernet II encapsulation.</li><li>• <b>1</b>—SNAP encapsulation.</li></ul>
AddressFormat	Management address format.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Number.</li><li>• <b>1</b>—String.</li></ul>
RemoteChange	Whether LLDP trapping is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>
LLDPNbNum	Total number of LLDP neighbors on the interface.	N/A	Unsigned integer. Length: 32 bits.



Column name	Column description	Column type	Data type and restrictions
CDPNbNum	Total number of CDP neighbors on the interface.	N/A	Unsigned integer. Length: 32 bits.
MEDNbNum	Total number of MED neighbors on the interface.	N/A	Unsigned integer. Length: 32 bits.
OptionalTLVNum	Total number of optional TLVs in the most recently transmitted LLDP frame.	N/A	Unsigned integer. Length: 32 bits.
UnknownTLVNum	Total number of unknown TLVs received in all LLDP frames.		Unsigned integer. Length: 32 bits.

## LLDP/TLVSelects

批注 [w07301-2]: Need confirmed by product

This table contains LLDP TLV transmitting status information.

## XML structure

```

<LLDP>
  <TLVSelects>
    <TLV>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <PortDesc></PortDesc>
      <SysName></SysName>
      <SysDesc></SysDesc>
      <SysCap></SysCap>
      <ManageAddress>
        <SubType></SubType>
        <Address></Address>
        <Enable></Enable>
      </ManageAddress>
      <PVID></PVID>
      <ProtocolVLAN>
        <VLANID></VLANID>
        <Enable></Enable>
      </ProtocolVLAN>
      <VLANName>
        <VLANID></VLANID>
        <Enable></Enable>
      </VLANName>
      <DCBX></DCBX>
      <LinkAgg></LinkAgg>

```

```

<ManageVLAN>
  <VLANID></VLANID>
  <Enable></Enable>
</ManageVLAN>
<EVB></EVB>
<QCN></QCN>
<MACPHY></MACPHY>
<Power></Power>
<MaxFrame></MaxFrame>
<MEDCapability></MEDCapability>
<NetworkPolicy></NetworkPolicy>
<ExtPower></ExtPower>
<Inventory></Inventory>
</TLV>
</TLVSelects>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	TLVSelects
Table type	Multi-instance table
Row name	TLV
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Nearest bridge agent.</li> <li>2—Nearest non-TPMR agent.</li> <li>3—Nearest customer agent.</li> </ul>
PortDesc	Whether the transmission of port description TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
SysName	Whether the transmission of system name TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
SysDesc	Whether the transmission of system description TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
SysCap	Whether the transmission of system capability TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
ManageAddress	Management address TLV information.	Data structure	Members include: <ul style="list-style-type: none"> <li>SubType.</li> <li>AddressValue.</li> <li>Enable.</li> </ul>
SubType	Subtype of the management address.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—IPv4.</li> <li><b>2</b>—IPv6.</li> </ul>
Address	Management address.	N/A	Base64 Binary. Length: 1 to 31 octets. The format of data depends on the management address subtype.
Enable	Whether the transmission of management address TLVs is enabled.		Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
PVID	Whether the transmission of port VLAN ID TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
ProtocolVLAN	Port and protocol VLAN ID TLV information.	Data structure	Members include: <ul style="list-style-type: none"> <li>VLANID.</li> <li>Enable.</li> </ul>
VLANID	VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.
Enable	Whether the transmission of port and protocol VLAN ID TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
VLANName	VLAN name TLV information.	Data structure	Members include: <ul style="list-style-type: none"> <li>VLANID.</li> <li>Enable.</li> </ul>
VLANID	VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.
Enable	Whether the transmission of VLAN name TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
DCBX	Whether the transmission of DCBX TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
LinkAgg	Whether the transmission of link aggregation TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
ManageVLAN	Management VLAN TLV information.	Data structure	Members include: <ul style="list-style-type: none"> <li>VLANID.</li> <li>Enable.</li> </ul>
VLANID	VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.
Enable	Whether the transmission of management VLAN TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
EVB	Whether the transmission of EVB TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
QCN	Whether the transmission of QCN TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
MACPHY	Whether the transmission of MAC/PHY configuration/status TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
Power	Whether the transmission of power via MDI TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
MaxFrame	Whether the transmission of max frame size TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
MEDCapability	Whether the transmission of MED capability TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
NetworkPolicy	Whether the transmission of network policy TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
ExtPower	Whether the transmission of extended power via MDI TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
Inventory	Whether the transmission of inventory TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

## LLDP/ELINumbers

This table contains information about LLDP emergency location identification numbers.

### XML structure

```

<LLDP>
  <ELINumbers>
    <ELIN>
      <IfIndex></IfIndex>
      <ELINumber></ELINumber>
      <Enable></Enable>
    </ELIN>
  </ELINumbers>
</LLDP>

```

### Table description

Item	Description
Feature name	LLDP
Table name	ELINumbers
Table type	Multi-instance table
Row name	ELIN
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
ELINumber	Emergency location identification number.	N/A	Numeric String. Length: 10 to 25 characters.
Enable	Whether the transmission of location ID TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

# LLDP/CivicAddresses

This table contains LLDP civic address information.

## XML structure

```
<LLDP>
  <CivicAddresses>
    <CivicAddress>
      <IfIndex></IfIndex>
      <DeviceType></DeviceType>
      <CountryCode></CountryCode>
      <CA>          <!-- Repeatable -->
        <Type></Type>
        <Value></Value>
      </CA>
      <Enable></Enable>
    </CivicAddress>
  </CivicAddresses>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	CivicAddresses
Table type	Multi-instance table
Row name	CivicAddress
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
DeviceType	Device type.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—DHCP Server.</li><li>• 1—Network device.</li><li>• 2—MED endpoint.</li></ul>
CountryCode	Country code.	N/A	String. Length: 2 characters. Letters in the string should be uppercased.

Column name	Column description	Column type	Data type and restrictions
CA	Civic address information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type.</li> <li>Value.</li> </ul>
Type	Civic address type.	N/A	Unsigned integer. Value range: 0 to 255.
Value	Civic address.	N/A	String. Length: 0 to 250 characters.
Enable	Whether the transmission of location ID TLVs is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

## LLDP/IfStatistics

This table contains LLDP interface statistics information.

### XML structure

```

<LLDP>
  <IfStatistics>
    <Stats>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <TxFrameNum></TxFrameNum>
      <RxFrameNum></RxFrameNum>
      <DiscardFrameNum></DiscardFrameNum>
      <ErrorFrameNum></ErrorFrameNum>
      <DiscardTLVNum></DiscardTLVNum>
      <UnknownTLVNum></UnknownTLVNum>
      <AgedNbNum></AgedNbNum>
      <TxCDPFrameNum></TxCDPFrameNum>
      <RxCDPFrameNum></RxCDPFrameNum>
      <DiscardCDPFrameNum></DiscardCDPFrameNum>
      <ErrorCDPFrameNum></ErrorCDPFrameNum>
    </Stats>
  </IfStatistics>
</LLDP>

```

### Table description

Item	Description
Feature name	LLDP
Table name	IfStatistics
Table type	Multi-instance table

Row name	Stats
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Nearest bridge agent.</li> <li>2—Nearest non-TPMR agent.</li> <li>3—Nearest customer agent.</li> </ul>
TxFNum	The number of transmitted LLDP frames	N/A	Unsigned integer. Length: 32 bits.
RxFNum	The number of received LLDP frames	N/A	Unsigned integer. Length: 32 bits.
DiscardFNum	The number of discarded LLDP frames	N/A	Unsigned integer. Length: 32 bits.
ErrorFNum	The number of LLDP error frames	N/A	Unsigned integer. Length: 32 bits.
DiscardTLVNum	The number of discarded LLDP TLVs	N/A	Unsigned integer. Length: 32 bits.
UnknownTLVNum	The number of unknown LLDP TLVs	N/A	Unsigned integer. Length: 32 bits.
AgedNbNum	The number of aged-out LLDP neighbors	N/A	Unsigned integer. Length: 32 bits.
TxCDFNum	The number of transmitted CDP frames	N/A	Unsigned integer. Length: 32 bits.
RxCDFNum	The number of received CDP frames	N/A	Unsigned integer. Length: 32 bits.
DiscardCDFNum	The number of discarded CDP frames	N/A	Unsigned integer. Length: 32 bits.
ErrorCDFNum	The number of CDP error frames	N/A	Unsigned integer. Length: 32 bits.



# LLDP/NbBasicInfos

This table contains basic information about LLDP neighbors.

## XML structure

```
<LLDP>
  <NbBasicInfos>
    <BasicInfo>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <NeighborIndex></NeighborIndex>
      <ChassisID>
        <SubType></SubType>
        <ID></ID>
      </ChassisID>
      <PortID>
        <SubType></SubType>
        <ID></ID>
      </PortID>
      <TTL></TTL>
      <PortDesc></PortDesc>
      <SystemName></SystemName>
      <SystemDesc></SystemDesc>
    </BasicInfo>
  </NbBasicInfos>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	NbBasicInfos
Table type	Multi-instance table
Row name	BasicInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Nearest bridge agent.</li> <li>2—Nearest non-TPMR agent.</li> <li>3—Nearest customer agent.</li> </ul>
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.
ChassisID	Chassis identifier information	Data structure	Members include: <ul style="list-style-type: none"> <li>SubType.</li> <li>ID.</li> </ul>
SubType	Subtype of the chassis ID	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Reserved.</li> <li>1—Chassis component.</li> <li>2—Interface alias.</li> <li>3—Port component.</li> <li>4—MAC address.</li> <li>5—Network address.</li> <li>6—Interface name.</li> <li>7—Locally assigned.</li> </ul>
ID	Chassis ID	N/A	Base64 Binary. Length: 1 to 255 octets. The format of data depends on the chassis ID subtype.
PortID	Port identifier information	Data structure	Members include: <ul style="list-style-type: none"> <li>SubType.</li> <li>ID.</li> </ul>
SubType	Subtype of the port ID	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Reserved.</li> <li>1—Interface alias.</li> <li>2—Port component.</li> <li>3—MAC address.</li> <li>4—Network address.</li> <li>5—Interface name.</li> <li>6—Agent circuit ID.</li> <li>7—Locally assigned.</li> </ul>
ID	Port ID	N/A	Base64 Binary. Length: 1 to 255 octets. The format of data depends on the port ID subtype.
TTL	Time to Live	N/A	Unsigned integer. Length: 32 bits.
PortDesc	Port description	N/A	String. Length: 0 to 255 characters.

Column name	Column description	Column type	Data type and restrictions
SystemName	System name	N/A	String. Length: 0 to 255 characters.
SystemDesc	System description	N/A	String. Length: 0 to 255 characters.

## LLDP/NbSysCaps

This table contains information about the system capabilities of LLDP neighbors.

### XML structure

```

<LLDP>
  <NbSysCaps>
    <SysCap>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <NeighborIndex></NeighborIndex>
      <Support>
        <Other></Other>
        <Repeater></Repeater>
        <Bridge></Bridge>
        <WLANAccessPoint></WLANAccessPoint>
        <Router></Router>
        <Telephone></Telephone>
        <DocsisCableDevice></DocsisCableDevice>
        <StationOnly></StationOnly>
        <CustomerBridge></CustomerBridge>
        <ServiceBridge></ServiceBridge>
        <TPMR></TPMR>
      </Support>
      <Enable>
        <Other></Other>
        <Repeater></Repeater>
        <Bridge></Bridge>
        <WLANAccessPoint></WLANAccessPoint>
        <Router></Router>
        <Telephone></Telephone>
        <DocsisCableDevice></DocsisCableDevice>
        <StationOnly></StationOnly>
        <CustomerBridge></CustomerBridge>
        <ServiceBridge></ServiceBridge>
        <TPMR></TPMR>
      </Enable>
    </SysCap>
  </NbSysCaps>
</LLDP>

```

```
</NbSysCaps>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	NbSysCaps
Table type	Multi-instance table
Row name	SysCap
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark.	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID.	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Nearest bridge agent.</li> <li>• <b>2</b>—Nearest non-TPMR agent.</li> <li>• <b>3</b>—Nearest customer agent.</li> </ul>
NeighborIndex	Neighbor index.	Index	Unsigned integer. Length: 32 bits.
Support	Supported capabilities.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Other.</li> <li>• Repeater.</li> <li>• Bridge.</li> <li>• WlanAccessPoint.</li> <li>• Router.</li> <li>• Telephone.</li> <li>• DocsisCableDevice.</li> <li>• StationOnly.</li> <li>• Customer Bridge.</li> <li>• Service Bridge.</li> <li>• TPMR.</li> </ul>
Other	Whether capabilities out of the list are supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
Repeater	Whether repeater is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
Bridge	Whether bridge is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
WLANAccessPoint	Whether WLAN AP is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
Router	Whether router is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
Telephone	Whether telephone is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
DocsisCableDevice	Whether docsis cable device is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
StationOnly	Whether station only is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
CustomerBridge	Whether customer bridge is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
ServiceBridge	Whether service bridge is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
TPMR	Whether TPMR is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
Enable	Enabled capabilities.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Other.</li> <li>• Repeater.</li> <li>• Bridge.</li> <li>• WlanAccessPoint.</li> <li>• Router.</li> <li>• Telephone.</li> <li>• DocsisCableDevice.</li> <li>• StationOnly.</li> <li>• Customer Bridge.</li> <li>• Service Bridge.</li> <li>• TPMR.</li> </ul>

## LLDP/NbManageAddresses

This table contains information about the management addresses of LLDP neighbors.

## XML structure

```
<LLDP>
  <NbManageAddresses>
    <ManageAddress>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <NeighborIndex></NeighborIndex>
      <SubType></SubType>
      <Address></Address>
      <InterfaceType></InterfaceType>
      <InterfaceID></InterfaceID>
    </ManageAddress>
  </NbManageAddresses>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	NbManageAddresses
Table type	Multi-instance table
Row name	ManageAddress
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Nearest bridge agent.</li><li>• 2—Nearest non-TPMR agent.</li><li>• 3—Nearest customer agent.</li></ul>
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.

Column name	Column description	Column type	Data type and restrictions
SubType	Subtype of the management address	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—Other.</li> <li>• 1—IPv4.</li> <li>• 2—IPv6.</li> <li>• 3—NSAP.</li> <li>• 4—HDLC.</li> <li>• 5—BBN1822.</li> <li>• 6—All802.</li> <li>• 7—E163.</li> <li>• 8—E164.</li> <li>• 9—F69.</li> <li>• 10—X121.</li> <li>• 11—IPX.</li> <li>• 12—AppleTalk.</li> <li>• 13—DECNetIV.</li> <li>• 14—BanyanVines.</li> <li>• 15—E164WithNSAP.</li> <li>• 16—DNS.</li> <li>• 17—DistinguishedName.</li> <li>• 18—ASNumber.</li> <li>• 19—XTPoverIPv4.</li> <li>• 20—XTPoverIPv6.</li> <li>• 21—XTPNativeModeXTP.</li> <li>• 22—FibreChannelWWPN.</li> <li>• 23—FibreChannelWWNN.</li> <li>• 24—GWID.</li> </ul>
Address	Management address	Index	Base64 Binary. Length: 1 to 31 octets. The format of data depends on the management address subtype.
InterfaceType	Interface type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Unknown.</li> <li>• 2—IfIndex.</li> <li>• 3—PortIndex.</li> </ul>
InterfaceID	Interface ID	N/A	Unsigned integer. Length: 32 bits.

## LLDP/NbDot1Infos

This table contains the IEEE 802.1 organizationally specific information about LLDP neighbors.

### XML structure

```

<LLDP>
  <NbDot1Infos>
    <Dot1Info>

```

```

<TimeMark></TimeMark>
<IfIndex></IfIndex>
<AgentID></AgentID>
<NeighborIndex></NeighborIndex>
<PVID></PVID>
<ManageVLAN></ManageVLAN>
<ProtocolID></ProtocolID> <!-- Repeatable -->
<LinkAgg>
  <Support></Support>
  <Enable></Enable>
  <PortIndex></PortIndex>
</LinkAgg>
<VIDUsage></VIDUsage>
</Dot1Info>
</NbDot1Infos>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	NbDot1Infos
Table type	Multi-instance table
Row name	Dot1Info
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeMark	Time mark.	Index	Unsigned integer. Length: 32 bits.	N/A
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.	N/A
AgentID	LLDP agent ID.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Nearest bridge agent.</li> <li>2—Nearest non-TPMR agent.</li> <li>3—Nearest customer agent.</li> </ul>	N/A
NeighborIndex	Neighbor index.	Index	Unsigned integer. Length: 32 bits.	N/A
PVID	Neighbor interface PVID.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
ManageVLAN	Management VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
ProtocolID	Protocol ID.	N/A	Base64 Binary. Length: 1 to 255 octets. The format of data depends on the protocol.	Repeatable
LinkAgg	Link aggregation information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Support.</li> <li>Enable.</li> <li>PortIndex.</li> </ul>	N/A
Support	Whether link aggregation is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>	N/A
Enable	Whether link aggregation is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
PortIndex	Member port ID.	N/A	Unsigned integer. Length: 32 bits.	N/A
VIDUsage	VID usage digest.	N/A	Base64 Binary. Length: 4 octets.	N/A

## LLDP/NbProtocolVLANs

This table contains information about the protocol VLANs of LLDP neighbors.

### XML structure

```

<LLDP>
  <NbProtocolVLANs>
    <NbProtocolVLAN>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <NeighborIndex></NeighborIndex>
      <VLANID></VLANID>
      <Support></Support>
      <Enable></Enable>
    </NbProtocolVLAN>
  </NbProtocolVLANs>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	NbProtocolVLANs
Table type	Multi-instance table
Row name	NbProtocolVLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark.	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID.	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—Nearest bridge agent.</li><li>• <b>2</b>—Nearest non-TPMR agent.</li><li>• <b>3</b>—Nearest customer agent.</li></ul>
NeighborIndex	Neighbor index.	Index	Unsigned integer. Length: 32 bits.
VLANID	Protocol VLAN ID.	Index	Unsigned integer. Value range: 0 to 4094.
Support	Whether protocol VLAN is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Supported.</li><li>• <b>false</b>—Not supported.</li></ul>
Enable	Whether protocol VLAN is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>

## LLDP/NbVLANNames

This table contains information about the VLAN names of LLDP neighbors.

## XML structure

```
<LLDP>
  <NbVLANNames>
    <NbVLANName>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
```

```

    <AgentID></AgentID>
    <NeighborIndex></NeighborIndex>
    <VLANID></VLANID>
    <VLANName></VLANName>
  </NbVLANName>
</NbVLANNames>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	NbVLANNames
Table type	Multi-instance table
Row name	NbVLANName
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Nearest bridge agent.</li> <li>2—Nearest non-TPMR agent.</li> <li>3—Nearest customer agent.</li> </ul>
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.
VLANName	VLAN name	N/A	String. Length: 0 to 32 characters.

## LLDP/NbDot3Infos

This table contains the IEEE 802.3 organizationally specific information about LLDP neighbors.

## XML structure

```
<LLDP>
```

```

<NbDot3Infos>
  <Dot3Info>
    <TimeMark></TimeMark>
    <IfIndex></IfIndex>
    <NeighborIndex></NeighborIndex>
    <MACPHY>
      <AutoNegSupport></AutoNegSupport>
      <AutoNegEnable></AutoNegEnable>
      <MAU></MAU>
    </MACPHY>
    <MaxFrameSize></MaxFrameSize>
    <Power>
      <PortClass></PortClass>
      <Support></Support>
      <Enable></Enable>
      <Pairs></Pairs>
      <PairsCtrlAbility></PairsCtrlAbility>
      <Classification></Classification>
    </Power>
  </Dot3Info>
</NbDot3Infos>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	NbDot3Infos
Table type	Multi-instance table
Row name	Dot3Info
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark.	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
NeighborIndex	Neighbor index.	Index	Unsigned integer. Length: 32 bits.

Column name	Column description	Column type	Data type and restrictions
MACPHY	MAC/PHY configuration/status information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• AutoNegSupport.</li> <li>• AutoNegEnable.</li> <li>• MAU.</li> </ul>
AutoNegSupport	Whether autonegotiation is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
AutoNegEnable	Whether autonegotiation is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>
MAU	Operational media attachment unit type.	N/A	Unsigned integer. Length: 32 bits.
MaxFrameSize	Maximum frame size.	N/A	Unsigned integer. Length: 32 bits.
Power	Power over MDI information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• PortClass.</li> <li>• Support.</li> <li>• Enable.</li> <li>• Pairs.</li> <li>• PairsCtrlAbility.</li> <li>• Classification.</li> </ul>
PortClass	Port class.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—PD.</li> <li>• <b>1</b>—PSE.</li> </ul>
Support	Whether PSE MDI power is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Supported.</li> <li>• <b>false</b>—Not supported.</li> </ul>
Enable	Whether PSE MDI power is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>
Pairs	Power supply mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Over signal wires.</li> <li>• <b>2</b>—Over spare wires.</li> </ul>
PairsCtrlAbility	Whether the PSE-PD pair control is available.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
Classification	Power class.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Class0.</li> <li>• <b>2</b>—Class1.</li> <li>• <b>3</b>—Class2.</li> <li>• <b>4</b>—Class3.</li> <li>• <b>5</b>—Class4.</li> </ul>

# LLDP/NbMEDInfos

This table contains the MED organizationally specific information about LLDP neighbors.

## XML structure

```
<LLDP>
  <NbMEDInfos>
    <MEDInfo>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <NeighborIndex></NeighborIndex>
      <DeviceClass></DeviceClass>
      <Inventory>
        <HardwareRev></HardwareRev>
        <FirmwareRev></FirmwareRev>
        <SoftwareRev></SoftwareRev>
        <SerialNum></SerialNum>
        <Manufacturer></Manufacturer>
        <ModelName></ModelName>
        <AssetID></AssetID>
      </Inventory>
      <ExtPower>
        <Source></Source>
        <Priority></Priority>
        <Value></Value>
      </ExtPower>
    </MEDInfo>
  </NbMEDInfos>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	NbMEDInfos
Table type	Multi-instance table
Row name	MEDInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.
DeviceClass	MED device class	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Class I.</li> <li>2—Class II.</li> <li>3—Class III.</li> <li>4—Connectivity device.</li> </ul>
Inventory	Device inventory information	Data structure	Members include: <ul style="list-style-type: none"> <li>HardwareRev.</li> <li>FirmwareRev.</li> <li>SoftwareRev.</li> <li>SerialNum.</li> <li>Manufacturer.</li> <li>ModelName.</li> <li>AssetID.</li> </ul>
HardwareRev	Hardware revision	N/A	String. Length: 0 to 255 characters.
FirmwareRev	Firmware revision	N/A	String. Length: 0 to 255 characters.
SoftwareRev	Software revision	N/A	String. Length: 0 to 255 characters.
SerialNum	Serial number	N/A	String. Length: 0 to 255 characters.
Manufacturer	Manufacturer name	N/A	String. Length: 0 to 255 characters.
ModelName	Model name	N/A	String. Length: 0 to 255 characters.
AssetID	Asset ID	N/A	String. Length: 0 to 255 characters.
ExtPower	Extended power via MDI information	Data structure	Members include: <ul style="list-style-type: none"> <li>Source.</li> <li>Priority.</li> <li>Value.</li> </ul>
Source	PSE power source	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown.</li> <li>1—Primary.</li> <li>2—Backup.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
Priority	Power priority	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Critical.</li> <li>2—High.</li> <li>3—Low.</li> </ul>
Value	Power value	N/A	Unsigned integer. Length: 32 bits. Unit: milliwatt.

## LLDP/NbELINumbers

This table contains information about the MED emergency location identification numbers of LLDP neighbors.

### XML structure

```

<LLDP>
  <NbELINumbers>
    <ELIN>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <NeighborIndex></NeighborIndex>
      <ELINumber></ELINumber>
    </ELIN>
  </NbELINumbers>
</LLDP>

```

### Table description

Item	Description
Feature name	LLDP
Table name	NbELINumbers
Table type	Multi-instance table
Row name	ELIN
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.



Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.
ElinNumber	Emergency location identification number	N/A	String. Length: 10 to 25 characters.

## LLDP/NbCivicAddresses

This table contains information about the MED civic addresses of LLDP neighbors.

### XML structure

```

<LLDP>
  <NbCivicAddresses>
    <CivicAddress>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <NeighborIndex></NeighborIndex>
      <DeviceType></DeviceType>
      <CountryCode></CountryCode>
      <CA>  <!-- Repeatable -->
        <Type></Type>
        <Value></Value>
      </CA>
    </CivicAddress>
  </NbCivicAddresses>
</LLDP>

```

### Table description

Item	Description
Feature name	LLDP
Table name	NbCivicAddresses
Table type	Multi-instance table
Row name	CivicAddress
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.
DeviceType	Device type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—DHCP Server.</li> <li>• 1—Network device.</li> <li>• 2—MED endpoint.</li> </ul>
CountryCode	Country code	N/A	String. Length: 2 characters.
CA	Civic address information	Data structure	Members include: <ul style="list-style-type: none"> <li>• Type.</li> <li>• Value.</li> </ul>
Type	Civic address type	N/A	Unsigned integer. Value range: 0 to 255.
Value	Civic address	N/A	String. Length: 0 to 250 characters.

## LLDP/NbNetworkPolicies

This table contains information about the MED network policies of LLDP neighbors.

## XML structure

```

<LLDP>
  <NbNetworkPolicies>
    <NetworkPolicy>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <NeighborIndex></NeighborIndex>
      <Application> <!-- Repeatable -->
        <AppType></AppType>
        <UnknownFlag></UnknownFlag>
        <TagFlag></TagFlag>
        <VLANID></VLANID>
        <L2priority></L2priority>
        <DSCP></DSCP>
      </Application>
    </NetworkPolicy>
  
```

```

</NbNetworkPolicies>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	NbNetworkPolicies
Table type	Multi-instance table
Row name	NetworkPolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark.	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
NeighborIndex	Neighbor index.	Index	Unsigned integer. Length: 32 bits.
Application	Application information.	Data structure	Members include: <ul style="list-style-type: none"> <li>• AppType.</li> <li>• UnknownFlag.</li> <li>• TagFlag.</li> <li>• VLANID.</li> <li>• L2priority</li> <li>• Dscp.</li> </ul>
AppType	Application type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Voice.</li> <li>• 2—Voice Signaling.</li> <li>• 3—Guest Voice.</li> <li>• 4—Guest Voice Signaling.</li> <li>• 5—Softphone Voice.</li> <li>• 6—Video Conferencing.</li> <li>• 7—Streaming Video.</li> <li>• 8—Video Signaling.</li> </ul>
UnknownFlag	Whether the application is unknown.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>
TagFlag	Whether the VLAN tag is used.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
VLANID	Network policy VLAN ID.	N/A	Unsigned integer. Value range: 0 to 4095.
L2priority	Layer 2 priority	N/A	Unsigned integer. Value range: 0 to 7.
DSCP	DSCP value.	N/A	Unsigned integer. Value range: 0 to 63.

## LLDP/NbUnknownBasicTLVs

This table contains information about the unknown basic TLVs of LLDP neighbors.

### XML structure

```

<LLDP>
  <NbUnknownBasicTLVs>
    <UnknownBasicTLV>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <NeighborIndex></NeighborIndex>
      <TLV> <!-- Repeatable -->
        <Type></Type>
        <Value></Value>
      </TLV>
    </UnknownBasicTLV>
  </NbUnknownBasicTLVs>
</LLDP>

```

### Table description

Item	Description
Feature name	LLDP
Table name	NbUnknownBasicTLVs
Table type	Multi-instance table
Row name	UnknownBasicTLV
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Nearest bridge agent.</li> <li>2—Nearest non-TPMR agent.</li> <li>3—Nearest customer agent.</li> </ul>
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.
TLV	TLV information	Data structure	Member Include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>
Type	TLV type	N/A	Unsigned integer. Length: 8 bits. Value range: 0 to 126.
Value	TLV value	N/A	Base64 Binary. Length: 0 to 511 octets.

## LLDP/NbUnknownOrgTLVs

This table contains information about the unknown organizationally specific TLVs of LLDP neighbors.

## XML structure

```

<LLDP>
  <NbUnknownOrgTLVs>
    <UnknownOrgTLV>
      <TimeMark></TimeMark>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <NeighborIndex></NeighborIndex>
      <TLV>    <!-- Repeatable -->
        <OUI></OUI>
        <SubType></SubType>
        <Value></Value>
      </TLV>
    </UnknownOrgTLV>
  </NbUnknownOrgTLVs>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	NbUnknownOrgTLVs
Table type	Multi-instance table
Row name	UnknownOrgTLV
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeMark	Time mark	Index	Unsigned integer. Length: 32 bits.
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID	Index	Enumeration: <ul style="list-style-type: none"><li>1—Nearest bridge agent.</li><li>2—Nearest non-TPMR agent.</li><li>3—Nearest customer agent.</li></ul>
NeighborIndex	Neighbor index	Index	Unsigned integer. Length: 32 bits.
TLV	TLV information	Data structure	Member Include: <ul style="list-style-type: none"><li>OUI</li><li>SubType</li><li>Value</li></ul>
OUI	Organizationally unique identifier	N/A	Base64 Binary.
SubType	TLV subtype	N/A	Unsigned integer. Length: 8 bits. Value range: 0 to 255.
Value	TLV value	N/A	Base64 Binary. Length: 0 to 511 octets.

## LLDP/LocalBasicInfos

This table contains basic information about local interfaces.

## XML structure

```
<LLDP>
  <LocalBasicInfos>
```

```

<BasicInfo>
  <IfIndex></IfIndex>
  <PortID>
    <SubType></SubType>
    <ID></ID>
  </PortID>
  <PortDesc></PortDesc>
</BasicInfo>
</LocalBasicInfos>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	LocalBasicInfos
Table type	Multi-instance table
Row name	BasicInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
PortID	Port identifier information	Data structure	Members include: <ul style="list-style-type: none"> <li>SubType.</li> <li>ID.</li> </ul>
SubType	Subtype of the port ID	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Reserved.</li> <li>1—Interface alias.</li> <li>2—Port component.</li> <li>3—MAC address.</li> <li>4—Network address.</li> <li>5—Interface name.</li> <li>6—Agent circuit ID.</li> <li>7—Locally assigned.</li> </ul>
ID	Port ID	N/A	Base64 Binary. Length: 1 to 255 octets. The format of data depends on the port ID subtype.
PortDesc	Port description	N/A	String. Length: 0 to 255 characters.

# LLDP/LocalManageAddresses

This table contains information about the management addresses of local interfaces.

## XML structure

```
<LLDP>
  <LocalManageAddresses>
    <ManageAddress>
      <IfIndex></IfIndex>
      <AgentID></AgentID>
      <SubType></SubType>
      <Address></Address>
      <InterfaceType></InterfaceType>
      <InterfaceID></InterfaceID>
    </ManageAddress>
  </LocalManageAddresses>
</LLDP>
```

## Table description

Item	Description
Feature name	LLDP
Table name	LocalManageAddresses
Table type	Multi-instance table
Row name	ManageAddress
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
AgentID	LLDP agent ID	Index	Enumeration: <ul style="list-style-type: none"><li>1—Nearest bridge agent.</li><li>2—Nearest non-TPMR agent.</li><li>3—Nearest customer agent.</li></ul>
SubType	Subtype of the management address	Index	Enumeration: <ul style="list-style-type: none"><li>0—Other.</li><li>1—IPv4.</li><li>2—IPv6.</li><li>6—All802.</li></ul>



Column name	Column description	Column type	Data type and restrictions
Address	Management address	Index	Base64 Binary. Length: 1 to 31 octets. The format of data depends on the management address subtype.
InterfaceType	Interface type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Unknown.</li> <li>2—IfIndex.</li> <li>3—PortIndex.</li> </ul>
InterfaceID	Interface ID	N/A	Unsigned integer. Length: 32 bits.

## LLDP/LocalDot1Infos

This table contains the IEEE 802.1 organizationally specific information about local interfaces.

### XML structure

```

<LLDP>
  <LocalDot1Infos>
    <Dot1Info>
      <IfIndex></IfIndex>
      <PVID></PVID>
      <PortProtocolVLAN>
        <VLANID></VLANID>
        <Support></Support>
        <Enable></Enable>
      </PortProtocolVLAN>
      <VLANName>
        <VLANID></VLANID>
        <Name></Name>
      </VLANName>
      <ManageVLAN></ManageVLAN>
      <ProtocolID></ProtocolID>
      <LinkAgg>
        <Support></Support>
        <Enable></Enable>
        <PortIndex></PortIndex>
      </LinkAgg>
      <VIDUsage></VIDUsage>
    </Dot1Info>
  </LocalDot1Infos>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	LocalDot1Infos
Table type	Multi-instance table
Row name	Dot1Info
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
PVID	Neighbor interface PVID.	N/A	Unsigned integer. Value range: 1 to 4094.
PortProtocolVLAN	Protocol VLAN information.	Data structure	Members include: <ul style="list-style-type: none"> <li>VLANID.</li> <li>Support.</li> <li>Enable.</li> </ul>
VLANID	Protocol VLAN ID.	N/A	Unsigned integer. Value range: 0 to 4094.
Support	Whether protocol VLAN is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>
Enable	Whether protocol VLAN is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
VLANName	VLAN name information.	Data structure	Members include: <ul style="list-style-type: none"> <li>VLANID.</li> <li>Name.</li> </ul>
VLANID	VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.
Name	VLAN name.	N/A	String. Length: 0 to 32 characters.
ManageVLAN	Management VLAN ID.	N/A	Unsigned integer. Value range: 0 to 4094.
ProtocolID	Protocol ID.	N/A	Base64 Binary. Length: 1 to 255 octets. The format of data depends on the protocol.

Column name	Column description	Column type	Data type and restrictions
LinkAgg	Link aggregation information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Support.</li> <li>Enable.</li> <li>PortIndex.</li> </ul>
Support	Whether link aggregation is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>
Enable	Whether link aggregation is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
PortIndex	Member port ID.	N/A	Unsigned integer. Length: 32 bits.
VIDUsage	VID usage digest.	N/A	Base64 Binary. Length: 4 octets.

## LLDP/LocalDot3Infos

This table contains the IEEE 802.3 organizationally specific information about local interfaces.

### XML structure

```

<LLDP>
  <LocalDot3Infos>
    <Dot3Info>
      <IfIndex></IfIndex>
      <MACPHY>
        <AutoNegSupport></AutoNegSupport>
        <AutoNegEnable></AutoNegEnable>
        <MAU></MAU>
      </MACPHY>
      <MaxFrameSize></MaxFrameSize>
      <Power>
        <PortClass></PortClass>
        <Support></Support>
        <Enable></Enable>
        <Pairs></Pairs>
        <PairsCtrlAbility></PairsCtrlAbility>
        <Classification></Classification>
      </Power>
    </Dot3Info>
  </LocalDot3Infos>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	LocalDot3Infos
Table type	Multi-instance table
Row name	Dot3Info
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
MACPHY	MAC/PHY configuration/status information.	Data structure	Members include: <ul style="list-style-type: none"> <li>AutoNegSupport.</li> <li>AutoNegEnable.</li> <li>MAU.</li> </ul>
AutoNegSupport	Whether autonegotiation is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>
AutoNegEnable	Whether autonegotiation is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
MAU	Operational media attachment unit type.	N/A	Unsigned integer. Length: 32 bits.
MaxFrameSize	Maximum frame size.	N/A	Unsigned integer. Length: 32 bits.
Power	Power over MDI information.	Data structure	Members include: <ul style="list-style-type: none"> <li>PortClass.</li> <li>Support.</li> <li>Enable.</li> <li>Pairs.</li> <li>PairsCtrlAbility.</li> <li>Classification.</li> </ul>
PortClass	Port class.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—PD.</li> <li><b>1</b>—PSE.</li> </ul>
Support	Whether PSE MDI power is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Supported.</li> <li><b>false</b>—Not supported.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
Enable	Whether PSE MDI power is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
Pairs	Power supply mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Over signal wires.</li> <li><b>2</b>—Over spare wires.</li> </ul>
PairsCtrlAbility	Whether the PSE-PD pair control is available.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>
Classification	Power class.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Class0.</li> <li><b>2</b>—Class1.</li> <li><b>3</b>—Class2.</li> <li><b>4</b>—Class3.</li> <li><b>5</b>—Class4.</li> </ul>

## LLDP/LocalMEDInfos

This table contains the MED organizationally specific information about local interfaces.

### XML structure

```

<LLDP>
  <LocalMEDInfos>
    <MEDInfo>
      <IfIndex></IfIndex>
      <NetworkPolicy> <!-- Repeatable -->
        <AppType></AppType>
        <UnknownFlag></UnknownFlag>
        <TagFlag></TagFlag>
        <VLANID></VLANID>
        <L2priority></L2priority>
        <DSCP></DSCP>
      </NetworkPolicy>
      <ExtPower>
        <Source></Source>
        <Priority></Priority>
        <Value></Value>
      </ExtPower>
    </MEDInfo>
  </LocalMEDInfos>
</LLDP>

```

## Table description

Item	Description
Feature name	LLDP
Table name	LocalMEDInfos
Table type	Multi-instance table
Row name	MEDInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index.	Index	Unsigned integer. Length: 32 bits.
NetworkPolicy	Network policy information.	N/A	Members include: <ul style="list-style-type: none"> <li>AppType.</li> <li>UnknownFlag.</li> <li>TagFlag.</li> <li>VLANID.</li> <li>L2priority</li> <li>Dscp.</li> </ul>
AppType	Application type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Voice.</li> <li>2—Voice Signaling.</li> <li>3—Guest Voice.</li> <li>4—Guest Voice Signaling.</li> <li>5—Softphone Voice.</li> <li>6—Video Conferencing.</li> <li>7—Streaming Video.</li> <li>8—Video Signaling.</li> </ul>
UnknownFlag	Whether the application is unknown.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>
TagFlag	Whether the VLAN tag is used.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>
VLANID	Network policy VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.
L2priority	Layer 2 priority	N/A	Unsigned integer. Value range: 0 to 7.
Dscp	DSCP value.	N/A	Unsigned integer. Value range: 0 to 63.

Column name	Column description	Column type	Data type and restrictions
ExtPower	Extended power via MDI information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Source.</li> <li>Priority.</li> <li>Value.</li> </ul>
Source	PSE power source.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown.</li> <li>1—Primary.</li> <li>2—Backup.</li> </ul>
Priority	Power priority.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Critical.</li> <li>2—High.</li> <li>3—Low.</li> </ul>
Value	Power value.	N/A	Unsigned integer. Length: 32 bits. Unit: milliwatt.

## LLDP/CustomizedFeature

This table contains LLDP customized feature information.

### XML structure

```

<LLDP>
  <CustomizedFeature>
    <DCBX></DCBX>
    <QCN></QCN>
    <EVB></EVB>
  </CustomizedFeature>
</LLDP>

```

### Table description

Item	Description
Feature name	LLDP
Table name	CustomizedFeature
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
DCBX	Whether DCBX feature is customized.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>
QCN	Whether QCN feature is customized..	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>
EVB	Whether EVB feature is customized..	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>



# Contents

LLDP event stream .....	1
NeighborEvent event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	1

# LLDP event stream

LLDP event stream description.

## NeighborEvent event

This event is used to report LLDP neighbor change information.

## XML structure for event subscription

```
<NeighborEvent>
</NeighborEvent>

Example:
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>LLDP</stream>
    <filter type="subtree">
      <NeighborEvent xmlns="http://www.h3c.com/netconf/event:1.0/LLDP:1.0">
      </NeighborEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	LLDP
Event name	NeighborEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/LLDP:1.0
Support for extended query	No

## XML structure for event report

```
<NeighborEvent>
  <IfName></IfName>
  <AgentID></AgentID>
  <NeighborChassisId ></NeighborChassisId>
  <NeighborPortId></NeighborPortId>
  <Neighborevent></Neighborevent>
</NeighborEvent>

Example:
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <NeighborEvent xmlns="http://www.h3c.com/netconf/event:1.0/LLDP:1.0">
```

```

<IfName>GigabitEthernet0/0/4</IfName>
<AgentID>1</AgentID>
<NeighborChassisId>7002-c2bf-0200</NeighborChassisId>
<NeighborPortId>GigabitEthernet0/0/4</NeighborPortId>
<Neighborevent>1</Neighborevent>
</NeighborEvent>
</notification>

```

## Table description

Column name	Column description	Data type and restrictions	Remarks
IfName	Interface name	String. Length: 0 to 47 characters.	N/A
AgentID	LLDP agent type	Enumeration <ul style="list-style-type: none"> <li>1 – Nearest bridge agent</li> <li>2 – Nearest non-TPMR agent</li> <li>3 – Nearest customer agent</li> </ul>	N/A
NeighborChassisId	Neighbor chassis ID	String. Length: 0 to 255 characters.	If the value of Neighborevent is 3, this column does not exist.
NeighborPortId	Neighbor port ID	String. Length: 0 to 255 characters.	If the value of Neighborevent is 3, this column does not exist.
Neighborevent	Neighbor event type	Enumeration <ul style="list-style-type: none"> <li>1 – LLDP neighbor creation</li> <li>2 – LLDP neighbor deletion</li> <li>3 – No LLDP neighbor creation.</li> </ul>	N/A

# Contents

Login .....	1
Login/Header .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Login/Class/Classes .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
Login/Class/Roles .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
Login/Line/Lines .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
Login/Line/Roles .....	7
XML structure .....	7
Table description .....	7
Columns .....	7

# Login

## Login/Header

Banner information about user login.

## XML structure

```
<Login>
  <Header>
    <Incoming></Incoming>
    <Legal></Legal>
    <Login></Login>
    <Motd></Motd>
    <Shell></Shell>
  </Header>
</Login>
```

## Table description

Item	Description
Feature name	Login
Table name	Header
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Incoming	The banner to be displayed before a modem dial-in user accesses user view.	N/A	String. Length: 2 to 2002 characters.	The starting and ending characters for each banner must be the same character. The character can be any character and can't be included in the banner.
Legal	The banner to be displayed before a user inputs the username and password to access the CLI.	N/A	String. Length: 2 to 2002 characters.	
Login	The banner to be displayed before	N/A	String.	

Column name	Column description	Column type	Data type and restrictions	Remarks
	password or scheme authentication is performed for a login user.		Length: 2 to 2002 characters.	
Motd	The greeting banner to be displayed before the legal banner appears.	N/A	String. Length: 2 to 2002 characters.	
Shell	The banner to be displayed before a non-modem dial-in user accesses user view.	N/A	String. Length: 2 to 2002 characters.	

## Login/Class/Classes

The authentication configuration information for users on each type of line class.

### XML structure

```

<Login>
  <Class>
    <Classes>
      <Class>
        <ClassType></ClassType>
        <AuthMode></AuthMode>
        <Password></Password>
        <ProtocolIn></ProtocolIn>
      </Class>
    </Classes>
  </Class>
</Login>

```

### Table description

Item	Description
Feature name	Login
Table name	Classes
Table type	Multi-instance table
Row name	Class
Restrictions	None
Support for row creation and	No

deletion

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClassType	User line class type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Console.</li> <li>2—TTY.</li> <li>3—AUX.</li> <li>4—VTY.</li> </ul>	The supported line class type depends on the device model.
AuthMode	Authentication mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Password</li> <li>2—Scheme.</li> </ul>	<p>In FIPS mode, the authentication mode must be scheme.</p> <p>The following default settings apply:</p> <ul style="list-style-type: none"> <li>In non-FIPS mode: <ul style="list-style-type: none"> <li>Password authentication is enabled for AUX and VTY lines.</li> <li>Authentication is disabled for console and TTY lines.</li> <li>If the device has an AUX port and does not have a console port, authentication is disabled for the AUX line.</li> </ul> </li> <li>In FIPS mode, scheme authentication is enabled.</li> </ul> <p><b>⚠ IMPORTANT:</b></p> <p>If the ProtocolIn value is 0, do not remove, delete, or replace this column. A violation will cause the system to report an error.</p>
Password	Password for password authentication.	N/A	String, case-sensitive. Length: 1 to 16 characters.	Available only in non-FIPS mode.
ProtocolIn	Supported protocols.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—SSH.</li> <li>1—Telnet.</li> <li>2—PAD.</li> <li>5—All.</li> </ul>	<p>The following default settings apply:</p> <ul style="list-style-type: none"> <li>In non-FIPS mode, all protocols are supported.</li> <li>In FIPS mode, SSH is supported.</li> </ul> <p>This column is effective only when the ClassType value is 4 (VTY).</p> <p>If the ProtocolIn value is 0 (SSH), the AuthMode value must be 2 (scheme).</p> <p>Support for PAD depends on the device model.</p>

# Login/Class/Roles

The user role information for users on each type of line class.

## XML structure

```
<Login>
  <Class>
    <Roles>
      <Role>
        <ClassType></ClassType>
        <RoleName></RoleName>
      </Role>
    </Roles>
  </Class>
</Login>
```

## Table description

Item	Description
Feature name	Login
Table name	Roles
Table type	Multi-instance table
Row name	Role
Restrictions	Available only in non-FIPS mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClassType	User line class type.	Index	Enumeration: <ul style="list-style-type: none"><li>1—Console</li><li>2—TTY.</li><li>3—AUX.</li><li>4—VTY.</li></ul>	The supported line class type depends on the device model.
RoleName	User role name.	Index	String, case-sensitive. Length: 1 to 63 characters.	You can assign a maximum of 64 user roles to a user line.  By default, the network-admin user role is specified on the console/AUX user line, and the network-operator user role is specified on any other user line. (MDC- and context-incapable devices.)  The following default settings apply



Column name	Column description	Column type	Data type and restrictions	Remarks
				(MDC- and context-capable devices): <ul style="list-style-type: none"> <li>The network-admin user role is specified on the console/AUX user line for default-Context or default-MDC login users. The network-operator user role is specified on any other user line for default-Context or default MDC login users.</li> <li>The mdc-operator user role is specified on user lines for other non-default MDC login users.</li> <li>The context-operator user role is specified on user lines for other non-default Context login users.</li> </ul>

## Login/Line/Lines

The authentication configuration information for users on specific user lines.

### XML structure

```

<Login>
  <Line>
    <Lines>
      <Line>
        <LineType></LineType>
        <LineNumber></LineNumber>
        <AuthMode></AuthMode>
        <Password></Password>
        <ProtocolIn></ProtocolIn>
      </Line>
    </Lines>
  </Line>
</Login>

```

### Table description

Item	Description
Feature name	Login
Table name	Lines
Table type	Multi-instance table
Row name	Line
Restrictions	None
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LineType	User line type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Console.</li> <li>2—TTY.</li> <li>3—AUX.</li> <li>4—VTY.</li> </ul>	The supported line type depends on the device model.
LineNumber	The number of the first user line to be specified.  This user line and the subsequent lines are specified.	Index	N/A	This value varies by line type and device model.
AuthMode	Authentication mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Password.</li> <li>2—Scheme.</li> </ul>	<p>In FIPS mode, the authentication mode must be scheme.</p> <p>The following default settings apply:</p> <ul style="list-style-type: none"> <li>In non-FIPS mode: <ul style="list-style-type: none"> <li>Password authentication is enabled for AUX and VTY lines.</li> <li>Authentication is disabled for console and TTY lines.</li> <li>If the device has an AUX port and does not have a console port, authentication is disabled for the AUX line.</li> </ul> </li> <li>In FIPS mode, scheme authentication is enabled.</li> </ul> <p><b>! IMPORTANT:</b> If the ProtocolIn value is 0, do not remove, delete, or replace this column. A violation will cause the system to report an error.</p>
Password	Password for password authentication.	N/A	String, case-sensitive. Length: 1 to 16 characters.	Available only in non-FIPS mode.
ProtocolIn	Supported protocols.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—SSH.</li> <li>1—Telnet.</li> <li>2—PAD.</li> <li>5—All.</li> </ul>	<p>The following default settings apply:</p> <ul style="list-style-type: none"> <li>In non-FIPS mode, all protocols are supported.</li> <li>In FIPS mode, SSH is supported.</li> </ul> <p>This column is effective only when the ClassType value is 4 (VTY). If the ProtocolIn value is 0 (SSH), the AuthMode value must be 2 (scheme). Support for PAD depends on the device model.</p>

# Login/Line/Roles

The user role information for users on specific user lines.

## XML structure

```
<Login>
  <Line>
    <Roles>
      <Role>
        <LineType></LineType>
        <LineNumber></LineNumber>
        <RoleName></RoleName>
      </Role>
    </Roles>
  </Line>
</Login>
```

## Table description

Item	Description
Feature name	Login
Table name	Roles
Table type	Multi-instance table
Row name	Role
Restrictions	Available only in non-FIPS mode.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LineType	User line type.	Index	Enumeration: <ul style="list-style-type: none"><li>1—Console.</li><li>2—TTY.</li><li>3—AUX.</li><li>4—VTY.</li></ul>	The supported line type depends on the device model.
LineNumber	The number of the first user line to be specified. This user line and the subsequent lines are specified.	Index	N/A	This value varies by line type and device model.
RoleName	User role name.	Index	String,	You can assign a maximum of 64

Column name	Column description	Column type	Data type and restrictions	Remarks
			case-sensitive. Length: 1 to 63 characters.	<p>user roles to a user line.</p> <p>By default, the network-admin user role is specified on the console/AUX user line, and the network-operator user role is specified on any other user line. (MDC- and context-incapable devices.)</p> <p>The following default settings apply (MDC- and context-capable devices):</p> <ul style="list-style-type: none"> <li>• The network-admin user role is specified on the console/AUX user line for default-Context or default-MDC login users. The network-operator user role is specified on any other user line for default-Context or default MDC login users.</li> <li>• The mdc-operator user role is specified on user lines for other non-default MDC login users.</li> <li>• The context-operator user role is specified on user lines for other non-default Context login users.</li> </ul>

# Contents

Login .....	1
Login/Header .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Login/Class/Classes .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
Login/Class/Roles .....	3
XML structure .....	3
Table description .....	4
Login/Line/Lines .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
Login/Line/Roles .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
Login/Specification .....	8
XML structure .....	8
Table description .....	8
Columns .....	8

# Login

## Login/Header

Banner information about user login.

## XML structure

```
<Login>
  <Header>
    <Incoming></Incoming>
    <Legal></Legal>
    <Login></Login>
    <Motd></Motd>
    <Shell></Shell>
  </Header>
</Login>
```

## Table description

Item	Description
Feature name	Login
Table name	Header
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Incoming	The banner to be displayed before a modem dial-in user accesses user view.	N/A	String. Length: 2 to 2002 characters.	The starting and ending characters for each banner must be the same character. The character can be any character and can't be included in the banner.
Legal	The banner to be displayed before a user inputs the username and password to access the CLI.	N/A	String. Length: 2 to 2002 characters.	
Login	The banner to be displayed before password or scheme	N/A	String. Length: 2 to 2002 characters.	

Column name	Column description	Column type	Data type and restrictions	Remarks
	authentication is performed for a login user.			
Motd	The greeting banner to be displayed before the legal banner appears.	N/A	String. Length: 2 to 2002 characters.	
Shell	The banner to be displayed before a non-modem dial-in user accesses user view.	N/A	String. Length: 2 to 2002 characters.	

## Login/Class/Classes

The authentication configuration information for users on each type of line class.

### XML structure

```

<Login>
  <Class>
    <Classes>
      <Class>
        <ClassType></ClassType>
        <AuthMode></AuthMode>
        <ProtocolIn></ProtocolIn>
      </Class>
    </Classes>
  </Class>
</Login>

```

### Table description

Item	Description
Feature name	Login
Table name	Classes
Table type	Multi-instance table
Row name	Class
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClassType	User line class type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Console.</li> <li>2—TTY.</li> <li>3—AUX.</li> <li>4—VTY.</li> </ul>	The supported line class type depends on the device model.
AuthMode	Authentication mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—Password.</li> <li>2—Scheme.</li> </ul>	<p>In FIPS mode, the authentication mode must be scheme.</p> <p>The following default settings apply:</p> <ul style="list-style-type: none"> <li>In non-FIPS mode: <ul style="list-style-type: none"> <li>Password authentication is enabled for AUX and VTY lines.</li> <li>Authentication is disabled for console and TTY lines.</li> <li>If the device has an AUX port and does not have a console port, authentication is disabled for the AUX line.</li> </ul> </li> <li>In FIPS mode, scheme authentication is enabled.</li> </ul> <p><b>! IMPORTANT:</b></p> <p>If the ProtocolIn value is 0, do not remove, delete, or replace this column. A violation will cause the system to report an error.</p>
ProtocolIn	Supported protocols.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—SSH.</li> <li>1—Telnet.</li> <li>2—PAD.</li> <li>5—All.</li> </ul>	<p>The following default settings apply:</p> <ul style="list-style-type: none"> <li>In non-FIPS mode, all protocols are supported.</li> <li>In FIPS mode, SSH is supported.</li> </ul> <p>This column is effective only when the ClassType value is 4 (VTY).</p> <p>If the ProtocolIn value is 0 (SSH), the AuthMode value must be 2 (scheme).</p> <p>Support for PAD depends on the device model.</p>

## Login/Class/Roles

The user role information for users on each type of line class.

### XML structure

```
<Login>
  <Class>
```



```

<Roles>
  <Role>
    <ClassType></ClassType>
    <RoleName></RoleName>
  </Role>
</Roles>
</Class>
</Login>

```

## Table description

Item	Description
Feature name	Login
Table name	Roles
Table type	Multi-instance table
Row name	Role
Restrictions	Available only in non-FIPS mode.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClassType	User line class type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Console.</li> <li>2—TTY.</li> <li>3—AUX.</li> <li>4—VTY.</li> </ul>	The supported line class type depends on the device model.
RoleName	User role name.	Index	String, case-sensitive. Length: 1 to 63 characters.	<p>You can assign a maximum of 64 user roles to a user line.</p> <p>By default, the network-admin user role is specified on the console/AUX user line, and the network-operator user role is specified on any other user line. (MDC- and context-incapable devices.)</p> <p>The following default settings apply (MDC- and context-capable devices):</p> <ul style="list-style-type: none"> <li>The network-admin user role is specified on the console/AUX user line for default-Context or default-MDC login users. The network-operator user role is specified on any other user line for default-Context or default MDC login users.</li> <li>The mdc-operator user role is specified on user lines for other non-default MDC login users.</li> <li>The context-operator user role is specified on user lines for other non-default Context login users.</li> </ul>

# Login/Line/Lines

The authentication configuration information for users on specific user lines.

## XML structure

```
<Login>
  <Line>
    <Lines>
      <Line>
        <LineType></LineType>
        <LineNumber></LineNumber>
        <AuthMode></AuthMode>
        <ProtocolIn></ProtocolIn>
      </Line>
    </Lines>
  </Line>
</Login>
```

## Table description

Item	Description
Feature name	Login
Table name	Lines
Table type	Multi-instance table
Row name	Line
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LineType	User line type.	Index	Enumeration: <ul style="list-style-type: none"><li>1—Console.</li><li>2—TTY.</li><li>3—AUX.</li><li>4—VTY.</li></ul>	The supported line type depends on the device model.
LineNumber	The number of the first user line to be specified. This user line and the subsequent lines are specified.	Index	N/A	This value varies by line type and device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthMode	Authentication mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>1</b>—Password.</li> <li>• <b>2</b>—Scheme.</li> </ul>	<p>In FIPS mode, the authentication mode must be scheme.</p> <p>The following default settings apply:</p> <ul style="list-style-type: none"> <li>• In non-FIPS mode:               <ul style="list-style-type: none"> <li>◦ Password authentication is enabled for AUX and VTY lines.</li> <li>◦ Authentication is disabled for console and TTY lines.</li> <li>◦ If the device has an AUX port and does not have a console port, authentication is disabled for the AUX line.</li> </ul> </li> <li>• In FIPS mode, scheme authentication is enabled.</li> </ul> <p><b>⚠ IMPORTANT:</b></p> <p>If the ProtocolIn value is 0, do not remove, delete, or replace this column. A violation will cause the system to report an error.</p>
ProtocolIn	Supported protocols.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—SSH.</li> <li>• <b>1</b>—Telnet.</li> <li>• <b>2</b>—PAD.</li> <li>• <b>5</b>—All.</li> </ul>	<p>The following default settings apply:</p> <ul style="list-style-type: none"> <li>• In non-FIPS mode, all protocols are supported.</li> <li>• In FIPS mode, SSH is supported.</li> </ul> <p>This column is effective only when the ClassType value is 4 (VTY).</p> <p>If the ProtocolIn value is 0 (SSH), the AuthMode value must be 2 (scheme).</p> <p>Support for PAD depends on the device model.</p>

## Login/Line/Roles

The user role information for users on specific user lines.

### XML structure

```

<Login>
  <Line>
    <Roles>
      <Role>
        <LineType></LineType>
        <LineNumber></LineNumber>
        <RoleName></RoleName>
      </Role>
    </Roles>
  </Line>

```

</Login>

## Table description

Item	Description
Feature name	Login
Table name	Roles
Table type	Multi-instance table
Row name	Role
Restrictions	Available only in non-FIPS mode.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LineType	User line type.	Index	Enumeration: <ul style="list-style-type: none"><li>1—Console</li><li>2—TTY.</li><li>3—AUX.</li><li>4—VTY.</li></ul>	The supported line type depends on the device model.
LineNumber	The number of the first user line to be specified. This user line and the subsequent lines are specified.	Index	N/A	This value varies by line type and device model.
RoleName	User role name.	Index	String, case-sensitive. Length: 1 to 63 characters.	<p>You can assign a maximum of 64 user roles to a user line.</p> <p>By default, the network-admin user role is specified on the console/AUX user line, and the network-operator user role is specified on any other user line. (MDC- and context-incapable devices.)</p> <p>The following default settings apply (MDC- and context-capable devices):</p> <ul style="list-style-type: none"><li>The network-admin user role is specified on the console/AUX user line for default-Context or default-MDC login users. The network-operator user role is specified on any other user line for default-Context or default MDC login users.</li><li>The mdc-operator user role is specified on user lines for other non-default MDC login users.</li><li>The context-operator user role is specified on user lines for other non-default Context login users.</li></ul>

# Login/Specification

Login configuration specification table.

Login configuration capacity differs on different device models.

- Whether the AuthMode column in the tables Login/Class/Classes and Login/Line/Lines can support the none or password authentication mode.
- Whether the ProtocolIn column in the tables Login/Class/Classes and Login/Line/Lines can support Telnet or PAD.

## XML structure

```
<Login>
  <Specification>
    <AuthMode>
      <NoneAuth></NoneAuth>
      <PasswordAuth></PasswordAuth>
    </AuthMode>
    <ProtocolIn>
      <Telnet></Telnet>
      <Pad></Pad>
    </ProtocolIn>
  </Specification>
</Login>
```

## Table description

Item	Description
Feature name	Login
Table name	Specification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthMode	Supported authentication modes.	Data structure	Members include: <ul style="list-style-type: none"><li>• NoneAuth.</li><li>• PasswordAuth.</li></ul>	N/A
NoneAuth	Whether to support the none authentication mode.	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	In non-FIPS mode, the none and password authentication modes are supported.

Column name	Column description	Column type	Data type and restrictions	Remarks
PasswordAuth	Whether to support the password authentication mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	In FIPS mode, the none and password authentication modes are not supported.
ProtocolIn	Supported protocols.	Data structure	Members include: <ul style="list-style-type: none"> <li>Telnet.</li> <li>Pad.</li> </ul>	
Telnet	Whether to support Telnet.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	In non-FIPS mode, Telnet and PAD are supported.
Pad	Whether to support PAD.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	

# Contents

- Login .....1
  - Login/Header .....1
  - Login/Class/Classes .....1
  - Login/Class/Roles .....1
  - Login/Line/Lines .....2
  - Login/Line/Roles .....2

# Login

## Login/Header

Message	Explanation
The string must begin and end with the same character. 输入错误! 请在结尾处输入与起始符一致的结束符。	The string must begin and end with the same character. Please check your input.

## Login/Class/Classes

Message	Explanation
Failed to set the line authentication method: The protocol is SSH. Please change the protocol first. 设置用户线认证方式失败, 请修改协议类型。	Failed to set the line authentication method: Please change the protocol first.
The device doesn't support PAD. 该设备不支持此操作。	The device doesn't support PAD.
The command is available only for VTY lines. 只有VTY用户线支持这条命令。	The command is available only for VTY lines.
Can't set the protocol to SSH. Please change the authentication method to scheme first. 不能设置SSH协议。 设置SSH协议之前, 请设置认证模式为scheme。	Can't set the protocol to SSH. Please change the authentication method to scheme first.

## Login/Class/Roles

Message	Explanation
Maximum number of user roles already reached. 用户角色数量已达到上限。	Maximum number of user roles already reached.
Can't delete the user role: The user role is the only user role for the user line. 最后一个用户角色不能被删除。	Can't delete the user role: The user role is the only user role for the user line.
Can't specify the security-audit user role for user lines. 用户角色security-audit不能在用户线上配置。	Can't specify the security-audit user role for user lines.
Can't specify user roles for user lines in FIPS mode. FIPS模式下, 用户线视图中不支持配置用户角色。	Can't specify user roles for user lines in FIPS mode.
Can't configure the system predefined role.	Can't configure the system predefined role.



系统预定义角色不能被配置。	
---------------	--

## Login/Line/Lines

Message	Explanation
Failed to set the line authentication method: The protocol is SSH. Please change the protocol first. 设置用户线认证方式失败，请修改协议类型。	Failed to set the line authentication method: Please change the protocol first.
The device doesn't support PAD. 该设备不支持此操作。	The device doesn't support PAD.
The command is available only for VTY lines. 只有VTY用户线支持这条命令。	The command is available only for VTY lines.
Can't set the protocol to SSH. Please change the authentication method to scheme first. 不能设置SSH协议。 设置SSH协议之前，请设置认证模式为scheme。	Can't set the protocol to SSH. Please change the authentication method to scheme first.

## Login/Line/Roles

Message	Explanation
Maximum number of user roles already reached. 用户角色数量已达到上限。	Maximum number of user roles already reached.
Can't delete the user role: The user role is the only user role for the user line. 最后一个用户角色不能被删除。	Can't delete the user role: The user role is the only user role for the user line.
Can't specify the security-audit user role for user lines. 用户角色security-audit不能在用户线上配置。	Can't specify the security-audit user role for user lines.
Can't specify user roles for user lines in FIPS mode. FIPS模式下，用户线视图中不支持配置用户角色。	Can't specify user roles for user lines in FIPS mode.
Can't configure the system predefined role. 系统预定义角色不能被配置。	Can't configure the system predefined role.

# Contents

- LPDT ..... 1
  - LPDT/SetPortLoopMode..... 1
  - XML structure..... 1
  - Table description..... 1
  - Columns..... 1

# LPDT

## LPDT/SetPortLoopMode

This table provides configuration of the loop protection action on a port of a PEX in an IRF 3.1 system. This table is for internal users only.

### XML structure

```
<LPDT>
  <SetPortLoopMode>
    <IfIndex></IfIndex>
    <Block></Block>
    <NoLearning></NoLearning>
    <Confirm></Confirm>
  </SetPortLoopMode>
</LPDT>
```

### Table description

Item	Description
Feature name	LPDT
Table name	SetPortLoopMode
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	N/A
Block	Whether to block the looped port	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Unblock.</li><li>1—Block.</li></ul>	N/A
NoLearning	Action to take when a frame with an unknown source MAC address is received	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Forward.</li><li>1—Disable MAC address learning.</li><li>2—Drop.</li></ul>	N/A
Confirm	Check code	N/A	String. Length: 1 to 20 characters.	Fixed at <b>lpdt action for 1br</b> .

# Contents

- LPDT ..... 1
  - LPDT/Base ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1

# LPDT

## LPDT/Base

This table provides global loop detection configuration.

### XML structure

```
<LPDT>
  <Base>
    <DetectVlanList></DetectVlanList>
    <DetectedAction></DetectedAction>
  </Base>
</LPDT>
```

### Table description

Item	Description
Feature name	LPDT
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global functions.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DetectVlanList	VLANs to be enabled with loop detection	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. The item is permitted to incremental edit. You can sign the flag like "< DetectVlanList base:incremental="true ">". If the value is true, the VLAN list will be added or removed. Otherwise, it is the final result.
DetectedAction	Action to take on an interface where a loop is detected	N/A	Enumeration: <ul style="list-style-type: none"><li>0—No action.</li><li>1—Shut down.</li></ul>	N/A

# Contents

- LPDT ..... 1
  - LPDT/Base ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1

# LPDT

## LPDT/Base

This table contains global loop detection information.

## XML structure

```
<LPDT>
  <Base>
    <DetectVlanList></DetectVlanList>
    <DetectedAction></DetectedAction>
  </Base>
</LPDT>
```

## Table description

Item	Description
Feature name	LPDT
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global functions.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DetectVlanList	VLANs to be enabled with loop detection	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	N/A
DetectedAction	Action to take on an interface where a loop is detected	N/A	Enumeration: <ul style="list-style-type: none"><li>0—No action.</li><li>1—Shut down.</li></ul>	N/A

# Contents

LPDT event stream.....	1
IfLoopbackedEvent event .....	1
XML structure for event subscription .....	1
XML structure for event report .....	1
IfVlanLoopbackedEvent event .....	2
XML structure for event subscription .....	2
XML structure for event report .....	3



# LPDT event stream

LPDT event stream description.

## IfLoopbackedEvent event

This event is used to report interface loop detection events.

## XML structure for event subscription

```
<IfLoopbackedEvent>
</IfLoopbackedEvent>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>LPDT</stream>
    <filter type="subtree">
      <IfLoopbackedEvent xmlns="http://www.h3c.com/netconf/event:1.0/LPDT:1.0">
      </IfLoopbackedEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	LPDT
Event name	IfLoopbackedEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/LPDT:1.0
Support for extended query	No

## XML structure for event report

```
<IfLoopbackedEvent>
  <IfLoopbacked>
    <IfName></IfName>
    <LoopStatus></LoopStatus>
    <APSerialID></APSerialID>
  </IfLoopbacked>
</IfLoopbackedEvent>
```

Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2018-11-13T14:22:21</eventTime>
  <IfLoopbackedEvent xmlns="http://www.h3c.com/netconf/event:1.0/LPDT:1.0">
```

```

<IfLoopbacked>
  <IfName>GigabitEthernet0/0/3</IfName>
  <LoopStatus>2</LoopStatus>
  <APSerialID>219801A17C817200001</APSerialID>
</IfLoopbacked>
</IfLoopbackedEvent>
</notification>

```

### Table description

Column name	Column description	Data type and restrictions	Remarks
IfName	Interface name	String. Length: 0 to 47 characters.	N/A
LoopStatus	Loop recovery status	Enumeration: <ul style="list-style-type: none"> <li>1—A loop exists.</li> <li>2—A loop has been removed.</li> </ul>	N/A
APSerialID	AP serial ID	String. Length: 0 to 63 characters.	This column is not displayed if the device is not an AP.

## IfVlanLoopbackedEvent event

This event is used to report VLAN loop detection events.

### XML structure for event subscription

```

<IfVlanLoopbackedEvent>
</IfVlanLoopbackedEvent>

```

#### Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>LPDT</stream>
    <filter type="subtree">
      <IfVlanLoopbackedEvent xmlns="http://www.h3c.com/netconf/event:1.0/LPDT:1.0">
        </IfVlanLoopbackedEvent>
      </filter>
    </create-subscription>
  </rpc>

```

### Table description

Item	Description
Event stream name	LPDT
Event name	IfVlanLoopbackedEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/LPDT:1.0

Item	Description
Support for extended query	No

## XML structure for event report

```

<IfVlanLoopbackedEvent>
  <IfVlanLoopbacked>
    <IfName></IfName>
    <VlanId><VlanId>
    <LoopStatus></LoopStatus>
    <APSerialID></APSerialID>
  </IfVlanLoopbacked>
</IfVlanLoopbackedEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2018-11-13T14:22:21</eventTime>
  <IfVlanLoopbackedEvent xmlns="http://www.h3c.com/netconf/event:1.0/LPDT:1.0">
    <IfVlanLoopbacked>
      <IfName>GigabitEthernet0/0/3</IfName>
      <VlanId>1,100<VlanId>
      <LoopStatus>2</LoopStatus>
      <APSerialID>219801A17C817200001</APSerialID>
    </IfVlanLoopbacked>
  </IfVlanLoopbackedEvent>
</notification>

```

### Table description

Column name	Column description	Data type and restrictions	Remarks
IfName	Interface name	String. Length: 0 to 47 characters.	N/A
VlanId	Looped VLANs on the interface	String. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20.
LoopStatus	Loop recovery status	Enumeration: <ul style="list-style-type: none"> <li>1—A loop exists.</li> <li>2—A loop has been removed.</li> </ul>	N/A
APSerialID	AP serial ID	String. Length: 0 to 63 characters.	This column is not displayed if the device is not an AP.



# Contents

- LR.....1
  - LR/Interfaces .....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# LR

## LR/Interfaces

This table contains information about line-rate.

### XML structure

```
<LR>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
    </Interface>
  </Interfaces>
</LR>
```

### Table description

Item	Description
Feature name	LR
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CIR	Committed information rate	N/A	Unsigned integer.	Required. The value of this column depends on the device model.
CBS	Committed burst size	N/A	Unsigned integer.	The value of this column depends on the device model.
EBS	Excess burst size	N/A	Unsigned integer.	The value of this column depends on the device model. If <b>CBS</b> is not configured, <b>EBS</b> can not be configured
PIR	Peak information rate	N/A	Unsigned integer.	The value of this column depends on the device model.

# Contents

LR.....	1
LR/Interfaces .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
LR/IfCapabilities .....	3
XML structure .....	3
Table description .....	3
Columns .....	4



# LR

## LR/Interfaces

This table contains information about line-rate.

### XML structure

```
<LR>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <PassedPkts></PassedPkts>
      <DiscardedPkts></DiscardedPkts>
      <DelayedPkts></DelayedPkts>
      <PassedBytes></PassedBytes>
      <DiscardedBytes></DiscardedBytes>
      <DelayedBytes></DelayedBytes>
      <Active></Active>
    </Interface>
  </Interfaces>
</LR>
```

### Table description

Item	Description
Feature name	LR
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Inbound.</li> <li>• <b>1</b>—Outbound.</li> </ul>	N/A
CIR	Committed information rate	N/A	Unsigned integer.	The value of this column depends on the device model.
CBS	Committed burst size	N/A	Unsigned integer.	The value of this column depends on the device model.
EBS	Excess burst size	N/A	Unsigned integer.	The value of this column depends on the device model.
PIR	Peak information rate	N/A	Unsigned integer.	The value of this column depends on the device model.
PassedPkts	Number of packets that have passed	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedPkts	Number of packets that have discarded	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DelaydePkts	Number of delayed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
PassdedBytes	Bytes of packets that have passed	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Bytes of packets that have discarded	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DelayedBytes	Bytes of delayed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Active	Whether the rate limit configuration is activated	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Activated.</li> <li>• <b>false</b>—Not activated.</li> </ul>	N/A

# LR/IfCapabilities

This table contains interface capability information about line-rate.

## XML structure

```
<LR>
  <IfCapabilities>
    <IfCapability>
      <IfIndex></IfIndex>
      <CIRMin></CIRMin>
      <CIRMax></CIRMax>
      <CIRGranularity></CIRGranularity>
      <CBSMin></CBSMin>
      <CBSMax></CBSMax>
      <CBSGranularity></CBSGranularity>
      <EBSMin></EBSMin>
      <EBSMax></EBSMax>
      <EBSGranularity></EBSGranularity>
      <PIRMin></PIRMin>
      <PIRMax></PIRMax>
      <PIRGranularity></PIRGranularity>
    </IfCapability>
  </IfCapabilities>
</LR>
```

## Table description

Item	Description
Feature name	LR
Table name	Interface capabilities
Table type	Multi-instance table
Row name	Interface capability
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
CIRMin	Minimum CIR value in kbps	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
CIRMax	Maximum CIR value in kbps	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
CIRGranularity	Granularity of CIR in kbps	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
CBSMin	Minimum CBS value in bytes	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
CBSMax	Maximum CBS value in bytes	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
CBSGranularity	Granularity of CBS in bytes	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
EBSMin	Minimum EBS value in bytes	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
EBSMax	Maximum EBS value in bytes	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.

Column name	Column description	Column type	Data type and restrictions	Remarks
EBSGranularity	Granularity of EBS in bytes	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
PIRMin	Minimum PIR value in kbps	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
PIRMax	Maximum PIR value in kbps	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.
PIRGranularity	Granularity of PIR in kbps	N/A	Unsigned integer.	The value of this column depends on the device model and interface type.

# Contents

LR.....1

    LR .....1

# LR

# LR

Message	Explanation
PIR should not be smaller than CIR. PIR的值不能小于CIR。	PIR should not be smaller than CIR. 限速配置峰值速率不能小于承诺信息速率。
CBS is not supported on the interface. 该接口不支持CBS配置。	CBS is not supported on the interface. 该接口不支持CBS配置。
EBS is not supported on the interface. 该接口不支持EBS配置。	EBS is not supported on the interface. 该接口不支持EBS配置。
PIR is not supported on the interface. 该接口不支持PIR配置。	PIR is not supported on the interface. 该接口不支持PIR配置。
The operation is not supported, because the interface belongs to an aggregation group. 设备不支持对加入聚合组的接口执行本操作。	The operation is not supported, because the interface belongs to an aggregation group. 设备不支持对加入聚合组的接口执行限速操作。

# Contents

MAC.....	1
MAC/MacClearByVLAN.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
MAC/MacClearByPortIndex.....	1
XML structure.....	2
Table description.....	2
Columns.....	2
MAC/MacClearByStatus.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
MAC/MacDelLearnMac .....	3
XML structure.....	3
Table description.....	3
Columns.....	4



# MAC

## MAC/MacClearByVLAN

This table is used to clear MAC address entries according to VLAN ID.

### XML structure

```
<MAC>
  <MacClearByVLAN>
    <ClearByVLAN>
      <Status></Status>
      <VLANID></VLANID>
    </ClearByVLAN>
  </MacClearByVLAN>
</MAC>
```

### Table description

Item	Description
Feature name	MAC
Table name	MacClearByVLAN
Table type	Multi-instance table
Row name	ClearByVLAN
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Status of the MAC address entry	Index	Enumeration: <ul style="list-style-type: none"><li>• 2—Learned.</li><li>• 3—Static.</li><li>• 4—Blackhole.</li><li>• 5—Multiport.</li><li>• 6—Multicast.</li></ul>	If you do not specify this column, all status is set.
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A

## MAC/MacClearByPortIndex

This table is used to clear MAC address entries according to port index.

## XML structure

```
<MAC>
  <MacClearByPortIndex>
    <ClearByPortIndex>
      <Status></Status>
      <PortIndex></PortIndex>
    </ClearByPortIndex>
  </MacClearByPortIndex>
</MAC>
```

## Table description

Item	Description
Feature name	MAC
Table name	MacClearByPortIndex
Table type	Multi-instance table
Row name	ClearByPortIndex
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Status of the MAC address entry	Index	Enumeration: <ul style="list-style-type: none"><li>2—Learned.</li><li>3—Static.</li></ul>	If you do not specify this column, all status is set.
PortIndex	Port index	Index	Unsigned integer.	N/A

## MAC/MacClearByStatus

This table is used to clear MAC address entries according to status.

## XML structure

```
<MAC>
  <MacClearByStatus>
    <ClearByStatus>
      <Status></Status>
    </ClearByStatus>
  </MacClearByStatus>
</MAC>
```

## Table description

Item	Description
Feature name	MAC
Table name	MacClearByStatus
Table type	Multi-instance table
Row name	ClearByStatus
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Status of the MAC address entry	Index	Enumeration: <ul style="list-style-type: none"><li>5—Multiport.</li><li>6—Multicast.</li></ul>	If you do not specify this column, all status is set.

## MAC/MacDelLearnMac

This table is used to delete a learned MAC address entry according to MAC address and VLAN ID.

## XML structure

```
<MAC>
  <MacDelLearnMac>
    <DelLearnMac>
      <VLANID></VLANID>
      <MacAddress></MacAddress>
    </DelLearnMac>
  </MacDelLearnMac>
</MAC>
```

## Table description

Item	Description
Feature name	MAC
Table name	MacDelLearnMac
Table type	Multi-instance table
Row name	DelLearnMac
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

# Contents

MAC.....	1
MAC/MacUnicastTable.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
MAC/MacGroupTable .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
MAC/MacAging .....	3
XML structure.....	3
Table description.....	3
Columns.....	4
MAC/MacPort .....	4
XML structure.....	4
Table description.....	4
Columns.....	5
MAC/MacVLAN .....	5
XML structure.....	5
Table description.....	6
Columns.....	6
MAC/MacFwdSrcCheck .....	7
XML structure.....	7
Table description.....	7
Columns.....	7
MAC/MacPortConfig .....	8
XML structure.....	8
Table description.....	8
Columns.....	8
MAC/SRVs .....	9
XML structure.....	9
Table description.....	9
Columns.....	9

# MAC

## MAC/MacUnicastTable

This table contains unicast MAC address table information.

### XML structure

```
<MAC>
  <MacUnicastTable>
    <Unicast>
      <VLANID></VLANID>
      <MacAddress></MacAddress>
      <PortIndex></PortIndex>
      <Status></Status>
    </Unicast>
  </MacUnicastTable>
</MAC>
```

### Table description

Item	Description
Feature name	MAC
Table name	MacUnicastTable
Table type	Multi-instance table
Row name	Unicast
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
PortIndex	Port index	N/A	Unsigned integer.	Required when Status is Learned or Static. It must not be specified when Status is Blackhole.

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Status of the MAC address entry	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—Learned.</li> <li>3—Static.</li> <li>4—Blackhole.</li> </ul>	N/A

## MAC/MacGroupTable

This table contains multiport MAC address table information.

### XML structure

```

<MAC>
  <MacGroupTable>
    <Group>
      <VLANID></VLANID>
      <MacAddress></MacAddress>
      <Status></Status>
      <PortList></PortList>
    </Group>
  </MacGroupTable>
</MAC>

```

### Table description

Item	Description
Feature name	MAC
Table name	MacGroupTable
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Status of the MAC address entry	N/A	Enumeration: <ul style="list-style-type: none"> <li>5—Multiport.</li> <li>6—Multicast.</li> </ul>	N/A
PortList	Port list of the MAC address	N/A	Base64 string.	<p>Bitmap of ports. the string length depends on the device port number.</p> <p>Supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface.</p> <p>Each bit represents a port. The left-most bit represents the port with the smallest port index 1 and the right-most bit represents the port with the biggest port index. If a bit is set, the port represented by the bit is included in the port set. Otherwise, the port isn't included.</p>

## MAC/MacAging

This table contains the information of aging time for dynamic MAC address entries.

### XML structure

```

<MAC>
  <MacAging>
    <AgingTime></AgingTime>
  </MacAging>
</MAC>

```

### Table description

Item	Description
Feature name	MAC
Table name	MacAging
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AgingTime	Aging time for dynamic MAC address entries	N/A	Unsigned integer. Value range: 0, AgingTimeMin to AgingTimeMax seconds.	The default is 300 seconds. 0 means not aging dynamic MAC address entries. Values of AgingTimeMin and AgingTimeMax depend on the device model.

## MAC/MacPort

This table contains the information of MAC learning on an interface.

## XML structure

```
<MAC>
  <MacPort>
    <PortLearn>
      <PortIndex></PortIndex>
      <LearnEnable></LearnEnable>
      <LearnMaxNum></LearnMaxNum>
      <PortForwardingEnable></PortForwardingEnable>
    </PortLearn>
  </MacPort>
</MAC>
```

## Table description

Item	Description
Feature name	MAC
Table name	MacPort
Table type	Multi-instance table
Row name	PortLearn
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface S-channel interface/S-channel aggregate interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortIndex	Port index	Index	Unsigned integer.	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
LearnEnable	Whether the MAC address learning function is enable	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>(default)</li> <li><b>false</b></li> </ul>	N/A
LearnMaxNum	MAC learning limit on an interface	N/A	Unsigned integer. Value range: 0 to PortLearnMaxNumLimit.	Supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface. 0 means the interface is disabled from learning MAC address. The value of PortLearnMaxNumLimit depends on the device model. The default setting varies by device model.
PortForwardingEnable	Forwards frames with unknown source MAC addresses after the number of learned MAC addresses reaches the upper limit.  Whether the PortForwarding function is enable	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b> (default)</li> <li><b>false</b></li> </ul>	Supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface.

## MAC/MacVLAN

This table contains the information of MAC learning for a VLAN.

## XML structure

```

<MAC>
  <MacVLAN>
    <VLANLearn>
      <VLANID></VLANID>
    
```

```

    <LearnEnable></LearnEnable>
    <LearnMaxNum></LearnMaxNum>
    <VLANForwardingEnable></VLANForwardingEnable>
  </VLANLearn>
</MacVLAN>
</MAC>

```

## Table description

Item	Description
Feature name	MAC
Table name	MacVLAN
Table type	Multi-instance table
Row name	VLANLearn
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
LearnEnable	Whether the MAC address learning function is enable	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>(default)</li> <li><b>false</b></li> </ul>	N/A
LearnMaxNum	MAC learning limit for a VLAN	N/A	Unsigned integer. Value range: 0 to VLANLearnMaxNumLimit.	0 means the VLAN is not allowed to learn MAC addresses. The value of VLANLearnMaxNumLimit depends on the device model. The default setting varies by device model.
VLANForwardingEnable	Forwards frames with unknown source MAC addresses after the number of learned MAC addresses reaches the upper limit. Whether the PortForwarding function is enable	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>(default)</li> <li><b>false</b></li> </ul>	N/A

# MAC/MacFwdSrcCheck

This table contains the information of source-mac check.

## XML structure

```
<MAC>
  <MacFwdSrcCheck>
    <FwdSrcCheck>
      <IfIndex></IfIndex>
      <FwdSrcCheckEnable></FwdSrcCheckEnable>
    </FwdSrcCheck>
  </MacFwdSrcCheck>
</MAC>
```

## Table description

Item	Description
Feature name	MAC
Table name	MacFwdSrcCheck
Table type	Multi-instance table
Row name	FwdSrcCheck
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 3 Ethernet interface/subinterface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	IfIndex ID	Index	Unsigned integer.	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
FwdSrcCheckEnable	Source MAC address checking	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled (default).</li><li><b>false</b>—Disabled.</li></ul>	N/A

# MAC/MacPortConfig

This table contains the information of MAC config on an interface.

## XML structure

```
<MAC>
  <MacPortConfig>
    <PortConfig>
      <IfIndex></IfIndex>
      <PortBridgeEnable></PortBridgeEnable>
    </PortConfig>
  </MacPortConfig>
</MAC>
```

## Table description

Item	Description
Feature name	MAC
Table name	MacPortConfig
Table type	Multi-instance table
Row name	PortConfig
Restrictions	This table supports interface types: Layer 2 Ethernet interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Port index	Index	Unsigned integer.	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
PortBridgeEnable	Whether the MAC address bridge function is enable	N/A	Boolean: <ul style="list-style-type: none"><li><b>false</b> (default)</li><li><b>true</b></li></ul>	N/A

# MAC/SRVs

This table contains information about service instances of Layer 2 Ethernet interfaces.

## XML structure

```
<MAC>
  <SRVs>
    <SRV>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <LrnPriority></LrnPriority>
    </SRV>
  </SRVs>
</MAC>
```

## Table description

Item	Description
Feature name	MAC
Table name	SRVs
Table type	Multi-instance table
Row name	SRV
Restrictions	This table supports only Layer 2 Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
LrnPriority	Priority type of MAC address learning	N/A	Enumeration: <ul style="list-style-type: none"><li>1—high</li><li>2—low</li></ul>	N/A



# Contents

MAC.....	1
MAC/MacUnicastTable.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
MAC/MacGroupTable.....	2
XML structure.....	2
Table description.....	2
Columns.....	3
MAC/MacAging.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
MAC/MacPort.....	4
XML structure.....	4
Table description.....	4
Columns.....	5
MAC/MacVLAN.....	5
XML structure.....	5
Table description.....	6
Columns.....	6
MAC/MacSpecification.....	6
XML structure.....	6
Table description.....	7
Columns.....	7
MAC/MacFwdSrcCheck.....	7
XML structure.....	7
Table description.....	8
Columns.....	8
MAC/MacPortConfig.....	8
XML structure.....	8
Table description.....	9
Columns.....	9
MAC/SRVs.....	9
XML structure.....	9
Table description.....	9
Columns.....	10



# MAC

## MAC/MacUnicastTable

This table contains unicast MAC address table information.

### XML structure

```
<MAC>
  <MacUnicastTable>
    <Unicast>
      <VLANID></VLANID>
      <MacAddress></MacAddress>
      <PortIndex></PortIndex>
      <NickName></NickName>
      <Status></Status>
      <Aging></Aging>
    </Unicast>
  </MacUnicastTable>
</MAC>
```

### Table description

Item	Description
Feature name	MAC
Table name	MacUnicastTable
Table type	Multi-instance table
Row name	Unicast
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
PortIndex	Port index	N/A	Unsigned integer.	N/A
NickName	RB through which packets leave the TRILL network	N/A	Hexadecimal string of 16-bit number	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Status of the MAC address entry	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Other.</li> <li>• <b>1</b>—Security.</li> <li>• <b>2</b>—Learned.</li> <li>• <b>3</b>—Static.</li> <li>• <b>4</b>—Blackhole.</li> </ul>	N/A
Aging	Aging time	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—The entry is aging.</li> <li>• <b>false</b>—The entry does not age.</li> </ul>	N/A

## MAC/MacGroupTable

This table contains multiport MAC address table information.

### XML structure

```

<MAC>
  <MacGroupTable>
    <Group>
      <VLANID></VLANID>
      <MacAddress></MacAddress>
      <Status></Status>
      <PortList></PortList>
    </Group>
  </MacGroupTable>
</MAC>

```

### Table description

Item	Description
Feature name	MAC
Table name	MacGroupTable
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
MacAddress	MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
Status	Status of the MAC address entry	N/A	Enumeration: <ul style="list-style-type: none"><li>• 5—Multiport.</li><li>• 6—Multicast.</li></ul>	N/A
PortList	Port list of the MAC address	N/A	Base64 string.	Bitmap of ports.

## MAC/MacAging

This table contains the information of aging time for dynamic MAC address entries.

## XML structure

```
<MAC>
  <MacAging>
    <AgingTimeMin></AgingTimeMin>
    <AgingTimeMax></AgingTimeMax>
    <AgingTime></AgingTime>
  </MacAging>
</MAC>
```

## Table description

Item	Description
Feature name	MAC
Table name	MacAging
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AgingTimeMin	Lower limit of the aging time	N/A	Unsigned integer.	<b>N/A</b>
AgingTimeMax	Upper limit of the aging time	N/A	Unsigned integer.	N/A
AgingTime	Aging time for dynamic MAC address entries	N/A	Unsigned integer. Value range: 0, AgingTimeMin to AgingTimeMax seconds.	The default is 300 seconds. 0 means not aging dynamic MAC address entries. Values of AgingTimeMin and AgingTimeMax depend on the device model.

## MAC/MacPort

This table contains the information of MAC learning on an interface.

### XML structure

```

<MAC>
  <MacPort>
    <PortLearn>
      <PortIndex></PortIndex>
      <LearnEnable></LearnEnable>
      <LearnMaxNum></LearnMaxNum>
      <PortForwardingEnable></PortForwardingEnable>
    </PortLearn>
  </MacPort>
</MAC>

```

### Table description

Item	Description
Feature name	MAC
Table name	MacPort
Table type	Multi-instance table
Row name	PortLearn
Restrictions	This table supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface S-channel interface/S-channel aggregate interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortIndex	Port index	Index	Unsigned integer.	N/A
LearnEnable	MAC address learning	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled (default).</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
LearnMaxNum	MAC learning limit on an interface	N/A	Unsigned integer. Value range: 0 to PortLearnMaxNumLimit.	Supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface. 0 means the interface is disabled from learning MAC address. The value of PortLearnMaxNumLimit depends on the device model. The default setting varies by device model.
PortForwardingEnable	Forwards frames with unknown source MAC addresses after the number of learned MAC addresses reaches the upper limit	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled (default).</li> <li><b>false</b>—Disabled.</li> </ul>	Supports interface types: Layer 2 Ethernet interface/Layer 2 aggregate interface.

## MAC/MacVLAN

This table contains the information of MAC learning for a VLAN.

## XML structure

```

<MAC>
  <MacVLAN>
    <VLANLearn>
      <VLANID></VLANID>
      <LearnEnable></LearnEnable>
      <LearnMaxNum></LearnMaxNum>
      <VLANForwardingEnable></VLANForwardingEnable>
    </VLANLearn>
  </MacVLAN>
</MAC>

```

## Table description

Item	Description
Feature name	MAC
Table name	MacVLAN
Table type	Multi-instance table
Row name	VLANLearn
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
LearnEnable	MAC address learning	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled(default).</li><li><b>false</b>—Disabled.</li></ul>	N/A
LearnMaxNum	MAC learning limit for a VLAN	N/A	Unsigned integer. Value range: 0 to VLANLearnMaxNumLimit.	0 means the VLAN is not allowed to learn MAC addresses. The value of VLANLearnMaxNumLimit depends on the device model. The default setting varies by device model.
VLANForwardingEnable	Forwards frames with unknown source MAC addresses after the number of learned MAC addresses reaches the upper limit	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled(default).</li><li><b>false</b>—Disabled.</li></ul>	N/A

## MAC/MacSpecification

This table contains MAC specifications information.

## XML structure

```
<MAC>
  <MacSpecification>
    <SupportMacGroup></SupportMacGroup>
    <SupportMacVLANLearnLimit></SupportMacVLANLearnLimit>
```

```

    <PortLearnMaxNumLimit></PortLearnMaxNumLimit>
    <VLANLearnMaxNumLimit></VLANLearnMaxNumLimit>
    <SupportPortBridgeEnable></SupportPortBridgeEnable>
  </MacSpecification>
</MAC>

```

## Table description

Item	Description
Feature name	MAC
Table name	MacSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SupportMacGroup	Supports for multiport MAC addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>
SupportMacVLANLearnLimit	Supports for configuring the MAC learning limit for a VLAN.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>
PortLearnMaxNumLimit	Upper limit of the maximum number for the MAC learning limit on an interface.	N/A	Unsigned integer.
VLANLearnMaxNumLimit	Upper limit of the maximum number for the MAC learning limit for a VLAN.	N/A	Unsigned integer.
SupportPortBridgeEnable	Supports for bridge function.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>

## MAC/MacFwdSrcCheck

This table contains the information of source-mac check.

## XML structure

```
<MAC>
```

```

<MacFwdSrcCheck>
  <FwdSrcCheck>
    <IfIndex></IfIndex>
    <FwdSrcCheckEnable></FwdSrcCheckEnable>
  </FwdSrcCheck>
</MacFwdSrcCheck>
</MAC>

```

## Table description

Item	Description
Feature name	MAC
Table name	MacFwdSrcCheck
Table type	Multi-instance table
Row name	FwdSrcCheck
Restrictions	This table supports interface types: Layer 2 Ethernet interface Layer 3 Ethernet interface/subinterface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	IfIndex ID	Index	Unsigned integer.	N/A
FwdSrcCheckEnable	Source MAC address checking	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled (default).</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## MAC/MacPortConfig

This table contains the information of MAC config on an interface.

## XML structure

```

<MAC>
  <MacPortConfig>
    <PortConfig>
      <IfIndex></IfIndex>
      <PortBridgeEnable></PortBridgeEnable>
    </PortConfig>
  </MacPortConfig>
</MAC>

```



## Table description

Item	Description
Feature name	MAC
Table name	MacPortConfig
Table type	Multi-instance table
Row name	PortConfig
Restrictions	This table supports interface types: Layer 2 Ethernet interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Port index	Index	Unsigned integer.	N/A
PortBridgeEnable	Whether the MAC address bridge function is enable	N/A	Boolean: <ul style="list-style-type: none"><li><b>false</b> (default)</li><li><b>true</b></li></ul>	N/A

## MAC/SRVs

This table contains information about service instances of Layer 2 Ethernet interfaces.

## XML structure

```
<MAC>
  <SRVs>
    <SRV>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <LrnPriority></LrnPriority>
    </SRV>
  </SRVs>
</MAC>
```

## Table description

Item	Description
Feature name	MAC
Table name	SRVs
Table type	Multi-instance table

Row name	SRV
Restrictions	This table supports only Layer 2 Ethernet interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	In some versions, the interface name is supported. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
LrnPriority	Priority type of MAC address learning	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1—high</b></li> <li>• <b>2—low</b></li> </ul>	N/A

# Contents

MAC.....	1
MAC/MacUnicastTable.....	1
MAC/MacGroupTable .....	2
MAC/MacPort .....	3
MAC/MacVLAN .....	3
MAC/MacFwdSrcCheck .....	4
MAC/MacPortConfig.....	5
MAC/MacClearByVLAN.....	5

# MAC

## MAC/MacUnicastTable

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please modify configuration under guidance. 当前配置不符合配置要求, 请按照配置说明修改
Broadcast MAC address is not supported. 不支持广播MAC地址。	Broadcast MAC address is not supported, please modify configuration under guidance. 不支持广播MAC地址, 请按照配置说明修改
Multicast MAC address is not supported. 不支持多播MAC地址。	Multicast MAC address is not supported, please modify configuration under guidance. 不支持多播MAC地址, 请按照配置说明修改
Invalid MAC address. 非法的MAC地址。	Invalid MAC address configuration, please modify configuration under guidance. 非法的MAC地址, 请按照配置说明修改
Subinterface is not supported. 不支持子接口	Subinterface is not supported, please modify configuration under guidance. 不支持子接口, 请按照配置说明修改
Maximum number of ports that can be configured with a multiport MAC address already reached. 可配多端口MAC地址的端口个数超过上限。	Maximum number of ports that can be configured with a multiport MAC address already reached, please check configuration or specifications. 可配多端口MAC地址的端口个数超过上限, 请检查配置或者设备规格
Maximum number of multicast and multiport MAC addresses already reached. 多播和多端口MAC地址个数超过上限。	Maximum number of multicast and multiport MAC addresses already reached, please check configuration or specifications. 多播和多端口MAC地址个数超过上限, 请检查配置或者设备规格
Maximum number of static MAC addresses already reached. 静态MAC地址个数超过上限。	Maximum number of static MAC addresses already reached, please check configuration or specifications. 静态MAC地址个数超过上限, 请检查配置或者设备规格
The MAC address already exists. 该MAC地址已经存在。	The MAC address already exists, please check MAC entry in device. 该MAC地址已经存在, 请检查MAC表
Some configured ports are not in the VLAN. 一些配置端口与VLAN不匹配。	Some configured ports are not in the VLAN, please check vlan and port configuration. 一些配置端口与VLAN不匹配, 请检查vlan和端口配置
The MAC address conflicts with another. 与其他MAC地址冲突。	The MAC address conflicts with another, please check MAC entry. 与其他MAC地址冲突

The VLAN doesn't exist. 该VLAN不存在。	The VLAN doesn't exist. 该VLAN不存在
The port is not assigned to the VLAN, or the VLAN is not permitted on the port. 该端口没有在该VLAN下，或者该端口禁止该VLAN。	The port is not assigned to the VLAN, or the VLAN is not permitted on the port. please check vlan and port configuration. 该端口没有在该VLAN下，或者该端口禁止该VLAN，请检查vlan和端口配置

## MAC/MacGroupTable

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改
Invalid MAC address. 非法的MAC地址。	Invalid MAC address. 非法的MAC地址。
Maximum number of ports that can be configured at a time already reached. 一次性可配端口个数超过上限。	Maximum number of ports that can be configured at a time already reached ,please check configuration or specifications 一次性可配端口个数超过上限，请检查配置或者设备规格
Maximum number of ports that can be configured with a multiport MAC address already reached. 可配多端口MAC地址的端口个数超过上限。	Maximum number of ports that can be configured with a multiport MAC address already reached ,please check configuration or specifications 可配多端口MAC地址的端口个数超过上限，请检查配置或者设备规格
Maximum number of multicast and multiport MAC addresses already reached. 多播和多端口MAC地址个数超过上限。	Maximum number of multicast and multiport MAC addresses already reached. please check configuration or specifications 多播和多端口MAC地址个数超过上限，请检查配置或者设备规格
Maximum number of static MAC addresses already reached. 静态MAC地址个数超过上限。	Maximum number of static MAC addresses already reached, please check configuration or specifications 静态MAC地址个数超过上限，请检查配置或者设备规格
The MAC address already exists. 该MAC地址已经存在。	The MAC address already exists,please check MAC entry 该MAC地址已经存在， 请检查MAC 表
Some configured ports are not in the VLAN. 一些配置端口与VLAN不匹配。	Some configured ports are not in the VLAN, please check VLAN and port configuration. 一些配置端口与VLAN不匹配，请检查VLAN和端口配置
The MAC address conflicts with another. 与其他MAC地址冲突。	The MAC address conflicts with another. please check MAC configuration. 与其他MAC地址冲突。请检查MAC配置
No port exists. 无端口存在。	No port exists, please modify configuration under guidance.

	无端口存在，请按照配置说明修改
Multicast and multiport MAC addresses are not supported. 不支持多播和多端口MAC地址。	Multicast and multiport MAC addresses are not supported, please modify configuration under guidance. 不支持多播和多端口MAC地址，无效配置，请按照配置说明修改
The VLAN doesn't exist. 该VLAN不存在。	The VLAN doesn't exist, please check vlan configuration 该VLAN不存在，请检查vlan配置

## MAC/MacPort

Message	Explanation
Maximum number of ports that can be configured with a multiport MAC address already reached. 可配多端口MAC地址的端口个数超过上限。	Maximum number of ports that can be configured with a multiport MAC address already reached, please check configuration or specifications 可配多端口MAC地址的端口个数超过上限，请检查配置或者设备规格
Maximum number of multicast and multiport MAC addresses already reached. 多播和多端口MAC地址个数超过上限。	Maximum number of multicast and multiport MAC addresses already reached, please check configuration or specifications 多播和多端口MAC地址个数超过上限，请检查配置或者设备规格
Maximum number of static MAC addresses already reached. 静态MAC地址个数超过上限。	Maximum number of static MAC addresses already reached, please check configuration or specifications 静态MAC地址个数超过上限，请检查配置或者设备规格
The MAC address already exists. 该MAC地址已经存在。	The MAC address already exists, please check MAC entry 该MAC地址已经存在，请检查MAC表
Some configured ports are not in the VLAN. 一些配置端口与VLAN不匹配。	Some configured ports are not in the VLAN, please check configuration. 一些配置端口与VLAN不匹配。
The MAC address conflicts with another. 与其他MAC地址冲突。	The MAC address conflicts with another, please check configuration. 与其他MAC地址冲突，请检查配置
The value is out of range. 参数值超出范围。	The value is out of range, please modify configuration under guidance. 参数值超出范围，请按照配置说明修改

## MAC/MacVLAN

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改

Maximum number of ports that can be configured with a multiport MAC address already reached. 可配多端口MAC地址的端口个数超过上限。	Maximum number of ports that can be configured with a multiport MAC address already reached, please check configuration or specifications 可配多端口MAC地址的端口个数超过上限, 请检查配置或者设备规格
Maximum number of multicast and multiport MAC addresses already reached. 多播和多端口MAC地址个数超过上限。	Maximum number of multicast and multiport MAC addresses already reached, please check configuration or specifications 多播和多端口MAC地址个数超过上限, 请检查配置或者设备规格
Maximum number of static MAC addresses already reached. 静态MAC地址个数超过上限。	Maximum number of static MAC addresses already reached, please check configuration or specifications 静态MAC地址个数超过上限, 请检查配置或者设备规格
The MAC address already exists. 该MAC地址已经存在。	The MAC address already exists, please check configuration. 该MAC地址已经存在,请检查配置
Some configured ports are not in the VLAN. 一些配置端口与VLAN不匹配。	Some configured ports are not in the VLAN, please modify configuration under guidance. 一些配置端口与VLAN不匹配, 请按照配置说明修改
The MAC address conflicts with another. 与其他MAC地址冲突。	The MAC address conflicts with another, please check configuration. 与其他MAC地址冲突,请检查配置
The VLAN doesn't exist. 该VLAN不存在。	The VLAN doesn't exist, please check vlan configuration 该VLAN不存在, 请检查vlan配置
The value is out of range. 参数值超出范围。	The value is out of range, please modify configuration under guidance. 参数值超出范围, 请按照配置说明修改

## MAC/MacFwdSrcCheck

Message	Explanation
Maximum number of ports that can be configured with a multiport MAC address already reached. 可配多端口MAC地址的端口个数超过上限。	Maximum number of ports that can be configured with a multiport MAC address already reached, please check configuration or specifications 可配多端口MAC地址的端口个数超过上限, 请检查配置或者设备规格
Maximum number of multicast and multiport MAC addresses already reached. 多播和多端口MAC地址个数超过上限。	Maximum number of multicast and multiport MAC addresses already reached, please check configuration or specifications 多播和多端口MAC地址个数超过上限, 请检查配置或者设备规格
Maximum number of static MAC addresses already reached. 静态MAC地址个数超过上限。	Maximum number of static MAC addresses already reached, please check configuration or specifications 静态MAC地址个数超过上限, 请检查配置或者设备规格

The MAC address already exists. 该MAC地址已经存在。	The MAC address already exists, please check configuration. 该MAC地址已经存在,请检查配置
Some configured ports are not in the VLAN. 一些配置端口与VLAN不匹配。	Some configured ports are not in the VLAN, please modify configuration under guidance. 一些配置端口与VLAN不匹配, 请按照配置说明修改
The MAC address conflicts with another. 与其他MAC地址冲突。	The MAC address conflicts with another, please check configuration. 与其他MAC地址冲突,请检查配置

## MAC/MacPortConfig

Message	Explanation
Maximum number of ports that can be configured with a multiport MAC address already reached. 可配多端口MAC地址的端口个数超过上限。	Maximum number of ports that can be configured with a multiport MAC address already reached, please check configuration or specifications 可配多端口MAC地址的端口个数超过上限, 请检查配置或者设备规格
Maximum number of multicast and multiport MAC addresses already reached. 多播和多端口MAC地址个数超过上限。	Maximum number of multicast and multiport MAC addresses already reached, please check configuration or specifications 多播和多端口MAC地址个数超过上限, 请检查配置或者设备规格
Maximum number of static MAC addresses already reached. 静态MAC地址个数超过上限。	Maximum number of static MAC addresses already reached, please check configuration or specifications 静态MAC地址个数超过上限, 请检查配置或者设备规格
The MAC address already exists. 该MAC地址已经存在。	The MAC address already exists, please check configuration. 该MAC地址已经存在,请检查配置
Some configured ports are not in the VLAN. 一些配置端口与VLAN不匹配。	Some configured ports are not in the VLAN, please modify configuration under guidance. 一些配置端口与VLAN不匹配, 请按照配置说明修改
The MAC address conflicts with another. 与其他MAC地址冲突。	The MAC address conflicts with another, please check configuration. 与其他MAC地址冲突,请检查配置

## MAC/MacClearByVLAN

Message	Explanation
The VLAN doesn't exist. 该VLAN不存在。	The VLAN doesn't exist, please check vlan configuration 该VLAN不存在, 请检查vlan配置



# Contents

MACA.....	1
MACA/ClearAllStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MACA/ClearInterStatistics.....	1
XML structure .....	1
Table description .....	2
Columns .....	2
MACA/ResetGVLANUser .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
MACA/ResetOneGVLANUser.....	3
XML structure .....	3
Table description .....	3
Columns .....	4
MACA/ResetCVLANUser.....	4
XML structure .....	4
Table description .....	4
Columns .....	5
MACA/ResetOneCVLANUser.....	5
XML structure .....	5
Table description .....	5
Columns .....	5

# MACA

## MACA/ClearAllStatistics

This table clears MAC authentication statistics for all interfaces.

### XML structure

```
<MACA>
  <ClearAllStatistics>
    <Clear></Clear>
  </ClearAllStatistics>
</MACA>
```

### Table description

Item	Description
Feature name	MACA
Table name	ClearAllStatistics
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clears MAC authentication statistics for all interfaces.	N/A	This column must be empty.

## MACA/ClearInterStatistics

This table clears MAC authentication statistics for an interface.

### XML structure

```
<MACA>
  <ClearInterStatistics>
    <Interface>
      <IfIndex></IfIndex>
    </Interface>
  </ClearInterStatistics>
</MACA>
```

```

    <Clear></Clear>
  </Interface>
</ClearInterStatistics>
</MACA>

```

## Table description

Item	Description
Feature name	MACA
Table name	ClearInterStatistics
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Resets the interface's statistics .	Index	Unsigned integer.
Clear	Clears the interface's statistics.	N/A	This column must be empty.

## MACA/ResetGVLANUser

This table removes all MAC authentication users from the guest VLAN on an interface.

## XML structure

```

<MACA>
  <ResetGVLANUser>
    <Interface>
      <IfIndex></IfIndex>
      <ResetAll></ResetAll>
    </Interface>
  </ResetGVLANUser>
</MACA>

```

## Table description

Item	Description
Feature name	MACA
Table name	ResetGVLANUser
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Specifies an interface.	Index	Unsigned integer.
ResetAll	Removes all MAC authentication users from the guest VLAN on the interface.	N/A	This column must be empty.

## MACA/ResetOneGVLANUser

This table removes the specified MAC authentication user from the guest VLAN on an interface.

## XML structure

```
<MACA>
  <ResetOneGVLANUser>
    <Interface>
      <IfIndex></IfIndex>
      <UserMAC></UserMAC>
      <Reset></Reset>
    </Interface>
  </ResetOneGVLANUser>
</MACA>
```

## Table description

Item	Description
Feature name	MACA
Table name	ResetOneGVLANUser
Table type	Multi-instance table

Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Specifies an interface.	Index	Unsigned integer.
UserMAC	Specifies a user by its MAC address.	Index	MAC address.
Reset	Removes the specified user from the guest VLAN on the interface.	N/A	This column must be empty.

## MACA/ResetCVLANUser

This table removes all MAC authentication users from the critical VLAN on an interface.

## XML structure

```

<MACA>
  <ResetCVLANUser>
    <Interface>
      <IfIndex></IfIndex>
      <ResetAll></ResetAll>
    </Interface>
  </ResetCVLANUser>
</MACA>

```

## Table description

Item	Description
Feature name	MACA
Table name	ResetCVLANUser
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Specifies an interface.	Index	Unsigned integer.
ResetAll	Removes all MAC authentication users from the critical VLAN on the interface.	N/A	This column must be empty.

## MACA/ResetOneCVLANUser

This table removes the specified MAC authentication user from the critical VLAN on an interface.

## XML structure

```
<MACA>
  <ResetOneCVLANUser>
    <Interface>
      <IfIndex></IfIndex>
      <UserMAC></UserMAC>
      <Reset></Reset>
    </Interface>
  </ResetOneCVLANUser>
</MACA>
```

## Table description

Item	Description
Feature name	MACA
Table name	ResetOneCVLANUser
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Specifies an interface.	Index	Unsigned integer.

UserMAC	Specifies a user by its MAC address.	Index	MAC address.
Reset	Removes the specified MAC authentication user from the critical VLAN on the interface.	N/A	This column must be empty.

# Contents

MACA.....	1
MACA/Common .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MACA/Interfaces .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
MACA/OfflineDetectTimers .....	4
XML structure .....	4
Table description .....	5
Columns .....	5



# MACA

## MACA/Common

This table contains information about MAC authentication global parameters.

### XML structure

```
<MACA>
  <Common>
    <Enable></Enable>
    <Domain></Domain>
    <UserNameFormat></UserNameFormat>
    <UserName></UserName>
    <UserPassword></UserPassword>
    <IdleInterval></IdleInterval>
    <QuietInterval></QuietInterval>
    <ServerInterval></ServerInterval>
  </Common>
</MACA>
```

### Table description

Item	Description
Feature name	MACA
Table name	Common
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Global MAC authentication status	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled(default).</li></ul>
Domain	Authentication domain	N/A	String. Length: 1 to 255 characters. Default: No authentication domain is specified for MAC authentication users. The

Column name	Column description	Column type	Data type and restrictions
			system default authentication domain is used.
UserNameFormat	Username format	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Fixed.</li> <li>2—Individual MAC address(default).</li> </ul>
UserName	Fixed username of the device	N/A	String. Length: 1 to 55 characters. Default value is "mac".
UserPassword	Password for the fixed user name	N/A	String. Length: 1 to 63 characters. Default is not configured.
IdleInterval	Value for the offline detect timer	N/A	Unsigned integer. Value range: 60 to 2147483647 seconds. Default: 300 seconds.
QuietInterval	Value for the quiet timer	N/A	Unsigned integer. Value range: 1 to 3600 seconds. Default: 60 seconds.
ServerInterval	Value for the server timeout timer	N/A	Unsigned integer. Value range: 100 to 300 seconds. Default: 100 seconds.

## MACA/Interfaces

This table contains MAC authentication information on interfaces.

### XML structure

```

<MACA>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <AuthDelayInterval></AuthDelayInterval>
      <MaxUser></MaxUser>
      <ReauthUnreachableMode></ReauthUnreachableMode>
      <MultiVLAN></MultiVLAN>
      <CriticalVLAN></CriticalVLAN>
      <GuestVLAN></GuestVLAN>
      <CriticalVSI>
        <VSIName></VSIName>
        <UrlUserLogoff></UrlUserLogoff>
      </CriticalVSI>
    </Interface>
  </Interfaces>
</MACA>

```

```

</CriticalVSI>
<GuestVSI></GuestVSI>
<Carry>
  <UserIP></UserIP>
  <ACLNumber></ACLNumber>
</Carry>
<Domain></Domain>
</Interface>
</Interfaces>
</MACA>

```

## Table description

Item	Description
Feature name	MACA
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
Enable	Status of MAC authentication	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default).</li> </ul>
AuthDelayInterval	Value for MAC authentication delay timer	N/A	Unsigned integer. Value range: 1 to 180 seconds. Default: Not configured.
MaxUser	Maximum number of users on this interface	N/A	Unsigned integer. Value range:1 to 4294967295. Default: 4294967295.
ReauthUnreachableMode	Status of users when the AAA server is not available for MAC reauthentication	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Offline(default).</li> <li><b>2</b>—Online.</li> </ul>
MultiVLAN	Allows authenticated users in multiple VLANs on this interface	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Single VLAN(default).</li> <li><b>1</b>—Multiple VLAN.</li> </ul>
CriticalVLAN	VLAN for users that have failed MAC authentication because of unreachable	N/A	Unsigned integer. Value range: 1 to 4094.

Column name	Column description	Column type	Data type and restrictions
	servers		Default: Not configured.
GuestVLAN	VLAN for users that have failed MAC authentication because of any reason other than unreachable servers	N/A	Unsigned integer. Value range: 1 to 4094. Default: Not configured.
CriticalVSI	VSI for users that have failed MAC authentication because of unreachable servers	Data structure	Members include: <ul style="list-style-type: none"> <li>VSIName.</li> <li>UrlUserLogoff.</li> </ul>
VSIName	Critical VSI name	N/A	String. Length: 1 to 31 characters.
UrlUserLogoff	Whether to log off users that have been assigned authorization URLs on the port when the first user is assigned to the critical VSI	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Keeps the users online (default).</li> <li><b>1</b>—Logs off the users.</li> </ul>
GuestVSI	VSI for users that have failed MAC authentication because of any reason other than unreachable servers	N/A	String. Length: 1 to 31 characters.
Carry	Settings for the feature of including user IP addresses in MAC authentication requests	Data structure	Members include: <ul style="list-style-type: none"> <li>UserIP.</li> <li>ACLNumber.</li> </ul>
UserIP	Whether to include user IP addresses in MAC authentication requests	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Include.</li> <li><b>false</b>—Exclude.</li> </ul>
ACLNumber	ACL used to filter source IP addresses that can or cannot trigger MAC authentication	N/A	Unsigned integer. Value range: 2000 to 2999. Default: 0 (no ACL is specified to filter source IP addresses).
Domain	Authentication domain of users on the interface	N/A	String. Length: 1 to 255 characters. Default: No authentication domain is specified for MAC authentication users. The system default authentication domain is used.

## MACA/OfflineDetectTimers

This table contains the parameters for configuring MAC authentication offline detection on a per-user basis.

### XML structure

```
<MACA>
  <OfflineDetectTimers>
```

```

<OfflineDetectTimer>
  <MacAddr></MacAddr>
  <Timer></Timer>
  <CheckSnooping></CheckSnooping>
</OfflineDetectTimer>
</OfflineDetectTimers>
</MACA>

```

## Table description

Item	Description
Feature name	MACA
Table name	OfflineDetectTimers
Table type	Multi-instance table
Row name	OfflineDetectTimer
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddr	User MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	N/A
Timer	User offline detect timer	N/A	Unsigned integer. Value range: 60 to 2147483647 seconds. 0: Skips offline detection for the specified user.	N/A
CheckSnooping	Whether to use the ARP snooping or ND snooping table to determine the offline state of the user	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false</b></li> </ul>	<ul style="list-style-type: none"> <li>If the ARP snooping or ND snooping table is used, the device searches the ARP snooping or ND snooping table before it checks for traffic from the user within the detection interval. If a matching ARP snooping or ND snooping entry is found, the device resets the offline detect timer and the user stays online. If the offline detect timer expires because the device has not found a matching snooping entry for the user or received traffic from the user, the device disconnects the user.</li> <li>If the ARP or ND snooping table is not used, the device disconnects the user if it has not</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				received traffic from that user before the offline detect timer expires.

# Contents

MACA.....	1
MACA/Common .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MACA/SilentMAC .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
MACA/Interfaces .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
MACA/InterfaceUsers .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
MACA/OfflineDetectTimers .....	7
XML structure .....	7
Table description .....	7
Columns .....	7

# MACA

## MACA/Common

This table contains information about MAC authentication global parameters.

### XML structure

```
<MACA>
  <Common>
    <Enable></Enable>
    <Domain></Domain>
    <UserNameFormat></UserNameFormat>
    <UserName></UserName>
    <IdleInterval></IdleInterval>
    <QuietInterval></QuietInterval>
    <ServerInterval></ServerInterval>
    <OnlineUserNum></OnlineUserNum>
    <SilentMACNum></SilentMACNum>
  </Common>
</MACA>
```

### Table description

Item	Description
Feature name	MACA
Table name	Common
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Global MAC authentication status	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>
Domain	Authentication domain of the user	N/A	String. Length: 1 to 255 characters.
UserNameFormat	Username format	N/A	Enumeration: <ul style="list-style-type: none"><li><b>1</b>—Fixed.</li><li><b>2</b>—Individual MAC address.</li></ul>



Column name	Column description	Column type	Data type and restrictions
UserName	Fixed username of the device	N/A	String. Length: 1 to 55 characters.
IdleInterval	Value for the offline detect timer	N/A	Unsigned integer. Value range: 60 to 2147483647 seconds.
QuietInterval	Value for the quiet timer	N/A	Unsigned integer. Value range: 1 to 3600 seconds.
ServerInterval	Value for the server timeout timer	N/A	Unsigned integer. Value range: 100 to 300 seconds.
OnlineUserNum	Current online user count	N/A	Unsigned integer.
SilentMACNum	Current silent MAC count	N/A	Unsigned integer.

## MACA/SilentMAC

This table contains silent MAC information of MAC authentication.

### XML structure

```

<MACA>
  <SilentMACs>
    <SilentMAC>
      <MAC></MAC>
      <VLANID></VLANID>
      <IfIndex></IfIndex>
    </SilentMAC>
  </SilentMACs>
</MACA>

```

### Table description

Item	Description
Feature name	MACA
Table name	SilentMACs
Table type	Multi-instance table
Row name	SilentMAC
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
MAC	Silent MAC address	Index	MAC address.
VLANID	From which VLAN the MAC tries to logs on	Index	Unsigned integer. Value range: 1 to 4094.
IfIndex	Interface index	Index	Unsigned integer.

## MACA/Interfaces

This table contains MAC authentication information on interfaces.

## XML structure

```
<MACA>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <AuthDelayEnable></AuthDelayEnable>
      <AuthDelayInterval></AuthDelayInterval>
      <MaxUser></MaxUser>
      <ReauthUnreachableMode></ReauthUnreachableMode>
      <MultiVLAN></MultiVLAN>
      <CriticalVLAN></CriticalVLAN>
      <GuestVLAN></GuestVLAN>
      <CriticalVSI>
        <VSIName></VSIName>
        <UrlUserLogoff></UrlUserLogoff>
      </CriticalVSI>
      <GuestVSI></GuestVSI>
      <Carry>
        <UserIP></UserIP>
        <ACLNumber></ACLNumber>
      </Carry>
      <OnlineUserNum></OnlineUserNum>
      <Domain></Domain>
    </Interface>
  </Interfaces>
</MACA>
```

## Table description

Item	Description
Feature name	MACA

Item	Description
Table name	Interfaces
Table type	Multi-instance table
Row name	interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
Enable	Status of MAC authentication	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
AuthDelayEnable	Status of MAC authentication delay	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
AuthDelayInterval	Value for MAC authentication delay timer	N/A	Unsigned integer Value range: 1 to 180 seconds.
MaxUser	Maximum number of users on this interface	N/A	Unsigned integer. Value range: 1 to 4294967295.
ReauthUnreachableMode	Status of users when the AAA server is not available for MAC reauthentication	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Offline.</li> <li><b>2</b>—Online.</li> </ul>
MultiVLAN	Allows authenticated users in multiple VLANs on this interface	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Single VLAN.</li> <li><b>1</b>—Multiple VLAN.</li> </ul>
CriticalVLAN	VLAN for users that have failed MAC authentication because of unreachable servers	N/A	Unsigned integer. Value range: 1 to 4094.
GuestVLAN	VLAN for users that have failed MAC authentication because of any reason other than unreachable servers	N/A	Unsigned integer. Value range: 1 to 4094.
CriticalVSI	VSI for users that have failed MAC authentication because of unreachable servers	Data structure	Members include: <ul style="list-style-type: none"> <li>VSIName.</li> <li>UrlUserLogoff.</li> </ul>
VSIName	Critical VSI name	N/A	String. Length: 1 to 31 characters.

Column name	Column description	Column type	Data type and restrictions
UrlUserLogoff	Whether to log off users that have been assigned authorization URLs on the port when the first user is assigned to the critical VSI	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Keeps the users online.</li> <li>• <b>1</b>—Logs off the users.</li> </ul>
GuestVSI	VSI for users that have failed MAC authentication because of any reason other than unreachable servers	N/A	String. Length: 1 to 31 characters.
Carry	Settings for the feature of including user IP addresses in MAC authentication requests	Data structure	Members include: <ul style="list-style-type: none"> <li>• UserIP.</li> <li>• ACLNumber.</li> </ul>
UserIP	Whether to include user IP addresses in MAC authentication requests	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Include.</li> <li>• <b>false</b>—Exclude.</li> </ul>
ACLNumber	ACL used to filter source IP addresses that can or cannot trigger MAC authentication	N/A	Unsigned integer. Value range: 2000 to 2999. Default: 0 (no ACL is specified to filter source IP addresses).
OnlineUserNum	Current online user count on the interface	N/A	Unsigned integer.
Domain	Authentication domain of users on the interface	N/A	String. Length: 1 to 255 characters. Default: No authentication domain is specified for MAC authentication users. The system default authentication domain is used.

## MACA/InterfaceUsers

This table displays MAC authentication user information.

### XML structure

```

<MACA>
  <InterfaceUsers>
    <InterfaceUser>
      <IfIndex></IfIndex>
      <UserMAC></UserMAC>
      <Name></Name>
      <Domain></Domain>
      <InitialVLAN></InitialVLAN>
      <AuthzVLAN></AuthzVLAN>
      <AuthzACLGroup></AuthzACLGroup>
      <AuthzUserProfile></AuthzUserProfile>
    </InterfaceUser>
  </InterfaceUsers>
</MACA>

```

```

    <TermAction></TermAction>
    <TimeoutPeriod></TimeoutPeriod>
    <LogonTime></LogonTime>
    <OnlineDuration></OnlineDuration>
  </InterfaceUser>
</InterfaceUsers>
</MACA>

```

## Table description

Item	Description
Feature name	MACA
Table name	InterfaceUsers
Table type	Multi-instance table
Row name	InterfaceUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
UserMAC	MAC address of the user on the interface	Index	MAC address.
Name	Username of the user	N/A	String. Length: 1 to 253 characters.
Domain	ISP domain used for MAC authentication	N/A	String. Length: 1 to 255 characters.
InitialVLAN	VLAN to which the user belongs before MAC authentication	N/A	Unsigned integer. Value range: 1 to 4094.
AuthzVLAN	VLAN authorized to the authenticated user	N/A	Unsigned integer. Value range: 1 to 4094.
AuthzACLGroup	ACL authorized to the authenticated user	N/A	Unsigned integer.
AuthzUserProfile	User profile authorized to the authenticated user	N/A	String.
TermAction	Action attribute assigned by the AAA server when the session timeout timer expires	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Default.</li> <li>1—Radius-request.</li> </ul>
TimeoutPeriod	Value for the AAA server-assigned session timeout timer	N/A	Unsigned integer

Column name	Column description	Column type	Data type and restrictions
LogonTime	Time at which the user logs into the device	N/A	String. Format: YYYY-MM-DD HH:MM:SS.
OnlineDuration	Online duration of the user	N/A	Unsigned integer.

## MACA/OfflineDetectTimers

This table contains the parameters for configuring MAC authentication offline detection on a per-user basis.

### XML structure

```
<MACA>
  <OfflineDetectTimers>
    <OfflineDetectTimer>
      <MacAddr></MacAddr>
      <Timer></Timer>
      <CheckSnooping></CheckSnooping>
    </OfflineDetectTimer>
  </OfflineDetectTimers>
</MACA>
```

### Table description

Item	Description
Feature name	MACA
Table name	OfflineDetectTimers
Table type	Multi-instance table
Row name	OfflineDetectTimer
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddr	User MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	N/A
Timer	User offline detect timer	N/A	Unsigned integer. Value range: 60 to 2147483647 seconds.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			0: Skips offline detection for the specified user.	
CheckSnooping	Whether to use the ARP snooping or ND snooping table to determine the offline state of the user	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false</b></li> </ul>	<ul style="list-style-type: none"> <li>If the ARP snooping or ND snooping table is used, the device searches the ARP snooping or ND snooping table before it checks for traffic from the user within the detection interval. If a matching ARP snooping or ND snooping entry is found, the device resets the offline detect timer and the user stays online. If the offline detect timer expires because the device has not found a matching snooping entry for the user or received traffic from the user, the device disconnects the user.</li> <li>If the ARP or ND snooping table is not used, the device disconnects the user if it has not received traffic from that user before the offline detect timer expires.</li> </ul>

# Contents

MAC Authentication .....1

MACA/IF .....1

MACA /Univerauth .....2



# MAC Authentication

## MACA/IF

Message	Explanation
Can't enable MAC authentication when port security is already enabled. 不能开启MAC地址认证，因为已经使能端口安全。	Can't enable MAC authentication when port security is already enabled. 不能开启MAC地址认证，因为已经使能端口安全。
Can't enable MAC authentication on the port when the port security mode is secure. 不能在端口上开启MAC地址认证，因为端口模式为secure。	Can't enable MAC authentication on the port when the port security mode is secure. 不能在端口上开启MAC地址认证，因为端口模式为secure。
The number can't be less than the current number of online users. 最大用户数目必须大于或等于当前在线用户数目。	The number can't be less than the current number of online users. 最大用户数目必须大于或等于当前在线用户数目。
Can't set a nonexistent VLAN as the critical VLAN. 无法将一个不存在的VLAN配置为MAC地址认证的Critical VLAN。	Can't set a nonexistent VLAN as the critical VLAN. 无法将一个不存在的VLAN配置为MAC地址认证的Critical VLAN。
Can't set a dynamic VLAN as the critical VLAN. 无法将一个动态VLAN配置为MAC地址认证的Critical VLAN。	Can't set a dynamic VLAN as the critical VLAN. 无法将一个动态VLAN配置为MAC地址认证的Critical VLAN。
Can't set a nonexistent VLAN as the guest VLAN. 无法将一个不存在的VLAN配置为MAC地址认证的Guest VLAN。	Can't set a nonexistent VLAN as the guest VLAN. 无法将一个不存在的VLAN配置为MAC地址认证的Guest VLAN。
Can't set a dynamic VLAN as the guest VLAN. 无法将一个动态VLAN配置为MAC地址认证的Guest VLAN。	Can't set a dynamic VLAN as the guest VLAN. 无法将一个动态VLAN配置为MAC地址认证的Guest VLAN。
Can't enable MAC authentication on a link aggregation member port. 不能在聚合组成员上开启MAC地址认证。	Can't enable MAC authentication on a link aggregation member port. 不能在聚合组成员上开启MAC地址认证。
Can't enable MAC authentication on the port when port-based access control is used. 不能在端口上开启MAC地址认证，因为端口的接入控制方式为基于端口认证。	Can't enable MAC authentication on the port when port-based access control is used. 不能在端口上开启MAC地址认证，因为端口的接入控制方式为基于端口认证。
Port security, MAC authentication, and 802.1X authentication are not supported on Layer 2 aggregate interfaces. 端口安全，MAC地址认证和802.1X认证不支持在二层以太网聚合接口上配置。	Port security, MAC authentication, and 802.1X authentication are not supported on Layer 2 aggregate interfaces. 端口安全，MAC地址认证和802.1X认证不支持在二层以太网聚合接口上配置。
This operation conflicts with VSI	VLAN configuration conflicts with VSI configuration.

Message	Explanation
configuration. 此操作和VSI配置冲突。	VLAN配置和VSI配置冲突。
This operation conflicts with VLAN configuration. 此操作和VLAN配置冲突。	VLAN configuration conflicts with VSI configuration. VLAN配置和VSI配置冲突。

## MACA /Univerauth

Message	Explanation
Can't enable MAC authentication when port security is already enabled. 不能开启MAC地址认证，因为已经使能端口安全。	Can't enable MAC authentication when port security is already enabled. 不能开启MAC地址认证，因为已经使能端口安全。
Can't enable MAC authentication on the port when the port security mode is secure. 不能在端口上开启MAC地址认证，因为端口模式为secure。	Can't enable MAC authentication on the port when the port security mode is secure. 不能在端口上开启MAC地址认证，因为端口模式为secure。
The number can't be less than the current number of online users. 最大用户数目必须大于或等于当前在线用户数目。	The number can't be less than the current number of online users. 最大用户数目必须大于或等于当前在线用户数目。
Can't set a nonexistent VLAN as the critical VLAN. 无法将一个不存在的VLAN配置为MAC地址认证的Critical VLAN。	Can't set a nonexistent VLAN as the critical VLAN. 无法将一个不存在的VLAN配置为MAC地址认证的Critical VLAN。
Can't set a dynamic VLAN as the critical VLAN. 无法将一个动态VLAN配置为MAC地址认证的Critical VLAN。	Can't set a dynamic VLAN as the critical VLAN. 无法将一个动态VLAN配置为MAC地址认证的Critical VLAN。
Can't set a nonexistent VLAN as the guest VLAN. 无法将一个不存在的VLAN配置为MAC地址认证的Guest VLAN。	Can't set a nonexistent VLAN as the guest VLAN. 无法将一个不存在的VLAN配置为MAC地址认证的Guest VLAN。
Can't set a dynamic VLAN as the guest VLAN. 无法将一个动态VLAN配置为MAC地址认证的Guest VLAN。	Can't set a dynamic VLAN as the guest VLAN. 无法将一个动态VLAN配置为MAC地址认证的Guest VLAN。
Can't enable MAC authentication on a link aggregation member port. 不能在聚合组成员上开启MAC地址认证。	Can't enable MAC authentication on a link aggregation member port. 不能在聚合组成员上开启MAC地址认证。
Can't disable MAC authentication when port security is already enabled. 不能关闭MAC地址认证，因为已经使能端口安全。	Can't disable MAC authentication when port security is already enabled. 不能关闭MAC地址认证，因为已经使能端口安全。
Can't disable MAC authentication on the port when the port security mode is not	Can't disable MAC authentication on the port when the port

Message	Explanation
noRestriction. 不能在端口上关闭MAC地址认证，因为端口安全模式不为noRestriction。	security mode is not noRestriction. 不能在端口上关闭MAC地址认证，因为端口安全模式不为noRestriction。
Invalid username. 用户名不合法。	Invalid username. 用户名不合法。
Can't configure the username and password when the username format is individual MAC address. 当用户名格式为MAC地址时，不允许配置用户名和密码。	Can't configure the username and password when the username format is individual MAC address. 当用户名格式为MAC地址时，不允许配置用户名和密码。
Can't enable MAC authentication on the port when port-based access control is used. 不能在端口上开启MAC地址认证，因为端口的接入控制方式为基于端口认证。	Can't enable MAC authentication on the port when port-based access control is used. 不能在端口上开启MAC地址认证，因为端口的接入控制方式为基于端口认证。
Can't disable MAC authentication on the port when port-based access control is used. 不能在端口上关闭MAC地址认证，因为端口的接入控制方式为基于端口认证。	Can't disable MAC authentication on the port when port-based access control is used. 不能在端口上关闭MAC地址认证，因为端口的接入控制方式为基于端口认证。
Can't enable MAC authentication when EAD assistant is already enabled. 不能开启MAC地址认证，因为已使能EAD快速部署。	Can't enable MAC authentication when EAD assistant is already enabled. 不能开启MAC地址认证，因为已使能EAD快速部署。
Can't disable MAC authentication when EAD assistant function is enabled. 不能关闭MAC地址认证，因为已使能EAD快速部署。	Can't disable MAC authentication when EAD assistant function is enabled. 不能关闭MAC地址认证，因为已使能EAD快速部署。

# Contents

MDC.....	1
MDC/Contexts.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
MDC/Resources/Disks.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
MDC/Resources/Memories.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
MDC/Resources/CPUs.....	4
XML structure.....	4
Table description.....	4
Columns.....	5
MDC/LocationEntitys.....	5
XML structure.....	5
Table description.....	5
Columns.....	6
MDC/LocationBladeControllerTeam.....	6
XML structure.....	6
Table description.....	6
Columns.....	7
MDC/AllocationIdentities.....	7
XML structure.....	7
Table description.....	7
Columns.....	8

# MDC

## MDC/Contexts

This table is used to configure MDCs for a device and show MDC's state.

### XML structure

```
<MDC>
  <Contexts>
    <Context>
      <MDCID></MDCID>
      <Name></Name>
      <State></State>
    </Context>
  </Contexts>
</MDC>
```

### Table description

Item	Description
Feature name	MDC
Table name	Contexts
Table type	Multi-instance table
Row name	Context
Restrictions	Only support default MDC.
Support for row creation and deletion	YES

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model. 0 means the system assigns the lowest ID number among the available IDs to the MDC.
Name	Full name of an MDC	N/A	String. Length: 1 to 15 characters.	N/A
State	State of the MDC	N/A	Enumeration:	Start—Start the

Column name	Column description	Column type	Data type and restrictions	Remarks
			1: start 2: stop	MDC. stop—Stop the MDC.

## MDC/Resources/Disks

This table contains disk information.

### XML structure

```

<MDC>
  <Resources>
    <Disks>
      <Disk>
        <MDCID></MDCID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <ReservedRatio></ReservedRatio>
        <QuotaRatio></QuotaRatio>
      </Disk>
    </Disks>
  </Resources>
</MDC>

```

### Table description

Item	Description
Feature name	MDC
Table name	Disks
Table type	Multi-instance table
Row name	Disk
Restrictions	Only support default MDC.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Chassis number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ReservedRatio	reserve resources of disk( %)	N/A	Unsigned integer. Value range: 0 to 100.	Not support yet.
QuotaRatio	The total limit resources of disk(%)	N/A	Positive integer. Value range: 1 to 100.	The default value is 100.

## MDC/Resources/Memories

This table contains memory information.

### XML structure

```

<MDC>
  <Resources>
    <Memories>
      <Memory>
        <MDCID></MDCID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <ReservedRatio></ReservedRatio>
        <QuotaRatio></QuotaRatio>
      </Memory>
    </Memories>
  </Resources>
</MDC>

```

### Table description

Item	Description
Feature name	MDC
Table name	Memories
Table type	Multi-instance table
Row name	Memory

Restrictions	Only support default MDC.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
Chassis	Chassis number of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ReservedRatio	reserve resources of memory(%)	N/A	Unsigned integer. Value range: 0 to 100.	Not support yet.
QuotaRatio	The total limit resources of memory(%)	N/A	Unsigned integer. Value range: 1 to 100.	The default value is 100.

## MDC/Resources/CPU

This table contains cpu information.

## XML structure

```

<MDC>
  <Resources>
    <CPUs>
      <CPU>
        <MDCID></MDCID>
        <Weight></Weight>
      </CPU>
    </CPUs>
  </Resources>
</MDC>

```

## Table description

Item	Description
Feature name	MDC



Table name	CPUs
Table type	Multi-instance table
Row name	CPU
Restrictions	Only support default MDC.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
Weight	CPU weight-maximum of available resources of CPU(weight)	N/A	Positive integer. Value range:1-10	Limit maximum of cpu resource. Default:Each MDC has a CPU weight of 10.

## MDC/LocationEntitys

This table contains location state.

## XML structure

```

<MDC>
  <Locations>
    <Location>
      <MDCID></MDCID>
      <Chassis></Chassis>
      <Slot></Slot>
      <State></State>
    </Location>
  </Locations>
</MDC>

```

## Table description

Item	Description
Feature name	MDC
Table name	Locations
Table type	Multi-instance table
Row name	Location
Restrictions	Only support default MDC.Blade controllers must be located by

	BladeControllerTeam table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
Chassis	Chassis number of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
State	Configure State of location	N/A	Enumeration: 1: location 2: undo location	Location: Authorize the MDC to use the interface cards. Default: All interface cards of the device belong to the default MDC.

## MDC/LocationBladeControllerTeam

This table contains location state of BladeControllerTeam.

## XML structure

```

<MDC>
  <LocationBladeControllerTeams>
    <LocationBladeControllerTeam>
      <MDCID></MDCID>
      <BladeControllerTeam></BladeControllerTeam>
      <State></State>
    </LocationBladeControllerTeam>
  </LocationBladeControllerTeams>
</MDC>

```

## Table description

Item	Description
Feature name	MDC
Table name	LocationBladeControllerTeams
Table type	Multi-instance table
Row name	LocationBladeControllerTeam
Restrictions	Only support default MDC.

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
BladeControllerTeam	BladeControllerTeam ID	Index	Unsigned integer. Value range: 1 to 256.	N/A
State	Configure State of location	N/A	Enumeration: 1: location 2: undo location	Location: Authorize the MDC to use the resource of BladeControllerTeams. Default: All BladeControllerTeams of the device belong to the default MDC.

## MDC/AllocationIdentities

This table contains physical interface.

## XML structure

```

<MDC>
  <Allocations>
    <Allocation>
      <MDCID></MDCID>
      <InterfaceList></InterfaceList>
    </Allocation>
  </Allocations>
</MDC>

```

## Table description

Item	Description
Feature name	MDC
Table name	Allocations
Table type	Multi-instance table
Row name	Allocation
Restrictions	Only support default MDC.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC ID of interface	N/A	Unsigned integer.	The value range depends on the device model.
InterfaceList	List of interfaces	N/A	String.	<p>Different interfaces combinations(a single interface or interface list)are separated by comma',';interface lists are separated by ' to '(There is a space on both sides of the word 'to').</p> <p>reference:  GigabitEthernet4/5/0/1 to  GigabitEthernet4/5/0/24 ,  GigabitEthernet4/5/0/48</p>

# Contents

MDC.....	1
MDC/Contexts.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
MDC/Resources/Disks.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
MDC/Resources/Memories.....	4
XML structure.....	4
Table description.....	4
Columns.....	4
MDC/Resources/CPUs.....	5
XML structure.....	5
Table description.....	6
Columns.....	6
MDC/LocationEntitys.....	6
XML structure.....	6
Table description.....	7
Columns.....	7
MDC/AllocationIdentities.....	7
XML structure.....	7
Table description.....	8
Columns.....	8
MDC/InterfaceAllocations.....	8
XML structure.....	8
Table description.....	9
Columns.....	9
MDC/Allocations.....	9
XML structure.....	9
Table description.....	9
Columns.....	10
MDC/Locations.....	10
XML structure.....	10
Table description.....	10
Columns.....	11
MDC/LocationBladeControllerTeam.....	11
XML structure.....	11
Table description.....	11
Columns.....	12

# MDC

## MDC/Contexts

This table contains MDC's status.

### XML structure

```
<MDC>
  <Contexts>
    <Context>
      <MDCID></MDCID>
      <Name></Name>
      <State></State>
      <Status></Status>
    </Context>
  </Contexts>
</MDC>
```

### Table description

Item	Description
Feature name	MDC
Table name	Contexts
Table type	Multi-instance table
Row name	Context
Restrictions	Default MDC can query information of all MDCs. Non-default MDC can only query the current MDC change without

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
Name	Full name of an MDC	N/A	String. Length: 1 to 15 characters.	N/A
State	State of the MDC	N/A	Enumeration: 1: start 2: stop	start—Start the MDC. stop—Stop the MDC.
Status	Status of the	N/A	Enumeration:	<ul style="list-style-type: none"><li>inactive—The MDC is</li></ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
	MDC		<ul style="list-style-type: none"> <li>1: inactive</li> <li>2: starting</li> <li>3: active</li> <li>4: stopping</li> <li>5: updating</li> </ul>	<p>stopped or not started yet.</p> <ul style="list-style-type: none"> <li>starting—The device is executing the mdc start command to start the MDC.</li> <li>active—The MDC is operating correctly.</li> <li>stopping—The device is executing the undo mdc start command to stop the MDC.</li> <li>updating—The MDC is updating.</li> </ul>

## MDC/Resources/Disks

This table contains disk information.

### XML structure

```

<MDC>
  <Resources>
    <Disks>
      <Disk>
        <MDCID></MDCID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Partition></Partition>
        <Reserved></Reserved>
        <Quota></Quota>
        <Used></Used>
        <Available></Available>
        <ReservedRatio></ReservedRatio>
        <QuotaRatio></QuotaRatio>
      </Disk>
    </Disks>
  </Resources>
</MDC>

```

## Table description

Item	Description
Feature name	MDC
Table name	Disks
Table type	Multi-instance table
Row name	Disk
Restrictions	Default MDC can query information of all MDCs. Non-default MDC can only query the current MDC's information.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
Chassis	Chassis number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of disk resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Partition	Instance name of disk resource	Index	String. Length: 1 to 31 characters.	N/A
Reserved	reserve resources of disk (KB)	N/A	Unsigned integer.	Limit minimum of disk resource. 0 means the MDC doesn't have reserve resource of disk.
Quota	The total limit resources of disk (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.	Limit maximum of disk resource.
Used	Current usage of disk resources (KB)	N/A	Unsigned integer.	N/A
Available	Current available resources of disk(KB)	N/A	Unsigned integer.	The minimum between(Quota-Used) and idle resource of disk.
ReservedRatio	reserve resources of disk( %)	N/A	Unsigned integer. Value range: 0 to 100.	Not support yet.
QuotaRatio	The total limit resources of disk(%)	N/A	Positive integer. Value range: 1 to 100.	N/A



# MDC/Resources/Memories

This table contains memory information.

## XML structure

```
<MDC>
  <Resources>
    <Memories>
      <Memory>
        <MDCID></MDCID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Reserved></Reserved>
        <Quota></Quota>
        <Used></Used>
        <Available></Available>
        <ReservedRatio></ReservedRatio>
        <QuotaRatio></QuotaRatio>
      </Memory>
    </Memories>
  </Resources>
</MDC>
```

## Table description

Item	Description
Feature name	MDC
Table name	Memories
Table type	Multi-instance table
Row name	Memory
Restrictions	Default MDC can query information of all MDCs. Non-default MDC can only query the current MDC's information.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
Chassis	Chassis number of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Slot	Slot number of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of memory resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Reserved	reserve resources of memory (KB)	N/A	Unsigned integer.	Limit minimum of disk resource. 0 means the MDC doesn't have reserve resource of memory.
Quota	The total limit resources of memory (KB)	N/A	Unsigned integer. Value range: 0 to 4294967295.	Limit maximum of disk resource.
Used	Current usage of memory resources (KB)	N/A	Unsigned integer.	N/A
Available	Current available resources of memory(KB)	N/A	Unsigned integer.	The minimum between(Quota-Used)and idle resource of disk.
ReservedRatio	reserve resources of memory(%)	N/A	Unsigned integer. Value range: 0 to 100.	Not support yet.
QuotaRatio	The total limit resources of memory(%)	N/A	Unsigned integer. Value range: 1 to 100.	N/A

## MDC/Resources/CPU

This table contains cpu information.

### XML structure

```

<MDC>
  <Resources>
    <CPUs>
      <CPU>
        <MDCID></MDCID>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Weight></Weight>
        <Usage></Usage>
      </CPU>
    </CPUs>
  </Resources>
</MDC>

```

## Table description

Item	Description
Feature name	MDC
Table name	CPUs
Table type	Multi-instance table
Row name	CPU
Restrictions	Default MDC can query information of all MDCs. Non-default MDC can only query the current MDC's information.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
Chassis	Chassis number of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Weight	CPU weight-maximum of available resources of CPU (weight)	N/A	Positive integer.	Limit maximum of cpu resource. Default:Each MDC has a CPU weight of 10.
Usage	Current usage of CPUresources (%)	N/A	Unsigned integer. Value range: 0 to 100.	N/A

## MDC/LocationEntitys

This table contains location state.

## XML structure

```
<MDC>
  <LocationEntitys>
    <LocationEntity>
      <MDCID></MDCID>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <State></State>
```

```

    </LocationEntity>
  </LocationEntitys>
</MDC>

```

## Table description

Item	Description
Feature name	MDC
Table name	LocationEntitys
Table type	Multi-instance table
Row name	LocationEntity
Restrictions	Information of BladeControllerTeam table will be changed to c-s-c and display in LocationEntitys table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
Chassis	Chassis number of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
State	Configure State of location	N/A	Enumeration: 1: location 2: undo location	Location:Authorize the MDC to use the interface cards. Default: All interface cards of the device belong to the default MDC.

## MDC/AllocationIdentities

This table contains physical interface.

## XML structure

```

<MDC>
  <AllocationIdentities>
    <AllocationIdentity>
      <PhysicalIndex></PhysicalIndex>
    </AllocationIdentity>
  </AllocationIdentities>
</MDC>

```

```

    <IfName></IfName>
    <AllocationIdentity></AllocationIdentity>
  </AllocationIdentity>
</AllocationIdentities>
</MDC>

```

## Table description

Item	Description
Feature name	MDC
Table name	AllocationIdentities
Table type	Multi-instance table
Row name	AllocationIdentity
Restrictions	Default MDC can query information of all interface group. Non-default MDC can only query the current MDC's interface group.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PhysicalIndex	Entity index of an interface	Index	Unsigned integer.	N/A
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters.	N/A
AllocationIdentity	Group Identifier	N/A	String. Length: 1 to 255 characters.	The interfaces in a group must be assigned to the same MDC at the same time or removed from an MDC at the same time.

## MDC/InterfaceAllocations

This table contains MDC of interface.

## XML structure

```

<MDC>
  <InterfaceAllocations>
    <InterfaceAllocation>
      <PhysicalIndex></PhysicalIndex>
      <IfName></IfName>
      <MDCID></MDCID>
    </InterfaceAllocation>
  </InterfaceAllocations>

```

</MDC>

## Table description

Item	Description
Feature name	MDC
Table name	InterfaceAllocations
Table type	Multi-instance table
Row name	InterfaceAllocation
Restrictions	Default MDC can query information of all interface. Non-default MDC can only query the current MDC's interface.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PhysicalIndex	Entity index of an interface	Index	Unsigned integer.	N/A
IfName	Full name of an interface	N/A	String. Length: 2 to 47 characters.	N/A
MDCID	MDC ID of interface	N/A	Unsigned integer.	The value range depends on the device model.

## MDC/Allocations

This table contains physical interface.

## XML structure

```
<MDC>
  <Allocations>
    <Allocation>
      <MDCID></MDCID>
      <InterfaceList></InterfaceList>
    </Allocation>
  </Allocations>
</MDC>
```

## Table description

Item	Description
Feature name	MDC
Table name	Allocations

Table type	Multi-instance table
Row name	Allocation
Restrictions	Only support default MDC.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC ID of interface	N/A	Unsigned integer.	The value range depends on the device model.
InterfaceList	List of interfaces	N/A	String. Length: 1 to 32767 characters.	Different interfaces combinations(a single interface or interface list)are separated by comma',';interface lists are separated by ' to '(There is a space on both sides of the word 'to').  reference: GigabitEthernet4/5/0/1 to GigabitEthernet4/5/0/24 , GigabitEthernet4/5/0/48

## MDC/Locations

This table contains location state.

## XML structure

```

<MDC>
  <Locations>
    <Location>
      <MDCID></MDCID>
      <Chassis></Chassis>
      <Slot></Slot>
      <State></State>
    </Location>
  </Locations>
</MDC>

```

## Table description

Item	Description
Feature name	MDC
Table name	Locations
Table type	Multi-instance table

Row name	Location
Restrictions	Only support default MDC. Blade controllers must be located by BladeControllerTeam table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
Chassis	Chassis number of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of CPU resource	Index	Unsigned integer. Value range: 0 to 65535.	N/A
State	Configure State of location	N/A	Enumeration: 1: location 2: undo location	Location: Authorize the MDC to use the interface cards.

## MDC/LocationBladeControllerTeam

This table contains location state of BladeControllerTeam.

## XML structure

```

<MDC>
  <LocationBladeControllerTeams>
    <LocationBladeControllerTeam>
      <MDCID></MDCID>
      <BladeControllerTeam></BladeControllerTeam>
      <State></State>
    </LocationBladeControllerTeam>
  </LocationBladeControllerTeams>
</MDC>

```

## Table description

Item	Description
Feature name	MDC
Table name	LocationBladeControllerTeams
Table type	Multi-instance table
Row name	LocationBladeControllerTeam
Restrictions	Only support default MDC.



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MDCID	MDC index	Index	Unsigned integer.	The value range depends on the device model.
BladeControllerTeam	BladeControllerTeam ID	Index	Unsigned integer. Value range: 1 to 256.	N/A
State	Configure State of location	N/A	Enumeration: 1: location 2: undo location	Location: Authorize the MDC to use the resource of BladeControllerTeams.

# Contents

MDC.....	1
MDC/Contexts.....	1
MDC/Resources/Disks .....	1
MDC/Resources/Memories .....	2
MDC/Resources/CPUs.....	2
MDC/Locations.....	2
MDC/AllocationIdentities.....	3

# MDC

## MDC/Contexts

Message	Explanation
Please install the license for the MDC feature first. MDC特性没有可用的license。	The license is invalid during executing create or start MDC operations. Please check the license's validity and install. 创建 MDC 或者启动 MDC 时没有安装 license，或者 license 无效。
Number of MDCs exceeded the limit. 操作失败，MDC个数超过最大限额。	During executing MDC creation, The MDC numbers exceeded the limit. 创建MDC时，MDC个数已经超过系统限制个数，不能继续创建了。
The MDC is not authorized to use this slot. MDC没有进驻该板。	The MDC is not authorized to use this slot, so that it cannot set or require this slot memory resource. MDC 没有进驻改板，无法设置和查询 memory 资源
Not enough resources available. 资源不足导致操作失败。	Memory space is not enough to operating start a MDC. 启动MDC时，各资源申请内存资源不足导致失败。
Restoring MDC configuration. Please try again later. MDC正在恢复配置，请稍后重试。	Set operations is forbidden, when MDC is not start over. 当MDC还没有配置恢复完成是，不允许设置相关的操作。
The MDC is busy. Please try again later. MDC正在忙，请稍后重试。	It cannot start or stop the MDC, due to the MDC is starting or stopping. 该MDC正在启动或者停止，不能再进行启动或者停止操作。
The MDC name and ID must identify the same MDC. 输入的MDC名称有误，请输入与ID对应的名称。	The MDC name and ID must identify the same MDC. 输入MDC名称错误，与MDC id不匹配。
Invalid MDC ID or MDC name. 输入的MDC ID或者名称无效。	Invalid MDC ID or MDC name. 输入的MDC ID或者名称无效。
The default MDC can't be deleted. 不允许删除缺省MDC。	The default MDC can't be deleted. 不允许删除缺省MDC。
Not enough resources available. 资源不足，创建MDC失败。	Not enough resources available. 资源不足，创建MDC失败。

## MDC/Resources/Disks

Message	Explanation
Not enough disk space available. 磁盘资源不足。	It has not enough disk space, please check the disk space. 限制MDC磁盘使用率时，磁盘空间不足，请检查。
The MDC is not authorized to use this slot. MDC没有进驻该板。	The MDC is not authorized to use this slot, so that it cannot set or require this slot disk resource. MDC没有进驻改板，无法设置和查询disk资源

Not enough resources available. 资源不足导致操作失败。	Malloc memory to operating this table is failed. 申请内存资源失败。
Restoring MDC configuration. Please try again later. MDC正在恢复配置，请稍后重试。	Set operations is forbidden, when MDC is not start over. 当MDC还没有配置恢复完成是，不允许设置相关的操作。

## MDC/Resources/Memories

Message	Explanation
Not enough resources available. 资源不足导致操作失败。	Malloc memory to operating this table is failed. 申请内存资源失败。
Restoring MDC configuration. Please try again later. MDC正在恢复配置，请稍后重试。	Set operations is forbidden, when MDC is not start over. 当MDC还没有配置恢复完成是，不允许设置相关的操作。

## MDC/Resources/CPUUs

Message	Explanation
Not enough resources available. 资源不足导致操作失败。	Malloc memory to operating this table is failed. 申请内存资源失败。
Restoring MDC configuration. Please try again later. MDC正在恢复配置，请稍后重试。	Set operations is forbidden, when MDC is not start over. 当MDC还没有配置恢复完成是，不允许设置相关的操作。

## MDC/Locations

Message	Explanation
Not enough resources available. 资源不足导致操作失败。	During executing location operation, it may fail and return error message: " Not enough resources available. ". The reasons may be exceeding the mdc number limit, lack of memory space or disk space in this slot,. Location单板失败时会返回资源不足，包括当前单板mdc个数，内存不足和磁盘资源不足等情况。
Operation failed. There are IRF physical ports. 存在IRF物理端口，不允许MDC退出接口板。	The IRF devices will be devided, If MDC exiting the IO board which has IRF physics ports. 当MDC在接口板上存在IRF的物理端口，不允许该MDC undo location接口板，否则会导致堆叠分裂。
Restoring MDC configuration. Please try again	Set operations is forbidden, when MDC is not start over.

later. MDC正在恢复配置，请稍后重试。	当MDC还没有配置恢复完成是，不允许设置相关的操作。
The MDC is busy. Please try again later. MDC正在忙，请稍后重试。	It cannot location the MDC, due to the MDC is starting or stopping. 该MDC正在启动或者停止，不能再进行location操作。
Not enough hardware resources available. 硬件资源不足导致操作失败。	This slot is lack of hardware resources. 单板的内存不足或者其他问题。

## MDC/AllocationIdentities

Message	Explanation
Some interfaces group have not include all of its interface. 接口组未包含全部的接口，分配失败。	Some interfaces group have not include all of its interface. 接口组未包含全部的接口，分配失败。
Some type of interfaces can not be allocated to an MDC exclusively. 接口列表中包含不能独占分配的接口。	Some type of interfaces can not be allocated to an MDC exclusively. 接口列表中包含不能独占分配的接口。
Some interfaces are duplicated. 接口列表中包含重复的接口名。	The MDC alloc interfaces failed. MDC 分配接口失败
Some interfaces are invalid. 存在不合法接口。	Some interfaces are invalid. 存在不合法接口。



# Contents

MGROUP .....	1
MGROUP/Groups .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MGROUP/MonitorPort .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
MGROUP/ReflectorPort .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
MGROUP/EgressPort .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
MGROUP/ProbeVlan .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
MGROUP/SourcePorts .....	6
XML structure .....	6
Table description .....	6
Columns .....	7

# MGROUP

## MGROUP/Groups

This table contains information about mirroring groups.

### XML structure

```
<MGROUP>
  <Groups>
    <Group>
      <ID></ID>
      <Type></Type>
      <Sampler></Sampler>
    </Group>
  </Groups>
</MGROUP>
```

### Table description

Item	Description
Feature name	MGROUP
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer Value range: 1 to256	The range of mirroring group ID depends on the device model.
Type	Mirroring group type.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Local.</li><li>2—Remote-source.</li><li>3—Remote-destination.</li></ul>	Required. Can not change the type if the mirroring group has been created.
Sampler	References the sampler to limit the volume of traffic to be mirrored.	N/A	String, case-sensitive. Length: 1 to 31 characters.	Can not change this item if the mirroring group has been created. Support for this option depends on the device



Column name	Column description	Column type	Data type and restrictions	Remarks
				model.

## MGROUP/MonitorPort

This table contains information about monitor port of mirroring groups.

### XML structure

```

<MGROUP>
  <MonitorPort>
    <Group>
      <ID></ID>
      <Port></Port>
      <IP>
        <DestIP></DestIP>
        <SrcIP></SrcIP>
        <DSCP></DSCP>
        <VLAN></VLAN>
        <VRF></VRF>
      </IP>
      <Mac></Mac>
    </Group>
  </MonitorPort>
</MGROUP>

```

### Table description

Item	Description
Feature name	MGROUP
Table name	MonitorPort
Table type	Multi-instance table
Row name	Group
Restrictions	When the type of mirroring group is local or remote destination, monitor port can be configured.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer. Value range: 1 to256.	The range of mirroring group ID depends on the device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
Port	Index of monitor port.	N/A	Unsigned integer.	Required.  Can not change the port if the monitor port has been created.
IP	Specify IP for mirroring to interface	Data structure	Members include: <ul style="list-style-type: none"> <li>• <b>DestIP.</b></li> <li>• <b>SrcIP.</b></li> <li>• <b>DSCP.</b></li> <li>• <b>VLAN.</b></li> <li>• <b>VRF.</b></li> </ul>	DestIP and SrcIP must both be specified.  DSCP, VLAN and VRF can be optionally specified when DestIP and SrcIP are configured.
DestIP	Destination IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
SrcIP	Source IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
DSCP	DSCP value	N/A	Unsigned integer. Value range: 0 to 63.	N/A
VLAN	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	VRF instance name	N/A	String. Length: 1 to 31 characters.	N/A
Mac	Specify destination MAC for mirroring to interface	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

## MGROUP/ReflectorPort

This table contains information about reflector port of mirroring groups.

### XML structure

```

<MGROUP>
  <ReflectorPort>
    <Group>
      <ID></ID>
      <Port></Port>
    </Group>
  </ReflectorPort>
</MGROUP>

```

## Table description

Item	Description
Feature name	MGROUP
Table name	ReflectorPort
Table type	Multi-instance table
Row name	Group
Restrictions	When the type of mirroring group is remote source, reflector port can be configured.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer. Value range: 1 to256.	The range of mirroring group ID depends on the device model.
Port	Index of reflector port.	N/A	Unsigned integer.	Required.  Can not change the port if the reflector port has been created.

## MGROUP/EgressPort

This table contains information about egress port of mirroring groups.

## XML structure

```
<MGROUP>
  <EgressPort>
    <Group>
      <ID></ID>
      <Port></Port>
    </Group>
  </EgressPort>
</MGROUP>
```

## Table description

Item	Description
Feature name	MGROUP
Table name	EgressPort

Table type	Multi-instance table
Row name	Group
Restrictions	When the type of mirroring group is remote source, egress port can be configured.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer. Value range: 1 to256.	The range of mirroring group ID depends on the device model.
Port	Index of egress port.	N/A	Unsigned integer.	Required.  Can not change the port if the egress port has been created.

## MGROUP/ProbeVlan

This table contains information about remote probe VLAN of mirroring groups.

## XML structure

```

<MGROUP>
  <ProbeVlan>
    <Group>
      <ID></ID>
      <VlanID></VlanID>
    </Group>
  </ProbeVlan>
</MGROUP>

```

## Table description

Item	Description
Feature name	MGROUP
Table name	ProbeVlan
Table type	Multi-instance table
Row name	Group
Restrictions	When the type of mirroring group is remote source or remote destination, remote probe VLAN can be configured.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer. Value range: 1 to 256.	The range of mirroring group ID depends on the device model.
VlanID	Probe VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.	Required.  Can not change the vlan if the probe vlan has been created.

## MGROUP/SourcePorts

This table contains information about source ports of the mirroring group.

## XML structure

```
<MGROUP>
  <SourcePorts>
    <SourcePort>
      <ID></ID>
      <IfIndex></IfIndex>
      <Direction></Direction>
    </SourcePort>
  </SourcePorts>
</MGROUP>
```

## Table description

Item	Description
Feature name	MGROUP
Table name	SourcePorts
Table type	Multi-instance table
Row name	SourcePort
Restrictions	When the type of mirroring group is remote source or local, source port can be configured.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer. Value range: 1 to256.	The range of mirroring group ID depends on the device model.
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Direction of source port.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Inbound.</li><li>• 2—Outbound.</li><li>• 3—Both.</li></ul>	Required

# Contents

MGROUP .....	1
MGROUP/Groups .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MGROUP/MonitorPort .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
MGROUP/ReflectorPort .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
MGROUP/EgressPort .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
MGROUP/ProbeVlan .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
MGROUP/SourcePorts .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
MGROUP/Capabilities .....	7
XML structure .....	7
Table description .....	7
Columns .....	7

# MGROUP

## MGROUP/Groups

This table contains information about mirroring groups.

### XML structure

```
<MGROUP>
  <Groups>
    <Group>
      <ID></ID>
      <Type></Type>
      <Sampler></Sampler>
      <Status></Status>
    </Group>
  </Groups>
</MGROUP>
```

### Table description

Item	Description
Feature name	MGROUP
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer Value range: 1 to256.	The range of mirroring group ID depends on the device model.
Type	Mirroring group type.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Local.</li><li>• 2—Remote-source.</li><li>• 3—Remote-destination.</li></ul>	N/A
Sampler	References the sampler to limit the volume of traffic to be mirrored.	N/A	String, case-sensitive. Length: 1 to 31 characters.	Support for this option depends on the device model.



Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Mirroring group status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Incomplete.</li> <li>2—Active.</li> </ul>	N/A

## MGROUP/MonitorPort

This table contains information about monitor port of mirroring groups.

### XML structure

```

<MGROUP>
  <MonitorPort>
    <Group>
      <ID></ID>
      <Port></Port>
      <IP>
        <DestIP></DestIP>
        <SrcIP></SrcIP>
        <DSCP></DSCP>
        <VLAN></VLAN>
        <VRF></VRF>
      </IP>
      <Mac></Mac>
    </Group>
  </MonitorPort>
</MGROUP>

```

### Table description

Item	Description
Feature name	MGROUP
Table name	MonitorPort
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer Value range: 1 to256.	The range of mirroring group ID depends on the

Column name	Column description	Column type	Data type and restrictions	Remarks
				device model.
Port	Index of monitor port.	N/A	Unsigned integer.	N/A
IP	Specify IP for mirroring to interface	Data structure	Members include: <ul style="list-style-type: none"> <li>• <b>DestIP.</b></li> <li>• <b>SrcIP.</b></li> <li>• <b>DSCP.</b></li> <li>• <b>VLAN.</b></li> <li>• <b>VRF.</b></li> </ul>	DestIP and SrcIP must both be specified. DSCP, VLAN and VRF can be optionally specified when DestIP and SrcIP are configured.
DestIP	Destination IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
SrcIP	Source IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
DSCP	DSCP value	N/A	Unsigned integer. Value range: 0 to 63.	N/A
VLAN	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	VRF instance name	N/A	String. Length: 1 to 31 characters.	N/A
Mac	Specify destination MAC for mirroring to interface	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

## MGROUP/ReflectorPort

This table contains information about reflector port of mirroring groups.

### XML structure

```

<MGROUP>
  <ReflectorPort>
    <Group>
      <ID></ID>
      <Port></Port>
    </Group>
  </ReflectorPort>
</MGROUP>

```

### Table description

Item	Description
Feature name	MGROUP

Table name	ReflectorPort
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer Value range: 1 to256.	The range of mirroring group ID depends on the device model.
Port	Index of reflector port.	N/A	Unsigned integer.	N/A

## MGROUP/EgressPort

This table contains information about egress port of mirroring groups.

## XML structure

```

<MGROUP>
  <EgressPort>
    <Group>
      <ID></ID>
      <Port></Port>
    </Group>
  </EgressPort>
</MGROUP>

```

## Table description

Item	Description
Feature name	MGROUP
Table name	EgressPort
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer Value range: 1 to256.	The range of mirroring group ID depends on the device model.
Port	Index of egress port.	N/A	Unsigned integer.	N/A

## MGROUP/ProbeVlan

This table contains information about remote probe VLAN of mirroring groups.

## XML structure

```
<MGROUP>
  <ProbeVlan>
    <Group>
      <ID></ID>
      <VlanID></VlanID>
    </Group>
  </ProbeVlan>
</MGROUP>
```

## Table description

Item	Description
Feature name	MGROUP
Table name	ProbeVlan
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer Value range: 1 to256.	The range of mirroring group ID depends on the device model.
VlanID	Probe VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A

# MGROUP/SourcePorts

This table contains information about source ports of the mirroring group.

## XML structure

```
<MGROUP>
  <SourcePorts>
    <SourcePort>
      <ID></ID>
      <IfIndex></IfIndex>
      <Direction></Direction>
    </SourcePort>
  </SourcePorts>
</MGROUP>
```

## Table description

Item	Description
Feature name	MGROUP
Table name	SourcePorts
Table type	Multi-instance table
Row name	SourcePort
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Mirroring group ID.	Index	Unsigned integer Value range: 1 to256.	The range of mirroring group ID depends on the device model.
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Direction of source port.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Inbound.</li><li>2—Outbound.</li><li>3—Both.</li></ul>	N/A

# MGROUP/Capabilities

This table contains capability information about mirroring group.

## XML structure

```
<MGROUP>
  <Capabilities>
    <MaxGroupNum></MaxGroupNum>
    <SourceType></SourceType>
    <VlanTagMode></VlanTagMode>
    <MultiMonitor></MultiMonitor>
    <Sampler></Sampler>
    <MultiMonitorInOneGroup></MultiMonitorInOneGroup>
  </Capabilities>
</MGROUP>
```

## Table description

Item	Description
Feature name	MGROUP
Table name	Capabilities
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxGroupNum	Max mirroring group number.	N/A	Unsigned integer	The range of mirroring group ID depends on the device model.
SourceType	Mirroring group source type.	N/A	Each bit represents a type as follows: 1—VLAN inbound 2—VLAN outbound 4—CPU inbound 8—CPU outbound	N/A
VlanTagMode	The VLAN tag on the message of the remote source mirroring group.	N/A	Each bit represents a type as follows: 1—Reflector 2—Egress 4—Reflector inner	N/A
MultiMonitor	Whether one port can be the	N/A	Boolean: true—Support	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	source port of multiple mirroring groups.		false—Not support	
Sampler	The mirroring group type which support sampler.	N/A	Each bit represents a type as follows: 1—Local 2—Source 4—Remote destination	N/A
MultiMonitorInOneGroup	Whether one mirroring group supports multiple monitor ports.	N/A	Boolean: true—Support • false—Not support	N/A

# Contents

MLDSnooping .....	1
MLDSnooping/Configuration.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
MLDSnooping/VLANs .....	1
XML structure.....	1
Table description.....	2
Columns.....	2
MLDSnooping/VSI.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
MLDSnooping/FastLeavePorts .....	5
XML structure.....	5
Table description.....	6
Columns.....	6
MLDSnooping/GroupLimitPorts.....	6
XML structure.....	6
Table description.....	7
Columns.....	7



# MLDSnooping

## MLDSnooping/Configuration

This table contains global MLD snooping information.

### XML structure

```
<MLDSnooping>
  <Configuration>
    <Enabled></Enabled>
  </Configuration>
</MLDSnooping>
```

### Table description

Item	Description
Feature name	MLDSnooping
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
Enabled	Set MLD snooping state globally.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>disable</b>(default)</li><li>• <b>enable</b></li></ul>

## MLDSnooping/VLANs

This table contains the MLD snooping information for VLANs.

### XML structure

```
<MLDSnooping>
  <VLANs>
    <VLAN>
      <VLANID></VLANID>
    </VLAN>
  </VLANs>
</MLDSnooping>
```

```

<Enabled></Enabled>
<Version></Version>
<DropUnknown></DropUnknown>
<Querier></Querier>
<QueryInterval></QueryInterval>
<GeneralQuerySourceAddr></GeneralQuerySourceAddr>
<SpecialQuerySourceAddr></SpecialQuerySourceAddr>
<ReportSourceAddr></ReportSourceAddr>
<DoneSourceAddr></DoneSourceAddr>
<Proxy></Proxy>
<QuerierElection></QuerierElection>
</VLAN>
</VLANs>
</MLDSnooping>

```

## Table description

Item	Description
Feature name	MLDSnooping
Table name	VLANs
Table type	Multi-instance table
Row name	VLAN
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID.	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Enabled	Set MLD snooping state for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
Version	Specify the MLD snooping version for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>(default)</li> <li><b>2</b></li> </ul>	N/A
DropUnknown	Set MLD snooping dropping unknown for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
Querier	Set MLD snooping querier for specified	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	VLAN.			
QueryInterval	Specify MLD snooping general query interval for specified VLAN.	N/A	Unsigned integer. Value range: 2 to 31744.	N/A
GeneralQuerySourceAddr	Specify the source IPv6 address of MLD general queries for specified VLAN.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
SpecialQuerySourceAddr	Specify the source IPv6 address for MLD group-specific queries for specified VLAN.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
ReportSourceAddr	Specify the source IPv6 address of MLD reports for the specified VLAN.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
DoneSourceAddr	Specify the source IPv6 address for MLD done messages for the specified VLAN.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
Proxy	Enable MLD snooping proxy for the specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b>(default)</li> <li>• <b>enable</b></li> </ul>	N/A
QuerierElection	Enable MLD snooping querier election for the specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b>(default)</li> <li>• <b>enable</b></li> </ul>	N/A

## MLDSnooping/VSI

This table contains the MLD snooping information for VSIs.

### XML structure

```

<MLDSnooping>
  <VSIs>
    <VSI>
      <VsiName></VsiName>
      <Enabled></Enabled>
      <Version></Version>
      <DropUnknown></DropUnknown>
      <Querier></Querier>
    </VSI>
  </VSIs>
</MLDSnooping>

```

```

<QueryInterval></QueryInterval>
<GeneralQuerySourceAddr></GeneralQuerySourceAddr>
<SpecialQuerySourceAddr></SpecialQuerySourceAddr>
<ReportSourceAddr></ReportSourceAddr>
<DoneSourceAddr></DoneSourceAddr>
<Proxy></Proxy>
<QuerierElection></QuerierElection>
</VSI>
</VSIs>
</MLDSnooping>

```

## Table description

Item	Description
Feature name	MLDSnooping
Table name	VSIs
Table type	Multi-instance table
Row name	VSI
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name.	Index	String. Length: 1 to 31 characters.	N/A
Enabled	Enable MLD snooping for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
Version	Specify the MLD snooping version for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>(default)</li> <li><b>2</b></li> </ul>	N/A
DropUnknown	Enable MLD snooping dropping unknown IPv6 multicast data for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
Querier	Enable the MLD snooping querier for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b>(default)</li> <li><b>enable</b></li> </ul>	N/A
QueryInterval	Set the MLD snooping general query interval for	N/A	Unsigned integer. Value range: 2 to 31744.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the specified VSI.			
GeneralQuerySourceAddr	Specify the source IPv6 address of MLD general queries for the specified VSI.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
SpecialQuerySourceAddr	Specify the source IPv6 address for MLD multicast-address-specific queries for the specified VSI.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
ReportSourceAddr	Specify the source IPv6 address of MLD reports for the specified VSI.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
DoneSourceAddr	Specify the source IPv6 address for MLD done messages for the specified VSI.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
Proxy	Enable MLD snooping proxy for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b>(default)</li> <li>• <b>enable</b></li> </ul>	N/A
QuerierElection	Enable MLD snooping querier election for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b>(default)</li> <li>• <b>enable</b></li> </ul>	N/A

## MLDSnooping/FastLeavePorts

This table contains the MLD snooping fast leave information on ports.

### XML structure

```

<MLDSnooping>
  <FastLeavePorts>
    <Interface>
      <IfIndex></IfIndex>
      <FastLeaveVlanList></FastLeaveVlanList>
    </Interface>
  </FastLeavePorts>
</MLDSnooping>

```

## Table description

Item	Description
Feature name	MLDSnooping
Table name	FastLeavePorts
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
FastLeaveVlanList	Set MLD snooping fast leave for VLANs on a port.	N/A	VLAN list.	Example: 1,2,3,5-8,10-20.

## MLDSnooping/GroupLimitPorts

This table contains the MLD snooping group limit information on ports.

## XML structure

```
<MLDSnooping>
  <GroupLimitPorts>
    <Interface>
      <IfIndex></IfIndex>
      <Limit></Limit>
      <GroupLimitVlanList></GroupLimitVlanList>
    </Interface>
  </GroupLimitPorts>
</MLDSnooping>
```

## Table description

Item	Description
Feature name	MLDSnooping
Table name	GroupLimitPorts
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Limit	Sets the maximum number of multicast groups that a port can join.	Index	Unsigned integer. Value range: 0 to 4294967295.	N/A
GroupLimitVlanList	Set MLD snooping group limit for VLANs on a port.	N/A	VLAN list.	You must specify this column when the operation is merge, create or replace. You can't specify this column when the operation is delete or remove.  Example: 1,2,3,5-8,10-20.

# Contents

MLDSnooping .....	1
MLDSnooping/Configuration.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
MLDSnooping/VLANs .....	1
XML structure.....	1
Table description.....	2
Columns.....	2
MLDSnooping/VSI's .....	3
XML structure.....	3
Table description.....	4
Columns.....	4
MLDSnooping/FastLeavePorts .....	5
XML structure.....	5
Table description.....	5
Columns.....	6
MLDSnooping/GroupLimitPorts.....	6
XML structure.....	6
Table description.....	6
Columns.....	7
MLDSnooping/IPv6Layer2MulticastGroups.....	7
XML structure.....	7
Table description.....	8
Columns.....	8
MLDSnooping/VsIPv6Layer2MulticastGroups .....	9
XML structure.....	9
Table description.....	9
Columns.....	9



# MLDSnooping

## MLDSnooping/Configuration

This table contains global MLD snooping information.

### XML structure

```
<MLDSnooping>
  <Configuration>
    <Enabled></Enabled>
  </Configuration>
</MLDSnooping>
```

### Table description

Item	Description
Feature name	MLDSnooping
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Enabled	Set MLD snooping state globally.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>enable</b></li><li>• <b>disable</b></li></ul>

## MLDSnooping/VLANs

This table contains the MLD snooping information for VLANs.

### XML structure

```
<MLDSnooping>
  <VLANs>
    <VLAN>
      <VLANID></VLANID>
      <Enabled></Enabled>
    </VLAN>
  </VLANs>
</MLDSnooping>
```

```

<Version></Version>
<DropUnknown></DropUnknown>
<Querier></Querier>
<QueryInterval></QueryInterval>
<GeneralQuerySourceAddr></GeneralQuerySourceAddr>
<SpecialQuerySourceAddr></SpecialQuerySourceAddr>
<ReportSourceAddr></ReportSourceAddr>
<DoneSourceAddr></DoneSourceAddr>
<Proxy></Proxy>
<QuerierElection></QuerierElection>
</VLAN>
</VLANs>
</MLDSnooping>

```

## Table description

Item	Description
Feature name	MLDSnooping
Table name	VLANs
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID.	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Enabled	Set MLD snooping state for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>enable</b></li> <li><b>disable</b></li> </ul>	N/A
Version	Specify the MLD snooping version for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b></li> <li><b>2</b></li> </ul>	N/A
DropUnknown	Set MLD snooping dropping unknown for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>enable</b></li> <li><b>disable</b></li> </ul>	N/A
Querier	Set MLD snooping querier for specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>enable</b></li> <li><b>disable</b></li> </ul>	N/A
QueryInterval	Specify MLD snooping general	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	query interval for specified VLAN.		Value range: 2 to 31744.	
GeneralQuerySourceAddr	Specify the source IPv6 address of MLD general queries for specified VLAN.	N/A	Hexadecimal string, colon-separated.	Example: FE80:1::1:1.
SpecialQuerySourceAddr	Specify the source IPv6 address for MLD group-specific queries for specified VLAN.	N/A	Hexadecimal string, colon-separated.	Example: FE80:1::1:1.
ReportSourceAddr	Specify the source IPv6 address of MLD reports for the specified VLAN.	N/A	Hexadecimal string, colon-separated.	Example: FE80:1::1:1.
DoneSourceAddr	Specify the source IPv6 address for MLD done messages for the specified VLAN.	N/A	Hexadecimal string, colon-separated.	Example: FE80:1::1:1.
Proxy	Enable MLD snooping proxy for the specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b></li> <li>• <b>enable</b></li> </ul>	N/A
QuerierElection	Enable MLD snooping querier election for the specified VLAN.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b></li> <li>• <b>enable</b></li> </ul>	N/A

## MLDSnooping/VSI

This table contains the MLD snooping information for VSIs.

### XML structure

```

<MLDSnooping>
  <VSIs>
    <VSI>
      <VsiName></VsiName>
      <Enabled></Enabled>
      <Version></Version>
      <DropUnknown></DropUnknown>
      <Querier></Querier>
      <QueryInterval></QueryInterval>
      <GeneralQuerySourceAddr></GeneralQuerySourceAddr>
      <SpecialQuerySourceAddr></SpecialQuerySourceAddr>
    </VSI>
  </VSIs>
</MLDSnooping>

```

```

    <ReportSourceAddr></ReportSourceAddr>
    <DoneSourceAddr></DoneSourceAddr>
    <Proxy></Proxy>
    <QuerierElection></QuerierElection>
  </VSI>
</VSIs>
</MLDSnooping>

```

## Table description

Item	Description
Feature name	MLDSnooping
Table name	VSIs
Table type	Multi-instance table
Row name	VSI
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name.	Index	String. Length: 1 to 31 characters.	N/A
Enabled	Enable MLD snooping for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b></li> <li><b>enable</b></li> </ul>	N/A
Version	Specify the MLD snooping version for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b></li> <li><b>2</b></li> </ul>	N/A
DropUnknown	Enable MLD snooping dropping unknown IPv6 multicast data for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b></li> <li><b>enable</b></li> </ul>	N/A
Querier	Enable the MLD snooping querier for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>disable</b></li> <li><b>enable</b></li> </ul>	N/A
QueryInterval	Set the MLD snooping general query interval for the specified VSI.	N/A	Unsigned integer. Value range: 2 to 31744.	N/A
GeneralQuerierSourceAddr	Specify the source IPv6 address of MLD	N/A	Hexadecimal string, colon-separated.	Example: FE80:1::1:1.

Column name	Column description	Column type	Data type and restrictions	Remarks
	general queries for the specified VSI.			
SpecialQuery SourceAddr	Specify the source IPv6 address for MLD multicast-address-specific queries for the specified VSI.	N/A	Hexadecimal string, colon-separated.	Example: FE80:1::1:1.
ReportSource Addr	Specify the source IPv6 address of MLD reports for the specified VSI.	N/A	Hexadecimal string, colon-separated.	Example: FE80:1::1:1.
DoneSourceAddr	Specify the source IPv6 address for MLD done messages for the specified VSI.	N/A	Hexadecimal string, colon-separated.	Example: FE80:1::1:1.
Proxy	Enable MLD snooping proxy for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b></li> <li>• <b>enable</b></li> </ul>	N/A
QuerierElection	Enable MLD snooping querier election for the specified VSI.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>disable</b></li> <li>• <b>enable</b></li> </ul>	N/A

## MLDSnooping/FastLeavePorts

This table contains the MLD snooping fast leave information on ports.

### XML structure

```

<MLDSnooping>
  <FastLeavePorts>
    <Interface>
      <IfIndex></IfIndex>
      <FastLeaveVlanList></FastLeaveVlanList>
    </Interface>
  </FastLeavePorts>
</MLDSnooping>

```

### Table description

Item	Description
Feature name	MLDSnooping

Item	Description
Table name	FastLeavePorts
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
FastLeaveVlanList	Set MLD snooping fast leave for VLANs on a port.	N/A	VLAN list.	Example: 1,2,3,5-8,10-20.

## MLDSnooping/GroupLimitPorts

This table contains the MLD snooping group limit information on ports.

## XML structure

```

<MLDSnooping>
  <GroupLimitPorts>
    <Interface>
      <IfIndex></IfIndex>
      <Limit></Limit>
      <GroupLimitVlanList></GroupLimitVlanList>
    </Interface>
  </GroupLimitPorts>
</MLDSnooping>

```

## Table description

Item	Description
Feature name	MLDSnooping
Table name	GroupLimitPorts
Table type	Multi-instance table

Item	Description
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Limit	Sets the maximum number of multicast groups that a port can join.	Index	Unsigned integer. Value range: 0 to 4294967295.	N/A
GroupLimitVlanList	Set MLD snooping group limit for VLANs on a port.	N/A	VLAN list.	Example: 1,2,3,5-8,10-20.

## MLDSnooping/IPv6Layer2MulticastGroups

This table contains information about Layer 2 IPv6 multicast groups for VLANs.

## XML structure

```

<MLDSnooping>
  <IPv6Layer2MulticastGroups>
    <VLAN>
      <VLANID></VLANID>
      <GroupAddr></GroupAddr>
      <SourceAddr></SourceAddr>
      <IfIndex></IfIndex>
      <PortAttribute></PortAttribute>
    </VLAN>
  </IPv6Layer2MulticastGroups>
</MLDSnooping>

```

## Table description

Item	Description
Feature name	MLDSnooping
Table name	IPv6Layer2MulticastGroups
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID.	Index	Unsigned integer. Value range: 1 to 4094.	N/A
GroupIpAddr	IPv6 multicast address.	Index	Hexadecimal string, colon-separated.	N/A
SourcelpAddr	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A
IfIndex	Interface IfIndex.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
PortAttribute	Port attribute.	N/A	Each bit represents a port attribute. Values: <ul style="list-style-type: none"> <li>1—Learned from MLD packets.</li> <li>2—Learned from MLD packets with Exclude filter mode.</li> <li>4—Configured statically.</li> <li>8—Learned from IPv6 PIM packets.</li> <li>16—Obtained from the kernel.</li> <li>32—Learned from (*, *) entries.</li> <li>64—Learned from (*, G) entries.</li> <li>128—Processed successfully.</li> <li>256—Failed to being processed.</li> <li>512—TRILL port that floods IPv6 multicast</li> </ul>	Examples: <ul style="list-style-type: none"> <li>129—means a port learned from MLD packets and processed successfully.</li> <li>136—means a port learned from IPv6 PIM packets and processed successfully.</li> </ul>



Column name	Column description	Column type	Data type and restrictions	Remarks
			data after the topology changes in VLAN.	

## MLDSnooping/VsiIPv6Layer2MulticastGroups

This table contains information about Layer 2 IPv6 multicast groups for VSIs.

### XML structure

```

<MLDSnooping>
  <VsiIPv6Layer2MulticastGroups>
    <VSI>
      <VsiName></VsiName>
      <GroupAddr></GroupAddr>
      <SourceAddr></SourceAddr>
      <LinkID></LinkID>
      <PortAttribute></PortAttribute>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
    </VSI>
  </VsiIPv6Layer2MulticastGroups>
</MLDSnooping>

```

### Table description

Item	Description
Feature name	MLDSnooping
Table name	VsiIPv6Layer2MulticastGroups
Table type	Multi-instance table
Row name	VSI
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name.	Index	String. Length: 1 to 31 characters.	N/A
GroupAddr	IPv6 multicast address.	Index	Hexadecimal string, colon-separated.	N/A
SourceAddr	IPv6 address.	Index	Hexadecimal string, colon-separated.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LinkID	Link ID.	Index	Unsigned integer.	N/A
PortAttribute	Port attribute.	N/A	<p>Each bit represents a port attribute.</p> <p>Values:</p> <ul style="list-style-type: none"> <li>1—Learned from MLD packets.</li> <li>2—Learned from MLD packets with Exclude filter mode.</li> <li>8—Learned from IPv6 PIM packets.</li> <li>16—Obtained from the kernel.</li> <li>32—Learned from (*, *) entries.</li> <li>64—Learned from (*, G) entries.</li> <li>128—Processed successfully.</li> <li>256—Failed to being processed.</li> <li>512—TRILL port that floods IPv6 multicast data after the topology changes in VLAN.</li> <li>1024—Learned from EVPN BGP route.</li> <li>2048—Port in Exclude filter-mode and learned from EVPN BGP route.</li> </ul>	<p>Examples:</p> <ul style="list-style-type: none"> <li>129—means a port learned from MLD packets and processed successfully.</li> <li>1152—means a port learned from EVPN BGP route and processed successfully.</li> </ul>
IfIndex	Interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
SrvID	Ethernet service instance ID.	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 4096.</p>	The value is 0 if the interface is not a Layer 2 Ethernet interface.

# Contents

MLDSnooping .....	2
MLDSnooping/Configuration.....	2
MLDSnooping/VLANs .....	2
MLDSnooping/VSI.....	3
MLDSnooping/FastLeavePorts .....	3
MLDSnooping/GroupLimitPorts.....	4
MLDSnooping/Ipv6Layer2MulticastGroups .....	4
MLDSnooping/ VSIIPv6Layer2MulticastGroups .....	4

# MLDSnooping

## MLDSnooping/Configuration

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。
MLD snooping is disabling globally. 全局MLD snooping正在去使能。	During executing set operation to enable global MLD snooping, MLD snooping is disabling globally. 使能全局MLD snooping时，全局MLD snooping正在去使能。

## MLDSnooping/VLANs

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。
MLD snooping drop-unknown is enabled globally. 全局MLD snooping已配置drop-unknown。	During executing set operation to enable drop-unknown for this VLAN, MLD snooping drop-unknown is enabled globally. 使能VLAN内drop-unknown时，全局drop-unknown已经使能。
MLD snooping is disabled on the VLAN. VLAN未使能MLD snooping。	During executing set operation for this VLAN, MLD snooping is disabled on the VLAN. 对该VLAN进行设置时，VLAN未使能MLD snooping。
MLD snooping is disabled globally. 全局MLD snooping未使能。	During executing set operation for this VLAN, MLD snooping is disabled globally. 对该VLAN进行设置时，全局MLD snooping未使能。
Invalid source address of general queries. 通用查询报文源IP地址错误。	During executing set operation for GeneralQuerySourceAddr of this VLAN, the value of GeneralQuerySourceAddr is invalid. 对该VLAN内GeneralQuerySourceAddr进行设置时，GeneralQuerySourceAddr值错误。
Invalid source address of group-specific queries. 特定组查询报文源IP地址错误。	During executing set operation for SpecialQuerySourceAddr of this VLAN, the value of SpecialQuerySourceAddr is invalid. 对该VLAN内SpecialQuerySourceAddr进行设置时，SpecialQuerySourceAddr值错误。
Invalid source address of reports. Report报文源IP地址错误。	During executing set operation for ReportSourceAddr of this VLAN, the value of ReportSourceAddr is invalid. 对该VLAN内ReportSourceAddr进行设置时，ReportSourceAddr值错误。
Invalid source address of done messages. Done报文源IP地址错误。	During executing set operation for DoneSourceAddr of this VLAN, the value of DoneSourceAddr is invalid. 对该VLAN内DoneSourceAddr进行设置时，DoneSourceAddr值错误。

# MLDSnooping/VSI

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。
MLD snooping drop-unknown is enabled globally. 全局MLD snooping已配置drop-unknown。	During executing set operation to enable drop-unknown for this VSI, MLD snooping drop-unknown is enabled globally. 使能VSI内drop-unknown时，全局drop-unknown已经使能。
MLD snooping is disabled on the VSI. VSI未使能MLD snooping。	During executing set operation for this VSI, MLD snooping is disabled on the VSI. 对该VSI进行设置时，VSI未使能MLD snooping。
MLD snooping is disabled globally. 全局MLD snooping未使能。	During executing set operation for this VSI, MLD snooping is disabled globally. 对该VSI进行设置时，全局MLD snooping未使能。
Invalid source address of general queries. 通用查询报文源IP地址错误。	During executing set operation for GeneralQuerySourceAddr of this VSI, the value of GeneralQuerySourceAddr is invalid. 对该VSI内GeneralQuerySourceAddr进行设置时，GeneralQuerySourceAddr值错误。
Invalid source address of group-specific queries. 特定组查询报文源IP地址错误。	During executing set operation for SpecialQuerySourceAddr of this VSI, the value of SpecialQuerySourceAddr is invalid. 对该VSI内SpecialQuerySourceAddr进行设置时，SpecialQuerySourceAddr值错误。
Invalid source address of reports. Report报文源IP地址错误。	During executing set operation for ReportSourceAddr of this VSI, the value of ReportSourceAddr is invalid. 对该VSI内ReportSourceAddr进行设置时，ReportSourceAddr值错误。
Invalid source address of done messages. Done报文源IP地址错误。	During executing set operation for DoneSourceAddr of this VSI, the value of DoneSourceAddr is invalid. 对该VSI内DoneSourceAddr进行设置时，DoneSourceAddr值错误。

# MLDSnooping/FastLeavePorts

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get或者set操作时，守护进程收到了错误的消息类型。
MLD snooping is disabled globally. 全局MLD snooping未使能。	During executing set operation, MLD snooping is disabled globally. 对该表进行配置时，全局 MLD snooping 未使能。

## MLDSnooping/GroupLimitPorts

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。
MLD snooping is disabled globally. 全局MLD snooping未使能。	During executing set operation, MLD snooping is disabled globally. 对该表进行配置时，全局 MLD snooping 未使能。
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	GroupLimitVLANList can't be removed alone, and should be removed together with Limit. GroupLimitVLANList不能单独删除，需要和Limit一起删除。

## MLDSnooping/Ipv6Layer2MulticastGroups

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。

## MLDSnooping/ VSIIPv6Layer2MulticastGroups

Message	Explanation
Invalid message type. 配置消息错误。	During executing get or set operation, daemon receives invalid message type. Get 或者 set 操作时，守护进程收到了错误的消息类型。

---

# Contents

- MODEM..... ]
- MODEM/ModemEnable..... ]
- XML structure..... ]
- Table description..... ]
- Columns..... ]

# MODEM

## MODEM/ModemEnable

This table contains information about modem call direction.

### XML structure

```
<MODEM>
  <ModemEnable>
    <Enable>
      <IfIndex></IfIndex>
      <CallType></CallType>
    </Enable>
  </ModemEnable>
</MODEM>
```

### Table description

Item	Description
Feature name	MODEM
Table name	ModemEnable
Table type	Multi-instance table
Row name	Enable
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	This table supports interface types: Asynchronous serial port; Synchronous serial port in asynchronous way; AM interface/TTY subscriber line view; AUX interface/AUX subscribe line view. Some versions support



Column name	Column description	Column type	Data type and restrictions	Remarks
				interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
CallType	Modem call direction	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—none(default).</li> <li>• 1—call-in.</li> <li>• 2—call-out</li> <li>• 3—both.</li> </ul>	N/A

---

# Contents

- MODEM..... ]
- MODEM/ModemEnable..... ]
- XML structure..... ]
- Table description..... ]
- Columns..... ]

# MODEM

## MODEM/ModemEnable

This table contains information about modem call direction.

### XML structure

```
<MODEM>
  <ModemEnable>
    <Enable>
      <IfIndex></IfIndex>
      <CallType></CallType>
    </Enable>
  </ModemEnable>
</MODEM>
```

### Table description

Item	Description
Feature name	MODEM
Table name	ModemEnable
Table type	Multi-instance table
Row name	Enable
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	This table supports interface types: Asynchronous serial port; Synchronous serial port in asynchronous way; AM interface/TTY subscriber line view; AUX interface/AUX subscribe line view. Some versions support interface name. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
CallType	Modem call direction	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—none.</li> <li>• 1—call-in.</li> <li>• 2—call-out</li> <li>• 3—both.</li> </ul>	N/A

# Contents

ModuleProxy .....	1
ModuleProxy/Global .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ModuleProxy/Job .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
ModuleProxy/Schedule .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
ModuleProxy/DeleteJob .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
ModuleProxy/DeleteSchedule .....	4
XML structure .....	4
Table description .....	4
Columns .....	5

# ModuleProxy

## ModuleProxy/Global

This table contains information of global.

### XML structure

```
<ModuleProxy>
  <Global>
    <WorkMode></WorkMode>
  </Global>
</ModuleProxy>
```

### Table description

Item	Description
Feature name	ModuleProxy
Table name	Global
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
WorkMode	Work mode of device.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—default</li><li>1—brige</li><li>2—route</li></ul>	N/A

## ModuleProxy/Job

This table contains job information.

### XML structure

```
<ModuleProxy>
```

```

<Job>
  <Name></Name>
  <Command>
    <Id></Id>
    <CommandString><CommandString>
  </Command>
</Job>
</ModuleProxy>

```

## Table description

Item	Description
Feature name	ModuleProxy
Table name	Job
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Job name.	N/A	String, case-insensitive. Length: 1 to 47 characters.	N/A
Command	String of execute based on time.	Data structure	Contains Id and CommandString	N/A
Id	Command Id.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
CommandString	Command String.	N/A	String, case-insensitive. Length: 1 to 512 characters.	N/A

## ModuleProxy/Schedule

This table contains Schedule information.

## XML structure

```

<ModuleProxy>
  <Schedule>

```

```

    <Name></Name>
    <JobName></JobName>
    <TimeString><TimeString>
  </Schedule>
</ModuleProxy>

```

## Table description

Item	Description
Feature name	ModuleProxy
Table name	Schedule
Table type	Single-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Schedule name.	N/A	String, case-insensitive. Length: 1 to 47 characters.	N/A
JobName	Job name.	N/A	String, case-insensitive. Length: 1 to 47 characters.	N/A
TimeString	Time String.	N/A	String, case-insensitive. Length: 1 to 512 characters.	N/A

## ModuleProxy/DeleteJob

This table delete job information.

## XML structure

```

<ModuleProxy>
  <DeleteJob>
    <Name></Name>
  </DeleteJob>
</ModuleProxy>

```



## Table description

Item	Description
Feature name	ModuleProxy
Table name	DeleteJob
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Job name.	N/A	String, case-insensitive. Length: 1 to 47 characters.	N/A

## ModuleProxy/DeleteSchedule

This table delete Schedule information.

## XML structure

```
<ModuleProxy>
  <DeleteSchedule>
    <Name></Name>
  </DeleteSchedule>
</ModuleProxy>
```

## Table description

Item	Description
Feature name	ModuleProxy
Table name	DeleteSchedule
Table type	Single-instance table
Row name	AP
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Schedule name.	N/A	String, case-insensitive. Length: 1 to 47 characters.	N/A

# Contents

ModuleProxy .....	1
ModuleProxy/Global .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ModuleProxy/ContainerPort .....	2
XML structure .....	2
Table description .....	2
Columns .....	3

# ModuleProxy

## ModuleProxy/Global

This table contains the informations of global.

### XML structure

```
<ModuleProxy>
  <Global>
    <WorkMode></WorkMode>
    <Sample></Sample>
    <EnergySaving></EnergySaving>
  </Global>
</ModuleProxy>
```

### Table description

Item	Description
Feature name	ModuleProxy
Table name	Global
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
WorkMode	Work mode of device.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—default</li><li>1—brige</li><li>2—route</li></ul>	N/A
Sample	Sampling at regular time.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Support.</li><li>false—Not support.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
EnergySaving	Green energy saving.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A

## ModuleProxy/ContainerPort

This table contains container information.

### XML structure

```

<ModuleProxy>
  <ContainerPort>
    <Container>
      <Name></Name>
      <PoeIndex></PoeIndex>
      <PoePortInfo></PoePortInfo>
    </Container>
  </ContainerPort>
</ModuleProxy>

```

### Table description

Item	Description
Feature name	ModuleProxy
Table name	ContainerPort
Table type	Multi-instance table
Row name	Container
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Container name.	Index	String, lowercase. Length: 1 to 64 characters.	If this column contains uppercase character, it will be converted to lowercase automatically.
PoeIndex	Port of the container.	N/A	Port of the container.	N/A
PoePortInfo	PoE information.	N/A	String. Length: 1 to 255 characters.	N/A

# Contents

ModuleProxy .....	1
ModuleProxy/Global .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ModuleProxy/HistoryStatistics/Interfaces .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
ModuleProxy/HistoryStatistics/AP .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
ModuleProxy/APStatistics .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
ModuleProxy/ContainerPort .....	6
XML structure .....	6
Table description .....	6
Columns .....	7

# ModuleProxy

## ModuleProxy/Global

This table contains the informations of global.

### XML structure

```
<ModuleProxy>
  <Global>
    <WorkMode></WorkMode>
    <Sample></Sample>
    <EnergySaving></EnergySaving>
  </Global>
</ModuleProxy>
```

### Table description

Item	Description
Feature name	ModuleProxy
Table name	Global
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
WorkMode	Work mode of device.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—default</li><li>1—brige</li><li>2—route</li></ul>	N/A
Sample	Sampling at regular time.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Support.</li><li>false—Not support.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
EnergySaving	Green energy saving.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Support.</li> <li>false—Not support.</li> </ul>	N/A

## ModuleProxy/HistoryStatistics/Interfaces

This table contains interfaces information of history statistics.

### XML structure

```

<ModuleProxy>
  <HistoryStatistics>
    <Interfaces>
      <Interface>
        <IfIndex></IfIndex>
        <Name></Name>
        <InPkts></InPkts>
        <OutPkts></OutPkts>
        <InOctets></InOctets>
        <OutOctets></OutOctets>
        <RecordTime></RecordTime>
      </Interface>
    </Interfaces>
  </HistoryStatistics>
</ModuleProxy>

```

### Table description

Item	Description
Feature name	ModuleProxy
Table name	HistoryStatistics
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	The Index of interface.	Index	Unsigned Integer. Value range: 0 to 65535.	N/A
Name	The name of interface.	N/A	String, lowercase. Length: 2 to 47 characters.	If this column contains uppercase character, it will be converted to lowercase automatically.
InPkts	Enter the number of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutPkts	The number of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
InOctets	Enter the bytes of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutOctets	The bytes of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
RecordTime	The date of the record flow.	N/A	Format: YYYY-MM-DD. Value range: 1970-01-01 to 2100-12-31.	N/A

## ModuleProxy/HistoryStatistics/AP

This table contains AP information of history statistics.

### XML structure

```
<ModuleProxy>
  <HistoryStatistics>
    <APs>
      <AP>
        <Name></Name>
        <InPkts></InPkts>
        <OutPkts></OutPkts>
        <InOctets></InOctets>
        <OutOctets></OutOctets>
        <RecordTime></RecordTime>
```

```

        </AP>
    </APs>
</HistoryStatistics>
</ModuleProxy>

```

## Table description

Item	Description
Feature name	ModuleProxy
Table name	HistoryStatistics
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name.	Index	String, lowercase. Length: 1 to 64 characters.	If this column contains uppercase character, it will be converted to lowercase automatically.
InPkts	Enter the number of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutPkts	The number of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
InOctets	The number of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutOctets	The bytes of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
RecordTime	The date of the record flow.	N/A	Format: YYYY-MM-DD. Value range: 1970-01-01 to 2100-12-31.	N/A

# ModuleProxy/APStatistics

This table contains statistics information of AP.

## XML structure

```
<ModuleProxy>
  <APStatistics>
    <AP>
      <Name></Name>
      <InPkts></InPkts>
      <OutPkts></OutPkts>
      <InOctets></InOctets>
      <OutOctets></OutOctets>
    </AP>
  </APStatistics>
</ModuleProxy>
```

## Table description

Item	Description
Feature name	ModuleProxy
Table name	APStatistics
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name.	Index	String, lowercase. Length: 1 to 64 characters.	If this column contains uppercase character, it will be converted to lowercase automatically.
InPkts	Enter the number of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutPkts	The number of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
InOctets	The number of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutOctets	The bytes of packets in the direction.	N/A	Unsigned Integer. Value range: 0 to $2^{64} - 1$ .	N/A

## ModuleProxy/ContainerPort

This table contains container information.

### XML structure

```

<ModuleProxy>
  <ContainerPort>
    <Container>
      <Name></Name>
      <PoeIndex></PoeIndex>
      <PoePortInfo></PoePortInfo>
    </Container>
  </ContainerPort>
</ModuleProxy>

```

### Table description

Item	Description
Feature name	ModuleProxy
Table name	ContainerPort
Table type	Multi-instance table
Row name	Container
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Container name.	Index	String, lowercase. Length: 1 to 64 characters.	If this column contains uppercase characters, it will be converted to lowercase automatically.
PoeIndex	Port of the container.	N/A	Unsigned short.	N/A
PoePortInfo	PoE information.	N/A	String. Length: 1 to 255 characters.	N/A

# Contents

- MPLS .....1
  - MPLS/ResetTETunnelStatistics .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# MPLS

## MPLS/ResetTETunnelStatistics

This table is used to reset TE tunnel statistics.

### XML structure

```
<MPLS>
  <ResetTETunnelStatistics>
    <ResetTETunnelStatistic>
      <TunnelID></TunnelID>
    </ResetTETunnelStatistic>
  </ResetTETunnelStatistics>
</MPLS>
```

### Table description

Item	Description
Feature name	MPLS
Table name	ResetTETunnelStatistics
Table type	Single-instance table
Row name	ResetTETunnelStatistic
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer.	The tunnel interface number



# Contents

MPLS .....	1
MPLS/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MPLS/Interfaces .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
MPLS/TunnelPolicies .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
MPLS/PreferredTunnelPolicies .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
MPLS/TunnelMbdfs .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
MPLS/StaticEgressLSPs .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
MPLS/StaticIngressLSPs .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
MPLS/StaticTransitLSPs .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
MPLS/StaticSRLSPs .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
MPLS/StaticSRAdjacencies .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
MPLS/StaticSRPrefixs .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
MPLS/MPLSVRF .....	13
XML structure .....	13
Table description .....	13
Columns .....	13

# MPLS

## MPLS/Base

This table contains global MPLS information.

### XML structure

```
<MPLS>
  <Base>
    <LSRID></LSRID>
    <CBTSStatInterval></CBTSStatInterval>
  </Base>
</MPLS>
```

### Table description

Item	Description
Feature name	MPLS
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSRID	The LSR ID.	N/A	String, dotted decimal notation.	N/A
CBTSStatInterval	CBTS statistics collection interval in seconds	N/A	Unsigned short. Value range: 5~65535. The default value is 5.	N/A

## MPLS/Interfaces

This table contains MPLS interface information.

### XML structure

```
<MPLS>
  <Interfaces>
    <Interface>
```

```

    <IfIndex></IfIndex>
    <Enable></Enable>
  </Interface>
</Interfaces>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only L3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Enable	Enable MPLS	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default).</li> </ul>	N/A

## MPLS/TunnelPolicies

This table contains Tunnel policy information.

## XML structure

```

<MPLS>
  <TunnelPolicies>
    <TunnelPolicy>

```

```

    <PolicyName></PolicyName>
    <Default></Default>
    <Sequence>
        <Strict></Strict>
        <PrefLspType></PrefLspType>
        <LoadBalancingNum></LoadBalancingNum>
    </Sequence>
</TunnelPolicy>
</TunnelPolicies>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	TunnelPolicies
Table type	Multi-instance table
Row name	TunnelPolicy
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the tunnel policy	Index	String. Length: 1 to 19 characters.	N/A
Default	The default tunnel policy	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default).</li> </ul>	N/A
Sequence	Tunnel selection setting	N/A	Members include: <ul style="list-style-type: none"> <li>PrefLspType.</li> <li>LoadBalancingNum.</li> </ul>	The members of PrefLspType and LoadBalancingNum must be specified.
Strict	Using only one type of tunnels for load balancing	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default).</li> </ul>	N/A
PrefLspType	Preferred tunnel type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—LSP.</li> <li>1—GRE.</li> <li>2—CR-LSP.</li> <li>3—SR-LSP.</li> </ul>	Up to 4 repeats are allowed for PrefLspType. Support for GRE depends on the device model.
LoadBalancingNum	Number of tunnels for load balancing	N/A	Unsigned integer. The value range varies by	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			device model.	

## MPLS/PreferredTunnelPolicies

This table contains preferred tunnel information in a tunnel policy.

### XML structure

```

<MPLS>
  <PreferredTunnelPolicies>
    <PreferredTunnelPolicy>
      <PolicyName></PolicyName>
      <TunnelType></TunnelType>
      <TunnelID></TunnelID>
    </PreferredTunnelPolicy>
  </PreferredTunnelPolicies>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	PreferredTunnelPolicies
Table type	Multi-instance table
Row name	PreferredTunnelPolicy
Restrictions	N/A
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of tunnel policy	Index	String. Length: 1 to 19 characters.	N/A
TunnelType	Preferred tunnel type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—TUNNEL.</li> <li>1—TUNNEL-BUNDLE.</li> </ul>	N/A
TunnelID	Tunnel ID.	Index	Unsigned integer.	N/A

## MPLS/TunnelMbdfs

This table contains MBFD Tunnel interface information.

# XML structure

```
<MPLS>
  <TunnelMbfs>
    <TunnelMbfd>
      <TunnelID></TunnelID>
      <Enable></Enable>
      <LocalDiscriminator></LocalDiscriminator>
      <RemoteDiscriminator></RemoteDiscriminator>
      <Echo></Echo>
      <Template></Template>
      <BackupTemplate></BackupTemplate>
    </TunnelMbfd>
  </TunnelMbfs>
</MPLS>
```

## Table description

Item	Description
Feature name	MPLS
Table name	TunnelMbfs
Table type	Multi-instance table
Row name	TunnelMbfd
Restrictions	Applicable to only MPLS TE tunnel interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID.	Index	Unsigned integer.	N/A
Enable	Enable MBFD	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled(default).</li></ul>	N/A
LocalDiscriminator	Local discriminator of the MBFD session	N/A	Unsigned integer.	The value range varies by device model.
RemoteDiscriminator	Remote discriminator of the MBFD session	N/A	Unsigned integer. Value range: 1 to 4294967295.	
Template	The MBFD parameter of main LSP	N/A	String. Length: 1 to 63 characters.	When has no BackupTemplate, the template also apply to backup

Column name	Column description	Column type	Data type and restrictions	Remarks
				LSP.
BackupTemplate	The MBFD parameter of backup LSP	N/A	String. Length: 1 to 63 characters.	N/A

## MPLS/StaticEgressLSPs

This table contains static egress LSP information.

### XML structure

```

<MPLS>
  <StaticEgressLSPs>
    <StaticEgressLSP>
      <LSPName></LSPName>
      <InLabel></InLabel>
    </StaticEgressLSP>
  </StaticEgressLSPs>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	StaticEgressLSPs
Table type	Multi-instance table
Row name	StaticEgressLSP
Restrictions	This table supports only global configurations.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSPName	Name of static LSP.	Index	String. Length: 1 to 15 characters..	N/A
InLabel	LSP incoming label	N/A	Unsigned integer. The value range varies by device model.	No modification.

# MPLS/StaticIngressLSPs

This table contains static ingress LSP information.

## XML structure

```
<MPLS>
  <StaticIngressLSPs>
    <StaticIngressLSP>
      <LSPName></LSPName>
      <OutLabel></OutLabel>
      <DestAddress></DestAddress>
      <DestWildcardMask></DestWildcardMask>
      <NextHop></NextHop>
      <OutIfIndex></OutIfIndex>
    </StaticIngressLSP>
  </StaticIngressLSPs>
</MPLS>
```

## Table description

Item	Description
Feature name	MPLS
Table name	StaticIngressLSPs
Table type	Multi-instance table
Row name	StaticIngressLSP
Restrictions	This table supports only global configurations.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSPName	Name of static LSP.	Index	String. Length: 1 to 15 characters..	N/A
OutLabel	LSP outgoing label	N/A	Unsigned integer.	This column must be specified.
DestAddress	IPv4 LSP destination address	N/A	String, dotted decimal notation.	The member of DestWildcardMask must also be specified.
DestWildcardMask	<b>Mask of the</b> IPv4 LSP destination address	N/A	String, dotted decimal notation.	The member of DestAddress must also be specified.
NextHop	LSP next hop address	N/A	String, dotted decimal notation.	One and only one of this column



Column name	Column description	Column type	Data type and restrictions	Remarks
				and OutIfIndex must be specified.
				One and only one of this column or NextHop must be specified.
				Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OutIfIndex	LSP outgoing interface index	N/A	Unsigned integer.	

## MPLS/StaticTransitLSPs

This table contains static transit LSP information.

### XML structure

```

<MPLS>
  <StaticTransitLSPs>
    <StaticTransitLSP>
      <LSPName></LSPName>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <NextHop></NextHop>
      <OutIfIndex></OutIfIndex>
    </StaticTransitLSP>
  </StaticTransitLSPs>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	StaticTransitLSPs
Table type	Multi-instance table
Row name	StaticTransitLSP
Restrictions	This table supports only global configurations.

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSPName	Name of static LSP.	Index	String. Length: 1 to 15 characters..	N/A
InLabel	LSP incoming label	N/A	Unsigned integer.	This column must be specified.
OutLabel	LSP outgoing label	N/A	Unsigned integer.	This column must be specified.
NextHop	LSP next hop address	N/A	String, dotted decimal notation.	One and only one of this column and OutIfIndex must be specified.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OutIfIndex	LSP outgoing interface index	N/A	Unsigned integer.	

## MPLS/StaticSRLSPs

This table contains static segment routing LSP information.

### XML structure

```

<MPLS>
  <StaticSRLSPs>
    <StaticSRLSP>
      <LSPName></LSPName>
      <OutLabel></OutLabel>
    </StaticSRLSP>
  </StaticSRLSPs>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	StaticSRLSPs
Table type	Multi-instance table
Row name	StaticSRLSP
Restrictions	This table supports only global configurations.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSPName	Name of static segment routing LSP.	Index	String. Length: 1 to 15 characters.	N/A
OutLabel	LSP outgoing label	N/A	Unsigned integer.	This column must be specified, and allow repeat.

## MPLS/StaticSRAdjacencies

This table contains static segment routing adjacency information.

## XML structure

```
<MPLS>
  <StaticSRAdjacencies>
    <StaticSRAdjacency>
      <AdjName></AdjName>
      <InLabel></InLabel>
      <NextHop></NextHop>
      <OutIfIndex></OutIfIndex>
    </StaticSRAdjacency>
  </StaticSRAdjacencies>
</MPLS>
```

## Table description

Item	Description
Feature name	MPLS
Table name	StaticSRAdjacencies

Table type	Multi-instance table
Row name	StaticSRAdjacency
Restrictions	This table supports only global configurations.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdjName	Name of static segment routing adjacency.	Index	String. Length: 1 to 15 characters.	N/A
InLabel	Adjacency incoming label	N/A	Unsigned integer.	This column must be specified.
NextHop	Adjacency next hop address	N/A	String, dotted decimal notation.	One and only one of this column and OutIfIndex must be specified.
OutIfIndex	Adjacency outgoing interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## MPLS/StaticSRPrefixs

This table contains static segment routing prefix information.

## XML structure

```

<MPLS>
  <StaticSRPrefixs>
    <StaticSRPrefix>
      <PrefixName></PrefixName>
      <DestAddress></DestAddress>
      <DestMask></DestMask>
      <InLabel></InLabel>
      <NextHop></NextHop>
      <OutIfIndex></OutIfIndex>
      <OutLabel></OutLabel>
    </StaticSRPrefix>
  </StaticSRPrefixs>
</MPLS>

```

```

    </StaticSRPrefix>
  </StaticSRPrefixs>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	StaticSRPrefixs
Table type	Multi-instance table
Row name	StaticSRPrefix
Restrictions	This table supports only global configurations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PrefixName	Name of static segment routing prefix.	Index	String. Length: 1 to 15 characters.	N/A
DestAddress	IPv4 prefix destination address	Index	String, dotted decimal notation.	N/A
DestMask	Prefix destination address mask	Index	Unsigned integer.	N/A
InLabel	Prefix incoming label	Index	Unsigned integer.	This column must be specified.
NextHop	Prefix next hop address	Index	String, dotted decimal notation.	One and only one of this column and OutIfIndex must be specified.  One and only one of this column and NextHop must be specified.
OutIfIndex	Prefix outgoing interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OutLabel	Prefix outgoing label	N/A	Unsigned integer.	This column must be specified, and

Column name	Column description	Column type	Data type and restrictions	Remarks
				allow repeat.

## MPLS/MPLSVRF

This table contains MPLS VRF information.

### XML structure

```

<MPLS>
  <MPLSVRFs>
    <MPLSVRF>
      <VRF></VRF>
      <Statistics></Statistics>
    </MPLSVRF>
  </MPLSVRFs>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	MPLSVRFs
Table type	Multi-instance table
Row name	MPLSVRF
Restrictions	N/A
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
Statistics	Whether statistics is enabled for the VRF	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this column depends on the device model.

# Contents

MPLS .....	1
MPLS/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MPLS/Interfaces .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
MPLS/TunnelPolicies .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
MPLS/PreferredTunnelPolicies .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
MPLS/LabelRanges .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
MPLS/LabelSegments .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
MPLS/TunnelMbdfs .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
MPLS/StaticEgressLSPs .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
MPLS/StaticIngressLSPs .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
MPLS/StaticTransitLSPs .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
MPLS/StaticSRLSPs .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
MPLS/StaticSRAdjacencies .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
MPLS/StaticSRPrefixs .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
MPLS/IPv4LSP .....	15
XML structure .....	15
Table description .....	16
Columns .....	16

MPLS/TEv4LSP .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
MPLS/StaticLSP .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
MPLS/MPLSVRF .....	25
XML structure .....	25
Table description .....	25
Columns .....	25
MPLS/TETunnelStatistics .....	26
XML structure .....	26
Table description .....	26
Columns .....	26
MPLS/TunnelForwarding .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
MPLS/ILMForwarding .....	28
XML structure .....	28
Table description .....	29
Columns .....	29



# MPLS

## MPLS/Base

This table contains global MPLS information.

### XML structure

```
<MPLS>
  <Base>
    <LSRID></LSRID>
    <StaticLabelMax></StaticLabelMax>
    <SupportGRE></SupportGRE>
    <SupportStaticSR></SupportStaticSR>
    <SRMaxLabelDepth></SRMaxLabelDepth>
    <CBTSSStatInterval></CBTSSStatInterval>
  </Base>
</MPLS>
```

### Table description

Item	Description
Feature name	MPLS
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSRID	The LSR ID	N/A	String, dotted decimal notation.	N/A
StaticLabelMax	The max label value for static lsp	N/A	Unsigned integer	N/A
SupportGRE	Whether GRE feature is supported	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Supported.</li><li><b>false</b>—<b>Not supported.</b></li></ul>	N/A
SupportStaticSR	Whether static segment routing with MPLS feature is supported	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Supported.</li><li><b>false</b>—<b>Not supported.</b></li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SRMaxLabel Depth	The max. label stack depths for segment routing with MPLS	N/A	<ul style="list-style-type: none"> <li>Unsigned integer</li> </ul>	N/A
CBTSSStat Interval	The CBTS statistics collection interval in seconds	N/A	Unsigned short. Value range: 5~65535	Unit of time is second.

## MPLS/Interfaces

This table contains MPLS interface information.

### XML structure

```

<MPLS>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </Interface>
  </Interfaces>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only L3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about

Column name	Column description	Column type	Data type and restrictions	Remarks
				IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Enable	Enable MPLS	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default).</li> </ul>	N/A

## MPLS/TunnelPolicies

This table contains Tunnel policy information.

### XML structure

```

<MPLS>
  <TunnelPolicies>
    <TunnelPolicy>
      <PolicyName></PolicyName>
      <Default></Default>
      <Sequence>
        <Strict></Strict>
        <PrefLspType></PrefLspType>
        <LoadBalancingNum></LoadBalancingNum>
      </Sequence>
    </TunnelPolicy>
  </TunnelPolicies>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	TunnelPolicies
Table type	Multi-instance table
Row name	TunnelPolicy
Restrictions	N/A

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the	Index	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	tunnel policy		Length: 1 to 19 characters..	
Default	The default tunnel policy	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
Sequence	Tunnel selection setting	N/A	Member include: <ul style="list-style-type: none"> <li>PrefLspType.</li> <li>LoadBalancingNum.</li> </ul>	N/A
Strict	Using only one type of tunnels for load balancing	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
PrefLspType	Preferred tunnel type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—LSP.</li> <li>1—GRE.</li> <li>2—CR-LSP.</li> <li>3—SR-LSP.</li> </ul>	Up to 4 repeats are allowed for PrefLspType. Support for GRE depends on the device model.
LoadBalancingNum	Number of tunnels for Load balancing	N/A	Unsigned integer. The value range varies by device model.	N/A

## MPLS/PreferredTunnelPolicies

This table contains preferred tunnel information in a tunnel policy.

### XML structure

```

<MPLS>
  <PreferredTunnelPolicies>
    <PreferredTunnelPolicy>
      <PolicyName></PolicyName>
      <TunnelType></TunnelType>
      <TunnelID></TunnelID>
      <PriorityLevel></PriorityLevel>
    </PreferredTunnelPolicy>
  </PreferredTunnelPolicies>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	PreferredTunnelPolicies
Table type	Multi-instance table
Row name	PreferredTunnelPolicy

Restrictions	N/A
--------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of tunnel policy	Index	String. Length: 1 to 19 characters.	N/A
TunnelType	Preferred tunnel type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—TUNNEL.</li> <li>1—TUNNEL-BUNDLE.</li> </ul>	N/A
TunnelID	Tunnel ID.	Index	Unsigned integer.	N/A
PriorityLevel	Priority level of preferred tunnel.	N/A	Unsigned integer.	A smaller number has a higher priority.

## MPLS/LabelRanges

This table contains MPLS label ranges information.

## XML structure

```

<MPLS>
  <LabelRanges>
    <ProtocolType></ProtocolType>
    <MinLabel></MinLabel>
    <MaxLabel></MaxLabel>
  </LabelRanges>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	LabelRanges
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProtocolType	Protocol Type.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—STATIC.</li></ul>	N/A
MinLabel	The minimum label of the range.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>The value range varies by device model.</li></ul>	N/A
MaxLabel	The maximum label of the range.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>The value range varies by device model.</li></ul>	N/A

## MPLS/LabelSegments

This table contains MPLS label segments information.

## XML structure

```
<MPLS>
  <LabelSegments>
    <LabelSegment>
      <ProtocolType></ProtocolType>
      <MinLabel></MinLabel>
      <MaxLabel></MaxLabel>
    </LabelSegment>
  </LabelSegments>
</MPLS>
```

## Table description

Item	Description
Feature name	MPLS
Table name	LabelSegments
Table type	Multi-instance table
Row name	LabelSegment
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProtocolType	Protocol Type.	Index	Enumeration: <ul style="list-style-type: none"><li>0—STATIC.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—EGRESS.</li> <li>2—DYNAMIC</li> <li>3—L3VPN</li> <li>4—VPWS</li> <li>5—VPLS</li> <li>6—SRGB</li> </ul>	
MinLabel	The minimum label of the range.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>The value range varies by device model.</li> </ul>	N/A
MaxLabel	The maximum label of the range.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>The value range varies by device model.</li> </ul>	N/A

## MPLS/TunnelMbfd

This table contains MBFD Tunnel interface information.

### XML structure

```

<MPLS>
  <TunnelMbfd>
    <TunnelMbfd>
      <TunnelID></TunnelID>
      <Enable></Enable>
      <LocalDiscriminator></LocalDiscriminator>
      <RemoteDiscriminator></RemoteDiscriminator>
      <Echo></Echo>
      <Template></Template>
      <BackupTemplate></BackupTemplate>
    </TunnelMbfd>
  </TunnelMbfd>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	TunnelMbfd
Table type	Multi-instance table
Row name	TunnelMbfd
Restrictions	Applicable to only MPLS TE tunnel interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID.	Index	Unsigned integer.	N/A
Enable	Enable MBFD	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
LocalDiscriminator	Local discriminator of the MBFD session	N/A	Unsigned integer.	The value range varies by device model.
RemoteDiscriminator	Remote discriminator of the MBFD session	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
Echo	Echo style of MBFD	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
Template	MBFD session parameter template for the primary LSP	N/A	String. Length: 1 to 63 characters.	This template also applies to the backup LSP if no template is specified for the backup LSP.
BackupTemplate	MBFD session parameter template for the backup LSP	N/A	String. Length: 1 to 63 characters.	N/A

## MPLS/StaticEgressLSPs

This table contains static egress LSP information.

### XML structure

```

<MPLS>
  <StaticEgressLSPs>
    <StaticEgressLSP>
      <LSPName></LSPName>
      <InLabel></InLabel>
    </StaticEgressLSP>
  </StaticEgressLSPs>
</MPLS>

```



## Table description

Item	Description
Feature name	MPLS
Table name	StaticEgressLSPs
Table type	Multi-instance table
Row name	StaticEgressLSP
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSPName	Name of static LSP.	Index	String. Length: 1 to 15 characters..	N/A
InLabel	LSP incoming label	N/A	Unsigned integer. The value range varies by device model.	N/A

## MPLS/StaticIngressLSPs

This table contains static ingress LSP information.

## XML structure

```
<MPLS>
  <StaticIngressLSPs>
    <StaticIngressLSP>
      <LSPName></LSPName>
      <OutLabel></OutLabel>
      <DestAddress></DestAddress>
      <DestWildcardMask></DestWildcardMask>
      <NextHop></NextHop>
      <OutIfIndex></OutIfIndex>
    </StaticIngressLSP>
  </StaticIngressLSPs>
</MPLS>
```

## Table description

Item	Description
Feature name	MPLS
Table name	StaticIngressLSPs

Table type	Multi-instance table
Row name	StaticIngressLSP
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSPName	Name of static LSP.	Index	String. Length: 1 to 15 characters..	N/A
OutLabel	LSP outgoing label	N/A	Unsigned integer.	N/A
DestAddress	IPv4 LSP destination address	N/A	String, dotted decimal notation.	The member of DestWildcardMask must also be specified.
DestWildcardMask	Mask of the IPv4 LSP destination address	N/A	String, dotted decimal notation.	The member of DestAddress must also be specified.
NextHop	LSP next hop address	N/A	String, dotted decimal notation.	N/A
OutIfIndex	LSP outgoing interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## MPLS/StaticTransitLSPs

This table contains static transit LSP information.

## XML structure

```

<MPLS>
  <StaticTransitLSPs>
    <StaticTransitLSP>
      <LSPName></LSPName>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <NextHop></NextHop>
      <OutIfIndex></OutIfIndex>

```

```

    </StaticTransitLSP>
  </StaticTransitLSPs>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	StaticTransitLSPs
Table type	Multi-instance table
Row name	StaticTransitLSP
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSPName	Name of static LSP.	Index	String. Length: 1 to 15 characters..	N/A
InLabel	LSP incoming label	N/A	Unsigned integer.	N/A
OutLabel	LSP outgoing label	N/A	Unsigned integer.	N/A
NextHop	LSP next hop address	N/A	String, dotted decimal notation.	N/A
OutIfIndex	LSP outgoing interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## MPLS/StaticSRLSPs

This table contains static segment routing LSP information.

## XML structure

```

<MPLS>
  <StaticSRLSPs>

```

```

<StaticSRLSP>
  <LSPName></LSPName>
  <OutLabel></OutLabel>
</StaticSRLSP>
</StaticSRLSPs>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	StaticSRLSPs
Table type	Multi-instance table
Row name	StaticSRLSP
Restrictions	This table supports only global configurations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LSPName	Name of static segment routing LSP.	Index	String. Length: 1 to 15 characters.	N/A
OutLabel	LSP outgoing label	N/A	Unsigned integer.	This column must be specified, and allow repeat.

## MPLS/StaticSRAdjacencies

This table contains static segment routing adjacency information.

## XML structure

```

<MPLS>
  <StaticSRAdjacencies>
    <StaticSRAdjacency>
      <AdjName></AdjName>
      <InLabel></InLabel>
      <NextHop></NextHop>
      <OutIfIndex></OutIfIndex>
    </StaticSRAdjacency>
  </StaticSRAdjacencies>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	StaticSRAdjacencies
Table type	Multi-instance table
Row name	StaticSRAdjacency
Restrictions	This table supports only global configurations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdjName	Name of static segment routing adjacency.	Index	String. Length: 1 to 15 characters.	N/A
InLabel	Adjacency incoming label	N/A	Unsigned integer.	This column must be specified.
NextHop	Adjacency next hop address	N/A	String, dotted decimal notation.	One and only one of this column and OutIfIndex must be specified.  One and only one of this column and NextHop must be specified.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OutIfIndex	Adjacency outgoing interface index	N/A	Unsigned integer.	

## MPLS/StaticSRPrefixs

This table contains static segment routing prefix information.

## XML structure

<MPLS>

```

<StaticSRPrefixs>
  <StaticSRPrefix>
    <PrefixName></PrefixName>
    <DestAddress></DestAddress>
    <DestMask></DestMask>
    <InLabel></InLabel>
    <NextHop></NextHop>
    <OutIfIndex></OutIfIndex>
    <OutLabel></OutLabel>
  </StaticSRPrefix>
</StaticSRPrefixs>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	StaticSRPrefixs
Table type	Multi-instance table
Row name	StaticSRPrefix
Restrictions	This table supports only global configurations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PrefixName	Name of static segment routing Prefix.	Index	String. Length: 1 to 15 characters.	N/A
DestAddress	IPv4 prefix destination address	Index	String, dotted decimal notation.	N/A
DestMask	Prefix destination address mask	Index	Unsigned integer.	N/A
InLabel	Prefix incoming label	Index	Unsigned integer.	This column must be specified.
NextHop	Prefix next hop address	Index	String, dotted decimal notation.	One and only one of this column and OutIfIndex must be specified.
OutIfIndex	Prefix outgoing interface index	Index	Unsigned integer.	One and only one of this column or NextHop must be specified. Some versions support interface name. For relevant information, see

Column name	Column description	Column type	Data type and restrictions	Remarks
				the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OutLabel	Prefix outgoing label	N/A	Unsigned integer.	This column must be specified, and allow repeat.

## MPLS/IPv4LSP

This table contains IPv4 LSP information.

### XML structure

```

<MPLS>
  <IPv4LSP>
    <LSP>
      <Protocol></Protocol>
      <VrfIndex></VrfIndex>
      <Ipv4Prefix>
        <Ipv4Address/>
        <Ipv4PrefixLenth/>
      </Ipv4Prefix>
      <LSRType></LSRType>
      <ID></ID>
      <InfoType></InfoType>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <OutIfIndex></OutIfIndex>
      <NextHop></NextHop>
      <NHLFEID></NHLFEID>
      <BackupOutLabel></BackupOutLabel>
      <BackupOutIfIndex></BackupOutIfIndex>
      <BackupNextHop></BackupNextHop>
      <BackupNHLFEID></BackupNHLFEID>
      <Octets></Octets>
      <HCOctets></HCOctets>
      <Packets></Packets>
      <Errors></Errors>
      <Discards></Discards>
    </LSP>
  </IPv4LSP>

```

## Table description

Item	Description
Feature name	MPLS
Table name	IPv4LSP
Table type	Multi-instance table
Row name	LSP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Protocol	LSP protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—Unknown.</li> <li>• 1—Static LSP.</li> <li>• 2—Static CRLSP.</li> <li>• 3—LDP.</li> <li>• 4—RSVP.</li> <li>• 5—MP-BGP.</li> <li>• 6—ISIS.</li> <li>• 7—OSPF.</li> </ul>	N/A
VrfIndex	Index of the VRF to which an IPv4 LSP belongs	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VrfIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
Ipv4Prefix	IPv4 LSP prefix	Index, data structure	Members include: <ul style="list-style-type: none"> <li>• Ipv4Address.</li> <li>• Ipv4PrefixLenth.</li> </ul>	N/A
Ipv4Address	IPv4 LSP prefix address	Index	String, dotted decimal notation.	N/A
Ipv4PrefixLenth	IPv4 LSP prefix length	Index	Unsigned integer. Value range: 1 to 32.	N/A
LSRType	LSR type	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—Ingress.</li> <li>• 1—Transit.</li> <li>• 2—Egress.</li> </ul>	N/A
ID	LSP ID	Index	Unsigned integer. Value range: 0 to 255.	An LSP can have one row for inbound information, and multiple rows for outbound



Column name	Column description	Column type	Data type and restrictions	Remarks
				information. Each row has an ID. <ul style="list-style-type: none"> <li>Inbound ID: 0.</li> <li>Outbound ID: 1 to 255.</li> </ul>
InfoType	LSP information type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Inbound information.</li> <li><b>1</b>—Outbound information.</li> </ul>	N/A
InLabel	LSP incoming label	N/A	Unsigned integer.	LSP inbound information contains this column.
OutLabel	LSP outgoing label	N/A	Unsigned integer.	LSP outbound information contains this column.
OutIfIndex	LSP outgoing interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .  LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
NextHop	LSP next hop address	N/A	String, dotted decimal notation.	LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
NHLFEID	NHLFE ID	N/A	Unsigned integer.	LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
BackupOutLabel	Backup LSP outgoing label	N/A	Unsigned integer.	Backup LSP outbound information contains this column.
BackupOutIfIndex	Backup LSP outgoing interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .  Backup LSP outbound

Column name	Column description	Column type	Data type and restrictions	Remarks
				information contains outgoing interface and next hop, or it contains NHLFE ID.
BackupNextHop	Backup LSP next hop address	N/A	String, dotted decimal notation.	Backup LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
BackupNHLFEID	Backup NHLFE ID	N/A	Unsigned integer.	Backup LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
Octets	Number of octets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
HCOctets	Number of high order octets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Packets	Number of packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Errors	Number of error packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Discards	Number of discarded packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MPLS/TEv4LSP

This table contains IPv4 MPLS TE LSP information.

### XML structure

```

<MPLS>
  <TEv4LSP>
    <LSP>
      <Protocol></Protocol>
      <VrfIndex></VrfIndex>
      <SrcAddress></SrcAddress>
      <DestAddress></DestAddress>
      <TunnelID></TunnelID>
      <LSPID></LSPID>
      <Direction></Direction>
      <LSRType></LSRType>
      <ID></ID>
      <InfoType></InfoType>
      <InLabel></InLabel>
      <OutLabel></OutLabel>

```

```

<OutIfIndex></OutIfIndex>
<NextHop></NextHop>
<NHLFEID></NHLFEID>
<BackupOutLabel></BackupOutLabel>
<BackupOutIfIndex></BackupOutIfIndex>
<BackupNextHop></BackupNextHop>
<BackupNHLFEID></BackupNHLFEID>
<Octets></Octets>
<HCOctets></HCOctets>
<Packets></Packets>
<Errors></Errors>
<Discards></Discards>
</LSP>
</TEv4LSP>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	TEv4LSP
Table type	Multi-instance table
Row name	LSP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Protocol	LSP protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown.</li> <li>1—Static LSP.</li> <li>2—Static CRLSP.</li> <li>3—LDP.</li> <li>4—RSVP.</li> <li>5—MP-BGP.</li> </ul>	N/A
VrfIndex	Index of the VRF to which a TEv4 LSP belongs	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see “Appendix” in L3vpn NETCONF XML API Data Reference.
SrcAddress	TEv4 LSP source address	Index	String, dotted decimal notation.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DestAddress	TEv4 LSP destination address	Index	String, dotted decimal notation.	N/A
TunnelID	TEv4 LSP tunnel ID	Index	Unsigned integer. Value range: 0 to 65535.	N/A
LSPID	TEv4 LSP ID	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Direction	TEv4 LSP direction	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Unidirectional tunnel.</li> <li>• <b>1</b>—Forward LSP for a bidirectional tunnel.</li> <li>• <b>2</b>—Backward LSP for a bidirectional tunnel.</li> </ul>	N/A
LSRType	LSR type	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Ingress.</li> <li>• <b>1</b>—Transit.</li> <li>• <b>2</b>—Egress.</li> </ul>	N/A
ID	LSP ID	Index	Unsigned integer. Value range: 0 to 255.	An LSP can have one row for inbound information, and multiple rows for outbound information. Each row has an ID. <ul style="list-style-type: none"> <li>• Inbound ID: 0.</li> <li>• Outbound ID: 1 to 255.</li> </ul>
InfoType	LSP information type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Inbound information.</li> <li>• <b>1</b>—Outbound information.</li> </ul>	N/A
InLabel	LSP incoming label	N/A	Unsigned integer.	LSP inbound information contains this column.
OutLabel	LSP outgoing label	N/A	Unsigned integer.	LSP outbound information contains this column.
OutIfIndex	LSP outgoing interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

Column name	Column description	Column type	Data type and restrictions	Remarks
				LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
NextHop	LSP next hop address	N/A	String, dotted decimal notation.	LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
NHLFEID	NHLFE ID	N/A	Unsigned integer.	LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
BackupOutLabel	Backup LSP outgoing label	N/A	Unsigned integer.	Backup LSP outbound information contains this column.
BackupOutIfIndex	Backup LSP outgoing interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>IfMgr NETCONF XML API Configuration Reference</i> . Backup LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
BackupNextHop	Backup LSP next hop address	N/A	String, dotted decimal notation.	Backup LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
BackupNHLFEID	Backup NHLFE ID	N/A	Unsigned integer.	Backup LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
Octets	Number of octets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
HCOctets	Number of high order octets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Packets	Number of packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Errors	Number of error	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	packets		Value range: 0 to $2^{64} - 1$ .	
Discards	Number of discarded packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MPLS/StaticLSP

This table contains static LSP and static CRLSP information.

### XML structure

```

<MPLS>
  <StaticLSP>
    <LSP>
      <Protocol></Protocol>
      <LspIndex></LspIndex>
      <LSRType></LSRType>
      <ID></ID>
      <InfoType></InfoType>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <OutIfIndex></OutIfIndex>
      <NextHop></NextHop>
      <NHLFEID></NHLFEID>
      <BackupOutLabel></BackupOutLabel>
      <BackupOutIfIndex></BackupOutIfIndex>
      <BackupNextHop></BackupNextHop>
      <BackupNHLFEID></BackupNHLFEID>
      <Octets></Octets>
      <HCOctets></HCOctets>
      <Packets></Packets>
      <Errors></Errors>
      <Discards></Discards>
    </LSP>
  </StaticLSP>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	StaticLSP
Table type	Multi-instance table

Row name	LSP
Restrictions	This table contains LSP information on the transit node and egress node. Static LSP information on the ingress node is stored in the IPv4LSP table. Static CRLSP information on the ingress node is stored in the TEv4LSP table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Protocol	LSP protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Unknown.</li> <li>• <b>1</b>—Static LSP.</li> <li>• <b>2</b>—Static CRLSP.</li> <li>• <b>3</b>—LDP.</li> <li>• <b>4</b>—RSVP.</li> <li>• <b>5</b>—MP-BGP.</li> </ul>	N/A
LspIndex	Static LSP index	Index	Unsigned integer. Length: 32 bits.	Typically, this column represents static LSP incoming label.
LSRType	LSR type	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Ingress.</li> <li>• <b>1</b>—Transit.</li> <li>• <b>2</b>—Egress.</li> </ul>	N/A
ID	LSP ID	Index	Unsigned integer. Value range: 0 to 255.	An LSP can have one row for inbound information, and multiple rows for outbound information. Each row has an ID. <ul style="list-style-type: none"> <li>• Inbound ID: 0.</li> <li>• Outbound ID: 1 to 255.</li> </ul>
InfoType	LSP information type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Inbound information.</li> <li>• <b>1</b>—Outbound information.</li> </ul>	N/A
InLabel	LSP incoming label	N/A	Unsigned integer.	LSP inbound information contains this column.
OutLabel	LSP outgoing label	N/A	Unsigned integer.	LSP outbound information contains this column.
OutIfIndex	LSP outgoing interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in

Column name	Column description	Column type	Data type and restrictions	Remarks
				<i>Ifmgr NETCONF XML API Configuration Reference.</i> LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
NextHop	LSP next hop address	N/A	String, dotted decimal notation.	LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
NHLFEID	NHLFE ID	N/A	Unsigned integer.	LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
BackupOutLabel	Backup LSP outgoing label	N/A	Unsigned integer.	Backup LSP outbound information contains this column.
BackupOutIfIndex	Backup LSP outgoing interface index	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference.</i> Backup LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
BackupNextHop	Backup LSP next hop address	N/A	String, dotted decimal notation.	Backup LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
BackupNHLFEID	Backup NHLFE ID	N/A	Unsigned integer.	Backup LSP outbound information contains outgoing interface and next hop, or it contains NHLFE ID.
Octets	Number of octets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
HCOctets	Number of high order octets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Packets	Number of packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			1.	
Errors	Number of error packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Discards	Number of discarded packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MPLS/MPLSVRF

This table contains MPLS VRF information.

### XML structure

```

<MPLS>
  <MPLSVRFs>
    <MPLSVRF>
      <VRF></VRF>
      <Statistics></Statistics>
    </MPLSVRF>
  </MPLSVRFs>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	MPLSVRFs
Table type	Multi-instance table
Row name	MPLSVRF
Restrictions	N/A

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
Statistics	Whether statistics is enabled for the VRF	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A

# MPLS/TE Tunnel Statistics

This table contains TE tunnel statistics information.

## XML structure

```
<MPLS>
  <TETunnelStatistics>
    <TETunnelStatistic>
      <TunnelID></TunnelID>
      <ServiceClass></ServiceClass>
      <Octets></Octets>
      <HCOctets></HCOctets>
      <Packets></Packets>
      <Errors></Errors>
      <Discards></Discards>
      <Systime></Systime>
    </TETunnelStatistic>
  </TETunnelStatistics>
</MPLS>
```

## Table description

Item	Description
Feature name	MPLS
Table name	TETunnelStatistics
Table type	Multi-instance table
Row name	TETunnelStatistics
Restrictions	This table contains TE tunnel statistics information.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID	Index	Unsigned integer.	The tunnel interface number
ServiceClass	The service class statistics of the MPLS TE tunnel interface.	Index	Unsigned integer. The value range varies by device model.	When service class no set, get all statistics of the TE tunnel.
Octets	Number of octets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
HCOctets	Number of high order octets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			1.	
Packets	Number of packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Errors	Number of error packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Discards	Number of discarded packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Systime	Time that elapsed after the device started up, in milliseconds	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MPLS/TunnelForwarding

This table contains tunnel forwarding information.

### XML structure

```

<MPLS>
  <TunnelForwardings>
    <TunnelForwarding>
      <TunnelNum></TunnelNum>
      <OutInfo>
        <ID></ID>
        <OutIfName></OutIfName>
        <NextHop></NextHop>
        <OutLabel></OutLabel>
        <Active></Active>
      </OutInfo>
      <BackupOutIfName></BackupOutIfName>
      <BackupNextHop></BackupNextHop>
      <BackupOutLabel></BackupOutLabel>
      <BackupActive></BackupActive>
    </TunnelForwarding>
  </TunnelForwardings>
</MPLS>

```

### Table description

Item	Description
Feature name	MPLS
Table name	TunnelForwardings

Table type	Multi-instance table
Row name	TunnelForwarding
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelNum	Tunnel number	Index	Unsigned integer.	N/A
OutInfo	Outbound information	Data structure	Members include: <ul style="list-style-type: none"> <li>ID.</li> <li>OutIfName.</li> <li>NextHop.</li> <li>OutLabel.</li> <li>Active.</li> </ul>	N/A
ID	Out information ID	N/A	Unsigned integer. Value range: 0 to 2.	N/A
OutIfName	Outgoing interface name	N/A	String.	Outbound information contains this column.
NextHop	Next hop address	N/A	String, dotted decimal notation.	Outbound information contains this column.
OutLabel	Outgoing label	N/A	Unsigned integer.	Outbound information contains this column.
Active	State of forwarding information	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
BackupOutIfName	Backup outgoing interface name	N/A	String.	Backup outbound information contains this column.
BackupNextHop	Backup next hop address	N/A	String, dotted decimal notation.	Backup outbound information contains this column.
BackupOutLabel	Backup outgoing label	N/A	Unsigned integer.	Backup outbound information contains this column.
BackupActive	State of the backup forwarding information	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## MPLS/ILMForwarding

This table contains ILM forwarding information.

## XML structure

<MPLS>

```

<ILMForwardings>
<ILMForwarding>
  <Label></Label>
  <OutInfo>
    <ID></ID>
    <OutIfName></OutIfName>
    <NextHop></NextHop>
    <OutLabel></OutLabel>
    <Active></Active>
  </OutInfo>
  <BackupOutIfName></BackupOutIfName>
  <BackupNextHop></BackupNextHop>
  <BackupOutLabel></BackupOutLabel>
  <BackupActive></BackupActive>
</ILMForwarding>
</ILMForwardings>
</MPLS>

```

## Table description

Item	Description
Feature name	MPLS
Table name	ILMForwardings
Table type	Multi-instance table
Row name	ILMForwarding
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Label	Label index	Index	Unsigned integer.	N/A
OutInfo	Outbound information	Data structure	Members include: <ul style="list-style-type: none"> <li>ID.</li> <li>OutIfName.</li> <li>NextHop.</li> <li>OutLabel.</li> <li>Active.</li> </ul>	N/A
ID	Out Information ID	N/A	Unsigned integer. Value range: 0 to 2.	N/A
OutIfName	Outgoing interface name	N/A	String.	Outbound information contains this column.
NextHop	Next hop address	N/A	String, dotted decimal notation.	Outbound information contains this column.
OutLabel	Outgoing label	N/A	Unsigned integer.	Outbound information

Column name	Column description	Column type	Data type and restrictions	Remarks
				contains this column.
Active	State of forwarding information	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>	N/A
BackupOutIfName	Backup outgoing interface name	N/A	String.	Backup outbound information contains this column.
BackupNextHop	Backup next hop address	N/A	String, dotted decimal notation.	Backup outbound information contains this column.
BackupOutLabel	Backup outgoing label	N/A	Unsigned integer.	Backup outbound information contains this column.
BackupActive	State of the backup forwarding information	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>	N/A

# Comware 7 LSM NETCONF XML API Error Message Reference

## MPLS/IPV4\_LSP

Message	Explanation
The feature LSM has not been enabled. LSM进程未启动。	Please start LSM service before getting MPLS/IPV4_LSP table information. 请在获取IPV4_LSP表之前启动LSM进程。
Not support Segment Routing Prefix. 不支持Segment Routing Prefix。	The device must support Segment Routing Prefix first. 设备须首先支持Segment Routing Prefix。
The incoming label is already in use. 入标签已被占用。	The incoming label configured must not be in use. 配置的入标签不能已被占用。

## MPLS/TEV4\_LSP

Message	Explanation
The feature LSM has not been enabled. LSM进程未启动。	Please start LSM service before getting MPLS/TEV4_LSP table information. 请在获取TEV4_LSP表之前启动LSM进程。
The incoming label is already in use. 入标签已被占用。	The incoming label configured must not be in use. 配置的入标签不能已被占用。
Not support Segment Routing Prefix. 不支持Segment Routing Prefix。	The device must support Segment Routing Prefix first. 设备须首先支持Segment Routing Prefix。

## MPLS/STATIC\_LSP

Message	Explanation
The feature LSM has not been enabled. LSM进程未启动。	Please start LSM service before getting MPLS/Static_LSP table information. 请在获取Static_LSP表之前启动LSM进程。
The incoming label is already in use. 入标签已被占用。	The incoming label configured must not be in use. 配置的入标签不能已被占用。
Not support Segment Routing Prefix. 不支持Segment Routing Prefix。	The device must support Segment Routing Prefix first. 设备须首先支持Segment Routing Prefix。

## MPLS/Base

Message	Explanation
The feature LSM has not been enabled. LSM进程未启动。	Please start LSM service before getting MPLS/Base table information. 请在获取Base表之前启动LSM进程。

## MPLS/Interfaces

Message	Explanation
The feature LSM has not been enabled. LSM进程未启动。	Please start LSM service before getting MPLS/Interfaces table information. 请在获取Interfaces表之前启动LSM进程。

## MPLS /TunnelPolicies

Message	Explanation
The feature LSM has not been enabled. LSM进程未启动。	Please start LSM service before getting MPLS/TunnelPolicies table information. 请在获取TunnelPolicies表之前启动LSM进程。
Both the tunnel selection order and the number of tunnels for load balancing are required. 请配置配置隧道的选择顺序和负载分担的隧道数目。	Please configure the tunnel selection order and the number of tunnels for load balancing at the same time. 请同时配置隧道的选择顺序和负载分担的隧道数目。
Can't specify duplicate tunnel types for tunnel selection. 隧道类型的优先级顺序不允许出现重复类型。	Tunnel types for tunnel selection must be unique. 隧道类型的优先级顺序必须唯一。
无效的隧道/捆绑隧道 ID The TunnelID is invalid.	The tunnel that preferred path configured must be valid. 优选隧道引用的隧道必须是有效的。
The PolicyName is invalid. 无效的隧道/捆绑隧道 名称。	The PolicyName length must be between 0 to 20. 隧道名称有效长度范围必须在0-20。
The TunnelType is invalid.无效的隧道/捆绑隧道类型	The TunnelType must be tunnel or tunnel-bundle. 隧道类型必须是tunnel 或者tunnel-bundle。

## MPLS/StaticEgressLSPs

Message	Explanation
The feature SLSP has not been enabled. SLSP进程未启动。	Please start SLSP service before getting MPLS/StaticEgressLSPs table information. 请在获取StaticEgressLSPs表之前启动SLSP进程。



The static LSP already exists. 该静态LSP已存在。	The LSP name must be unique. LSP名称必须唯一。
The incoming label is already in use. 入标签已被占用。	The incoming label configured must not be in use. 配置的入标签不能被占用。

## MPLS/StaticIngressLSPs

Message	Explanation
The feature SLSP has not been enabled. SLSP进程未启动。	Please start SLSP service before getting MPLS/StaticIngressLSPs table information. 请在获取StaticIngressLSPs表之前启动SLSP进程。
The static LSP already exists. 该静态LSP已存在。	The LSP name must be unique. LSP名称必须唯一。
The incoming label is already in use. 入标签已被占用。	The incoming label configured must not be in use. 配置的入标签不能被占用。

## MPLS/StaticTransitLSPs

Message	Explanation
The feature SLSP has not been enabled. SLSP进程未启动。	Please start SLSP service before getting MPLS/StaticTransitLSPs table information. 请在获取StaticTransitLSPs表之前启动SLSP进程。
The static LSP already exists. 该静态LSP已存在。	The LSP name must be unique. LSP名称必须唯一。
The incoming label is already in use. 入标签已被占用。	The incoming label configured must not be in use. 配置的入标签不能被占用。

## MPLS/StaticSRLSPs

Message	Explanation
Not support Static Segment Routing. 不支持Static Segment Routing。	The device must support Static Segment Routing first. 设备须首先支持Segment Routing Prefix。
The feature SLSP has not been enabled. SLSP进程未启动。	Please start SLSP service before getting MPLS/StaticSRLSPs table information. 请在获取StaticSRLSPs表之前启动SLSP进程。
The static LSP already exists. 该静态LSP已存在。	The LSP name must be unique. LSP名称必须唯一。
The static SRLSP already exists. 该静态SRLSP已存在。	The SRLSP name must be unique. SRLSP名称必须唯一。
The depth of the out label stack is out of the range.	The depth of the out label stack must be in the specified range.

标签栈深度超出规定范围。	标签栈的深度必须在设备定制范围内。
The null label must be configured on the outermost layer. 空标签只能配置在最外层。	The implicit null label 3 and explicit null label 0 must be configured on the outermost layer. 隐式空标签3和显示空标签0必须配置在最外层。

## MPLS/StaticSRAdjacencies

Message	Explanation
The feature SLSP has not been enabled. SLSP进程未启动。	Please start SLSP service before getting MPLS/StaticSRAdjacencies table information. 请在获取StaticSRAdjacencies表之前启动SLSP进程。
The static LSP already exists. 该静态LSP已存在。	The LSP name must be unique. LSP名称必须唯一。
The static SRLSP already exists. 该静态SRLSP已存在。	The SRLSP name must be unique. SRLSP名称必须唯一。
The depth of the out label stack is out of the range. 标签栈深度超出规定范围。	The depth of the out label stack must be in the specified range. 标签栈的深度必须在设备定制范围内。

## MPLS/StaticSRPrefixs

Message	Explanation
The feature SLSP has not been enabled. SLSP进程未启动。	Please start SLSP service before getting MPLS/StaticSRPrefixs table information. 请在获取StaticSRPrefixs表之前启动SLSP进程。
The static LSP already exists. 该静态LSP已存在。	The LSP name must be unique. LSP名称必须唯一。
The static SRLSP already exists. 该静态SRLSP已存在。	The SRLSP name must be unique. SRLSP名称必须唯一。
The depth of the out label stack is out of the range. 标签栈深度超出规定范围。	The depth of the out label stack must be in the specified range. 标签栈的深度必须在设备定制范围内。
Prefix segments that share the same name must be configured with the same destination IP address. 同名的配置必须配置相同的地址。	The destination of the same prefix segment must be unique. 相同静态Prefix Segment路径的地址必须唯一。
Can't create a prefix segment to both transit node and egress node. 同一静态Prefix Segment不能既是中间节点又是尾节点。	Can't create a prefix segment to both transit node and egress node. 不能配置同一静态Prefix Segment既是中间节点又是尾节点。

Prefix segments configured with the same destination IP address must use the same name. 相同目的地址必须配置相同的名字。	Prefix segments configured with the same destination IP address must use the same name. 相同的地址必须配置相同的名字。
Prefix segments that share the same name must be configured with the same incoming label. 同名的配置必须配置相同的入标签。	Prefix segments that use the same name must use the same incoming label. 配置静态Prefix Segment时，同名的配置必须配置相同的入标签
The destination IP address doesn't match the name of the prefix segment. 删除静态Prefix Segment时，如果携带目的地址必须同配置保持一致。	The destination address specified when you delete a prefix segment must be the same as the destination address specified when the prefix segment was created. 删除静态Prefix Segment时，如果携带目的地址必须同配置保持一致。
The incoming label doesn't match the name of the prefix segment. 删除静态Prefix Segment时，如果携带入标签必须同配置保持一致。	The incoming label specified when you delete a prefix path must be the same as the incoming label specified when the prefix segment was created. 删除静态Prefix Segment时，如果携带入标签必须同配置保持一致。
Not support Static Segment Routing. 不支持Static Segment Routing。	The device must support Static Segment Routing first. 设备须首先支持Static Segment Routing。
The null label must be configured on the outermost layer. 空标签只能配置在最外层。	The implicit null label 3 and explicit null label 0 must be configured on the outermost layer. 隐式空标签3和显示空标签0必须配置在最外层。
Not support Segment Routing Prefix. 不支持Segment Routing Prefix。	The device must support Segment Routing Prefix first. 设备须首先支持Segment Routing Prefix。

## MPLS/TunnelMbfd

Message	Explanation
Number of MPLS BFDs has reached the upper limit. BFD已经满规格了。	Number of MPLS BFDs must be smaller than or equal to the upper limit. MPLS BFD的数量必须小于或等于满规格的数量。
Not support MPLS BFD. 不支持MPLS BFD。	The product must support MPLS BFD first when getting MPLS/TunnelMbfd table information. 获取MPLS BFD表的信息时，产品必须首先支持MPLS BFD。
The MPLS BFD feature has not been enabled. MPLS BFD还没使能。	Please start MPLS BFD service before getting MPLS/TunnelMbfd table information. 请获取MPLS BFD表之前先启动MPLS BFD进程。

## MPLS/PreferredTunnelPolicies

Message	Explanation
The TunnelID is invalid.	The tunnel configured as the preferred path must be valid.

无效的隧道/捆绑隧道 ID	优选隧道引用的隧道必须是有效的。
The PolicyName is invalid. 无效的隧道/捆绑隧道名称。	The PolicyName length must be between 0 to 20. 隧道名称有效长度范围必须在0-20。
The TunnelType is invalid. 无效的隧道/捆绑隧道类型	The TunnelType must be tunnel or tunnel-bundle. 隧道类型必须是tunnel或者tunnel-bundle。

## MPLS/MPLSVRF

Message	Explanation
MPLS VPN statistics not supported. 不支持MPLS VPN统计功能。	To get MPLS/MPLS VRF table information of the product, the product must support MPLS VPN statistics. 获取MPLS VRF表的信息时，产品必须首先支持MPLS VPN统计功能。



# Contents

MQC .....	1
MQC/ClearGlobalStatistic .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MQC/ClearVlanStatistic .....	2
XML structure .....	2
Table description .....	2
Columns .....	2

# MQC

## MQC/ClearGlobalStatistic

This table is used to clear statistics of a global QoS policy.

### XML structure

```
<MQC>
  <ClearGlobalStatistic>
    <Application>
      <Direction></Direction>
      <Clear></Clear>
      <PolicyType></PolicyType>
    </Application>
  </ClearGlobalStatistic>
</MQC>
```

### Table description

Item	Description
Feature name	MQC
Table name	ClearGlobalStatistic
Table type	Multi-instance table
Row name	Application
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Inbound.</li><li>1—Outbound.</li></ul>	If you do not specify this column, All directions are cleared.
Clear	Clear global policy statistics	N/A	This column must be empty	Required.
PolicyType	Policy type	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Common policy.</li><li>1—Remarking policy.</li><li>2—Accounting policy.</li><li>3—Mirroring policy.</li></ul>	If you do not specify this column, common policies are cleared.

# MQC/ClearVlanStatistic

This table is used to clear statistics of the QoS policy applied in VLAN.

## XML structure

```
<MQC>
  <ClearVlanStatistic>
    <Application>
      <VLANID></VLANID>
      <Direction></Direction>
      <Clear></Clear>
    </Application>
  </ClearVlanStatistic>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	ClearVlanStatistic
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	If you do not specify this column, All VLANs are cleared.
Direction	Application direction	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Inbound.</li><li>1—Outbound.</li></ul>	If you do not specify this column, All directions are cleared.
Clear	Clear VLAN policy statistics	N/A	This column must be empty	Required.



# Contents

MQC .....	1
MQC/Classifiers .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MQC/Behaviors .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
MQC/Policies .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
MQC/CBMaps .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
MQC/Rules .....	5
XML structure .....	5
Table description .....	6
Columns .....	7
MQC/Remark .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
MQC/Redirect .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
MQC/Filter .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
MQC/AssuredForwarding .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
MQC/ExpeditedForwarding .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
MQC/WFQ .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
MQC/CAR .....	22
XML structure .....	22
Table description .....	23
Columns .....	23
MQC/GTS .....	26
XML structure .....	26
Table description .....	27
Columns .....	27
MQC/ReservedBandwidth .....	28
XML structure .....	28
Table description .....	28
Columns .....	29

MQC/Mirror .....	29
XML structure .....	29
Table description .....	30
Columns .....	30
MQC/MirrorDynamicIF .....	32
XML structure .....	32
Table description .....	33
Columns .....	33
MQC/GlobalPolicy .....	33
XML structure .....	33
Table description .....	34
Columns .....	34
MQC/VlanPolicy .....	34
XML structure .....	34
Table description .....	35
Columns .....	35
MQC/InterfacePolicy .....	35
XML structure .....	35
Table description .....	35
Columns .....	36
MQC/IfPolicyEnhance .....	36
XML structure .....	36
Table description .....	37
Columns .....	37
MQC/GlobalPolicyEnhance .....	37
XML structure .....	37
Table description .....	38
Columns .....	38
MQC/Account .....	38
XML structure .....	38
Table description .....	38
Columns .....	39
MQC/PostClassify .....	39
XML structure .....	39
Table description .....	39
Columns .....	40
MQC/GlobalCategoryPolicy .....	40
XML structure .....	40
Table description .....	40
Columns .....	41
MQC/InterfaceCategoryPolicy .....	41
XML structure .....	41
Table description .....	41
Columns .....	42
MQC/Telemetry .....	42
XML structure .....	42
Table description .....	43
Columns .....	43
MQC/TelemetryRoles .....	44
XML structure .....	44
Table description .....	44
Columns .....	44
MQC/TelemetryLoopbacks .....	45
XML structure .....	45
Table description .....	45
Columns .....	45
MQC/TelemetryGlobalEnable .....	45
XML structure .....	45
Table description .....	46
Columns .....	46
MQC/TelemetryAction .....	46
XML structure .....	46

Table description .....	47
Columns .....	47
MQC/OverheadLayer .....	48
XML structure .....	48
Table description .....	48
Columns .....	49
MQC/SysTruncation .....	49
XML structure .....	49
Table description .....	49
Columns .....	49
MQC/MonitorGroup .....	49
XML structure .....	50
Table description .....	50
Columns .....	50
MQC/MonitorPort .....	50
XML structure .....	50
Table description .....	51
Columns .....	51
MQC/Strip .....	51
XML structure .....	51
Table description .....	52
Columns .....	52
MQC/Nest .....	53
XML structure .....	53
Table description .....	53
Columns .....	53
MQC/BehaviorTruncation .....	54
XML structure .....	54
Table description .....	54
Columns .....	54
MQC/TimeStamp .....	54
XML structure .....	55
Table description .....	55
Columns .....	55
MQC/VSIPolicy .....	55
XML structure .....	56
Table description .....	56
Columns .....	56
MQC/AccountInterfacePolicy .....	56
XML structure .....	56
Table description .....	57
Columns .....	57
MQC/RemarkInterfacePolicy .....	57
XML structure .....	57
Table description .....	58
Columns .....	58
MQC/TapInterfacePolicy .....	58
XML structure .....	58
Table description .....	59
Columns .....	59
Appendix .....	59

# MQC

## MQC/Classifiers

This table contains information about classifiers.

### XML structure

```
<MQC>
  <Classifiers>
    <Classifier>
      <Name></Name>
      <Operator></Operator>
      <Description></Description>
    </Classifier>
  </Classifiers>
</MQC>
```

### Table description

Item	Description
Feature name	MQC
Table name	Classifiers
Table type	Multi-instance table
Row name	Classifier
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Traffic classifier name	Index	String. Length: 1 to 31 characters.	N/A
Operator	Match operator of the traffic classifier	N/A	Enumeration: <ul style="list-style-type: none"><li>1—And.</li><li>2—Or.</li></ul>	When the <b>Operator</b> column is <b>1</b> , the traffic classifier matches the packets that match all its match criteria.  When the <b>Operator</b> column is <b>2</b> , the traffic classifier matches the packets that match any of its match criteria.  If this column is not

Column name	Column description	Column type	Data type and restrictions	Remarks
				configured, the default value is 1.
Description	Traffic classifier description.	N/A	String. Length: 1 to 127 characters.	N/A

## MQC/Behaviors

This table contains information about behavior.

### XML structure

```

<MQC>
  <Behaviors>
    <Behavior>
      <Name></Name>
    </Behavior>
  </Behaviors>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	Behaviors
Table type	Multi-instance table
Row name	Behavior
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A

## MQC/Policies

This table contains information about policy.

## XML structure

```
<MQC>
  <Policies>
    <Policy>
      <Name></Name>
      <Type></Type>
    </Policy>
  </Policies>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Policy name	Index	String. Length: 1 to 31 characters.	N/A
Type	Policy type	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Common policy (default).</li><li>• <b>1</b>—Remarking policy.</li><li>• <b>2</b>—Accounting policy.</li><li>• <b>3</b>—Mirroring policy.</li></ul>	This column cannot be modified.

## MQC/CBMaps

This table contains information about classifier-behavior association.

## XML structure

```
<MQC>
  <CBMaps>
    <CBMap>
      <PolicyName></PolicyName>
      <ClassifierName></ClassifierName>
```

```

    <BehaviorName></BehaviorName>
    <Mode></Mode>
    <InsertBeforeClassifierName></InsertBeforeClassifierName>
  </CBMap>
</CBMaps>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	CBMaps
Table type	Multi-instance table
Row name	CBMap
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassifierName	Traffic classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Traffic behavior name	N/A	String. Length: 1 to 31 characters.	Required.
Mode	Mode of the classifier-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—None.</li> <li><b>2</b>—Qppb.</li> <li><b>16</b>—Dcbx.</li> </ul>	Required. When the <b>Mode</b> column is <b>0</b> , there is no restriction on the classifier-behavior association. When the <b>Mode</b> column is <b>2</b> , the classifier-behavior association applies only to QPPB. When the <b>Mode</b> column is <b>16</b> , the classifier-behavior association applies only to the Data Center Bridging Exchange Protocol (DCBX).
InsertBeforeClassifierName	Insert the new traffic class before an existing traffic class.	N/A	String. Length: 1 to 31 characters	N/A

# MQC/Rules

This table contains information about rule.

## XML structure

```
<MQC>
  <Rules>
    <Rule>
      <ClassName></ClassName>
      <RuleID></RuleID>
      <Not></Not>
      <PktType></PktType>
      <Acl>
        <IPv4Acl></IPv4Acl>
        <IPv6Acl></IPv6Acl>
        <Inner></Inner>
        <MACAcl></MACAcl>
        <UserAcl></UserAcl>
      </Acl>
      <IPv4Acl></IPv4Acl>
      <IPv6Acl></IPv6Acl>
      <SrcMac></SrcMac>
      <DestMac></DestMac>
      <ServiceVLANID></ServiceVLANID>
      <CustomerVLANID></CustomerVLANID>
      <ServiceDot1pList>
        <ServiceDot1p></ServiceDot1p>
      </ServiceDot1pList>
      <CustomerDot1pList>
        <CustomerDot1p></CustomerDot1p>
      </CustomerDot1pList>
      <ExpList>
        <Exp></Exp>
      </ExpList>
      <InnerExpList>
        <InnerExp></InnerExp>
      </InnerExpList>
      <IPPrecedenceList>
        <IPPrecedence></IPPrecedence>
      </IPPrecedenceList>
      <LocalPrecedenceList>
        <LocalPrecedence></LocalPrecedence>
      </LocalPrecedenceList>
      <DscpList>
        <Dscp></Dscp>
      </DscpList>
      <DropPriorityList>
```



```

        <DropPriority></DropPriority>
    </DropPriorityList>
    <QoSLocalID></QoSLocalID>
    <MplsLabelList>
        <MplsLabel></MplsLabel>
    </MplsLabelList>
    <InnerMplsLabelList>
        <InnerMplsLabel></InnerMplsLabel>
    </InnerMplsLabelList>
    <PktLength>
        <Min></Min>
        <Max></Max>
    </PktLength>
    <MplsLabelRange>
        <LabelStart></LabelStart>
        <LabelEnd></LabelEnd>
    </MplsLabelRange>
    <InnerMplsLabelRange>
        <InnerLabelStart></InnerLabelStart>
        <InnerLabelEnd></InnerLabelEnd>
    </InnerMplsLabelRange>
    <RTPPort>
        <PortStart></PortStart>
        <PortEnd></PortEnd>
    </RTPPort>
    <Application></Application>
    <ApplicationGroup></ApplicationGroup>
    <Vxlan></Vxlan>
    <VxlanAny></VxlanAny>
    <TunnelID></TunnelID>
    <VLANTag></VLANTag>
    <TunnelDscpList>
        <TunnelDscp></TunnelDscp>
    </TunnelDscpList>
    <IFA></IFA>
    <OutBoundInterface></OutBoundInterface>
    <Mpls></Mpls>
    <Nvgre></Nvgre>
    <NvgreAny></NvgreAny>
</Rule>
</Rules>
</MQC>

```

## Table description

Item	Description
Feature name	MQC

Table name	Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	Only one match column can be configured once, Rule cannot be modified by ID. The <b>delete/remove</b> operation can only carry the ClassName and RuleID columns.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClassName	Traffic classifier name	Index	String. Length: 1 to 31 characters.	N/A
RuleID	ID of the rule	Index	Unsigned integer	When the operation type of the message is <b>create</b> , <b>RuleID</b> can be configured as 4294967295 or the <b>NextRuleID</b> of the <b>Classifiers</b> table.
Not	Whether the rule is used as an unsuccessful match criterion	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	Required.
PktType	Packet type to be matched.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Any.</li> <li><b>2</b>—IP.</li> <li><b>3</b>—IPv6.</li> <li><b>4</b>—Arp.</li> <li><b>5</b>—Bt.</li> <li><b>6</b>—Bridge.</li> <li><b>7</b>—Route.</li> </ul>	<p>When the <b>PktType</b> column is <b>1</b>, the rule matches all packets.</p> <p>When the <b>PktType</b> column is <b>2</b>, the rule matches IPv4 packets.</p> <p>When the <b>PktType</b> column is <b>3</b>, the rule matches IPv6 packets.</p> <p>When the <b>PktType</b> column is <b>4</b>, the rule matches ARP packets.</p> <p>When the <b>PktType</b> column is <b>5</b>, the rule matches BitTorrent packets.</p> <p>When the <b>PktType</b> column is <b>6</b>, the rule matches Layer 2 forwarded packets.</p> <p>When the <b>PktType</b> column is <b>7</b>, the rule matches Layer 3 forwarded packets.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
Acl	Match ACL	Data structure	Members include: <ul style="list-style-type: none"> <li>• <b>IPv4Acl.</b></li> <li>• <b>IPv6Acl.</b></li> <li>• <b>Inner.</b></li> </ul>	IPv4Acl and IPv6Acl cannot be specified together. For information about how to configure, see "Appendix."
IPv4Acl	Match IPv4 ACL.	N/A	<ul style="list-style-type: none"> <li>• <b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li>• <b>ACL number:</b> An unsigned integer in the range of 2000 to 5999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .
IPv6Acl	Match IPv6 ACL.	N/A	<ul style="list-style-type: none"> <li>• <b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li>• <b>ACL number:</b> An unsigned integer in the range of 2000 to 3999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .
Inner	Match inner ACL.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Conform.</li> <li>• <b>false</b>—Not conform.</li> </ul>	Matches the entries that describe the inner flags of a packet in an ACL.
MACAcl	Match MAC ACL.	N/A	<ul style="list-style-type: none"> <li>• <b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li>• <b>ACL number:</b> An unsigned integer in the range of 4000 to 4999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .
UserAcl	Match User ACL.	N/A	<ul style="list-style-type: none"> <li>• <b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li>• <b>ACL number:</b> An unsigned integer in the range of 5000 to 5999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .
IPv4Acl	Match IPv4 ACL.	N/A	<ul style="list-style-type: none"> <li>• <b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li>• <b>ACL number:</b> An unsigned integer in the range of 2000 to 5999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> . This column and Acl cannot be specified together. For information about how to configure, see "Appendix."
IPv6Acl	Match IPv6 ACL.	N/A	<ul style="list-style-type: none"> <li>• <b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li>• <b>ACL number:</b> An unsigned integer in the range of 2000 to 3999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> . This column and Acl cannot be specified together. For information about how

Column name	Column description	Column type	Data type and restrictions	Remarks
				to configure, see "Appendix."
SrcMac	Match a source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
DestMac	Match a destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
ServiceVLANID	Match the service provider VLAN ID.	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string must not end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. you can specify up to 10 VLAN IDs or VLAN ID ranges.
CustomerVLANID	Match the customer VLAN ID.	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string must not end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. you can specify up to 10 VLAN IDs or VLAN ID ranges.
ServiceDot1p	Match the 802.1p priority of the service provider network.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>ServiceDot1p</b> for a rule
CustomerDot1p	Match the 802.1p priority of the customer network.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>CustomerDot1p</b> for a rule
Exp	Match MPLS EXP value.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>Exp</b> for a rule
InnerExp	Match inner MPLS EXP value.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>InnerExp</b> for a rule
IPPrecedence	Match IP precedence.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>IPPrecedence</b> for a rule
LocalPrecedence	Match local precedence.	N/A	Unsigned integer. Value range: 0 to 7.	You can specify up to 8 <b>LocalPrecedence</b> for a rule

Column name	Column description	Column type	Data type and restrictions	Remarks
Dscp	Match DSCP values.	N/A	Unsigned integer. Value range: 0 to 63.	You can specify up to 63 <b>Dscp</b> for a rule
DropPriority	Match drop precedence.	N/A	Unsigned integer. Value range: 0 to 2.	You can specify up to 3 <b>DropPriority</b> for a rule
QoSLocalID	Match local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A
MplsLabel	Match MPLS label.	N/A	Unsigned integer. Value range: 0 to 1048575.	You can specify up to 8 <b>MplsLabel</b> for a rule
InnerMplsLabel	Match inner MPLS label.	N/A	Unsigned integer. Value range: 0 to 1048575.	You can specify up to 8 <b>InnerMplsLabel</b> for a rule
PktLength	Match packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>Min.</b></li> <li><b>Max.</b></li> </ul>	N/A
Min	The minimum packet length in bytes.	N/A	Unsigned integer. Value range: 1 to 65535.	<b>Min</b> cannot be bigger than <b>Max</b> .
Max	The maximum packet length in bytes.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
MplsLabelRange	Match MPLS label range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>LabelStart.</b></li> <li><b>LabelEnd.</b></li> </ul>	The two members must both be specified.
LabelStart	Start Label Value.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
LabelEnd	End Label Value.	N/A	Unsigned integer. Value range: 0 to 1048575.	<b>LabelEnd</b> must be bigger than <b>LabelStart</b> .
InnerMplsLabelRange	Match inner MPLS label range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>InnerLabelStart.</b></li> <li><b>InnerLabelEnd.</b></li> </ul>	The two members must both be specified.
InnerLabelStart	Start Label Value.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
InnerLabelEnd	End Label Value.	N/A	Unsigned integer. Value range: 0 to 1048575.	<b>InnerLabelEnd</b> must be bigger than <b>InnerLabelStart</b> .
RTPPort	Match RTP protocol port range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>PortStart.</b></li> <li><b>PortEnd.</b></li> </ul>	The two members must both be specified.
PortStart	Start RTP port number	N/A	Unsigned integer.	<b>PortStart</b> cannot be bigger than <b>PortEnd</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 2000 to 65535.	
PortEnd	End RTP port number	N/A	Unsigned integer. Value range: 2000 to 65535.	N/A
Application	Match application layer protocol.	N/A	String, case-insensitive. Length: 1 to 63 characters.	APR/Applications/Application/AppName.
ApplicationGroup	Match application group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	APR/AppGroups/GroupInfo/GroupName.
Vxlan	Match vxlan ID.	N/A	Unsigned integer. Value range: 0 to 16777215.	It must be empty when the VxlanAny column is <b>true</b> .
VxlanAny	Match any vxlan ID.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	The Vxlan column must be specified when the VxlanAny column is <b>false</b> .
TunnelID	Match tunnel ID.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
VLANTag	Match VLAN tagging mode	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—None.</li> <li><b>2</b>—Single-tagged.</li> <li><b>4</b>—Double-tagged.</li> </ul>	N/A
TunnelDscpList	Match tunnel DSCP values.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>TunnelDscp</b>.</li> </ul>	N/A
TunnelDscp	Match tunnel DSCP values.	N/A	Unsigned integer. Value range: 0 to 63.	You can specify up to 8 <b>Dscp</b> for a rule
IFA	Inband Flow Analyzer	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—tcp.</li> <li><b>2</b>—udp.</li> </ul>	N/A
OutBoundInterface	Match output interface	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Mpls	Mpls type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—l2.</li> <li><b>2</b>—l3.</li> </ul>	N/A
Nvgre	Match NVGRE.	N/A	Hexadecimal string. Length: 4 to 6 characters. Value range: 1000 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			FFFFFFE.	
NvgreAny	Match any NVGRE ID	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	The Nvgre column must be specified when the NvgreAny column is <b>false</b> .

## MQC/Remark

This table contains information about marking action.

## XML structure

```

<MQC>
  <Remark>
    <Action>
      <BehaviorName></BehaviorName>
      <Type></Type>
      <Color></Color>
      <Value></Value>
      <SrcMACAddr></SrcMACAddr>
      <DstMACAddr></DstMACAddr>
      <SrcIPv4Addr></SrcIPv4Addr>
      <DstIPv4Addr></DstIPv4Addr>
      <SrcIPv6Addr></SrcIPv6Addr>
      <DstIPv6Addr></DstIPv6Addr>
    </Action>
  </Remark>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Remark
Table type	Multi-instance table
Row name	Action
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Type	Type of remark	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—CDot1pTrust.</li> <li>1—Dscp.</li> <li>2—IPPre.</li> <li>3—MplsExp.</li> <li>4—Dot1p.</li> <li>5—LocalID.</li> <li>6—LocalPre.</li> <li>7—DropPre.</li> <li>8—CVlanID.</li> <li>9—SVlanID.</li> <li>10—ImpositionMplsExp.</li> <li>11—ForwardingClass.</li> <li>12—AtmClp.</li> <li>16—ServiceClass.</li> <li>17—TunnelDscp.</li> <li>18—DstMACAddr.</li> <li>19—SrcMACAddr.</li> <li>20—DstIPv4Addr.</li> <li>21—SrcIPv4Addr.</li> <li>22—DstIPv6Addr.</li> <li>23—SrcIPv6Addr.</li> </ul>	<p>When the <b>Type</b> column is 0, configure an inner-to-outer tag priority copying action.</p> <p>When the <b>Type</b> column is 1, configure a DSCP marking action.</p> <p>When the <b>Type</b> column is 2, configure an IP precedence marking action.</p> <p>When the <b>Type</b> column is 3, configure an EXP value marking action.</p> <p>When the <b>Type</b> column is 4, configure an 802.1p priority marking action.</p> <p>When the <b>Type</b> column is 5, configure the action of setting the specified local QoS ID for packets.</p> <p>When the <b>Type</b> column is 6, configure a local precedence marking action.</p> <p>When the <b>Type</b> column is 7, configure a drop priority marking action.</p> <p>When the <b>Type</b> column is 8, configure a CVLAN marking action.</p> <p>When the <b>Type</b> column is 9, configure a SVLAN marking action.</p> <p>When the <b>Type</b> column is 10, configure an EXP value marking action for added labels.</p> <p>When the <b>Type</b> column is 11, configure a forwarding-class marking action.</p> <p>When the <b>Type</b> column is 12, configure the action of setting the CLP bit for ATM cells.</p> <p>When the <b>Type</b> column is 16, configure the action of setting the service-class of MPLS traffic</p>



Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>engineering.</p> <p>When the <b>Type</b> column is <b>17</b>, configure a tunnel-DSCP marking action.</p> <p>When the <b>Type</b> column is <b>18</b>, configure a destination MAC address.</p> <p>When the <b>Type</b> column is <b>19</b>, configure a source MAC address.</p> <p>When the <b>Type</b> column is <b>20</b>, configure a destination IPv4 address.</p> <p>When the <b>Type</b> column is <b>21</b>, configure a source IPv4 address.</p> <p>When the <b>Type</b> column is <b>22</b>, configure a destination IPv6 address.</p> <p>When the <b>Type</b> column is <b>23</b>, configure a source IPv6 address.</p>
Color	The color of affected packets	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>0</b>—No color.</li> <li>• <b>1</b>—Green.</li> <li>• <b>2</b>—Yellow.</li> <li>• <b>3</b>—Red.</li> </ul>	<p>Specifies different color packets for the priority marking action. Support for the green, red and yellow keyword depends on the device model.</p> <p>When- the <b>Color</b> column is <b>0</b>, specifies all packets.</p> <p>When the <b>Color</b> column is <b>1</b>, specifies green packets.</p> <p>When the <b>Color</b> column is <b>2</b>, specifies yellow packets.</p> <p>When the <b>Color</b> column is <b>3</b>, specifies red packets.</p>
Value	The value of marking action	N/A	Unsigned integer.	<p>Required when the <b>Type</b> column is <b>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16</b> or <b>17</b>.</p> <p>When the <b>Type</b> column is <b>0</b>, the value is invalid.</p> <p>When the <b>Type</b> column is <b>8</b> or <b>9</b>, the value range is 1 to 4094.</p> <p>When the <b>Type</b> column is <b>7</b>, the value range is 0 to 2.</p> <p>When the <b>Type</b> column is <b>5</b>, the value range is 1 to</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>4095.</p> <p>When the <b>Type</b> column is <b>2, 3, 4, 6</b> or <b>10</b>, the value range is 0 to 7.</p> <p>When the <b>Type</b> column is <b>11</b>, the value range is 0 to 3 or 0 to 7.</p> <p>When the <b>Type</b> column is <b>1</b>, the value range is 0 to 63.</p> <p>When the <b>Type</b> column is <b>12</b>, the value range is 0 to 1.</p> <p>When the <b>Type</b> column is <b>16</b>, the value range is 0 to 7 or a customized value.</p> <p>When the <b>Type</b> column is <b>17</b>, the value range is 0 to 63.</p>
SrcMACAddr	The source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Required when the <b>Type</b> column is <b>19</b>
DstMACAddr	The destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Required when the <b>Type</b> column is <b>18</b>
SrcIPv4Addr	The source IPv4 address.	N/A	String, dotted decimal notation.	Required when the <b>Type</b> column is <b>21</b>
DstIPv4Addr	The destination IPv4 address.	N/A	String, dotted decimal notation.	Required when the <b>Type</b> column is <b>20</b>
SrcIPv6Addr	The source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Required when the <b>Type</b> column is <b>23</b>
DstIPv6Addr	The destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Required when the <b>Type</b> column is <b>22</b>

## MQC/Redirect

This table contains information about redirect.

## XML structure

```

<MQC>
  <Redirect>
    <Action>
      <BehaviorName></BehaviorName>
      <Type></Type>
      <IfIndex></IfIndex>
      <TrackOap></TrackOap>
      <VLANID></VLANID>
      <VSI></VSI>
    </Action>
  </Redirect>
</MQC>

```

```

<Nexthop>
  <VRF></VRF>
  <IPAddr></IPAddr>
  <IPAddrBackup></IPAddrBackup>
  <Track></Track>
  <TrackBackup></TrackBackup>
</Nexthop>
<FailoverGroup>
  <GroupName></GroupName>
  <Channel></Channel>
</FailoverGroup>
<MonitorGroupID></MonitorGroupID>
</Action>
</Redirect>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Redirect
Table type	Multi-instance table
Row name	Action
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Type	Type of redirect	Index	Enumeration: <ul style="list-style-type: none"> <li>1—CPU.</li> <li>2—Interface.</li> <li>3—VSI.</li> <li>4—FailoverGroup.</li> <li>6—Nexthop</li> <li>7—MonitorGroup</li> </ul>	When the <b>Type</b> column is <b>1</b> , redirect traffic to CPU. When the <b>Type</b> column is <b>2</b> , redirect traffic to an interface. When the <b>Type</b> column is <b>3</b> , redirect traffic to a virtual station interface. When the <b>Type</b> column is <b>4</b> , redirect traffic to a failover group. When the <b>Type</b> column is <b>6</b> , redirect traffic to nexthop. When the <b>Type</b> column is

Column name	Column description	Column type	Data type and restrictions	Remarks
				<b>7</b> , redirect traffic to monitor group.
IfIndex	Interface index	Index	Unsigned integer.	The value of this column is valid if <b>Type</b> is <b>2</b> . Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
TrackOap	Enable the traffic redirecting action to collaborate with OAP	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	The value of this column is valid if <b>Type</b> is <b>2</b> .
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	The value of this column is valid if <b>Type</b> is <b>2</b> .
VSI	Name of VSI	N/A	String. Length: 1 to 31 characters.	Required when the <b>Type</b> column is <b>3</b> .
Nexthop	Nexthop	N/A	N/A	N/A
VRF	VRF instance name	N/A	String. Length: 0 to 31 characters.	The value of this column is valid if <b>Type</b> is <b>6</b> .
IPAddr	Nexthop ip address	N/A	String, dotted decimal notation. Or Hexadecimal string, colon-separated. Length: 1 to 46 characters.	The value of this column is valid if <b>Type</b> is <b>6</b> . For example, 1.1.1.1, or 1:1::1:1.
IPAddrBackup	Nexthop ip address	N/A	String, dotted decimal notation. Or Hexadecimal string, colon-separated. Length: 1 to 46 characters.	The value of this column is valid if <b>Type</b> is <b>6</b> . For example, 1.1.1.1, or 1:1::1:1.
Track	Track	N/A	Unsigned integer. Value range: 1 to 1024.	The value of this column is valid if <b>Type</b> is <b>6</b> .
TrackBackup	Track	N/A	Unsigned integer. Value range: 1 to 1024.	The value of this column is valid if <b>Type</b> is <b>6</b> .
FailoverGroup	Failover group	Data structure	Members include: <ul style="list-style-type: none"> <li>GroupName.</li> <li>Channel.</li> </ul>	N/A
GroupName	Failover group name	N/A	String. Length: 1 to 63 characters.	The value of this column is valid if <b>Type</b> is <b>4</b> .
Channel	Channel	N/A	Unsigned integer. Value range: 0 to 1.	The value of this column is valid if <b>Type</b> is <b>4</b> . Some versions don't

Column name	Column description	Column type	Data type and restrictions	Remarks
				support this column. For relevant information, see the XSD document of your product.
MonitorGroup ID	Monitor group ID.	N/A	Unsigned integer.	N/A

## MQC/Filter

This table contains information about filtering action.

## XML structure

```

<MQC>
  <Filter>
    <Action>
      <BehaviorName></BehaviorName>
      <Type></Type>
    </Action>
  </Filter>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Filter
Table type	Multi-instance table
Row name	Action
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Type	Type of filter	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	Required.

# MQC/AssuredForwarding

This table contains information about assured-forwarding queue.

## XML structure

```
<MQC>
  <AssuredForwarding>
    <Action>
      <BehaviorName></BehaviorName>
      <Kbps></Kbps>
      <Pct></Pct>
      <RemainingPct></RemainingPct>
    </Action>
  </AssuredForwarding>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	AssuredForwarding
Table type	Multi-instance table
Row name	Action
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Kbps	Bandwidth value in kbps	N/A	Unsigned integer. Value range: 8 to 10,000,000.	When the configuration way of Bandwidth is Kbps, the others can't be configured at the same time.
Pct	Percentage of reserved bandwidth.	N/A	Unsigned integer. Value range: 1 to 100.	When the configuration way of Bandwidth is Pct, the others can't be configured at the same time.
RemainingPct	Percentage of remaining bandwidth.	N/A	Unsigned integer. Value range: 1 to 100.	When the configuration way of Bandwidth is RemainingPct, the others can't be configured at the

Column name	Column description	Column type	Data type and restrictions	Remarks
				same time.

## MQC/ExpeditedForwarding

This table contains information about expedited-forwarding queue.

### XML structure

```

<MQC>
  <ExpeditedForwarding>
    <Action>
      <BehaviorName></BehaviorName>
      <Bandwidth>
        <Kbps></Kbps>
        <CBS></CBS>
      </Bandwidth>
      <BandwidthPct>
        <Pct></Pct>
        <CBSRatio></CBSRatio>
      </BandwidthPct>
    </Action>
  </ExpeditedForwarding>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	ExpeditedForwarding
Table type	Multi-instance table
Row name	Action
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Bandwidth	Specify the Bandwidth value	Data structure	Members include: • Kbps.	When the configuration way of Bandwidth is Bandwidth, the <b>Kbps</b>

Column name	Column description	Column type	Data type and restrictions	Remarks
	in kbps		<ul style="list-style-type: none"> <li><b>CBS.</b></li> </ul>	must be specified, and another way can't be configured at the same time.
Kbps	value in kbps	N/A	Unsigned integer. Value range: 8 to 10,000,000.	N/A
CBS	Committed Burst Size	N/A	Unsigned integer. Value range: 32 to 1,000,000,000.	N/A
BandwidthPct	Specify the percentage of reserved bandwidth.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>Pct.</b></li> <li><b>CBS-Ratio.</b></li> </ul>	When the configuration way of Bandwidth is BandwidthPct, the <b>Pct</b> must be specified, and another way can't be configured at the same time.
Pct	Percentage of reserved bandwidth.	N/A	Unsigned integer. Value range: 1 to 100.	N/A
CBSRatio	CBS Ratio	N/A	Unsigned integer. Value range: 25 to 500.	The default value is 25.

## MQC/WFQ

This table contains information about weighted fair queue.

## XML structure

```

<MQC>
  <WFQ>
    <Action>
      <BehaviorName></BehaviorName>
      <QueueNum></QueueNum>
    </Action>
  </WFQ>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	WFQ
Table type	Multi-instance table
Row name	Action
Restrictions	None



Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
QueueNum	Total queue number	N/A	Unsigned integer. Value range: 16 to 4096.	The value is power of 2. This column can be specified null. If it is null, the value is default, and default value varies by device.

## MQC/CAR

This table contains information about car action.

## XML structure

```

<MQC>
  <CAR>
    <Action>
      <BehaviorName></BehaviorName>
      <BandwidthUnit></BandwidthUnit>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenAction>
        <GreenActionType></GreenActionType>
        <GreenActionValue></GreenActionValue>
      </GreenAction>
      <YellowAction>
        <YellowActionType></YellowActionType>
        <YellowActionValue></YellowActionValue>
      </YellowAction>
      <RedAction>
        <RedActionType></RedActionType>
        <RedActionValue></RedActionValue>
      </RedAction>
      <AggregativeName></AggregativeName>
      <HierarchicalName></HierarchicalName>
      <Mode></Mode>
    </Action>
  </CAR>

```

</MQC>

## Table description

Item	Description
Feature name	MQC
Table name	CAR
Table type	Multi-instance table
Row name	Action
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
BandwidthUnit	Specify bandwidth Unit	N/A	Enumeration: <ul style="list-style-type: none"><li>1—pps.</li><li>2—kbps.</li><li>3—percent.</li></ul>	If this column is not configured, the default bandwidth unit is kbps.
CIR	Committed information rate	N/A	Unsigned integer.	Required when the <b>AggregativeName</b> is not specified. When BandwidthUnit is 3, the value range is 1 to 100.
CBS	Committed burst size	N/A	Unsigned integer.	When BandwidthUnit is 3, the value range is 50 to 2000.
EBS	Excess burst size	N/A	Unsigned integer.	If both <b>CBS</b> and <b>PIR</b> are not configured, <b>EBS</b> cannot be configured. When BandwidthUnit is 3, the value range is 0 to 2000.
PIR	Peak information rate	N/A	Unsigned integer.	When BandwidthUnit is 3, the value range is 1 to 100.
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"><li><b>GreenActionType</b>.</li><li><b>GreenActionValue</b>.</li></ul>	GreenActionValue is required when GreenActionType is not 1, 10 or 19.
GreenActionType	Green Action Type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—pass.</li><li>2—remark-dscp-pass.</li></ul>	When <b>GreenActionType</b> is 1, send the packet. When <b>GreenActionType</b> is 2, remark DSCP value

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• <b>3</b>—remark -prec-pass.</li> <li>• <b>4</b>—remark-mpls-exp-pass.</li> <li>• <b>5</b>—remark-dot1p-pass.</li> <li>• <b>6</b>—remark-atm-clp-pass.</li> <li>• <b>7</b>—remark-frde-pass.</li> <li>• <b>8</b>—remark-local-prec-pass.</li> <li>• <b>10</b>—discard.</li> <li>• <b>19</b>—continue.</li> </ul>	<p>of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet.</p>
GreenActionValue	Green Action Value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>GreenActionType</b> is <b>1</b>, <b>10</b> or <b>19</b>, <b>GreenActionValue</b> is ignored.</p> <p>When <b>GreenActionType</b> is <b>6</b> or <b>7</b>, <b>GreenActionValue</b> is 0~1.</p> <p>When <b>GreenActionType</b> is <b>2</b>, <b>GreenActionValue</b> is 0~63.</p> <p>When <b>GreenActionType</b> is <b>3</b>, <b>4</b>, <b>5</b>, <b>8</b>, <b>GreenActionValue</b> is 0~7.</p>
YellowAction	Specify behavior for yellow packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>• <b>YellowActionType</b>.</li> <li>• <b>YellowActionValue</b>.</li> </ul>	YellowActionValue is required when YellowActionType is not 1, 10 or 19.
YellowActionType	Yellow Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>1</b>—pass.</li> <li>• <b>2</b>—remark-dscp-pass.</li> <li>• <b>3</b>—remark -prec-pass.</li> <li>• <b>4</b>—remark-mpls-exp-pass.</li> <li>• <b>5</b>—remark-dot1p-pass.</li> <li>• <b>6</b>—remark-atm-clp-pass</li> </ul>	<p>When <b>YellowActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>YellowActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> <li>19—continue.</li> </ul>	<p>When <b>YellowActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>YellowActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>YellowActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet.</p>
YellowAction Value	Yellow Action Value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>YellowActionType</b> is <b>1</b>, <b>10</b> or <b>19</b>, <b>YellowActionValue</b> is ignored.</p> <p>When <b>YellowActionType</b> is <b>6</b> or <b>7</b>, <b>YellowActionValue</b> is 0~1.</p> <p>When <b>YellowActionType</b> is <b>2</b>, <b>YellowActionValue</b> is 0~63.</p> <p>When <b>YellowActionType</b> is <b>3</b>, <b>4</b>, <b>5</b>, <b>8</b>, <b>YellowActionValue</b> is 0~7.</p>
RedAction	Specify behavior for red packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li><b>RedActionType</b>.</li> <li><b>RedActionValue</b>.</li> </ul>	RedActionValue is required when RedActionType is not 1, 10 or 19.
RedActionType	Red Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—pass.</li> <li>2—remark-dscp-pass.</li> <li>3—remark -prec-pass.</li> <li>4—remark-mpls-exp-pass.</li> <li>5—remark-dot1p-pass.</li> <li>6—remark-atm-clp-pass.</li> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> </ul>	<p>When <b>RedActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>RedActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>19</b>—continue.</li> </ul>	<p>send it.</p> <p>When <b>RedActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet.</p>
RedActionValue	Red Action Value	N/A	Unsigned integer. Value range: 0 to 63.	<p>When <b>RedActionType</b> is <b>1, 10</b> or <b>19</b>, <b>RedActionValue</b> is ignored.</p> <p>When <b>RedActionType</b> is <b>6</b> or <b>7</b>, <b>RedActionValue</b> is 0~1.</p> <p>When <b>RedActionType</b> is <b>2</b>, <b>RedActionValue</b> is 0~63.</p> <p>When <b>RedActionType</b> is <b>3, 4, 5, 8</b>, <b>RedActionValue</b> is 0~7.</p>
AggregativeName	Aggregate CAR action name	N/A	String. Length: 1 to 31 characters. The string must start with an English letter.	This column only can be configured together with <b>HierarchicalName</b> and <b>Mode</b> .
HierarchicalName	Hierarchical CAR action name	N/A	String. Length: 1 to 31 characters. The string must start with an English letter.	N/A
Mode	Match operator	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—And (default).</li> <li><b>2</b>—Or.</li> </ul>	This column must be configured together with <b>HierarchicalName</b> .

## MQC/GTS

This table contains information about GTS actions.

## XML structure

```

<MQC>
  <GTS>
    <Action>

```

```

    <BehaviorName></BehaviorName>
    <BandwidthUnit></BandwidthUnit>
    <CIR></CIR>
    <CBS></CBS>
    <EBS></EBS>
    <PIR></PIR>
    <QueueLength></QueueLength>
  </Action>
</GTS>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	GTS
Table type	Multi-instance table
Row name	Action
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
BandwidthUnit	Bandwidth unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—kbps (default).</li> <li>3—percent.</li> </ul>	N/A
CIR	Committed information rate	N/A	Unsigned integer.	Required. When <b>BandwidthUnit</b> is 2, the value range for this column depends on the device model. When <b>BandwidthUnit</b> is 3, the value range is 1 to 100.
CBS	Committed burst size	N/A	Unsigned integer.	When <b>BandwidthUnit</b> is 2, the value range for this column depends on the device model. When <b>BandwidthUnit</b> is 3, the value range is 50 to 2000.
EBS	Excess burst size	N/A	Unsigned integer.	If both <b>CBS</b> and <b>PIR</b> are not configured, <b>EBS</b> cannot be configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
				When <b>BandwidthUnit</b> is 2, the value range for this column depends on the device model. When <b>BandwidthUnit</b> is 3, the value range is 0 to 2000.
PIR	Peak information rate	N/A	Unsigned integer.	When <b>BandwidthUnit</b> is 2, the value range for this column depends on the device model. When <b>BandwidthUnit</b> is 3, the value range is 1 to 100.
QueueLength	Queue length	N/A	Unsigned integer.	The value range for this column depends on the device model.

## MQC/ReservedBandwidth

This table contains information about the maximum reserved bandwidth as a percentage of available bandwidth.

## XML structure

```

<MQC>
  <ReservedBandwidth>
    <Interface>
      <IfIndex></IfIndex>
      <Pct></Pct>
    </Interface>
  </ReservedBandwidth>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	ReservedBandwidth
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Pct	Specify the percentage of available bandwidth to be reserved	N/A	Unsigned integer. Value range: 1 to 100.	Required

## MQC/Mirror

This table contains information about mirroring.

## XML structure

```

<MQC>
  <Mirror>
    <Action>
      <BehaviorName></BehaviorName>
      <Type></Type>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <IP>
        <DestIP></DestIP>
        <SrcIP></SrcIP>
        <DSCP></DSCP>
        <VLAN></VLAN>
        <VRF></VRF>
      </IP>
      <Mac></Mac>
      <Board>
        <Chassis></Chassis>
        <Slot></Slot>
        <BackupChassis></BackupChassis>
        <BackupSlot></BackupSlot>
      </Board>
      <SamplerName></SamplerName>
      <Truncation></Truncation>
      <EncapType></EncapType>
    </Action>
  </Mirror>
</MQC>

```



```

    </Action>
  </Mirror>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Mirror
Table type	Multi-instance table
Row name	Action
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Type	Type of mirror	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—CPU.</li> <li>3—VLAN.</li> <li>4—Slot.</li> <li>5—Local.</li> <li>6—GRPC.</li> <li>7—IFA.</li> </ul>	When the <b>Type</b> column is <b>1</b> , mirror to an interface. When the <b>Type</b> column is <b>2</b> , mirror to CPU. When the <b>Type</b> column is <b>3</b> , mirror to VLAN. When the <b>Type</b> column is <b>4</b> , traffic is mirrored to a board. When the <b>Type</b> column is <b>5</b> , traffic is mirrored to the board on which the mirrored traffic is received or sent out. When the <b>Type</b> column is <b>6</b> , traffic is mirrored to GRPC. When the <b>Type</b> column is <b>7</b> , traffic is mirrored to inband flow analyzer processor.
IfIndex	Interface index	Index	Unsigned integer.	The value of this column is valid if <b>Type</b> is 1. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr

Column name	Column description	Column type	Data type and restrictions	Remarks
				NETCONF XML API Configuration Reference.
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	The value of this column is valid if <b>Type</b> is 3.
IP	Specify IP for mirroring to interface with GRE format	Data structure	Members include: <ul style="list-style-type: none"> <li>• DestIP</li> <li>• SrcIP</li> <li>• DSCP</li> <li>• VLAN</li> <li>• VRF</li> </ul>	DestIP and SrcIP must both be specified.  DSCP, VLAN and VRF can be optionally specified when DestIP and SrcIP are configured.  This structure is valid and optional if Type is 1.
DestIP	Destination IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
SrcIP	Source IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
DSCP	DSCP value	N/A	Unsigned integer. Value range: 0 to 63.	N/A
VLAN	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	VRF instance name	N/A	String. Length: 1 to 31 characters.	N/A
Mac	Specify destination MAC for mirroring to interface	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.  The value of this column is valid and optional if <b>Type</b> is 1.
Board	Specify Board for mirroring to a board.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Chassis</li> <li>• Slot</li> <li>• BackupChassis</li> <li>• BackupSlot</li> </ul>	If the device is a distributed device in standalone mode or a centralized IRF device, the slot must be specified. If the device supports mirroring packets to a backup slot, the BackupSlot can be specified.  If the device is a distributed device in IRF mode, the chassis and slot must both be specified. If the device supports mirroring packets to a backup slot, the BackupChassis and BackupSlot can be specified.  This structure is valid and optional if <b>Type</b> is 4.
Chassis	Chassis number	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 65535	
Slot	Slot number	N/A	Unsigned integer. Value range: 0 to 65535	N/A
BackupChassis	Backup chassis number	N/A	Unsigned integer. Value range: 0 to 65535	N/A
BackupSlot	Backup slot number	N/A	Unsigned integer. Value range: 0 to 65535	N/A
SamplerName	Sampler name	N/A	String. Length: 1 to 31 characters.	The value of this column depends on the device model. The value of this column is valid and optional if <b>Type</b> is 1, 4, 5 or 7.
Truncation	Truncation packets	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	The value of this column is valid if <b>Type</b> is 1.
EncapType	Specify encapsulation type for mirrored packet	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—VLAN encapsulation.</li> </ul>	The value of this column is valid if <b>Type</b> is 7.

## MQC/MirrorDynamicIF

This table contains information about mirroring packets to a dynamic interface, which is found by IP address.

### XML structure

```

<MQC>
  <MirrorDynamicIF>
    <Action>
      <BehaviorName></BehaviorName>
      <DestIP></DestIP>
      <SrcIP></SrcIP>
      <DSCP></DSCP>
      <VLAN></VLAN>
      <VRF></VRF>
      <Mac></Mac>
      <SamplerName></SamplerName>
      <Truncation></Truncation>
    </Action>
  </MirrorDynamicIF>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	MirrorDynamicIF
Table type	Multi-instance table
Row name	Action
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
DestIP	Destination IP address	Index	String, dotted decimal notation.	Example: 10.153.93.54.
SrcIP	Source IP address	Index	String, dotted decimal notation.	Example: 10.153.93.60.
DSCP	DSCP value	N/A	Unsigned integer. Value range: 0 to 63.	N/A
VLAN	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	VRF instance name	N/A	String. Length: 1 to 31 characters.	N/A
Mac	Specify destination MAC	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
SamplerName	Sampler name	N/A	String. Length: 1 to 31 characters.	The value of this column depends on the device model.
Truncation	Truncation packets	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Conform.</li><li><b>false</b>—Not conform.</li></ul>	N/A

## MQC/GlobalPolicy

This table contains information about global QoS policies.

## XML structure

<MQC>

```

<GlobalPolicy>
  <Application>
    <Direction></Direction>
    <PolicyName></PolicyName>
  </Application>
</GlobalPolicy>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalPolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.

## MQC/VlanPolicy

This table contains information about QoS policies applied to VLANs.

## XML structure

```

<MQC>
  <VlanPolicy>
    <Application>
      <VLANID></VLANID>
      <Direction></Direction>
      <PolicyName></PolicyName>
    </Application>
  </VlanPolicy>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	VlanPolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.

## MQC/InterfacePolicy

This table contains information about QoS policies applied to interfaces.

## XML structure

```
<MQC>
  <InterfacePolicy>
    <Application>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Mode></Mode>
    </Application>
  </InterfacePolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC

Table name	InterfacePolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.
Mode	Mode of policies applied to interfaces.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—extension.</li> <li>2—inner-match.</li> </ul>	When the <b>Direction</b> column is 0, configure the Mode. Mode cannot be modified .

## MQC/IfPolicyEnhance

This table contains information about QoS policies applied to interfaces in enhanced mode.

## XML structure

```

<MQC>
  <IfPolicyEnhance>
    <Application>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyName></PolicyName>
    </Application>
  </IfPolicyEnhance>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfPolicyEnhance
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>0—Inbound.</li><li>1—Outbound.</li></ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.

## MQC/GlobalPolicyEnhance

This table contains information about global QoS policies in enhanced mode.

## XML structure

```
<MQC>
  <GlobalPolicyEnhance>
    <Application>
      <Direction></Direction>
      <PolicyName></PolicyName>
    </Application>
  </GlobalPolicyEnhance>
</MQC>
```



## Table description

Item	Description
Feature name	MQC
Table name	GlobalPolicyEnhance
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.

## MQC/Account

This table contains information about accounting action.

## XML structure

```
<MQC>
  <Account>
    <Action>
      <BehaviorName></BehaviorName>
      <Byte></Byte>
      <Packet></Packet>
    </Action>
  </Account>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Account
Table type	Multi-instance table

Row name	Action
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Byte	Accounting in bytes	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	N/A
Packet	Accounting in packets	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	N/A

## MQC/PostClassify

This table contains information about processing QoS after other modules in the outbound direction of an interface.

## XML structure

```

<MQC>
  <PostClassify>
    <Application>
      <IfIndex></IfIndex>
      <enable></enable>
    </Application>
  </PostClassify>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	PostClassify
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
lflIndex	Interface index	Index	Unsigned integer.	Some version support interface name. For relevant information, see the XSD document of your product. For information about lflIndex, see “Appendix” in lfmgr NETCONF XML API Configuration Reference.
enable	Enable	column	Boolean <ul style="list-style-type: none"><li>true—Conform.</li><li>false—Not conform.</li></ul>	N/A

## MQC/GlobalCategoryPolicy

This table contains information about QoS policies of the specified types applied globally.

## XML structure

```
<MQC>
  <GlobalCategoryPolicy>
    <Application>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <PreOrder></PreOrder>
    </Application>
  </GlobalCategoryPolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalCategoryPolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>0—Inbound.</li><li>1—Outbound.</li></ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"><li>0—Common policy (default).</li><li>1—Remarking policy.</li><li>2—Accounting policy.</li><li>3—Mirroring policy.</li></ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
PreOrder	Application priority	N/A	Unsigned integer. Default: 0.	A greater value indicates a higher matching priority. The value range can be customized for devices. This column cannot be modified.

## MQC/InterfaceCategoryPolicy

This table contains information about QoS policies of the specified types applied to interfaces.

## XML structure

```
<MQC>
  <InterfaceCategoryPolicy>
    <Application>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <PreOrder></PreOrder>
    </Application>
  </InterfaceCategoryPolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	InterfaceCategoryPolicy
Table type	Multi-instance table

Item	Description
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy (default).</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
PreOrder	Application priority	N/A	Unsigned integer. Default: 0.	A greater value indicates a higher matching priority. The value range can be customized for devices. This column cannot be modified.

## MQC/Telemetry

This table contains information about inband telemetry.

## XML structure

```

<MQC>
  <Telemetry>
    <DeviceID></DeviceID>

```

```

<Collector>
  <SrcIP></SrcIP>
  <DstIP></DstIP>
  <SrcPort></SrcPort>
  <DstPort></DstPort>
  <VLANID></VLANID>
</Collector>
</Telemetry>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Telemetry
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceID	Device address	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
Collector	Telemetry collector	N/A	Members include: <ul style="list-style-type: none"> <li>SrcIP</li> <li>DstIP</li> <li>SrcPort</li> <li>DstPort</li> <li>VLANID</li> </ul>	You must specify the SrcIP, DstIP, SrcPort and DstPort when you remove or delete the telemetry collector.  You must specify the SrcIP, DstIP, SrcPort and DstPort when you replace the telemetry collector, or when you merge or create the telemetry collector that does not exist.
SrcIP	Source IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
DstIP	Destination IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
SrcPort	Source port	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPort	Destination port	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
VLANID	VLAN ID	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 1 to 4094.	

## MQC/TelemetryRoles

This table contains information about inband telemetry role.

### XML structure

```

<MQC>
  <TelemetryRoles>
    <TelemetryRole>
      <IfIndex></IfIndex>
      <Role></Role>
    </TelemetryRole>
  </TelemetryRoles>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	TelemetryRoles
Table type	Multi-instance table
Row name	TelemetryRole
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Role	Telemetry role	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ingress.</li> <li>2—Transit.</li> <li>3—Egress</li> </ul>	N/A

# MQC/TelemetryLoopbacks

This table contains information about inband telemetry loopback interfaces.

## XML structure

```
<MQC>
  <TelemetryLoopbacks>
    <TelemetryLoopback>
      <IfIndex></IfIndex>
      <Loopback></Loopback>
    </TelemetryLoopback>
  </TelemetryLoopbacks>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	TelemetryLoopbacks
Table type	Multi-instance table
Row name	TelemetryLoopback
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Loopback	Telemetry loopback	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Conform.</li><li><b>false</b>—Not conform.</li></ul>	N/A

# MQC/TelemetryGlobalEnable

This table contains information about inband telemetry status.

## XML structure

```
<MQC>
  <TelemetryGlobalEnable>
```



```

    <Enable></Enable>
  </TelemetryGlobalEnable>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	TelemetryGlobalEnable
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	no

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable IFA	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable(default).</li> <li><b>false</b>—Disable.</li> </ul>	N/A

## MQC/TelemetryAction

This table contains information about inband telemetry actions.

## XML structure

```

<MQC>
  <TelemetryActions>
    <TelemetryAction>
      <IfIndex></IfIndex>
      <IFAIId></IFAIId>
      <Match>
        <AclType></AclType>
        <Acl></Acl>
        <Loopback></Loopback>
      </Match>
      <Action>
        <Md></Md>
        <Mirror></Mirror>
        <SamplerName></SamplerName>
        <Drop></Drop>
      </Action>
    </TelemetryAction>
  </TelemetryActions>
</MQC>

```

```

    </TelemetryActions>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	TelemetryActions
Table type	Multi-instance table
Row name	TelemetryAction
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
IFAIId	IFA action ID	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Match	Telemetry match	N/A	Members include: <ul style="list-style-type: none"> <li>• AclType</li> <li>• Acl</li> <li>• Loopback</li> </ul>	N/A
AclType	ACL type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4Acl.</li> <li>• 2—IPv6Acl.</li> <li>• 3—MACAcl.</li> <li>• 4—UserAcl.</li> </ul>	You must specify the Acl when you specify the AclType.
Acl	ACL name or ACL number.	N/A	<ul style="list-style-type: none"> <li>• <b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li>• <b>ACL number:</b> An unsigned integer in the range based on AclType.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> . You must specify the AclType when you specify the Acl.
Loopback	Telemetry loopback	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Conform.</li> <li>• <b>false</b>—Not conform.</li> </ul>	If this column is not configured, the default value is <b>false</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Telemetry action	N/A	Members include: <ul style="list-style-type: none"> <li>Md</li> <li>Mirror</li> <li>SamplerName</li> <li>Drop</li> </ul>	You must specify one member at least.
Md	Add metadata	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	If this column is not configured, the default value is <b>false</b> .
Mirror	Mirror packets	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	If this column is not configured, the default value is <b>false</b> .
SamplerName	Sampler name	N/A	String. Length: 1 to 31 characters.	You must specify the Mirror when you specify the SamplerName.
Drop	Drop original packets	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	If this column is not configured, the default value is <b>false</b> .

## MQC/OverheadLayer

This table contains information about processing QoS in which overhead layer type of packet considered.

### XML structure

```

<MQC>
  <OverheadLayer>
    <Application>
      <Layer></Layer>
    </Application>
  </OverheadLayer>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	OverheadLayer
Table type	Multi-instance table
Row name	Application
Restrictions	None

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Layer	Type of overhead layer	column	Enumeration: <ul style="list-style-type: none"> <li>1—Link.</li> <li>2—Physics.</li> </ul>	N/A

## MQC/SysTruncation

This table contains information about global truncation.

## XML structure

```

<MQC>
  <SysTruncation>
    <TruncationLen></TruncationLen>
  </SysTruncation>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	SysTruncation
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TruncationLen	Truncation length.	column	Unsigned integer.	The value depends on device.

## MQC/MonitorGroup

This table contains information about monitor group.

## XML structure

```
<MQC>
  <MonitorGroup>
    <Group>
      <GroupID></GroupID>
    </Group>
  </MonitorGroup>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	MonitorGroup
Table type	Multi -instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	Monitor group id.	Index	Unsigned integer.	The value depends on device.

## MQC/MonitorPort

This table contains information about monitor groups applied to interfaces.

## XML structure

```
<MQC>
  <MonitorPort>
    <MonitorPort>
      <GroupID></GroupID>
      <IfIndex></IfIndex>
    </MonitorPort>
  </MonitorPort>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	MonitorPort
Table type	Multi -instance table
Row name	MonitorPort
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	Monitor group id.	Index	Unsigned integer.	The value depends on device.
IfIndex	Interface index.	Index	Unsigned integer.	N/A

## MQC/Strip

This table contains information about strip.

## XML structure

```
<MQC>
  <Strip>
    <Strip>
      <BehaviorName></BehaviorName>
      <Type></Type>
      <OffsetValue></OffsetValue>
      <HeadLength></HeadLength>
      <DstMACAddr></DstMACAddr>
      <SrcMACAddr></SrcMACAddr>
      <VlanID></VlanID>
      <Dot1p></Dot1p>
      <EthTypeID></EthTypeID>
    </Strip>
  </Strip>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Strip
Table type	Multi -instance table
Row name	Strip
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name.	Index	String. Length: 1 to 31 characters.	N/A
Type	Strip type.	column	Enumeration: <ul style="list-style-type: none"> <li>0—strip header.</li> <li>1—top-most-vlan.</li> <li>2—position I2.</li> <li>3—position I3.</li> <li>4—position I4.</li> <li>5—vxlan.</li> <li>6—nvgre.</li> <li>7—gre.</li> </ul>	Required.
OffsetValue	Strip offset value.	column	Unsigned integer.	The value depends on device.
HeadLength	Length of a GRE header	column	Unsigned integer Value range: 4 to 16.	The value depends on user configuration. The value of this column is valid if the type is gre.
DstMACAddr	Destination MAC address	column	Six groups of two hexadecimal digits, hyphen-separated.	DstMACAddr, SrcMACAddr, and EthTypeID must be added together. The value of this column is valid if the type is gre.
SrcMACAddr	Source MAC address	column	Six groups of two hexadecimal digits, hyphen-separated.	DstMACAddr, SrcMACAddr, and EthTypeID must be added together. The value of this column is valid if the type is gre.
VlanID	VLAN tag ID	column	Unsigned integer. Value range: 1 to 4094.	The value of this column is valid if the type is gre.

Column name	Column description	Column type	Data type and restrictions	Remarks
Dot1p	802.1p CoS	column	Unsigned integer. Value range: 0 to 7.	The value of this column is valid if the type is gre.
EthTypeID	Ethernet type ID	column	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	The value of this column is valid if the type is gre.

## MQC/Nest

This table contains information about nest.

## XML structure

```

<MQC>
  <Nest>
    <Nest>
      <BehaviorName></BehaviorName>
      <VlanID></VlanID>
      <Dot1p></Dot1p>
    </Nest>
  </Nest>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Nest
Table type	Multi -instance table
Row name	Nest
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name.	Index	String. Length: 1 to 31 characters.	N/A
VlanID	Vlan id.	column	Unsigned integer. Value range: 1 to 4094.	Required.



Column name	Column description	Column type	Data type and restrictions	Remarks
Dot1p	802.1p COS.	column	Unsigned integer. Value range: 0 to 7.	N/A

## MQC/BehaviorTruncation

This table contains information about truncation of behavior.

### XML structure

```

<MQC>
  <BehaviorTruncation>
    <Truncation>
      <BehaviorName></BehaviorName>
      <Truncation></Truncation>
    </Truncation>
  </BehaviorTruncation>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	BehaviorTruncation
Table type	Multi -instance table
Row name	Truncation
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name.	Index	String. Length: 1 to 31 characters.	N/A
Truncation	Whether to truncation.	column	Boolean <ul style="list-style-type: none"> <li>true—Truncation.</li> <li>false—Not truncation.</li> </ul>	Required.

## MQC/TimeStamp

This table contains information about time stamp.

## XML structure

```
<MQC>
  <TimeStamp>
    <TimeStamp>
      <BehaviorName></BehaviorName>
      <DstMACAddr></DstMACAddr>
      <SrcMACAddr></SrcMACAddr>
      <EthType></EthType>
    </TimeStamp>
  </TimeStamp>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	TimeStamp
Table type	Multi -instance table
Row name	TimeStamp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name.	Index	String. Length: 1 to 31 characters.	N/A
DstMACAddr	Destination MAC address.	column	Six groups of two hexadecimal digits, hyphen-separated..	DstMACAddr, SrcMACAddr and EthType must be add together and required.
SrcMACAddr	Source MAC address.	column	Six groups of two hexadecimal digits, hyphen-separated..	Required.
EthType	Ethtype id of timestamp.	column	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF..	Required.

## MQC/VSI Policy

This table contains information about QoS policies applied to VSI.

## XML structure

```
<MQC>
  <VSIPolicy>
    <Application>
      <VSI></VSI>
      <Direction></Direction>
      <PolicyName></PolicyName>
    </Application>
  </VSIPolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	VSIPolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VSI	Name of VSI	index	String. Length: 1 to 31 characters.	N/A
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	N/A

## MQC/AccountInterfacePolicy

This table contains information about QoS accounting policies applied to interfaces.

## XML structure

```
<MQC>
  <AccountInterfacePolicy>
    <Application>
      <IfIndex></IfIndex>
    </Application>
  </AccountInterfacePolicy>
</MQC>
```

```

    <Direction></Direction>
    <PolicyName></PolicyName>
    <Mode></Mode>
  </Application>
</AccountInterfacePolicy>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	AccountInterfacePolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Inbound.</li> <li><b>1</b>—Outbound.</li> </ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.
Mode	Mode of policies applied to interfaces.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—extension.</li> <li><b>2</b>—inner-match.</li> </ul>	When the <b>Direction</b> column is <b>0</b> , configure the Mode.Mode cannot be modified .

## MQC/RemarkInterfacePolicy

This table contains information about QoS remarking policies applied to interfaces.

## XML structure

```

<MQC>
  <RemarkInterfacePolicy>
    <Application>
      <IfIndex></IfIndex>
    </Application>
  </RemarkInterfacePolicy>
</MQC>

```

```

    <Direction></Direction>
    <PolicyName></PolicyName>
    <Mode></Mode>
  </Application>
</RemarkInterfacePolicy>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	RemarkInterfacePolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Inbound.</li> <li><b>1</b>—Outbound.</li> </ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.
Mode	Mode of policies applied to interfaces.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—extension.</li> <li><b>2</b>—inner-match.</li> </ul>	When the <b>Direction</b> column is <b>0</b> , configure the Mode.Mode cannot be modified .

## MQC/TapInterfacePolicy

This table contains information about QoS tap policies applied to interfaces.

## XML structure

```

<MQC>
  <TapInterfacePolicy>
    <Application>
      <IfIndex></IfIndex>
    </Application>
  </TapInterfacePolicy>
</MQC>

```

```

        <Direction></Direction>
        <PolicyName></PolicyName>
        <Mode></Mode>
    </Application>
</TapInterfacePolicy>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	TapInterfacePolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Inbound.</li> <li><b>1</b>—Outbound.</li> </ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.
Mode	Mode of policies applied to interfaces.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—extension.</li> <li><b>2</b>—inner-match.</li> </ul>	When the <b>Direction</b> column is <b>0</b> , configure the Mode.Mode cannot be modified .

## Appendix

This section describes how to configure an ACL rule and an inner ACL rule.

- There are two methods of configuring an ACL rule:
  - Use the ACL group method.

```

<MQC>
  <Rules>
    <Rule>
      <ClassName>class</ClassName>
      <RuleID>0</RuleID>
    </Rule>
  </Rules>
</MQC>

```

```

    <Not>false</Not>
    <Acl>
      <IPv4Acl>3000</IPv4Acl>
      <Inner>false</Inner>
    </Acl>
  </Rule>
</Rules>
</MQC>

```

- o Use the IPv4 ACL node method.

```

<MQC>
  <Rules>
    <Rule>
      <ClassName>class</ClassName>
      <RuleID>0</RuleID>
      <Not>false</Not>
      <IPv4Acl>3000</IPv4Acl>
    </Rule>
  </Rules>
</MQC>

```

- Configure an inner ACL rule.

```

<MQC>
  <Rules>
    <Rule>
      <ClassName>class</ClassName>
      <RuleID>0</RuleID>
      <Not>false</Not>
      <Acl>
        <IPv4Acl>3000</IPv4Acl>
        <Inner>true</Inner>
      </Acl>
    </Rule>
  </Rules>
</MQC>

```

# Contents

MQC .....	1
MQC/GlobalRunInfo .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
MQC/AppRunInfo .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
MQC/CBRunInfo .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
MQC/AccountRunInfo .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
MQC/CARRunInfo .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
MQC/Classifiers .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
MQC/Behaviors .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
MQC/Policies .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
MQC/CBMaps .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
MQC/Rules .....	15
XML structure .....	15
Table description .....	16
Columns .....	17
MQC/Remark .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
MQC/Redirect .....	24
XML structure .....	25
Table description .....	25
Columns .....	25
MQC/Mirror .....	27
XML structure .....	27
Table description .....	28
Columns .....	28
MQC/MirrorDynamicIF .....	30
XML structure .....	30
Table description .....	31
Columns .....	31



MQC/Filter	32
XML structure	32
Table description	32
Columns	32
MQC/AssuredForwarding	32
XML structure	32
Table description	33
Columns	33
MQC/ExpeditedForwarding	33
XML structure	33
Table description	34
Columns	34
MQC/WFQ	35
XML structure	35
Table description	35
Columns	35
MQC/CAR	36
XML structure	36
Table description	36
Columns	37
MQC/GTS	40
XML structure	40
Table description	40
Columns	41
MQC/ReservedBandwidth	41
XML structure	41
Table description	41
Columns	42
MQC/GlobalPolicy	42
XML structure	42
Table description	42
Columns	43
MQC/VlanPolicy	43
XML structure	43
Table description	43
Columns	44
MQC/InterfacePolicy	44
XML structure	44
Table description	44
Columns	45
MQC/IfPolicyCBMap	45
XML structure	45
Table description	46
Columns	46
MQC/GlobalPolicyCBMap	47
XML structure	47
Table description	48
Columns	48
MQC/VLANPolicyCBMap	49
XML structure	49
Table description	49
Columns	49
MQC/IfPolicyCar	50
XML structure	50
Table description	51
Columns	51
MQC/IfPolicyAF	56
XML structure	56
Table description	56
Columns	56
MQC/IfPolicyEF	57
XML structure	57

Table description .....	58
Columns .....	58
MQC/IfPolicyWFQ .....	59
XML structure .....	59
Table description .....	59
Columns .....	59
MQC/IfPolicyEnhance .....	60
XML structure .....	60
Table description .....	60
Columns .....	61
MQC/IfPolicyEnhanceCBMap .....	61
XML structure .....	61
Table description .....	62
Columns .....	62
MQC/GlobalPolicyEnhance .....	63
XML structure .....	63
Table description .....	63
Columns .....	64
MQC/GlobalPolicyEnhanceCBMap .....	64
XML structure .....	64
Table description .....	64
Columns .....	65
MQC/Account .....	65
XML structure .....	66
Table description .....	66
Columns .....	66
MQC/IfPolicyAccount .....	66
XML structure .....	66
Table description .....	67
Columns .....	67
MQC/VLANPolicyCar .....	68
XML structure .....	68
Table description .....	69
Columns .....	69
MQC/VLANPolicyAccount .....	73
XML structure .....	73
Table description .....	73
Columns .....	74
MQC/GlobalPolicyCar .....	74
XML structure .....	74
Table description .....	75
Columns .....	75
MQC/GlobalPolicyAccount .....	79
XML structure .....	79
Table description .....	80
Columns .....	80
MQC/Capability .....	80
XML structure .....	80
Table description .....	81
Columns .....	81
MQC/PostClassify .....	81
XML structure .....	81
Table description .....	82
Columns .....	82
MQC/GlobalCategoryPolicy .....	82
XML structure .....	82
Table description .....	83
Columns .....	83
MQC/InterfaceCategoryPolicy .....	83
XML structure .....	83
Table description .....	84
Columns .....	84

MQC/IfCategoryPolicyCBMap	85
XML structure	85
Table description	85
Columns	85
MQC/GlobalCategoryPolicyCBMap	86
XML structure	86
Table description	87
Columns	87
MQC/IfCategoryPolicyCar	88
XML structure	88
Table description	89
Columns	89
MQC/IfCategoryPolicyAF	93
XML structure	94
Table description	94
Columns	94
MQC/IfCategoryPolicyEF	95
XML structure	95
Table description	96
Columns	96
MQC/IfCategoryPolicyWFQ	97
XML structure	97
Table description	97
Columns	98
MQC/IfCategoryPolicyAccount	99
XML structure	99
Table description	99
Columns	99
MQC/GlobalCategoryPolicyCar	100
XML structure	100
Table description	101
Columns	101
MQC/GlobalCategoryPolicyAccount	105
XML structure	105
Table description	106
Columns	106
MQC/IfCategoryPolicyGts	107
XML structure	107
Table description	107
Columns	108
MQC/GlobalCategoryPolicyGts	109
XML structure	109
Table description	109
Columns	110
MQC/Telemetry	110
XML structure	111
Table description	111
Columns	111
MQC/TelemetryRoles	112
XML structure	112
Table description	112
Columns	112
MQC/TelemetryLoopbacks	113
XML structure	113
Table description	113
Columns	113
MQC/TelemetryGlobalEnable	113
XML structure	114
Table description	114
Columns	114
MQC/TelemetryAction	114
XML structure	114

Table description .....	115
Columns .....	115
MQC/Capabilities .....	116
XML structure .....	116
Table description .....	117
Columns .....	117
MQC/OverheadLayer .....	119
XML structure .....	120
Table description .....	120
Columns .....	120
MQC/SysTruncation .....	120
XML structure .....	120
Table description .....	120
Columns .....	121
MQC/SysTruncationCapa .....	121
XML structure .....	121
Table description .....	121
Columns .....	121
MQC/MonitorGroup .....	122
XML structure .....	122
Table description .....	122
Columns .....	122
MQC/MonitorGroupCapa .....	122
XML structure .....	122
Table description .....	123
Columns .....	123
MQC/MonitorPort .....	123
XML structure .....	123
Table description .....	123
Columns .....	124
MQC/Strip .....	124
XML structure .....	124
Table description .....	124
Columns .....	125
MQC/StripCapa .....	125
XML structure .....	126
Table description .....	126
Columns .....	126
MQC/Nest .....	126
XML structure .....	126
Table description .....	127
Columns .....	127
MQC/BehaviorTruncation .....	127
XML structure .....	127
Table description .....	127
Columns .....	128
MQC/TimeStamp .....	128
XML structure .....	128
Table description .....	128
Columns .....	128
MQC/VSIPolicy .....	129
XML structure .....	129
Table description .....	129
Columns .....	129
MQC/VSIPolicyCBMap .....	130
XML structure .....	130
Table description .....	130
Columns .....	131
MQC/AccountInterfacePolicy .....	131
XML structure .....	132
Table description .....	132
Columns .....	132

MQC/RemarkInterfacePolicy .....	132
XML structure .....	133
Table description .....	133
Columns .....	133
MQC/TapInterfacePolicy .....	133
XML structure .....	134
Table description .....	134
Columns .....	134
MQC/IfAccountPolicyCBMap .....	134
XML structure .....	135
Table description .....	135
Columns .....	135
MQC/IfRemarkPolicyCBMap .....	136
XML structure .....	136
Table description .....	137
Columns .....	137
MQC/IfTapPolicyCBMap .....	138
XML structure .....	138
Table description .....	139
Columns .....	139

# MQC

## MQC/GlobalRunInfo

This table contains global operation status information.

### XML structure

```
<MQC>
  <GlobalRunInfo>
    <ProcessingStatus></ProcessingStatus>
  </GlobalRunInfo>
</MQC>
```

### Table description

Item	Description
Feature name	MQC
Table name	GlobalRunInfo
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProcessingStatus	Global operation status	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Idle.</li><li>2—Busy.</li></ul>	N/A

## MQC/AppRunInfo

This table contains policy application information.

### XML structure

```
<MQC>
  <AppRunInfo>
    <AppRunInfoEntry>
      <AppType></AppType>
      <AppMainIndex></AppMainIndex>
    </AppRunInfoEntry>
  </AppRunInfo>
</MQC>
```

```

    <AppSubIndex></AppSubIndex>
    <AppDirection></AppDirection>
    <AppPolicyName></AppPolicyName>
    <ApplyStatus></ApplyStatus>
  </AppRunInfoEntry>
</AppRunInfo>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	AppRunInfo
Table type	Multi-instance table
Row name	AppRunInfoEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppType	Application type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—VLAN.</li> <li>3—Global.</li> <li>4—COPP.</li> </ul>	N/A
AppMainIndex	Primary index of the application	Index	Unsigned integer.	<p>The value depends on the AppType column:</p> <ul style="list-style-type: none"> <li>Interface index if AppType is 1. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.</li> <li>VLAN ID in the range of 1 to 4094 if AppType is 2.</li> <li>0 if AppType is 3.</li> <li>Member ID (0 for a standalone device) if AppType is 4.</li> </ul>
AppSubIndex	Secondary index	Index	Unsigned integer.	The value depends on

Column name	Column description	Column type	Data type and restrictions	Remarks
	of the application			the AppType column: <ul style="list-style-type: none"> <li>Slot number of the card if AppType is <b>4</b>.</li> <li><b>0</b> is AppType is not <b>4</b>.</li> </ul>
AppDirection	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Inbound.</li> <li><b>2</b>—Outbound.</li> </ul>	N/A
AppPolicyName	Policy name	N/A	String. Length: 0 to 31 characters.	N/A
ApplyStatus	Application status	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Succeeded.</li> <li><b>2</b>—Succeeded partly.</li> </ul>	If some class-behavior associations in the policy are applied successfully but some are not, the value of this column is <b>2</b> .

## MQC/CBRunInfo

This table contains class-behavior association operation information.

## XML structure

```

<MQC>
  <CBRunInfo>
    <CBRunInfoEntry>
      <AppType></AppType>
      <AppMainIndex></AppMainIndex>
      <AppSubIndex></AppSubIndex>
      <AppDirection></AppDirection>
      <CBMapIndex></CBMapIndex>
      <ClassName></ClassName>
      <BehaviorName></BehaviorName>
      <CBApplyStatus></CBApplyStatus>
    </CBRunInfoEntry>
  </CBRunInfo>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	CBRunInfo
Table type	Multi-instance table



Item	Description
Row name	CBRunInfoEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppType	Application type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—VLAN.</li> <li>3—Global.</li> <li>4—COPP.</li> </ul>	N/A
AppMainIndex	Primary index of the application	Index	Unsigned integer.	The value depends on the AppType column: <ul style="list-style-type: none"> <li>Interface index if AppType is <b>1</b>. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.</li> <li>VLAN ID in the range of 1 to 4094 if AppType is <b>2</b>.</li> <li><b>0</b> if AppType is <b>3</b>.</li> <li>Member ID (0 for a standalone device) if AppType is <b>4</b>.</li> </ul>
AppSubIndex	Secondary index of the application	Index	Unsigned integer.	The value depends on the AppType column: <ul style="list-style-type: none"> <li>Slot number of the card if AppType is <b>4</b>.</li> <li><b>0</b> is AppType is not <b>4</b>.</li> </ul>
AppDirection	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
CBMapIndex	Class-behavior association index	Index	Unsigned integer.	N/A
ClassName	Traffic class name	N/A	String. Length: 0 to 31 characters.	
BehaviorName	Traffic behavior name	N/A	String. Length: 0 to 31 characters.	

Column name	Column description	Column type	Data type and restrictions	Remarks
CBApplStatus	Class-behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> <li>3—Succeeded partly.</li> </ul>	If a class-behavior association fails to applied on a card when the policy is applied globally or to a VLAN, the value of this field is 3.

## MQC/AccountRunInfo

This table contains traffic statistics information.

### XML structure

```

<MQC>
  <AccountRunInfo>
    <AccountRunInfoEntry>
      <AppType></AppType>
      <AppMainIndex></AppMainIndex>
      <AppSubIndex></AppSubIndex>
      <AppDirection></AppDirection>
      <CBMapIndex></CBMapIndex>
      <AccountPkts></AccountPkts>
      <AccountBytes></AccountBytes>
      <Accounttps></Accounttps>
      <Accountbps></Accountbps>
    </AccountRunInfoEntry>
  </AccountRunInfo>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	AccountRunInfo
Table type	Multi-instance table
Row name	AccountRunInfoEntry
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppType	Application type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—VLAN.</li> <li>3—Global.</li> <li>4—COPP.</li> </ul>	N/A
AppMainIndex	Primary index of the application	Index	Unsigned integer.	The value depends on the AppType column: <ul style="list-style-type: none"> <li>Interface index if AppType is 1. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.</li> <li>VLAN ID in the range of 1 to 4094 if AppType is 2.</li> <li>0 if AppType is 3.</li> <li>Member ID (0 for a standalone device) if AppType is 4.</li> </ul>
AppSubIndex	Secondary index of the application	Index	Unsigned integer.	The value depends on the AppType column: <ul style="list-style-type: none"> <li>Slot number of the card if AppType is 4.</li> <li>0 is AppType is not 4.</li> </ul>
AppDirection	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
CBMapIndex	Class-behavior association index	Index	Unsigned integer.	N/A
AccountPkts	Traffic statistic in packets	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
AccountBytes	Traffic statistic in bytes	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
Accountpps	Traffic statistic in packets per second	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A
Accountbps	Traffic statistic in bits per	N/A	Unsigned integer. Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	second			

## MQC/CARRunInfo

This table contains CAR operation information. Aggregate CAR and hierarchical CAR are not supported.

### XML structure

```

<MQC>
  <CARRunInfo>
    <CARRunInfoEntry>
      <AppType></AppType>
      <AppMainIndex></AppMainIndex>
      <AppSubIndex></AppSubIndex>
      <AppDirection></AppDirection>
      <CBMapIndex></CBMapIndex>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenPkts></GreenPkts>
      <GreenBytes></GreenBytes>
      <RedPkts></RedPkts>
      <RedBytes></RedBytes>
      <YellowPkts></YellowPkts>
      <YellowBytes></YellowBytes>
    </CARRunInfoEntry>
  </CARRunInfo>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	CARRunInfo
Table type	Multi-instance table
Row name	CARRunInfoEntry
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppType	Application type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—VLAN.</li> <li>3—Global.</li> <li>4—COPP.</li> </ul>	N/A
AppMainIndex	Primary index of the application	Index	Unsigned integer.	The value depends on the AppType column: <ul style="list-style-type: none"> <li>Interface index if AppType is 1. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.</li> <li>VLAN ID in the range of 1 to 4094 if AppType is 2.</li> <li>0 if AppType is 3.</li> <li>Member ID (0 for a standalone device) if AppType is 4.</li> </ul>
AppSubIndex	Secondary index of the application	Index	Unsigned integer.	The value depends on the AppType column: <ul style="list-style-type: none"> <li>Slot number of the card if AppType is 4.</li> <li>0 is AppType is not 4.</li> </ul>
AppDirection	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Inbound.</li> <li>2—Outbound.</li> </ul>	N/A
CBMapIndex	Class-behavior association index	Index	Unsigned integer.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	The value of this column depends on the device model.
CBS	Committed burst size	N/A	Unsigned integer.	The value of this column depends on the device model.
EBS	Excess burst size	N/A	Unsigned integer.	The value of this column depends on the device model.
PIR	Peak information	N/A	Unsigned integer.	The value of this

Column name	Column description	Column type	Data type and restrictions	Remarks
	rate			column depends on the device model. If PIR is not configured, 0xFFFFFFFF is returned.
GreenPkts	Green packet statistic in packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support this statistic, 0xFFFFFFFF F is returned.
GreenBytes	Green packet statistic in bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support this statistic, 0xFFFFFFFF F is returned.
RedPkts	Red packet statistic in packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support this statistic, 0xFFFFFFFF F is returned.
RedBytes	Red packet statistic in bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support this statistic, 0xFFFFFFFF F is returned.
YellowPkts	Yellow packet statistic in packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support this statistic, 0xFFFFFFFF F is returned.
YellowBytes	Yellow packet statistic in bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	If the device does not support this statistic, 0xFFFFFFFF F is returned.

## MQC/Classifiers

This table contains information about classifiers.

### XML structure

```

<MQC>
  <Classifiers>
    <Classifier>
      <Name></Name>
      <Operator></Operator>
      <Description></Description>
      <RuleNum></RuleNum>
      <DefineMode></DefineMode>
      <NextRuleID></NextRuleID>
    </Classifier>
  </Classifiers>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Classifiers
Table type	Multi-instance table
Row name	Classifier
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Traffic Classifier name.	Index	String. Length: 1 to 31 characters.	N/A
Operator	Match operator of the traffic classifier	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—And.</li><li>• 2—Or.</li></ul>	When the <b>Operator</b> column is <b>1</b> , the traffic classifier matches the packets that match all its match criteria. When the <b>Operator</b> column is <b>2</b> , the traffic classifier matches the packets that match any of its match criteria.
Description	Traffic classifier description.	N/A	String. Length: 1 to 127 characters.	N/A
RuleNum	Number of rules.	N/A	Unsigned integer.	N/A
DefineMode	Define Mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—System defined.</li><li>• 2—User defined.</li></ul>	N/A
NextRuleID	ID for create a new rule.	N/A	Unsigned integer.	N/A

## MQC/Behaviors

This table contains information about behaviors.

## XML structure

<MQC>

```

<Behaviors>
  <Behavior>
    <Name></Name>
    <ActionMask></ActionMask>
    <DefineMode></DefineMode>
  </Behavior>
</Behaviors>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Behaviors
Table type	Multi-instance table
Row name	Behavior
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
ActionMask	Mask of action	N/A	Unsigned integer.	Action mask defines bit mask that it represents the action information of the behavior, defined below: ACCOUNT 0x02 FILTER 0x04 NEST 0x08 REMARK 0x10 REDIRECT 0x20 MIRROR 0x40 CAR 0x80 PRIMAP 0x100 GTS 0x200 AF 0x400 EF 0x800 WFQ 0x1000 WRED 0x2000 POLICY 0x4000 PKTRATE 0x8000 WEIGHT 0x10000
DefineMode	Define Mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—System defined.</li> <li>2—User defined.</li> </ul>	N/A

## MQC/Policies

This table contains information about policies.

### XML structure

```

<MQC>
  <Policies>
    <Policy>
      <Name></Name>
      <Type></Type>
      <CMapNum></CMapNum>
      <DefineMode></DefineMode>
      <NextCMapID></NextCMapID>
    </Policy>
  </Policies>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Policy name	Index	String. Length: 1 to 31 characters.	N/A
Type	Policy type	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Common policy.</li><li>• <b>1</b>—Remarking policy.</li><li>• <b>2</b>—Accounting policy.</li><li>• <b>3</b>—Mirroring policy.</li></ul>	N/A
CBMapNum	Number of class-behavior associations	N/A	Unsigned integer.	N/A
DefineMode	Define Mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—System defined.</li><li>• <b>2</b>—User defined.</li></ul>	N/A
NextCBMapID	ID for create a new CBMap.	N/A	Unsigned integer.	N/A

## MQC/CBMaps

This table contains information about class-behavior associations.

## XML structure

```
<MQC>
  <CBMaps>
    <CBMap>
      <PolicyName></PolicyName>
      <ClassifierName></ClassifierName>
      <BehaviorName></BehaviorName>
      <Mode></Mode>
      <DefineMode></DefineMode>
    </CBMap>
  </CBMaps>
</MQC>
```

```

</CBMaps>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	CBMaps
Table type	Multi-instance table
Row name	CBMap
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassifierName	Traffic class name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Traffic behavior name	N/A	String. Length: 1 to 31 characters.	N/A
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>2</b>—Qppb.</li> <li>• <b>16</b>—Dcbx.</li> </ul>	<p>When the <b>Mode</b> column is <b>0</b>, there is no restriction on the classifier-behavior or association.</p> <p>When the <b>Mode</b> column is <b>2</b>, the classifier-behavior or association applies only to QPPB.</p> <p>When the <b>Mode</b> column is <b>16</b>, the classifier-behavior or association applies only to the Data Center Bridging Exchange Protocol (DCBX).</p>
DefineMode	Define Mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—System defined.</li> <li>• <b>2</b>—User defined.</li> </ul>	N/A

# MQC/Rules

This table contains information about rule.

## XML structure

```
<MQC>
  <Rules>
    <Rule>
      <ClassName></ClassName>
      <RuleID></RuleID>
      <Not></Not>
      <PktType></PktType>
      <Acl>
        <IPv4Acl></IPv4Acl>
        <IPv6Acl></IPv6Acl>
        <Inner></Inner>
        <MACAcl></MACAcl>
        <UserAcl></UserAcl>
      </Acl>
      <IPv4Acl></IPv4Acl>
      <IPv6Acl></IPv6Acl>
      <SrcMac></SrcMac>
      <DestMac></DestMac>
      <ServiceVLANID></ServiceVLANID>
      <CustomerVLANID></CustomerVLANID>
      <ServiceDot1pList>
        <ServiceDot1p></ServiceDot1p>
      </ServiceDot1pList>
      <CustomerDot1pList>
        <CustomerDot1p></CustomerDot1p>
      </CustomerDot1pList>
      <ExpList>
        <Exp></Exp>
      </ExpList>
      <InnerExpList>
        <InnerExp></InnerExp>
      </InnerExpList>
      <IPPrecedenceList>
        <IPPrecedence></IPPrecedence>
      </IPPrecedenceList>
      <LocalPrecedenceList>
        <LocalPrecedence></LocalPrecedence>
      </LocalPrecedenceList>
      <DscpList>
        <Dscp></Dscp>
      </DscpList>
      <DropPriorityList>
```

```

        <DropPriority></DropPriority>
    </DropPriorityList>
    <QoSLocalID></QoSLocalID>
    <MplsLabelList>
        <MplsLabel></MplsLabel>
    </MplsLabelList>
    <InnerMplsLabelList>
        <InnerMplsLabel></InnerMplsLabel>
    </InnerMplsLabelList>
    <PktLength>
        <Min></Min>
        <Max></Max>
    </PktLength>
    <MplsLabelRange>
        <LabelStart></LabelStart>
        <LabelEnd></LabelEnd>
    </MplsLabelRange>
    <InnerMplsLabelRange>
        <InnerLabelStart></InnerLabelStart>
        <InnerLabelEnd></InnerLabelEnd>
    </InnerMplsLabelRange>
    <RTPPort>
        <PortStart></PortStart>
        <PortEnd></PortEnd>
    </RTPPort>
    <Application></Application>
    <ApplicationGroup></ApplicationGroup>
    <Vxlan></Vxlan>
    <VxlanAny></VxlanAny>
    <TunnelID></TunnelID>
    <VLANTag></VLANTag>
    <TunnelDscpList>
        <TunnelDscp></TunnelDscp>
    </TunnelDscpList>
    <INTIFA></INTIFA>
    <OutBoundInterface></OutBoundInterface>
    <Mpls></Mpls>
    <Nvgre></Nvgre>
    <NvgreAny></NvgreAny>
</Rule>
</Rules>
</MQC>

```

## Table description

Item	Description
Feature name	MQC

Table name	Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClassName	Traffic class name	Index	String. Length: 1 to 31 characters.	N/A
RuleID	ID of the rule	Index	Unsigned integer	N/A
Not	Whether the rule is used as an unsuccessful match criterion	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	N/A
PktType	Packet type to be matched	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Any.</li> <li><b>2</b>—IP.</li> <li><b>3</b>—IPv6.</li> <li><b>4</b>—Arp.</li> <li><b>5</b>—Bt.</li> <li><b>6</b>—Bridge.</li> <li><b>7</b>—Route.</li> </ul>	<p>When the <b>PktType</b> column is <b>1</b>, the rule matches all packets.</p> <p>When the <b>PktType</b> column is <b>2</b>, the rule matches IPv4 packets.</p> <p>When the <b>PktType</b> column is <b>3</b>, the rule matches IPv6 packets.</p> <p>When the <b>PktType</b> column is <b>4</b>, the rule matches ARP packets.</p> <p>When the <b>PktType</b> column is <b>5</b>, the rule matches BitTorrent packets.</p> <p>When the <b>PktType</b> column is <b>6</b>, the rule matches Layer 2 forwarded packets.</p> <p>When the <b>PktType</b> column is <b>7</b>, the rule matches Layer 3 forwarded packets.</p>
Acl	Match ACL	Data structure	Members include: <ul style="list-style-type: none"> <li><b>IPv4Acl.</b></li> <li><b>IPv6Acl.</b></li> <li><b>Inner.</b></li> </ul>	IPv4Acl and IPv6Acl cannot be specified together.
IPv4ACI	Match IPv4 ACL.	N/A	<ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b></li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
			An unsigned integer in the range of 2000 to 5999.	
IPv6ACI	Match IPv6 ACL.	N/A	<ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> An unsigned integer in the range of 2000 to 3999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .
Inner	Match inner ACL.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	N/A
MACAcI	Match MAC ACL.	N/A	<ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> An unsigned integer in the range of 4000 to 4999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .
UserAcI	Match User ACL.	N/A	<ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> An unsigned integer in the range of 5000 to 5999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .
IPv4ACI	Match IPv4 ACL.	N/A	<ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> An unsigned integer in the range of 2000 to 5999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .
IPv6ACI	Match IPv6 ACL.	N/A	<ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> An unsigned integer in the range of 2000 to 3999.</li> </ul>	An ACL name must start with an English letter and cannot be <b>all</b> .
SrcMac	Match a source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
DestMac	Match a destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
ServiceVLANID	Match the service provider VLAN ID.	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			range. The string must not end with a comma or hyphen, or include any whitespace characters.	
CustomerVLANID	Match the customer VLAN ID.	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string must not end with a comma or hyphen, or include any whitespace characters.	N/A
ServiceDot1p	Match the 802.1p priority of the service provider network.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
CustomerDot1p	Match the 802.1p priority of the customer network.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
Exp	Match MPLS EXP value.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
InnerExp	Match inner MPLS EXP value.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
IPPrecedence	Match IP precedence.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
LocalPrecedence	Match local precedence.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
Dscp	Match DSCP values.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
DropPriority	Match drop precedence.	N/A	Unsigned integer. Value range: 0 to 2.	N/A
QoSLocalID	Match local QoS ID.	N/A	Unsigned integer. Value range: 1 to 4095.	N/A
MplsLabel	Match MPLS label.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
InnerMplsLabel	Match inner MPLS label.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
PktLength	Match packet length.	Data structure	Members include: <ul style="list-style-type: none"> <li>• <b>Min.</b></li> <li>• <b>Max.</b></li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Min	The minimum packet length in bytes.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
Max	The maximum packet length in bytes.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
MplsLabelRange	Match MPLS label range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>LabelStart.</b></li> <li><b>LabelEnd.</b></li> </ul>	N/A
LabelStart	Start Label Value.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
LabelEnd	End Label Value.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
InnerMplsLabelRange	Match inner MPLS label range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>InnerLabelStart.</b></li> <li><b>InnerLabelEnd.</b></li> </ul>	N/A
InnerLabelStart	Start Label Value.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
InnerLabelEnd	End Label Value.	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
RTPPort	Match RTP protocol port range.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>PortStart.</b></li> <li><b>PortEnd.</b></li> </ul>	N/A
PortStart	Start RTP port number	N/A	Unsigned integer. Value range: 2000 to 65535.	N/A
PortEnd	End RTP port number	N/A	Unsigned integer. Value range: 2000 to 65535.	N/A
Application	Match application layer protocol.	N/A	String, case-insensitive. Length: 1 to 63 characters.	APR/Applications/Application/AppName.
ApplicationGroup	Match application group.	N/A	String, case-insensitive. Length: 1 to 63 characters.	APR/AppGroups/GroupInfo/GroupName.
Vxlan	Match vxlan ID.	N/A	Unsigned integer. Value range: 0 to 16777215.	N/A
VxlanAny	Match any vxlan ID.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	N/A
TunnelID	Match tunnel ID.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
VLANTag	Match VLAN tagging mode	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—None.</li> <li><b>2</b>—Single-tagged.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>4</b>—Double-tagged.</li> </ul>	
TunnelDscpList	Match Tunnel DSCP values.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>TunnelDscp</b>.</li> </ul>	N/A
TunnelDscp	Match Tunnel DSCP values.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
IFA	Inband Flow Analyzer	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—tcp.</li> <li><b>2</b>—udp.</li> </ul>	N/A
OutBoundInterface	Match output interface	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Mpls	Mpls type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—I2.</li> <li><b>2</b>—I3.</li> </ul>	N/A
Nvgre	Match NVGRE.	N/A	Hexadecimal string. Length: 4 to 6 characters. Value range: 1000 to FFFFE.	N/A
NvgreAny	Match any NVGRE ID	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	The Nvgre column must be specified when the NvgreAny column is <b>false</b> .

## MQC/Remark

This table contains information about marking action.

## XML structure

```

<MQC>
  <Remark>
    <Action>
      <BehaviorName></BehaviorName>
      <Type></Type>
      <Color></Color>
      <Value></Value>
      <SrcMACAddr></SrcMACAddr>
      <DstMACAddr></DstMACAddr>
      <SrcIPv4Addr></SrcIPv4Addr>
      <DstIPv4Addr></DstIPv4Addr>
      <SrcIPv6Addr></SrcIPv6Addr>

```

```

        <DstIPv6Addr></DstIPv6Addr>
    </Action>
</Remark>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Remark
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Type	Type of remark	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>0—CDot1pTrust.</li> <li>1—Dscp.</li> <li>2—IPPre.</li> <li>3—MplsExp.</li> <li>4—Dot1p.</li> <li>5—LocalID.</li> <li>6—LocalPre.</li> <li>7—DropPre.</li> <li>8—CVlanID.</li> <li>9—SVlanID.</li> <li>10—ImpositionMplsExp.</li> <li>12—AtmClp.</li> <li>16—ServiceClass.</li> <li>17—TunnelDscp.</li> <li>18—DstMACAddr.</li> <li>19—SrcMACAddr.</li> <li>20—DstIPv4Addr.</li> <li>21—SrcIPv4Addr.</li> <li>22—DstIPv6Addr.</li> <li>23—SrcIPv6Addr.</li> </ul>	<p>When the <b>Type</b> column is 0, configure an inner-to-outer tag priority copying action.</p> <p>When the <b>Type</b> column is 1, configure a DSCP marking action.</p> <p>When the <b>Type</b> column is 2, configure an IP precedence marking action.</p> <p>When the <b>Type</b> column is 3, configure an EXP value marking action.</p> <p>When the <b>Type</b> column is 4, configure an 802.1p priority marking action.</p> <p>When the <b>Type</b> column is 5, configure the action of setting the specified local QoS ID for packets.</p> <p>When the <b>Type</b> column is 6, configure a local precedence marking action.</p> <p>When the <b>Type</b> column is 7, configure a drop priority marking action.</p> <p>When the <b>Type</b> column is 8, configure a CVLAN</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>marking action.</p> <p>When the <b>Type</b> column is <b>9</b>, configure a SVLAN marking action.</p> <p>When the <b>Type</b> column is <b>10</b>, configure an EXP value marking action for added labels.</p> <p>When the <b>Type</b> column is <b>12</b>, configure the action of setting the CLP bit for ATM cells.</p> <p>When the <b>Type</b> column is <b>16</b>, configure the action of setting the service-class for MPLS traffic engineering.</p> <p>When the <b>Type</b> column is <b>17</b>, configure a tunnel-DSCP marking action.</p> <p>When the <b>Type</b> column is <b>18</b>, configure a destination MAC address.</p> <p>When the <b>Type</b> column is <b>19</b>, configure a source MAC address.</p> <p>When the <b>Type</b> column is <b>20</b>, configure a destination IPv4 address.</p> <p>When the <b>Type</b> column is <b>21</b>, configure a source IPv4 address.</p> <p>When the <b>Type</b> column is <b>22</b>, configure a destination IPv6 address.</p> <p>When the <b>Type</b> column is <b>23</b>, configure a source IPv6 address.</p>
Color	The color of affected packets	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>0</b>—No color.</li> <li>• <b>1</b>—Green.</li> <li>• <b>2</b>—Yellow.</li> <li>• <b>3</b>—Red.</li> </ul>	<p>Specify different color packets for the priority marking action. Support for the green, red and yellow keyword depends on the device model.</p> <p>When- the <b>Color</b> column is <b>0</b>, specifies all packets.</p> <p>When the <b>Color</b> column is <b>1</b>, specifies green packets.</p> <p>When the <b>Color</b> column is <b>2</b>, specifies yellow packets.</p> <p>When the <b>Color</b> column is <b>3</b>, specifies red packets.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
Value	The value of marking action	N/A	Unsigned integer.	<p>Required when the <b>Type</b> column is <b>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16</b> or <b>17</b>.</p> <p>When the <b>Type</b> column is <b>0</b>, the value is invalid.</p> <p>When the <b>Type</b> column is <b>8</b> or <b>9</b>, the value range is 1 to 4094.</p> <p>When the <b>Type</b> column is <b>7</b>, the value range is 0 to 2.</p> <p>When the <b>Type</b> column is <b>5</b>, the value range is 1 to 4095.</p> <p>When the <b>Type</b> column is <b>2, 3, 4, 6</b> or <b>10</b>, the value range is 0 to 7.</p> <p>When the <b>Type</b> column is <b>1</b>, the value range is 0 to 63.</p> <p>When the <b>Type</b> column is <b>12</b>, the value range is 0 to 1.</p> <p>When the <b>Type</b> column is <b>16</b>, the value range is 0 to 7 or a customized value.</p> <p>When the <b>Type</b> column is <b>17</b>, the value range is 0 to 63.</p>
SrcMACAddr	The source MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Required when the <b>Type</b> column is <b>19</b>
DstMACAddr	The destination MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Required when the <b>Type</b> column is <b>18</b>
SrcIPv4Addr	The source IPv4 address.	N/A	String, dotted decimal notation.	Required when the <b>Type</b> column is <b>21</b>
DstIPv4Addr	The destination IPv4 address.	N/A	String, dotted decimal notation.	Required when the <b>Type</b> column is <b>20</b>
SrcIPv6Addr	The source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Required when the <b>Type</b> column is <b>23</b>
DstIPv6Addr	The destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Required when the <b>Type</b> column is <b>22</b>

## MQC/Redirect

This table contains information about redirect.

## XML structure

```
<MQC>
  <Redirect>
    <Action>
      <BehaviorName></BehaviorName>
      <Type></Type>
      <IfIndex></IfIndex>
      <TrackOap></TrackOap>
      <VLANID></VLANID>
      <VSI></VSI>
      <Nexthop>
        <VRF></VRF>
        <IPAddr></IPAddr>
        <IPAddrBackup></IPAddrBackup>
        <Track></Track>
        <TrackBackup></TrackBackup>
      </Nexthop>
      <FailoverGroup>
        <GroupName></GroupName>
        <Channel></Channel>
      </FailoverGroup>
      <MonitorGroupID></MonitorGroupID>
    </Action>
  </Redirect>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Redirect
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Type	Type of redirect	Index	Enumeration: <ul style="list-style-type: none"><li>1—CPU.</li><li>2—Interface.</li></ul>	When the <b>Type</b> column is <b>1</b> , redirect traffic to CPU. When the <b>Type</b> column is

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>3—VSI.</li> <li>4—FailoverGroup.</li> <li>6—Nexthop</li> <li>7—MonitorGroup</li> </ul>	<p>2, redirect traffic to an interface.</p> <p>When the <b>Type</b> column is 3, redirect traffic to a virtual station interface.</p> <p>When the <b>Type</b> column is 4, redirect traffic to a failover group.</p> <p>When the <b>Type</b> column is 6, redirect traffic to nexthop.</p> <p>When the <b>Type</b> column is 7, redirect traffic to monitor group.</p>
IfIndex	Interface index	Index	Unsigned integer.	The value of this column is valid only when the <b>Type</b> column is 2. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
TrackOap	Enable the traffic redirecting action to collaborate with OAP	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	The value of this column is valid only when the <b>Type</b> column is 2.
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	The value of this column is valid only when the <b>Type</b> column is 2.
VSI	Name of VSI	N/A	String. Length: 1 to 31 characters.	Required and valid only when the <b>Type</b> column is 3.
Nexthop	Nexthop	N/A	N/A	N/A
VRF	VRF instance name	N/A	String. Length: 0 to 31 characters.	The value of this column is valid if <b>Type</b> is 6.
IPAddr	Nexthop ip address	N/A	String, dotted decimal notation. Or Hexadecimal string, colon-separated. Length: 1 to 46 characters.	The value of this column is valid if <b>Type</b> is 6. For example, 1.1.1.1, or 1:1::1:1.
IPAddrBackup	Nexthop ip address	N/A	String, dotted decimal notation. Or Hexadecimal string, colon-separated. Length: 1 to 46 characters.	The value of this column is valid if <b>Type</b> is 6. For example, 1.1.1.1, or 1:1::1:1.
Track	Track	N/A	Unsigned integer. Value range: 1 to 1024.	The value of this column is valid if <b>Type</b> is 6.
TrackBackup	Track	N/A	Unsigned integer.	The value of this column

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 1 to 1024.	is valid if <b>Type</b> is <b>6</b> .
FailoverGroup	Failover group	Data structure	Members include: <ul style="list-style-type: none"> <li>GroupName.</li> <li>Channel.</li> </ul>	N/A
GroupName	Failover group name	N/A	String. Length: 1 to 63 characters.	The value of this column is valid if <b>Type</b> is <b>4</b> .
Channel	Channel	N/A	Unsigned integer. Value range: 0 to 1.	The value of this column is valid if <b>Type</b> is <b>4</b> . Some versions don't support this column. For relevant information, see the XSD document of your product.
MonitorGroupID	Monitor group ID.	N/A	Unsigned integer.	N/A

## MQC/Mirror

This table contains information about mirroring.

## XML structure

```

<MQC>
  <Mirror>
    <Action>
      <BehaviorName></BehaviorName>
      <Type></Type>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <IP>
        <DestIP></DestIP>
        <SrcIP></SrcIP>
        <DSCP></DSCP>
        <VLAN></VLAN>
        <VRF></VRF>
      </IP>
      <Mac></Mac>
      <Board>
        <Chassis></Chassis>
        <Slot></Slot>
        <BackupChassis></BackupChassis>
        <BackupSlot></BackupSlot>
      </Board>
      <SamplerName></SamplerName>
      <Truncation></Truncation>
      <EncapType></EncapType>
    </Action>
  </Mirror>
</MQC>

```



```

    </Action>
  </Mirror>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Mirror
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Type	Type of mirror	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Interface.</li> <li>2—CPU.</li> <li>3—VLAN.</li> <li>4—Slot.</li> <li>5—Local.</li> <li>6—GRPC.</li> <li>7—IFA.</li> </ul>	<p>When the <b>Type</b> column is <b>1</b>, mirror to an interface.</p> <p>When the <b>Type</b> column is <b>2</b>, mirror to CPU.</p> <p>When the <b>Type</b> column is <b>3</b>, mirror to VLAN.</p> <p>When the <b>Type</b> column is <b>4</b>, traffic is mirrored to a board.</p> <p>When the <b>Type</b> column is <b>5</b>, traffic is mirrored to the board on which the mirrored traffic is received or sent out.</p> <p>When the <b>Type</b> column is <b>6</b>, traffic is mirrored to GRPC.</p> <p>When the <b>Type</b> column is <b>7</b>, traffic is mirrored to inband flow analyzer processor.</p>
IfIndex	Interface index	Index	Unsigned integer.	The value of this column is valid if <b>Type</b> is <b>1</b> . Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	The value of this column is valid if <b>Type</b> is <b>3</b> .
IP	Specify IP for mirroring to interface with GRE format	Data structure	Members include: <ul style="list-style-type: none"> <li>• DestIP</li> <li>• SrcIP</li> <li>• DSCP</li> <li>• VLAN</li> <li>• VRF</li> </ul>	DestIP and SrcIP must both be specified. DSCP, VLAN and VRF can be optionally specified when DestIP and SrcIP are configured. This structure is valid and optional if Type is 1.
DestIP	Destination IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
SrcIP	Source IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
DSCP	DSCP value	N/A	Unsigned integer. Value range: 0 to 63.	N/A
VLAN	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	VRF instance name	N/A	String. Length: 1 to 31 characters.	N/A
Mac	Specify destination MAC for mirroring to interface	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0. The value of this column is valid and optional if <b>Type</b> is <b>1</b> .
Board	Specify Board for mirroring to a board.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Chassis</li> <li>• Slot</li> <li>• BackupChassis</li> <li>• BackupSlot</li> </ul>	If the device is a distributed device in standalone mode or a centralized IRF device, the slot must be specified. If the device supports mirroring packets to a backup slot, the BackupSlot can be specified. If the device is a distributed device in IRF mode, the chassis and slot must both be specified. If the device supports mirroring packets to a backup slot, the BackupChassis and BackupSlot can be specified. This structure is valid and optional if <b>Type</b> is <b>4</b> .
Chassis	Chassis number	N/A	Unsigned integer. Value range: 0 to 65535	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Slot	Slot number	N/A	Unsigned integer. Value range: 0 to 65535	N/A
BackupChassis	Backup chassis number	N/A	Unsigned integer. Value range: 0 to 65535	N/A
BackupSlot	Backup slot number	N/A	Unsigned integer. Value range: 0 to 65535	N/A
SamplerName	Sampler name	N/A	String. Length: 1 to 31 characters.	The value of this column depends on the device model. The value of this column is valid and optional if <b>Type</b> is 1, 4, 5 or 7.
Truncation	Truncation packets	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	The value of this column is valid if <b>Type</b> is 1.
EncapType	Specify encapsulation type for mirrored packet	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—VXLAN encapsulation.</li> </ul>	The value of this column is valid if <b>Type</b> is 7.

## MQC/MirrorDynamicIF

This table contains information about mirroring packets to a dynamic interface, which is found by IP address.

### XML structure

```

<MQC>
  <MirrorDynamicIF>
    <Action>
      <BehaviorName></BehaviorName>
      <DestIP></DestIP>
      <SrcIP></SrcIP>
      <DSCP></DSCP>
      <VLAN></VLAN>
      <VRF></VRF>
      <Mac></Mac>
      <SamplerName></SamplerName>
      <Truncation></Truncation>
      <DynamicIfIndex></DynamicIfIndex>
    </Action>
  </MirrorDynamicIF>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	MirrorDynamicIF
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
DestIP	Destination IP address	Index	String, dotted decimal notation.	Example: 10.153.93.54.
SrcIP	Source IP address	Index	String, dotted decimal notation.	Example: 10.153.93.60.
DSCP	DSCP value	N/A	Unsigned integer. Value range: 0 to 63.	N/A
VLAN	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	VRF instance name	N/A	String. Length: 1 to 31 characters.	N/A
Mac	Specify destination MAC	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
SamplerName	Sampler name	N/A	String. Length: 1 to 31 characters.	The value of this column depends on the device model.
Truncation	Truncation packets	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	N/A
DynamicIfIndex	Dynamic interface index	N/A	Unsigned integer.	The interface found by destination IP address. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.

# MQC/Filter

This table contains information about filtering action.

## XML structure

```
<MQC>
  <Filter>
    <Action>
      <BehaviorName></BehaviorName>
      <Type></Type>
    </Action>
  </Filter>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Filter
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Type	Type of filter	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Deny.</li><li>2—Permit.</li><li>3—None.</li></ul>	Required.

# MQC/AssuredForwarding

This table contains information about assured-forwarding queue.

## XML structure

```
<MQC>
  <AssuredForwarding>
    <Action>
```

```

    <BehaviorName></BehaviorName>
    <Kbps></Kbps>
    <Pct></Pct>
    <RemainingPct></RemainingPct>
  </Action>
</AssuredForwarding>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	AssuredForwarding
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Kbps	Bandwidth value in kbps	N/A	Unsigned integer. Value range: 8 to 10,000,000.	When the configuration way of Bandwidth is Kbps, the others can't be configured at the same time.
Pct	Percentage of reserved bandwidth.	N/A	Unsigned integer. Value range: 1 to 100.	When the configuration way of Bandwidth is Pct, the others can't be configured at the same time.
RemainingPct	Percentage of remaining bandwidth.	N/A	Unsigned integer. Value range: 1 to 100.	When the configuration way of Bandwidth is RemainingPct, the others can't be configured at the same time.

## MQC/ExpeditedForwarding

This table contains information about expedited-forwarding queue.

## XML structure

```

<MQC>
  <ExpeditedForwarding>

```

```

<Action>
  <BehaviorName></BehaviorName>
  <Bandwidth>
    <Kbps></Kbps>
    <CBS></CBS>
  </Bandwidth>
  <BandwidthPct>
    <Pct></Pct>
    <CBSRatio></CBSRatio>
  </BandwidthPct>
</Action>
</ExpeditedForwarding>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	ExpeditedForwarding
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Bandwidth	Specify the Bandwidth value in kbps	Data structure	Members include: <ul style="list-style-type: none"> <li><b>Kbps.</b></li> <li><b>CBS.</b></li> </ul>	When the configuration way of Bandwidth is Bandwidth, the <b>Kbps</b> must be specified, and another way can't be configured at the same time.
Kbps	value in kbps	N/A	Unsigned integer. Value range: 8 to 10,000,000.	N/A
CBS	Committed Burst Size	N/A	Unsigned integer. Value range: 32 to 1,000,000,000.	N/A
BandwidthPct	Specify the percentage of reserved bandwidth.	Data structure	Members include: <ul style="list-style-type: none"> <li><b>Pct.</b></li> <li><b>CBSRatio.</b></li> </ul>	When the configuration way of Bandwidth is BandwidthPct, the <b>Pct</b> must be specified, and another way can't be configured at the same

Column name	Column description	Column type	Data type and restrictions	Remarks
				time.
Pct	Percentage of reserved bandwidth.	N/A	Unsigned integer. Value range: 1 to 100.	N/A
CBSRatio	CBS Ratio	N/A	Unsigned integer. Value range: 25 to 500.	N/A

## MQC/WFQ

This table contains information about weighted fair queue.

## XML structure

```

<MQC>
  <WFQ>
    <Action>
      <BehaviorName></BehaviorName>
      <QueueNum></QueueNum>
    </Action>
  </WFQ>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	WFQ
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
QueueNum	Total queue number	N/A	Unsigned integer. Value range: 16 to 4096.	When the value is 0, the device model does not support configuring the QueueNum.



# MQC/CAR

This table contains information about car action.

## XML structure

```
<MQC>
  <CAR>
    <Action>
      <BehaviorName></BehaviorName>
      <BandwidthUnit></BandwidthUnit>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenAction>
        <GreenActionType></GreenActionType>
        <GreenActionValue></GreenActionValue>
      </GreenAction>
      <YellowAction>
        <YellowActionType></YellowActionType>
        <YellowActionValue></YellowActionValue>
      </YellowAction>
      <RedAction>
        <RedActionType></RedActionType>
        <RedActionValue></RedActionValue>
      </RedAction>
      <AggregativeName></AggregativeName>
      <HierarchicalName></HierarchicalName>
      <Mode></Mode>
    </Action>
  </CAR>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	CAR
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
BandwidthUnit	Specify bandwidth Unit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pps.</li> <li>2—kbps.</li> <li>3—percent.</li> </ul>	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>GreenActionType.</b></li> <li><b>GreenActionValue.</b></li> </ul>	
GreenActionType	Green Action Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pass.</li> <li>2—remark-dscp-pass.</li> <li>3—remark-prec-pass.</li> <li>4—remark-mpls-exp-pass.</li> <li>5—remark-dot1p-pass.</li> <li>6—remark-atm-clp-pass.</li> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> <li>19—continue.</li> </ul>	<p>When <b>GreenActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>GreenActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
GreenActionValue	Green Action Value	N/A	Unsigned integer.	<p>When <b>GreenActionType</b> is <b>1, 10</b> or <b>19</b>, <b>GreenActionValue</b> is invisible.</p> <p>When <b>GreenActionType</b> is <b>6</b> or <b>7</b>, <b>GreenActionValue</b> is <b>0~1</b>.</p> <p>When <b>GreenActionType</b> is <b>2</b>, <b>GreenActionValue</b> is <b>0~63</b>.</p> <p>When <b>GreenActionType</b> is <b>3, 4, 5, 8</b>, <b>GreenActionValue</b> is <b>0~7</b>.</p>
YellowAction	Specify behavior for yellow packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>• <b>YellowActionType.</b></li> <li>• <b>YellowActionValue.</b></li> </ul>	
YellowActionType	Yellow Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>1</b>—pass.</li> <li>• <b>2</b>—remark-dscp-pass.</li> <li>• <b>3</b>—remark-prec-pass.</li> <li>• <b>4</b>—remark-mpls-exp-pass.</li> <li>• <b>5</b>—remark-dot1p-pass.</li> <li>• <b>6</b>—remark-atm-clp-pass.</li> <li>• <b>7</b>—remark-frde-pass.</li> <li>• <b>8</b>—remark-local-prec-pass.</li> <li>• <b>10</b>—discard.</li> <li>• <b>19</b>—continue.</li> </ul>	<p>When <b>YellowActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>YellowActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>YellowActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>YellowActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>YellowActionType</b> is <b>19</b>, continue to process the packet.</p>
YellowActionValue	Yellow Action Value	N/A	Unsigned integer.	<p>When <b>YellowActionType</b> is <b>1, 10</b> or <b>19</b>, <b>YellowActionValue</b> is invisible.</p> <p>When <b>YellowActionType</b></p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>is 6 or 7, <b>YellowActionValue</b> is 0~1.</p> <p>When <b>YellowActionType</b> is 2, <b>YellowActionValue</b> is 0~63.</p> <p>When <b>YellowActionType</b> is 3, 4, 5, 8, <b>YellowActionValue</b> is 0~7.</p>
RedAction	Specify behavior for red packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>• <b>RedActionType.</b></li> <li>• <b>RedActionValue.</b></li> </ul>	
RedActionType	Red Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 1—pass.</li> <li>• 2—remark-dscp-pass.</li> <li>• 3—remark-prec-pass.</li> <li>• 4—remark-mpls-exp-pass.</li> <li>• 5—remark-dot1p-pass.</li> <li>• 6—remark-atm-clp-pass.</li> <li>• 7—remark-frde-pass.</li> <li>• 8—remark-local-prec-pass.</li> <li>• 10—discard.</li> <li>• 19—continue.</li> </ul>	<p>When <b>RedActionType</b> is 1, send the packet.</p> <p>When <b>RedActionType</b> is 2, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is 3, remark IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is 4, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is 5, remark 802.1p priority value of the packet and send it.</p> <p>When <b>RedActionType</b> is 6, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is 7, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is 8, remark local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is 10, drop the packet.</p> <p>When <b>RedActionType</b> is 19, continue to process the packet.</p>
RedActionValue	Red Action Value	N/A	Unsigned integer.	<p>When <b>RedActionType</b> is 1, 10 or 19, <b>RedActionValue</b> is invisible.</p> <p>When <b>RedActionType</b> is 6 or 7, <b>RedActionValue</b> is 0~1.</p> <p>When <b>RedActionType</b> is 2, <b>RedActionValue</b> is 0~63.</p> <p>When <b>RedActionType</b> is</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<b>3, 4, 5, 8, RedActionValue</b> is 0~7.
AggregativeName	Aggregate CAR action name	N/A	String. Length: 1 to 31 characters. The string must start with an English letter.	N/A
HierarchicalName	Hierarchical CAR action name	N/A	String. Length: 1 to 31 characters. The string must start with an English letter.	N/A
Mode	Match operator	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—And.</li> <li>2—Or.</li> </ul>	N/A

## MQC/GTS

This table contains information about GTS actions.

### XML structure

```

<MQC>
  <GTS>
    <Action>
      <BehaviorName></BehaviorName>
      <BandwidthUnit></BandwidthUnit>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <QueueLength></QueueLength>
    </Action>
  </GTS>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	GTS
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
BandwidthUnit	Bandwidth unit	N/A	Enumeration: <ul style="list-style-type: none"><li>2—kbps.</li><li>3—percent.</li></ul>	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
QueueLength	Queue length	N/A	Unsigned integer.	N/A

## MQC/ReservedBandwidth

This table contains information about the maximum reserved bandwidth as a percentage of available bandwidth.

## XML structure

```
<MQC>
  <ReservedBandwidth>
    <Interface>
      <IfIndex></IfIndex>
      <Pct></Pct>
    </Interface>
  </ReservedBandwidth>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	ReservedBandwidth
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Pct	Specify the percentage of available bandwidth to be reserved	N/A	Unsigned integer	N/A

## MQC/GlobalPolicy

This table contains information about global QoS policies.

## XML structure

```
<MQC>
  <GlobalPolicy>
    <Application>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Status></Status>
    </Application>
  </GlobalPolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalPolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Inbound.</li><li>• <b>1</b>—Outbound.</li></ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	N/A
Status	Application status	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—Succeeded.</li><li>• <b>2</b>—Failed.</li><li>• <b>3</b>—Succeeded partly.</li></ul>	If some class-behavior associations in the policy are applied successfully but some are not, the value of this column is <b>3</b> .

## MQC/VlanPolicy

This table contains information about QoS policies applied to VLANs.

## XML structure

```
<MQC>
  <VlanPolicy>
    <Application>
      <VLANID></VLANID>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Status></Status>
    </Application>
  </VlanPolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	VlanPolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VALNID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Inbound.</li><li>• <b>1</b>—Outbound.</li></ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	N/A
Status	Application status	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—Succeeded.</li><li>• <b>2</b>—Failed.</li><li>• <b>3</b>—Succeeded partly.</li></ul>	If some class-behavior associations in the policy are applied successfully but some are not, the value of this column is <b>3</b> .

## MQC/InterfacePolicy

This table contains information about QoS policies applied to interfaces.

## XML structure

```
<MQC>
  <InterfacePolicy>
    <Application>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Status></Status>
      <Mode></Mode>
    </Application>
  </InterfacePolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	InterfacePolicy
Table type	Multi-instance table
Row name	Application

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Inbound.</li> <li>• <b>1</b>—Outbound.</li> </ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	N/A
Status	Application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Succeeded.</li> <li>• <b>2</b>—Failed.</li> <li>• <b>3</b>—Succeeded partly.</li> </ul>	If some class-behavior associations in the policy are applied successfully but some are not, the value of this column is <b>3</b> .
Mode	Mode of policies applied to interfaces.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—extension.</li> <li>• <b>2</b>—inner-match.</li> </ul>	When the <b>Direction</b> column is <b>0</b> , configure the Mode. Mode cannot be modified .

## MQC/IfPolicyCBMap

This table contains information about class-behavior associations running information applied to interfaces.

## XML structure

<MQC>

```

<IfPolicyCMap>
  <Interface>
    <IfIndex></IfIndex>
    <Direction></Direction>
    <ClassName></ClassName>
    <BehaviorName></BehaviorName>
    <Mode></Mode>
    <Status></Status>
    <MatchedPackets></MatchedPackets>
    <MatchedBytes></MatchedBytes>
  </Interface>
</IfPolicyCMap>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfPolicyCMap
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Behavior name	N/A	String. Length: 1 to 31 characters.	N/A
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None.</li> <li>• 2—Qppb.</li> <li>• 16—Dcbx.</li> </ul>	<p>When the Mode column is 0, there is no restriction on the classifier-behavior or association.</p> <p>When the Mode column is 2, the classifier-behavior or association applies only to QPPB.</p> <p>When the Mode column is 16, the classifier-behavior or association applies only to the Data Center Bridging Exchange Protocol (DCBX).</p>
Status	Class-Behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Succeeded.</li> <li>• 2—Failed.</li> </ul>	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/GlobalPolicyCBMap

This table contains information about class-behavior associations running information applied to global.

### XML structure

```

<MQC>
  <GlobalPolicyCBMap>
    <Global>
      <Direction></Direction>
      <ClassName></ClassName>
      <BehaviorName></BehaviorName>
      <Mode></Mode>
      <Status></Status>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
    
```

```

    </Global>
  </GlobalPolicyCMap>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalPolicyCMap
Table type	Multi-instance table
Row name	Global
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Behavior name	N/A	String. Length: 1 to 31 characters.	N/A
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>2—Qppb.</li> <li>16—Dcbx.</li> </ul>	<p>When the Mode column is 0, there is no restriction on the classifier-behavior or association.</p> <p>When the Mode column is 2, the classifier-behavior or association applies only to QPPB.</p> <p>When the Mode column is 16, the classifier-behavior or association applies only to the Data Center Bridging Exchange Protocol (DCBX).</p>
Status	Class-Behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/VLANPolicyCBMap

This table contains information about class-behavior associations running information applied to VLANs.

### XML structure

```

<MQC>
  <VLANPolicyCBMap>
    <VLAN>
      <VLANID></VLANID>
      <Direction></Direction>
      <ClassName></ClassName>
      <BehaviorName></BehaviorName>
      <Mode></Mode>
      <Status></Status>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
    </VLAN>
  </VLANPolicyCBMap>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	VLANPolicyCBMap
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A

Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Behavior name	N/A	String. Length: 1 to 31 characters.	N/A
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>2—Qppb.</li> <li>16—Dcbx.</li> </ul>	When the Mode column is 0, there is no restriction on the classifier-behavior or association.  When the Mode column is 2, the classifier-behavior or association applies only to QPPB.  When the Mode column is 16, the classifier-behavior or association applies only to the Data Center Bridging Exchange Protocol (DCBX).
Status	Class-Behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> </ul>	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfPolicyCar

This table contains information about car associations running information applied to interfaces.

## XML structure

```

<MQC>
  <IfPolicyCar>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <ClassName></ClassName>
      <CIR></CIR>
    
```

```

<CBS></CBS>
<EBS></EBS>
<PIR></PIR>
<GreenAction>
  <GreenActionType></GreenActionType>
  <GreenActionValue></GreenActionValue>
</GreenAction>
<YellowAction>
  <YellowActionType></YellowActionType>
  <YellowActionValue></YellowActionValue>
</YellowAction>
<RedAction>
  <RedActionType></RedActionType>
  <RedActionValue></RedActionValue>
</RedAction>
<GreenPkts></GreenPkts>
<GreenBytes></GreenBytes>
<YellowPkts></YellowPkts>
<YellowBytes></YellowBytes>
<RedPkts></RedPkts>
<RedBytes></RedBytes>
</Interface>
</IfPolicyCar>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfPolicyCar
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.



Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>GreenActionType.</b></li> <li><b>GreenActionValue.</b></li> </ul>	
GreenActionType	Green Action Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pass.</li> <li>2—remark-dscp-pass.</li> <li>3—remark-prec-pass.</li> <li>4—remark-mpls-exp-pass.</li> <li>5—remark-dot1p-pass.</li> <li>6—remark-atm-clp-pass.</li> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> <li>19—continue.</li> </ul>	<p>When <b>GreenActionType</b> is 1, send the packet.</p> <p>When <b>GreenActionType</b> is 2, remark DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is 3, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is 4, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is 5, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is 6, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is 7, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is 8, remark local precedence of the packet and send it.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>When <b>GreenActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet.</p>
GreenActionValue	Green Action Value	N/A	Unsigned integer.	<p>When <b>GreenActionType</b> is <b>1</b>, <b>10</b> or <b>19</b>, <b>GreenActionValue</b> is invisible.</p> <p>When <b>GreenActionType</b> is <b>6</b> or <b>7</b>, <b>GreenActionValue</b> is <b>0~1</b>.</p> <p>When <b>GreenActionType</b> is <b>2</b>, <b>GreenActionValue</b> is <b>0~63</b>.</p> <p>When <b>GreenActionType</b> is <b>3</b>, <b>4</b>, <b>5</b>, <b>8</b>, <b>GreenActionValue</b> is <b>0~7</b>.</p>
YellowAction	Specify behavior for yellow packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li><b>YellowActionType.</b></li> <li><b>YellowActionValue.</b></li> </ul>	
YellowActionType	Yellow Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> <li><b>4</b>—remark-mpls-exp-pass.</li> <li><b>5</b>—remark-dot1p-pass.</li> <li><b>6</b>—remark-atm-clp-pass.</li> <li><b>7</b>—remark-frde-pass.</li> <li><b>8</b>—remark-local-prec-pass.</li> <li><b>10</b>—discard.</li> <li><b>19</b>—continue.</li> </ul>	<p>When <b>YellowActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>YellowActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>YellowActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>it.</p> <p>When <b>YellowActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is 19, continue to process the packet.</p>
YellowAction Value	Yellow Action Value	N/A	Unsigned integer.	<p>When <b>YellowActionType</b> is <b>1, 10</b> or 19, <b>YellowActionValue</b> is invisible.</p> <p>When <b>YellowActionType</b> is 6 or 7, <b>YellowActionValue</b> is 0~1.</p> <p>When <b>YellowActionType</b> is <b>2</b>, <b>YellowActionValue</b> is 0~63.</p> <p>When <b>YellowActionType</b> is <b>3, 4, 5, 8</b>, <b>YellowActionValue</b> is 0~7.</p>
RedAction	Specify behavior for red packets	Data structure	Members include: <ul style="list-style-type: none"> <li>• <b>RedActionType.</b></li> <li>• <b>RedActionValue.</b></li> </ul>	
RedActionType	Red Action Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—pass.</li> <li>• <b>2</b>—remark-dscp-pass.</li> <li>• <b>3</b>—remark-prec-pass.</li> <li>• <b>4</b>—remark-mpls-exp-pass.</li> <li>• <b>5</b>—remark-dot1p-pass.</li> <li>• <b>6</b>—remark-atm-clp-pass.</li> <li>• <b>7</b>—remark-frde-pass.</li> <li>• <b>8</b>—remark-local-prec-pass.</li> <li>• <b>10</b>—discard.</li> <li>• <b>19</b>—continue.</li> </ul>	<p>When <b>RedActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>RedActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is <b>5</b>, remark 802.1p</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>priority value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is 19, continue to process the packet.</p>
RedActionValue	Red Action Value	N/A	Unsigned integer.	<p>When <b>RedActionType</b> is <b>1, 10 or 19</b>, <b>RedActionValue</b> is invisible.</p> <p>When <b>RedActionType</b> is 6 or 7, <b>RedActionValue</b> is 0~1.</p> <p>When <b>RedActionType</b> is <b>2</b>, <b>RedActionValue</b> is 0~63.</p> <p>When <b>RedActionType</b> is <b>3, 4, 5, 8</b>, <b>RedActionValue</b> is 0~7.</p>
GreenPkts	Number of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenBytes	Bytes of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPkts	Number of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowBytes	Bytes of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPkts	Number of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedBytes	Bytes of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

# MQC/IfPolicyAF

This table contains running information about assured-forwarding queue.

## XML structure

```
<MQC>
  <IfPolicyAF>
    <Interface>
      <IfIndex></IfIndex>
      <ClassName></ClassName>
      <Kbps></Kbps>
      <Bps></Bps>
      <RemainingPct></RemainingPct>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
      <EnqueuedPackets></EnqueuedPackets>
      <EnqueuedBytes></EnqueuedBytes>
      <DiscardedPackets></DiscardedPackets>
      <DiscardedBytes></DiscardedBytes>
    </Interface>
  </IfPolicyAF>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	IfPolicyAF
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Kbps	Bandwidth value in kbps	N/A	Unsigned integer. Value range: 8 to 10,000,000.	N/A
Bps	Bandwidth value in bps	N/A	Unsigned integer. Value range: 8 to 1,000.	N/A
RemainingPct	Percentage of remaining bandwidth.	N/A	Unsigned integer. Value range: 1 to 100.	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedPackets	Enqueued Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedBytes	Enqueued Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedPackets	Discarded Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Discarded Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfPolicyEF

This table contains running information about expedited-forwarding queue.

### XML structure

```

<MQC>
  <IfPolicyEF>
    <Interface>
      <IfIndex></IfIndex>
      <ClassName></ClassName>
      <Kbps></Kbps>
      <CBS></CBS>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
      <EnqueuedPackets></EnqueuedPackets>
      <EnqueuedBytes></EnqueuedBytes>
      <DiscardedPackets></DiscardedPackets>
      <DiscardedBytes></DiscardedBytes>
    </Interface>
  </IfPolicyEF>
</MQC>

```

```

</IfPolicyEF>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfPolicyEF
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Kbps	Bandwidth value in kbps	N/A	Unsigned integer. Value range: 8 to 10,000,000.	N/A
CBS	Committed Burst Size	N/A	Unsigned integer. Value range: 32 to 1,000,000,000.	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedPackets	Enqueued Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedBytes	Enqueued Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DiscardedPackets	Discarded Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Discarded Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfPolicyWFQ

This table contains running information about weighted fair queue.

### XML structure

```

<MQC>
  <IfPolicyWFQ>
    <Interface>
      <IfIndex></IfIndex>
      <ClassName></ClassName>
      <QueueNum></QueueNum>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
      <EnqueuedPackets></EnqueuedPackets>
      <EnqueuedBytes></EnqueuedBytes>
      <DiscardedPackets></DiscardedPackets>
      <DiscardedBytes></DiscardedBytes>
    </Interface>
  </IfPolicyWFQ>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	IfPolicyWFQ
Table type	Multi-instance table
Row name	Interface
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see



Column name	Column description	Column type	Data type and restrictions	Remarks
				the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
QueueNum	Total queue number	N/A	Unsigned integer. Value range: 16 to 4096.	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedPackets	Enqueued Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedBytes	Enqueued Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedPackets	Discarded Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Discarded Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfPolicyEnhance

This table contains information about QoS policies applied to interfaces in enhanced mode.

### XML structure

```

<MQC>
  <IfPolicyEnhance>
    <Application>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Status></Status>
    </Application>
  </IfPolicyEnhance>
</MQC>

```

### Table description

Item	Description
Feature name	MQC

Item	Description
Table name	IfPolicyEnhance
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	N/A
Status	Application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> <li>3—Succeeded partly.</li> </ul>	If some class-behavior associations in the policy are applied successfully but some are not, the value of this column is 3.

## MQC/IfPolicyEnhanceCBMap

This table contains information about class-behavior associations running information applied to interfaces in enhanced mode.

## XML structure

```

<MQC>
  <IfPolicyEnhanceCBMap>
    <Interface>

```

```

<IfIndex></IfIndex>
<Direction></Direction>
<ClassName></ClassName>
<BehaviorName></BehaviorName>
<Mode></Mode>
<Status></Status>
</Interface>
</IfPolicyEnhanceCMap>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfPolicyEnhanceCMap
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Behavior name	N/A	String. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None.</li> <li>• 2—Qppb.</li> <li>• 16—Dcbx.</li> </ul>	When the Mode column is 0, there is no restriction on the classifier-behavior or association.  When the Mode column is 2, the classifier-behavior or association applies only to QPPB.  When the Mode column is 16, the classifier-behavior or association applies only to the Data Center Bridging Exchange Protocol (DCBX).
Status	Class-Behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Succeeded.</li> <li>• 2—Failed.</li> </ul>	N/A

## MQC/GlobalPolicyEnhance

This table contains information about global QoS policies in enhanced mode.

### XML structure

```

<MQC>
  <GlobalPolicyEnhance>
    <Application>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Status></Status>
    </Application>
  </GlobalPolicyEnhance>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	GlobalPolicyEnhance
Table type	Multi-instance table

Item	Description
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Inbound.</li> <li>• <b>1</b>—Outbound.</li> </ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	N/A
Status	Application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Succeeded.</li> <li>• <b>2</b>—Failed.</li> <li>• <b>3</b>—Succeeded partly.</li> </ul>	If some class-behavior associations in the policy are applied successfully but some are not, the value of this column is <b>3</b> .

## MQC/GlobalPolicyEnhanceCBMap

This table contains information about class-behavior associations running information applied to global in enhanced mode.

## XML structure

```

<MQC>
  <GlobalPolicyEnhanceCBMap>
    <Global>
      <Direction></Direction>
      <ClassName></ClassName>
      <BehaviorName></BehaviorName>
      <Mode></Mode>
      <Status></Status>
    </Global>
  </GlobalPolicyEnhanceCBMap>
</MQC>

```

## Table description

Item	Description
Feature name	MQC

Item	Description
Table name	GlobalPolicyEnhanceCBMap
Table type	Multi-instance table
Row name	Global
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Behavior name	N/A	String. Length: 1 to 31 characters.	N/A
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>2—Qppb.</li> <li>16—Dcbx.</li> </ul>	When the Mode column is 0, there is no restriction on the classifier-behavior or association.  When the Mode column is 2, the classifier-behavior or association applies only to QPPB.  When the Mode column is 16, the classifier-behavior or association applies only to the Data Center Bridging Exchange Protocol (DCBX).
Status	Class-Behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> </ul>	N/A

## MQC/Account

This table contains information about accounting action.

## XML structure

```
<MQC>
  <Account>
    <Action>
      <BehaviorName></BehaviorName>
      <Byte></Byte>
      <Packet></Packet>
    </Action>
  </Account>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Account
Table type	Multi-instance table
Row name	Action
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name	Index	String. Length: 1 to 31 characters.	N/A
Byte	Accounting in bytes	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Conform.</li><li><b>false</b>—Not conform.</li></ul>	N/A
Packet	Accounting in packets	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Conform.</li><li><b>false</b>—Not conform.</li></ul>	N/A

## MQC/IfPolicyAccount

This table contains information about accounting running information applied to interfaces.

## XML structure

```
<MQC>
  <IfPolicyAccount>
    <Interface>
      <IfIndex></IfIndex>
    </Interface>
  </IfPolicyAccount>
</MQC>
```

```

    <Direction></Direction>
    <ClassName></ClassName>
    <Packets></Packets>
    <Bytes></Bytes>
    <pps></pps>
    <bps></bps>
  </Interface>
</IfPolicyAccount>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfPolicyAccount
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Packets	Accounting Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Bytes	Accounting Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
pps	Accounting packets per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
bps	Accounting bits per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/VLANPolicyCar

This table contains information about car associations running information applied to VLANs.

### XML structure

```

<MQC>
  <VLANPolicyCar>
    <VLAN>
      <VLANID></VLANID>
      <Direction></Direction>
      <ClassName></ClassName>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenAction>
        <GreenActionType></GreenActionType>
        <GreenActionValue></GreenActionValue>
      </GreenAction>
      <YellowAction>
        <YellowActionType></YellowActionType>
        <YellowActionValue></YellowActionValue>
      </YellowAction>
      <RedAction>
        <RedActionType></RedActionType>
        <RedActionValue></RedActionValue>
      </RedAction>
      <GreenPkts></GreenPkts>
      <GreenBytes></GreenBytes>
      <YellowPkts></YellowPkts>
      <YellowBytes></YellowBytes>
      <RedPkts></RedPkts>
      <RedBytes></RedBytes>
    </VLAN>
  </VLANPolicyCar>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	VLANPolicyCar
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>GreenActionType.</b></li> <li><b>GreenActionValue.</b></li> </ul>	
GreenActionType	Green Action Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pass.</li> <li>2—remark-dscp-pass.</li> <li>3—remark-prec-pass.</li> <li>4—remark-mpls-exp-pass.</li> <li>5—remark-dot1p-pass.</li> <li>6—remark-atm-clp-pass.</li> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> <li>19—continue.</li> </ul>	<p>When <b>GreenActionType</b> is 1, send the packet.</p> <p>When <b>GreenActionType</b> is 2, remark DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is 3, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is 4, remark EXP of the MPLS packet and send</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet.</p>
GreenActionValue	Green Action Value	N/A	Unsigned integer.	<p>When <b>GreenActionType</b> is <b>1</b>, <b>10</b> or <b>19</b>, <b>GreenActionValue</b> is invisible.</p> <p>When <b>GreenActionType</b> is <b>6</b> or <b>7</b>, <b>GreenActionValue</b> is 0~1.</p> <p>When <b>GreenActionType</b> is <b>2</b>, <b>GreenActionValue</b> is 0~63.</p> <p>When <b>GreenActionType</b> is <b>3</b>, <b>4</b>, <b>5</b>, <b>8</b>, <b>GreenActionValue</b> is 0~7.</p>
YellowAction	Specify behavior for yellow packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li><b>YellowActionType.</b></li> <li><b>YellowActionValue.</b></li> </ul>	
YellowActionType	Yellow Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> <li><b>4</b>—remark-mpls-exp-pass.</li> </ul>	<p>When <b>YellowActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>YellowActionType</b> is <b>2</b>, remark DSCP value of the packet and send</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>5—remark-dot1p-pass.</li> <li>6—remark-atm-clp-pass.</li> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> <li>19—continue.</li> </ul>	<p>it.</p> <p>When <b>YellowActionType</b> is 3, remark IP precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is 4, remark EXP of the MPLS packet and send it.</p> <p>When <b>YellowActionType</b> is 5, remark 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is 6, remark CLP bit of the ATM packet and send it.</p> <p>When <b>YellowActionType</b> is 7, remark DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is 8, remark local precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is 10, drop the packet.</p> <p>When <b>YellowActionType</b> is 19, continue to process the packet.</p>
YellowAction Value	Yellow Action Value	N/A	Unsigned integer.	<p>When <b>YellowActionType</b> is 1, 10 or 19, <b>YellowActionValue</b> is invisible.</p> <p>When <b>YellowActionType</b> is 6 or 7, <b>YellowActionValue</b> is 0~1.</p> <p>When <b>YellowActionType</b> is 2, <b>YellowActionValue</b> is 0~63.</p> <p>When <b>YellowActionType</b> is 3, 4, 5, 8, <b>YellowActionValue</b> is 0~7.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
RedAction	Specify behavior for red packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>RedActionType.</b></li> <li><b>RedActionValue.</b></li> </ul>	
RedActionType	Red Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> <li><b>4</b>—remark-mpls-exp-pass.</li> <li><b>5</b>—remark-dot1p-pass.</li> <li><b>6</b>—remark-atm-clp-pass.</li> <li><b>7</b>—remark-frde-pass.</li> <li><b>8</b>—remark-local-prec-pass.</li> <li><b>10</b>—discard.</li> <li><b>19</b>—continue.</li> </ul>	<p>When <b>RedActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>RedActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is 19, continue to process the packet.</p>
RedActionValue	Red Action Value	N/A	Unsigned integer.	<p>When <b>RedActionType</b> is <b>1, 10 or 19</b>, <b>RedActionValue</b> is invisible.</p> <p>When <b>RedActionType</b> is 6 or 7, <b>RedActionValue</b> is 0~1.</p> <p>When <b>RedActionType</b> is <b>2</b>, <b>RedActionValue</b> is 0~63.</p> <p>When <b>RedActionType</b> is <b>3, 4, 5, 8</b>, <b>RedActionValue</b> is 0~7.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
GreenPkts	Number of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenBytes	Bytes of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPkts	Number of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowBytes	Bytes of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPkts	Number of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedBytes	Bytes of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/VLANPolicyAccount

This table contains information about accounting running information applied to VLANs.

### XML structure

```

<MQC>
  <VLANPolicyAccount>
    <VLAN>
      <VLANID></VLANID>
      <Direction></Direction>
      <ClassName></ClassName>
      <Packets></Packets>
      <Bytes></Bytes>
      <pps></pps>
      <bps></bps>
    </VLAN>
  </VLANPolicyAccount>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	VLANPolicyAccount
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VALNID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Packets	Accounting Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Bytes	Accounting Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
pps	Accounting packets per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
bps	Accounting bits per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/GlobalPolicyCar

This table contains information about car associations running information applied to global.

## XML structure

```

<MQC>
  <GlobalPolicyCar>
    <Global>
      <Direction></Direction>
      <ClassName></ClassName>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenAction>
        <GreenActionType></GreenActionType>
        <GreenActionValue></GreenActionValue>
      </GreenAction>
      <YellowAction>
        <YellowActionType></YellowActionType>
        <YellowActionValue></YellowActionValue>
      </YellowAction>
      <RedAction>
        <RedActionType></RedActionType>

```

```

        <RedActionValue></RedActionValue>
    </RedAction>
    <GreenPkts></GreenPkts>
    <GreenBytes></GreenBytes>
    <YellowPkts></YellowPkts>
    <YellowBytes></YellowBytes>
    <RedPkts></RedPkts>
    <RedBytes></RedBytes>
</Global>
</GlobalPolicyCar>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalPolicyCar
Table type	Multi-instance table
Row name	Global
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Inbound.</li> <li><b>1</b>—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>GreenActionType.</b></li> <li><b>GreenActionValue.</b></li> </ul>	
GreenActionType	Green Action Type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> </ul>	When <b>GreenActionType</b> is <b>1</b> , send the packet. When <b>GreenActionType</b> is <b>2</b> ,



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>4—remark-mpls-exp-pass.</li> <li>5—remark-dot1p-pass.</li> <li>6—remark-atm-clp-pass.</li> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> <li>19—continue.</li> </ul>	<p>remark DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is 3, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is 4, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is 5, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is 6, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is 7, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is 8, remark local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is 10, drop the packet.</p> <p>When <b>GreenActionType</b> is 19, continue to process the packet.</p>
GreenActionValue	Green Action Value	N/A	Unsigned integer.	<p>When <b>GreenActionType</b> is 1, 10 or 19, <b>GreenActionValue</b> is invisible.</p> <p>When <b>GreenActionType</b> is 6 or 7, <b>GreenActionValue</b> is 0~1.</p> <p>When <b>GreenActionType</b> is 2, <b>GreenActionValue</b> is 0~63.</p> <p>When <b>GreenActionType</b> is 3, 4, 5, 8, <b>GreenActionValue</b> is 0~7.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
YellowAction	Specify behavior for yellow packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>YellowActionType.</b></li> <li><b>YellowActionValue.</b></li> </ul>	
YellowActionType	Yellow Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> <li><b>4</b>—remark-mpls-exp-pass.</li> <li><b>5</b>—remark-dot1p-pass.</li> <li><b>6</b>—remark-atm-clp-pass.</li> <li><b>7</b>—remark-frde-pass.</li> <li><b>8</b>—remark-local-prec-pass.</li> <li><b>10</b>—discard.</li> <li><b>19</b>—continue.</li> </ul>	<p>When <b>YellowActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>YellowActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>YellowActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>YellowActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is 19, continue to process the packet.</p>
YellowActionValue	Yellow Action Value	N/A	Unsigned integer.	<p>When <b>YellowActionType</b> is <b>1</b>, <b>10</b> or <b>19</b>, <b>YellowActionValue</b> is invisible.</p> <p>When <b>YellowActionType</b> is <b>6</b> or <b>7</b>, <b>YellowActionValue</b> is</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				0~1. When <b>YellowActionType</b> is <b>2</b> , <b>YellowActionValue</b> is 0~63. When <b>YellowActionType</b> is <b>3, 4, 5, 8</b> , <b>YellowActionValue</b> is 0~7.
RedAction	Specify behavior for red packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>RedActionType.</b></li> <li><b>RedActionValue.</b></li> </ul>	
RedActionType	Red Action Type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> <li><b>4</b>—remark-mpls-exp-pass.</li> <li><b>5</b>—remark-dot1p-pass.</li> <li><b>6</b>—remark-atm-clp-pass.</li> <li><b>7</b>—remark-frde-pass.</li> <li><b>8</b>—remark-local-prec-pass.</li> <li><b>10</b>—discard.</li> <li><b>19</b>—continue.</li> </ul>	When <b>RedActionType</b> is <b>1</b> , send the packet. When <b>RedActionType</b> is <b>2</b> , remark DSCP value of the packet and send it. When <b>RedActionType</b> is <b>3</b> , remark IP precedence of the packet and send it. When <b>RedActionType</b> is <b>4</b> , remark EXP of the MPLS packet and send it. When <b>RedActionType</b> is <b>5</b> , remark 802.1p priority value of the packet and send it. When <b>RedActionType</b> is <b>6</b> , remark CLP bit of the ATM packet and send it. When <b>RedActionType</b> is <b>7</b> , remark DE bit of the FR packet and send it. When <b>RedActionType</b> is <b>8</b> , remark local precedence of the packet and send it. When <b>RedActionType</b> is <b>10</b> , drop the packet. When <b>GreenActionType</b> is 19, continue to process the packet.
RedActionValue	Red Action Value	N/A	Unsigned integer.	When <b>RedActionType</b> is <b>1, 10 or 19</b> , <b>RedActionValue</b> is invisible. When <b>RedActionType</b> is 6 or 7,

Column name	Column description	Column type	Data type and restrictions	Remarks
				<b>RedActionValue</b> is 0~1. When <b>RedActionType</b> is <b>2</b> , <b>RedActionValue</b> is 0~63. When <b>RedActionType</b> is <b>3, 4, 5, 8</b> , <b>RedActionValue</b> is 0~7.
GreenPkts	Number of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenBytes	Bytes of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPkts	Number of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowBytes	Bytes of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPkts	Number of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedBytes	Bytes of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/GlobalPolicyAccount

This table contains information about accounting running information applied to global.

### XML structure

```

<MQC>
  <GlobalPolicyAccount>
    <Global>
      <Direction></Direction>
      <ClassName></ClassName>
      <Packets></Packets>
      <Bytes></Bytes>
      <pps></pps>
      <bps></bps>
    </Global>
  </GlobalPolicyAccount>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalPolicyAccount
Table type	Multi-instance table
Row name	Global
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Packets	Accounting Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Bytes	Accounting Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
pps	Accounting packets per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
bps	Accounting bits per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/Capability

This table contains MQC capability information, and it is used to obtain MQC direction parameters.

## XML structure

```
<MQC>
  <Capability>
    <MQCIfType></MQCIfType>
    <MQCvlanType></MQCvlanType>
    <MQCglobalType></MQCglobalType>
  </Capability>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Capability
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MQCIfType	MQC interface type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Inbound.</li><li>2—Outbound.</li><li>3—Both.</li></ul>	N/A
MQCVlanType	MQC VLAN type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Inbound.</li><li>2—Outbound.</li><li>3—Both.</li></ul>	N/A
MQCGlobalType	MQC global type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Inbound.</li><li>2—Outbound.</li><li>3—Both.</li></ul>	N/A

## MQC/PostClassify

This table contains information about processing QoS after other modules running information applied to the outbound direction of an interfaces.

## XML structure

```
<MQC>
  <PostClassify>
    <Application>
      <IfIndex></IfIndex>
      <enable></enable>
    </Application>
  </PostClassify>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	PostClassify
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
enable	Enable	Column	Boolean <ul style="list-style-type: none"><li>true—Conform.</li><li>false—Not conform.</li></ul>	N/A

## MQC/GlobalCategoryPolicy

This table contains information about global QoS category policies.

## XML structure

```
<MQC>
  <GlobalCategoryPolicy>
    <Application>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <PreOrder></PreOrder>
      <Status></Status>
    </Application>
  </GlobalCategoryPolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalCategoryPolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Common policy.</li><li>• 1—Remarking policy.</li><li>• 2—Accounting policy.</li><li>• 3—Mirroring policy.</li></ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
PreOrder	Application priority	N/A	Unsigned integer.	N/A
Status	Application status	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Succeeded.</li><li>• 2—Failed.</li><li>• 3—Succeeded partly.</li></ul>	If some class-behavior associations in the policy are applied successfully but some are not, the value of this column is 3.

## MQC/InterfaceCategoryPolicy

This table contains information about QoS policies of the specified types applied to interfaces.

## XML structure

```
<MQC>
  <InterfaceCategoryPolicy>
    <Application>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
```



```

    <PreOrder></PreOrder>
    <Status></Status>
  </Application>
</InterfaceCategoryPolicy>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	InterfaceCategoryPolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
PreOrder	Application priority	N/A	Unsigned integer.	N/A
Status	Application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> <li>3—Succeeded partly.</li> </ul>	If some class-behavior associations in the policy are applied successfully but some are not, the value of this column is <b>3</b> .

# MQC/IfCategoryPolicyCBMap

This table contains information about class-behavior associations running information for QoS category policies applied to interfaces.

## XML structure

```
<MQC>
  <IfCategoryPolicyCBMap>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <ClassName></ClassName>
      <BehaviorName></BehaviorName>
      <Mode></Mode>
      <Status></Status>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
    </Interface>
  </IfCategoryPolicyCBMap>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	IfCategoryPolicyCBMap
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Behavior name	N/A	String. Length: 1 to 31 characters.	N/A
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>2—Qppb.</li> <li>16—Dcbx.</li> </ul>	When the Mode column is 0, there is no restriction on the classifier-behavior association.  When the Mode column is 2, the classifier-behavior association applies only to QPPB.  When the Mode column is 16, the classifier-behavior association applies only to the Data Center Bridging Exchange Protocol (DCBX).
Status	Class-Behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> </ul>	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/GlobalCategoryPolicyCBMap

This table contains information about class-behavior associations running information for QoS category policies applied to global.

### XML structure

<MQC>

```

<GlobalCategoryPolicyCBMap>
  <Global>
    <Direction></Direction>
    <PolicyType></PolicyType>
    <PolicyName></PolicyName>
    <ClassName></ClassName>
    <BehaviorName></BehaviorName>
    <Mode></Mode>
    <Status></Status>
    <MatchedPackets></MatchedPackets>
    <MatchedBytes></MatchedBytes>
  </Global>
</GlobalCategoryPolicyCBMap>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalCategoryPolicyCBMap
Table type	Multi-instance table
Row name	Global
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Behavior name	N/A	String. Length: 1 to 31 characters.	N/A
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> </ul>	When the Mode column is 0, there is no restriction on the

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—Qppb.</li> <li>16—Dcbx.</li> </ul>	<p>classifier-behavior association.</p> <p>When the Mode column is 2, the classifier-behavior association applies only to QPPB.</p> <p>When the Mode column is 16, the classifier-behavior association applies only to the Data Center Bridging Exchange Protocol (DCBX).</p>
Status	Class-behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> </ul>	N/A
MatchedPackets	Matched packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfCategoryPolicyCar

This table contains information about car associations running information for QoS category policies applied to interfaces.

### XML structure

```

<MQC>
  <IfCategoryPolicyCar>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <ClassName></ClassName>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenAction>
        <GreenActionType></GreenActionType>
        <GreenActionValue></GreenActionValue>
      </GreenAction>
      <YellowAction>
        <YellowActionType></YellowActionType>

```

```

        <YellowActionValue></YellowActionValue>
    </YellowAction>
    <RedAction>
        <RedActionType></RedActionType>
        <RedActionValue></RedActionValue>
    </RedAction>
    <GreenPkts></GreenPkts>
    <GreenBytes></GreenBytes>
    <YellowPkts></YellowPkts>
    <YellowBytes></YellowBytes>
    <RedPkts></RedPkts>
    <RedBytes></RedBytes>
</Interface>
</IfCategoryPolicyCar>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfCategoryPolicyCar
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 31 characters.	
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>GreenActionType.</b></li> <li><b>GreenActionValue.</b></li> </ul>	N/A
GreenActionType	Green Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> <li><b>4</b>—remark-mpls-exp-pass.</li> <li><b>5</b>—remark-dot1p-pass.</li> <li><b>6</b>—remark-atm-clp-pass.</li> <li><b>7</b>—remark-frde-pass.</li> <li><b>8</b>—remark-local-prec-pass.</li> <li><b>10</b>—discard.</li> <li><b>19</b>—continue.</li> </ul>	<p>When <b>GreenActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>GreenActionType</b> is <b>2</b>, remark the DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>3</b>, remark the IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>4</b>, remark the EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark the 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark the CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark the DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, remark the local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p><b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet.</p>
GreenActionValue	Green Action Value	N/A	Unsigned integer.	<p>When <b>GreenActionType</b> is <b>1</b>, <b>10</b>, or <b>19</b>, <b>GreenActionValue</b> is invisible.</p> <p>When <b>GreenActionType</b> is <b>6</b> or <b>7</b>, <b>GreenActionValue</b> is 0~1.</p> <p>When <b>GreenActionType</b> is <b>2</b>, <b>GreenActionValue</b> is 0~63.</p> <p>When <b>GreenActionType</b> is <b>3</b>, <b>4</b>, <b>5</b>, or <b>8</b>, <b>GreenActionValue</b> is 0~7.</p>
YellowAction	Specify behavior for yellow packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li><b>YellowActionType.</b></li> <li><b>YellowActionValue.</b></li> </ul>	N/A
YellowActionType	Yellow Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> <li><b>4</b>—remark-mpls-exp-pass.</li> <li><b>5</b>—remark-dot1p-pass.</li> <li><b>6</b>—remark-atm-clp-pass.</li> <li><b>7</b>—remark-frde-pass.</li> <li><b>8</b>—remark-local-prec-pass.</li> <li><b>10</b>—discard.</li> <li><b>19</b>—continue.</li> </ul>	<p>When <b>YellowActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>YellowActionType</b> is <b>2</b>, remark the DSCP value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>3</b>, remark the IP precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>4</b>, remark the EXP of the MPLS packet and send it.</p> <p>When <b>YellowActionType</b> is <b>5</b>, remark the 802.1p priority value of the packet and send it.</p> <p>When <b>YellowActionType</b> is <b>6</b>, remark the CLP bit of the ATM packet and send it.</p> <p>When</p>



Column name	Column description	Column type	Data type and restrictions	Remarks
				<p><b>YellowActionType</b> is 7, remark the DE bit of the FR packet and send it.</p> <p>When <b>YellowActionType</b> is 8, remark the local precedence of the packet and send it.</p> <p>When <b>YellowActionType</b> is 10, drop the packet.</p> <p>When <b>YellowActionType</b> is 19, continue to process the packet.</p>
YellowActionValue	Yellow Action Value	N/A	Unsigned integer.	<p>When <b>YellowActionType</b> is 1, 10, or 19, <b>YellowActionValue</b> is invisible.</p> <p>When <b>YellowActionType</b> is 6 or 7, <b>YellowActionValue</b> is 0~1.</p> <p>When <b>YellowActionType</b> is 2, <b>YellowActionValue</b> is 0~63.</p> <p>When <b>YellowActionType</b> is 3, 4, 5, or 8, <b>YellowActionValue</b> is 0~7.</p>
RedAction	Specify behavior for red packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li><b>RedActionType.</b></li> <li><b>RedActionValue.</b></li> </ul>	N/A
RedActionType	Red Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—pass.</li> <li>2—remark-dscp-pass.</li> <li>3—remark-prec-pass.</li> <li>4—remark-mpls-exp-pass.</li> <li>5—remark-dot1p-pass.</li> <li>6—remark-atm-clp-pass.</li> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> <li>19—continue.</li> </ul>	<p>When <b>RedActionType</b> is 1, send the packet.</p> <p>When <b>RedActionType</b> is 2, remark the DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is 3, remark the IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is 4, remark the EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is 5, remark the 802.1p priority value of the packet and send it.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>When <b>RedActionType</b> is <b>6</b>, remark the CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark the DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is <b>8</b>, remark the local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>RedActionType</b> is <b>19</b>, continue to process the packet.</p>
RedActionValue	Red Action Value	N/A	Unsigned integer.	<p>When <b>RedActionType</b> is <b>1, 10, or 19</b>, <b>RedActionValue</b> is invisible.</p> <p>When <b>RedActionType</b> is <b>6 or 7</b>, <b>RedActionValue</b> is 0~1.</p> <p>When <b>RedActionType</b> is <b>2</b>, <b>RedActionValue</b> is 0~63.</p> <p>When <b>RedActionType</b> is <b>3, 4, 5, 8</b>, <b>RedActionValue</b> is 0~7.</p>
GreenPkts	Number of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenBytes	Bytes of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPkts	Number of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowBytes	Bytes of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPkts	Number of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedBytes	Bytes of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfCategoryPolicyAF

This table contains running information about assured-forwarding queue for QoS category policies applied to interfaces.

# XML structure

```
<MQC>
  <IfCategoryPolicyAF>
    <Interface>
      <IfIndex></IfIndex>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <ClassName></ClassName>
      <Kbps></Kbps>
      <Bps></Bps>
      <RemainingPct></RemainingPct>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
      <EnqueuedPackets></EnqueuedPackets>
      <EnqueuedBytes></EnqueuedBytes>
      <DiscardedPackets></DiscardedPackets>
      <DiscardedBytes></DiscardedBytes>
    </Interface>
  </IfCategoryPolicyAF>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	IfCategoryPolicyAF
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"><li>0—Common policy.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Kbps	Bandwidth value in kbps	N/A	Unsigned integer. Value range: 8 to 10,000,000.	N/A
Bps	Bandwidth value in bps	N/A	Unsigned integer. Value range: 8 to 1,000.	N/A
RemainingPct	Percentage of remaining bandwidth.	N/A	Unsigned integer. Value range: 1 to 100.	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedPackets	Enqueued Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedBytes	Enqueued Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedPackets	Discarded Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Discarded Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfCategoryPolicyEF

This table contains running information about expedited-forwarding queue for QoS category policies applied to interfaces.

### XML structure

```

<MQC>
  <IfCategoryPolicyEF>
    <Interface>
      <IfIndex></IfIndex>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <ClassName></ClassName>
      <Kbps></Kbps>
      <CBS></CBS>

```

```

    <MatchedPackets></MatchedPackets>
    <MatchedBytes></MatchedBytes>
    <EnqueuedPackets></EnqueuedPackets>
    <EnqueuedBytes></EnqueuedBytes>
    <DiscardedPackets></DiscardedPackets>
    <DiscardedBytes></DiscardedBytes>
  </Interface>
</IfCategoryPolicyEF>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfCategoryPolicyEF
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Kbps	Bandwidth value in kbps	N/A	Unsigned integer. Value range: 8 to 10,000,000.	N/A
CBS	Committed Burst Size	N/A	Unsigned integer. Value range: 32 to 1,000,000,000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedPackets	Enqueued Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedBytes	Enqueued Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedPackets	Discarded Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Discarded Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfCategoryPolicyWFQ

This table contains running information about weighted fair queue for QoS category policies applied to interfaces.

### XML structure

```

<MQC>
  <IfCategoryPolicyWFQ>
    <Interface>
      <IfIndex></IfIndex>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <ClassName></ClassName>
      <QueueNum></QueueNum>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
      <EnqueuedPackets></EnqueuedPackets>
      <EnqueuedBytes></EnqueuedBytes>
      <DiscardedPackets></DiscardedPackets>
      <DiscardedBytes></DiscardedBytes>
    </Interface>
  </IfCategoryPolicyWFQ>
</MQC>

```

### Table description

Item	Description
Feature name	MQC

Item	Description
Table name	IfCategoryPolicyWFQ
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
QueueNum	Total queue number	N/A	Unsigned integer. Value range: 16 to 4096.	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedPackets	Enqueued Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EnqueuedBytes	Enqueued Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedPackets	Discarded Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Discarded Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

# MQC/IfCategoryPolicyAccount

This table contains information about accounting running information for QoS category policies applied to interfaces.

## XML structure

```
<MQC>
  <IfCategoryPolicyAccount>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <ClassName></ClassName>
      <Packets></Packets>
      <Bytes></Bytes>
      <pps></pps>
      <bps></bps>
    </Interface>
  </IfCategoryPolicyAccount>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	IfCategoryPolicyAccount
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Direction	Application	Index	Enumeration:	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	direction		<ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Packets	Accounting Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Bytes	Accounting Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
pps	Accounting packets per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
bps	Accounting bits per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/GlobalCategoryPolicyCar

This table contains information about car associations running information for QoS category policies applied to global.

### XML structure

```

<MQC>
  <GlobalCategoryPolicyCar>
    <Global>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <ClassName></ClassName>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <GreenAction>
        <GreenActionType></GreenActionType>
        <GreenActionValue></GreenActionValue>
      </GreenAction>
      <YellowAction>

```

```

    <YellowActionType></YellowActionType>
    <YellowActionValue></YellowActionValue>
  </YellowAction>
  <RedAction>
    <RedActionType></RedActionType>
    <RedActionValue></RedActionValue>
  </RedAction>
  <GreenPkts></GreenPkts>
  <GreenBytes></GreenBytes>
  <YellowPkts></YellowPkts>
  <YellowBytes></YellowBytes>
  <RedPkts></RedPkts>
  <RedBytes></RedBytes>
</Global>
</GlobalCategoryPolicyCar>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalCategoryPolicyCar
Table type	Multi-instance table
Row name	Global
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	size			
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>GreenActionType.</b></li> <li><b>GreenActionValue.</b></li> </ul>	
GreenActionType	Green Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> <li><b>4</b>—remark-mpls-exp-pass.</li> <li><b>5</b>—remark-dot1p-pass.</li> <li><b>6</b>—remark-atm-clp-pass.</li> <li><b>7</b>—remark-frde-pass.</li> <li><b>8</b>—remark-local-prec-pass.</li> <li><b>10</b>—discard.</li> <li><b>19</b>—continue.</li> </ul>	<p>When <b>GreenActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>GreenActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet.</p>
GreenActionValue	Green Action Value	N/A	Unsigned integer.	When <b>GreenActionType</b> is <b>1</b> , <b>10</b> or <b>19</b> , <b>GreenActionValue</b> is

Column name	Column description	Column type	Data type and restrictions	Remarks
				invisible. When <b>GreenActionType</b> is 6 or 7, <b>GreenActionValue</b> is 0~1. When <b>GreenActionType</b> is 2, <b>GreenActionValue</b> is 0~63. When <b>GreenActionType</b> is 3, 4, 5, 8, <b>GreenActionValue</b> is 0~7.
YellowAction	Specify behavior for yellow packets	Data structure	Members include: <ul style="list-style-type: none"> <li><b>YellowActionType.</b></li> <li><b>YellowActionValue.</b></li> </ul>	
YellowAction Type	Yellow Action Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pass.</li> <li>2—remark-dscp-pass.</li> <li>3—remark-prec-pass.</li> <li>4—remark-mpls-exp-pass.</li> <li>5—remark-dot1p-pass.</li> <li>6—remark-atm-clp-pass.</li> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> <li>19—continue.</li> </ul>	When <b>YellowActionType</b> is 1, send the packet. When <b>YellowActionType</b> is 2, remark DSCP value of the packet and send it. When <b>YellowActionType</b> is 3, remark IP precedence of the packet and send it. When <b>YellowActionType</b> is 4, remark EXP of the MPLS packet and send it. When <b>YellowActionType</b> is 5, remark 802.1p priority value of the packet and send it. When <b>YellowActionType</b> is 6, remark CLP bit of the ATM packet and send it. When <b>YellowActionType</b> is 7, remark DE bit of the FR packet and send it. When <b>YellowActionType</b> is 8, remark local precedence of the packet and send it. When

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p><b>YellowActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>YellowActionType</b> is <b>19</b>, continue to process the packet.</p>
YellowAction Value	Yellow Action Value	N/A	Unsigned integer.	<p>When <b>YellowActionType</b> is <b>1, 10</b>, or <b>19</b>, <b>YellowActionValue</b> is invisible.</p> <p>When <b>YellowActionType</b> is <b>6</b> or <b>7</b>, <b>YellowActionValue</b> is 0~1.</p> <p>When <b>YellowActionType</b> is <b>2</b>, <b>YellowActionValue</b> is 0~63.</p> <p>When <b>YellowActionType</b> is <b>3, 4, 5, 8</b>, <b>YellowActionValue</b> is 0~7.</p>
RedAction	Specify behavior for red packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li><b>RedActionType.</b></li> <li><b>RedActionValue.</b></li> </ul>	
RedActionType	Red Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>1</b>—pass.</li> <li><b>2</b>—remark-dscp-pass.</li> <li><b>3</b>—remark-prec-pass.</li> <li><b>4</b>—remark-mpls-exp-pass.</li> <li><b>5</b>—remark-dot1p-pass.</li> <li><b>6</b>—remark-atm-clp-pass.</li> <li><b>7</b>—remark-frde-pass.</li> <li><b>8</b>—remark-local-prec-pass.</li> <li><b>10</b>—discard.</li> <li><b>19</b>—continue.</li> </ul>	<p>When <b>RedActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>RedActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b></p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				is <b>8</b> , remark local precedence of the packet and send it. When <b>RedActionType</b> is <b>10</b> , drop the packet. When <b>RedActionType</b> is <b>19</b> , continue to process the packet.
RedActionValue	Red Action Value	N/A	Unsigned integer.	When <b>RedActionType</b> is <b>1</b> , <b>10</b> , or <b>19</b> , <b>RedActionValue</b> is invisible. When <b>RedActionType</b> is <b>6</b> or <b>7</b> , <b>RedActionValue</b> is 0~1. When <b>RedActionType</b> is <b>2</b> , <b>RedActionValue</b> is 0~63. When <b>RedActionType</b> is <b>3</b> , <b>4</b> , <b>5</b> , <b>8</b> , <b>RedActionValue</b> is 0~7.
GreenPkts	Number of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenBytes	Bytes of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPkts	Number of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowBytes	Bytes of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPkts	Number of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedBytes	Bytes of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/GlobalCategoryPolicyAccount

This table contains information about accounting running information for QoS category policies applied to global.

### XML structure

```
<MQC>
  <GlobalCategoryPolicyAccount>
    <Global>
      <Direction></Direction>
```

```

    <PolicyType></PolicyType>
    <PolicyName></PolicyName>
    <ClassName></ClassName>
    <Packets></Packets>
    <Bytes></Bytes>
    <pps></pps>
    <bps></bps>
  </Global>
</GlobalCategoryPolicyAccount>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	GlobalCategoryPolicyAccount
Table type	Multi-instance table
Row name	Global
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Packets	Accounting Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Bytes	Accounting Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
pps	Accounting packets per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
bps	Accounting bits per second	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to $2^{64} - 1$ .	

## MQC/IfCategoryPolicyGts

This table contains operation information about GTS actions for QoS policies of the specified types applied to interfaces.

### XML structure

```

<MQC>
  <IfCategoryPolicyGts>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <ClassName></ClassName>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <QueueLength></QueueLength>
      <PassedPkts></PassedPkts>
      <DiscardedPkts></DiscardedPkts>
      <DelayedPkts></DelayedPkts>
      <PassedPBytes></PassedBytes>
      <DiscardedBytes></DiscardedBytes>
      <DelayedBytes></DelayedBytes>
      <QueueSize></QueueSize>
    </Interface>
  </IfCategoryPolicyGts>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	IfCategoryPolicyGts
Table type	Multi-instance table
Row name	Interface
Restrictions	None



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
QueueLength	Queue length	N/A	Unsigned integer.	N/A
PassedPkts	Number of passed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedPkts	Number of discarded packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DelayedPkts	Number of delayed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
PassedBytes	Number of passed bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Number of discarded bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DelayedBytes	Number of delayed bytes	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to $2^{64} - 1$ .	
QueueSize	Queue size	N/A	Unsigned integer.	N/A

## MQC/GlobalCategoryPolicyGts

This table contains operation information about GTS actions for QoS policies of the specified types applied globally.

### XML structure

```

<MQC>
  <GlobalCategoryPolicyGts>
    <Global>
      <Direction></Direction>
      <PolicyType></PolicyType>
      <PolicyName></PolicyName>
      <ClassName></ClassName>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <QueueLength></QueueLength>
      <PassedPkts></PassedPkts>
      <DiscardedPkts></DiscardedPkts>
      <DelayedPkts></DelayedPkts>
      <PassedPBytes></PassedBytes>
      <DiscardedBytes></DiscardedBytes>
      <DelayedBytes></DelayedBytes>
      <QueueSize></QueueSize>
    </Global>
  </GlobalCategoryPolicyGts>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	GlobalCategoryPolicyGts
Table type	Multi-instance table
Row name	Global
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyType	Policy type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Common policy.</li> <li>1—Remarking policy.</li> <li>2—Accounting policy.</li> <li>3—Mirroring policy.</li> </ul>	N/A
PolicyName	Policy name	Index	String. Length: 1 to 31 characters.	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
QueueLength	Queue length	N/A	Unsigned integer.	N/A
PassedPkts	Number of passed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedPkts	Number of discarded packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DelayedPkts	Number of delayed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
PassedBytes	Number of passed bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DiscardedBytes	Number of discarded bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DelayedBytes	Number of delayed bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
QueueSize	Queue size	N/A	Unsigned integer.	N/A

## MQC/Telemetry

This table contains information about inband telemetry.

## XML structure

```
<MQC>
  <Telemetry>
    <DeviceID></DeviceID>
    <Collector>
      <SrcIP></SrcIP>
      <DstIP></DstIP>
      <SrcPort></SrcPort>
      <DstPort></DstPort>
      <VLANID></VLANID>
    </Collector>
  </Telemetry>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Telemetry
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceID	Device IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.60.
Collector	Telemetry collector	N/A	Members include: <ul style="list-style-type: none"><li>• SrcIP</li><li>• DstIP</li><li>• SrcPort</li><li>• DstPort</li><li>• VLANID</li></ul>	You must specify the SrcIP, DstIP, SrcPort and DstPort when you remove or delete the telemetry collector.  You must specify the SrcIP, DstIP, SrcPort and DstPort when you replace the telemetry collector, or when you merge or create the telemetry collector that does not exist.
SrcIP	Source IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.60.

DstIP	Destination IP address	N/A	String, dotted decimal notation.	Example: 10.153.93.54.
SrcPort	Source port	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
DstPort	Destination port	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A

## MQC/TelemetryRoles

This table contains information about inband telemetry roles.

### XML structure

```
<MQC>
  <TelemetryRoles>
    <TelemetryRole>
      <IfIndex></IfIndex>
      <Role></Role>
    </TelemetryRole>
  </TelemetryRoles>
</MQC>
```

### Table description

Item	Description
Feature name	MQC
Table name	TelemetryRoles
Table type	Multi-instance table
Row name	TelemetryRole
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Role	Telemetry role	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ingress.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—Transit.</li> <li>3—Egress</li> </ul>	

## MQC/TelemetryLoopbacks

This table contains information about inband telemetry loopback interfaces.

### XML structure

```

<MQC>
  <TelemetryLoopbacks>
    <TelemetryLoopback>
      <IfIndex></IfIndex>
      <Loopback></Loopback>
    </TelemetryLoopback>
  </TelemetryLoopbacks>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	TelemetryLoopbacks
Table type	Multi-instance table
Row name	TelemetryLoopback
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	<ul style="list-style-type: none"> <li>Unsigned integer.</li> </ul>	For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Loopback	Telemetry loopback	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Conform.</li> <li><b>false</b>—Not conform.</li> </ul>	N/A

## MQC/TelemetryGlobalEnable

This table contains information about inband telemetry status.

## XML structure

```
<MQC>
  <TelemetryGlobalEnable>
    <Enable></Enable>
  </TelemetryGlobalEnable>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	TelemetryGlobalEnable
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable IFA	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable.</li><li><b>false</b>—Disable.</li></ul>	N/A

## MQC/TelemetryAction

This table contains information about inband telemetry actions.

## XML structure

```
<MQC>
  <TelemetryActions>
    <TelemetryAction>
      <IfIndex></IfIndex>
      <IFAIId></IFAIId>
      <Match>
        <AclType></AclType>
        <Acl></Acl>
        <Loopback></Loopback>
      </Match>
      <Action>
        <Md></Md>
        <Mirror></Mirror>
        <SamplerName></SamplerName>
      </Action>
    </TelemetryAction>
  </TelemetryActions>
</MQC>
```

```

        <Drop></Drop>
    </Action>
    <Status></Status>
</TelemetryAction>
</TelemetryActions>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	TelemetryActions
Table type	Multi-instance table
Row name	TelemetryAction
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
IFAIId	IFA action ID	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Match	Telemetry match	N/A	Members include: <ul style="list-style-type: none"> <li>• AcIType</li> <li>• AcI</li> <li>• Loopback</li> </ul>	N/A
AcIType	ACL type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4AcI.</li> <li>• 2—IPv6AcI.</li> <li>• 3—MACAcI.</li> <li>• 4—UserAcI.</li> </ul>	N/A
AcI	ACL name or ACL number	N/A	<ul style="list-style-type: none"> <li>• <b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li>• <b>ACL number:</b> An unsigned integer in the range based on AcIType.</li> </ul>	N/A
Loopback	Telemetry loopback	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Conform.</li> <li>• <b>false</b>—Not conform.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Telemetry action	N/A	Members include: <ul style="list-style-type: none"> <li>• Md</li> <li>• Mirror</li> <li>• SamplerName</li> <li>• Drop</li> </ul>	N/A
Md	Add metadata	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Conform.</li> <li>• <b>false</b>—Not conform.</li> </ul>	N/A
Mirror	Mirror packets	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Conform.</li> <li>• <b>false</b>—Not conform.</li> </ul>	N/A
SamplerName	Sampler name	N/A	String. Length: 1 to 31 characters.	N/A
Drop	Drop original packets	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Conform.</li> <li>• <b>false</b>—Not conform.</li> </ul>	N/A
Status	Action application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Inactive.</li> <li>• <b>1</b>—Successful.</li> <li>• <b>2</b>—Failed.</li> </ul>	N/A

## MQC/Capabilities

This table contains capability information about the MQC module.

### XML structure

```

<MQC>
  <Capabilities>
    <InterfacePolicy></InterfacePolicy>
    <GlobalPolicy></GlobalPolicy>
    <VlanPolicy></VlanPolicy>
    <RemarkAction></RemarkAction>
    <HardwareAccount></HardwareAccount>
    <MirrorInterface></MirrorInterface>
    <MirrorCPU></MirrorCPU>
    <RedirectInterface></RedirectInterface>
    <RedirectCPU></RedirectCPU>
  </Capabilities>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	Capabilities
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
InterfacePolicy	Interface policy	N/A	Unsigned integer	<p>If one of the last 5 bits of this object is set to 1, it indicates that the interface policy is supported:</p> <ul style="list-style-type: none"> <li>bit 0 stands for inbound.</li> <li>bit 1 stands for outbound.</li> <li>bit 2 stands for enhanced.</li> <li>bit 3 stands for extension.</li> <li>bit 4 stands for share mode.</li> </ul>
GlobalPolicy	Global policy	N/A	Unsigned integer	<p>If one of the last 5 bits of this object is set to 1, it indicates that the global policy is supported:</p> <ul style="list-style-type: none"> <li>bit 0 stands for inbound.</li> <li>bit 1 stands for outbound.</li> <li>bit 2 stands for enhanced.</li> <li>bit 3 stands for extension.</li> <li>bit 4 stands for share mode.</li> </ul>
VlanPolicy	VLAN policy	N/A	Unsigned integer	<p>If one of the last 5 bits of this object is set to 1, it indicates that the VLAN policy is supported:</p> <ul style="list-style-type: none"> <li>bit 0 stands for inbound.</li> <li>bit 1 stands for outbound.</li> <li>bit 2 stands for enhanced.</li> <li>bit 3 stands for extension.</li> <li>bit 4 stands for share mode.</li> </ul>
RemarkAction	Remark action	N/A	Unsigned integer	<p>If one of the last 18 bits of this object is set to 1, it indicates that the remark action is supported:</p> <ul style="list-style-type: none"> <li>bit 0 stands for DSCP.</li> <li>bit 1 stands for IP precedence.</li> <li>bit 2 stands for MPLS-EXP.</li> <li>bit 3 stands for dot1p.</li> <li>bit 4 stands for local QoS ID.</li> <li>bit 5 stands for local precedence.</li> <li>bit 6 stands for drop</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>precedence.</p> <ul style="list-style-type: none"> <li>• bit 7 stands for customer VLAN ID.</li> <li>• bit 8 stands for service VLAN ID.</li> <li>• bit 9 stands for customer dot1p trust.</li> <li>• bit 10 stands for imposition-mpls-exp.</li> <li>• bit 11 stands for FC.</li> <li>• bit 12 stands for atm-clp.</li> <li>• bit 13 stands for fr-de.</li> <li>• bit 14 stands for second-mpls-exp.</li> <li>• bit 15 stands for account level.</li> <li>• bit 16 stands for service class.</li> <li>• bit 17 stands for tunnel dscp.</li> </ul>
HardwareAccount	Hardware accounting	N/A	Unsigned integer	<p>0 indicates that the accounting action is supported.</p> <p>1 indicates that accounting by the default method is supported.</p> <p>2 indicates that accounting by one method of packet and byte is supported.</p> <p>3 indicates that accounting by neither method or one of packet and byte is supported.</p> <p>4 indicates that accounting by neither method or one or two of packet and byte is supported.</p>
MirrorInterface	Mirror traffic to interface	N/A	Unsigned integer	<p>If one of the last 23 bits of this object is set to 1, it indicates that mirroring traffic to an interface of the specified type is supported:</p> <ul style="list-style-type: none"> <li>• bit 0 stands for l2ethernet.</li> <li>• bit 1 stands for l2ge.</li> <li>• bit 2 stands for l2xge.</li> <li>• bit 3 stands for l2fge.</li> <li>• bit 4 stands for l2hge.</li> <li>• bit 5 stands for l3ethernet.</li> <li>• bit 6 stands for l3ge.</li> <li>• bit 7 stands for l3xge.</li> <li>• bit 8 stands for l3fge.</li> <li>• bit 9 stands for l3hge.</li> <li>• bit 10 stands for tunnel.</li> <li>• bit 11 stands for ragg.</li> <li>• bit 12 stands for bagg.</li> <li>• bit 13 stands for l2tge.</li> <li>• bit 14 stands for l3tge.</li> <li>• bit 15 stands for blade.</li> <li>• bit 16 stands for blagg.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>bit 17 stands for olt.</li> <li>bit 18 stands for l2wge.</li> <li>bit 19 stands for l3wge.</li> <li>bit 20 stands for l2sge.</li> <li>bit 21 stands for l3sge.</li> <li>bit 22 stands for loopback.</li> </ul>
MirrorCPU	Mirror traffic to CPU	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>0—Not supported.</li> <li>1—Supported.</li> </ul>	N/A
RedirectInterface	Redirect traffic to interface	N/A	Unsigned integer	If one of the last 23 bits of this object is set to 1, it indicates that redirecting traffic to an interface of the specified type is supported, <ul style="list-style-type: none"> <li>bit 0 stands for l2ethernet.</li> <li>bit 1 stands for l2ge.</li> <li>bit 2 stands for l2xge.</li> <li>bit 3 stands for l2fge.</li> <li>bit 4 stands for l2hge.</li> <li>bit 5 stands for l3ethernet.</li> <li>bit 6 stands for l3ge.</li> <li>bit 7 stands for l3xge.</li> <li>bit 8 stands for l3fge.</li> <li>bit 9 stands for l3hge.</li> <li>bit 10 stands for tunnel.</li> <li>bit 11 stands for ragg.</li> <li>bit 12 stands for bagg.</li> <li>bit 13 stands for l2tge.</li> <li>bit 14 stands for l3tge.</li> <li>bit 15 stands for blade.</li> <li>bit 16 stands for blagg.</li> <li>bit 17 stands for olt.</li> <li>bit 18 stands for l2wge.</li> <li>bit 19 stands for l3wge.</li> <li>bit 20 stands for l2sge.</li> <li>bit 21 stands for l3sge.</li> <li>bit 22 stands for loopback.</li> </ul>
RedirectCPU	Redirect traffic to CPU	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>0—Not supported.</li> <li>1—Supported.</li> </ul>	N/A

## MQC/OverheadLayer

This table contains information about processing QoS in which overhead layer type of packet considered.

## XML structure

```
<MQC>
  <OverheadLayer>
    <Application>
      <Layer></Layer>
    </Application>
  </OverheadLayer>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	OverheadLayer
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Layer	Type of overhead layer	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Link.</li><li>2—Physics.</li></ul>	N/A

## MQC/SysTruncation

This table contains information about global truncation.

## XML structure

```
<MQC>
  <SysTruncation>
    <TruncationLen></TruncationLen>
  </SysTruncation>
</MQC>
```

## Table description

Item	Description
Feature name	MQC

Table name	SysTruncation
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TruncationLen	Truncation length.	column	Unsigned integer.	The value depends on device.

## MQC/SysTruncationCapa

This table contains information about global truncation capability.

## XML structure

```
<MQC>
  <SysTruncationCapa>
    <Min></Min>
    <Max></Max>
  </SysTruncationCapa>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	SysTruncationCapa
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Min	Min truncation length.	column	Unsigned integer.	The value depends on device.
Max	Max truncation length.	column	Unsigned integer.	The value depends on device.

# MQC/MonitorGroup

This table contains information about monitor group.

## XML structure

```
<MQC>
  <MonitorGroup>
    <Group>
      <GroupID></GroupID>
    </Group>
  </MonitorGroup>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	MonitorGroup
Table type	Multi -instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	Monitor group id.	Index	Unsigned integer.	The value depends on device.

# MQC/MonitorGroupCapa

This table contains information about monitor group capability.

## XML structure

```
<MQC>
  <MonitorGroupCapa>
    <MaxGroupID></MaxGroupID>
  </MonitorGroupCapa>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	MonitorGroupCapa
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxGroupID	Max monitor group id.	N/A	Unsigned integer.	The value depends on device.

## MQC/MonitorPort

This table contains information about monitor groups applied to interfaces.

## XML structure

```
<MQC>
  <MonitorPort>
    <MonitorPort>
      <GroupID></GroupID>
      <IfIndex></IfIndex>
    </MonitorPort>
  </MonitorPort>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	MonitorPort
Table type	Multi -instance table
Row name	MonitorPort
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupID	Monitor group id.	Index	Unsigned integer.	The value depends on device.
IfIndex	Interface index.	Index	Unsigned integer.	N/A

## MQC/Strip

This table contains information about strip.

## XML structure

```
<MQC>
  <Strip>
    <Strip>
      <BehaviorName></BehaviorName>
      <Type></Type>
      <OffsetValue></OffsetValue>
      <HeadLength></HeadLength>
      <DstMACAddr></DstMACAddr>
      <SrcMACAddr></SrcMACAddr>
      <VlanID></VlanID>
      <Dot1p></Dot1p>
      <EthTypeID></EthTypeID>
    </Strip>
  </Strip>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Strip
Table type	Multi -instance table
Row name	Strip
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name.	Index	String. Length: 1 to 31 characters.	N/A
Type	Strip type.	column	Enumeration: <ul style="list-style-type: none"> <li>• 0—strip header.</li> <li>• 1—top-most-vlan.</li> <li>• 2—position I2.</li> <li>• 3—position I3.</li> <li>• 4—position I4.</li> <li>• 5—vxlan.</li> <li>• 6—nvgre.</li> <li>• 7—gre.</li> </ul>	Required.
OffSetValue	Strip offset value.	column	Unsigned integer.	The value depends on device.
HeadLength	Length of a GRE header	column	Unsigned integer. Value range: 4 to 16.	The value depends on user configuration. The value of this column is valid if the type is gre.
DstMACAddr	Destination MAC address	column	Six groups of two hexadecimal digits, hyphen-separated.	DstMACAddr, SrcMACAddr, and EthTypeID must be added together. The value of this column is valid if the type is gre.
SrcMACAddr	Source MAC address	column	Six groups of two hexadecimal digits, hyphen-separated.	DstMACAddr, SrcMACAddr, and EthTypeID must be added together. The value of this column is valid if the type is gre.
VlanID	VLAN tag ID	column	Unsigned integer. Value range: 1 to 4094.	The value of this column is valid if the type is gre.
Dot1p	802.1p CoS	column	Unsigned integer. Value range: 0 to 7.	The value of this column is valid if the type is gre.
EthTypeID	Ethernet type ID	column	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF.	The value of this column is valid if the type is gre.

## MQC/StripCapa

This table contains information about strip capability.

## XML structure

```
<MQC>
  <StripCapa>
    <Min></Min>
    <Max></Max>
  </StripCapa>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	StripCapa
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Min	Min strip offsetvalue.	column	Unsigned integer.	The value depends on device.
Max	Max strip offset value.	column	Unsigned integer.	The value depends on device.

## MQC/Nest

This table contains information about nest.

## XML structure

```
<MQC>
  <Nest>
    <Nest>
      <BehaviorName></BehaviorName>
      <VlanID></VlanID>
      <Dot1p></Dot1p>
    </Nest>
  </Nest>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	Nest
Table type	Multi -instance table
Row name	Nest
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name.	Index	String. Length: 1 to 31 characters.	N/A
VlanID	Vlan id.	column	Unsigned integer. Value range: 1 to 4094.	N/A
Dot1p	802.1p COS.	column	Unsigned integer. Value range: 0 to 7.	N/A

## MQC/BehaviorTruncation

This table contains information about truncation of behavior.

## XML structure

```
<MQC>
  <BehaviorTruncation>
    <Truncation>
      <BehaviorName></BehaviorName>
      <Truncation></Truncation>
    </Truncation>
  </BehaviorTruncation>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	BehaviorTruncation
Table type	Multi -instance table
Row name	Truncation

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior name.	Index	String. Length: 1 to 31 characters.	N/A
Truncation	Whether to truncation.	column	Boolean <ul style="list-style-type: none"> <li>true—Truncation.</li> <li>false—Not truncation.</li> </ul>	N/A

## MQC/TimeStamp

This table contains information about time stamp.

## XML structure

```

<MQC>
  <TimeStamp>
    <TimeStamp>
      <BehaviorName></BehaviorName>
      <DstMACAddr></DstMACAddr>
      <SrcMACAddr></SrcMACAddr>
      <EthType></EthType>
    </TimeStamp>
  </TimeStamp>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	TimeStamp
Table type	Multi -instance table
Row name	TimeStamp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BehaviorName	Traffic behavior	Index	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	name.		Length: 1 to 31 characters.	
DstMACAddr	Destination MAC address.	column	Six groups of two hexadecimal digits, hyphen-separated..	DstMACAddr, SrcMACAddr and EthType must be add together.
SrcMACAddr	Source MAC address.	column	Six groups of two hexadecimal digits, hyphen-separated..	N/A
EthType	Ethtype id of timestamp.	column	Hexadecimal string. Length: 1 to 4 characters. Value range: 0 to FFFF..	N/A

## MQC/VSIPolicy

This table contains information about QoS policies applied to VSIs.

### XML structure

```

<MQC>
  <VSIPolicy>
    <Application>
      <VSI></VSI>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Status></Status>
    </Application>
  </VSIPolicy>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	VSIPolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VSI	Name of a VSI	Index	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 31 characters.	
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	N/A
Status	Application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> <li>3—Succeeded partly.</li> </ul>	If some class-behavior associations in the policy are applied successfully but some are not, the value of this column is 3.

## MQC/VSIPolicyCBMap

This table contains information about class-behavior associations running information applied to VSIs.

### XML structure

```

<MQC>
  <VSIPolicyCBMap>
    <VSI>
      <VSI></VSI>
      <Direction></Direction>
      <ClassName></ClassName>
      <BehaviorName></BehaviorName>
      <Mode></Mode>
      <Status></Status>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
    </VSI>
  </VSIPolicyCBMap>
</MQC>

```

### Table description

Item	Description
Feature name	MQC
Table name	VSIPolicyCBMap
Table type	Multi-instance table
Row name	VSI
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VSI	Name of a VSI	Index	String. Length: 1 to 31 characters.	N/A
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Inbound.</li> <li>• <b>1</b>—Outbound.</li> </ul>	N/A
ClassName	Traffic class name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Traffic behavior name	N/A	String. Length: 1 to 31 characters.	N/A
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—None.</li> <li>• <b>2</b>—Qppb.</li> <li>• <b>16</b>—Dcbx.</li> </ul>	<p>When the <b>Mode</b> column is <b>0</b>, there is no restriction on the classifier-behavior association.</p> <p>When the <b>Mode</b> column is <b>2</b>, the classifier-behavior association applies only to QPPB.</p> <p>When the <b>Mode</b> column is <b>16</b>, the classifier-behavior association applies only to the Data Center Bridging Exchange Protocol (DCBX).</p>
Status	Application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Succeeded.</li> <li>• <b>2</b>—Failed.</li> </ul>	N/A
MatchedPackets	Matched packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	The soft switch device does not support.
MatchedBytes	Matched bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	The soft switch device does not support.

## MQC/AccountInterfacePolicy

This table contains information about QoS accounting policies applied to interfaces.



## XML structure

```
<MQC>
  <AccountInterfacePolicy>
    <Application>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Mode></Mode>
    </Application>
  </AccountInterfacePolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	AccountInterfacePolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Inbound.</li><li>• <b>1</b>—Outbound.</li></ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.
Mode	Mode of policies applied to interfaces.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—extension.</li><li>• <b>2</b>—inner-match.</li></ul>	When the <b>Direction</b> column is <b>0</b> , configure the Mode.

## MQC/RemarkInterfacePolicy

This table contains information about QoS remarking policies applied to interfaces.

## XML structure

```
<MQC>
  <RemarkInterfacePolicy>
    <Application>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Mode></Mode>
    </Application>
  </RemarkInterfacePolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	RemarkInterfacePolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Inbound.</li><li>• <b>1</b>—Outbound.</li></ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.
Mode	Mode of policies applied to interfaces.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—extension.</li><li>• <b>2</b>—inner-match.</li></ul>	When the <b>Direction</b> column is <b>0</b> , configure the Mode.

## MQC/TapInterfacePolicy

This table contains information about QoS tap policies applied to interfaces.

## XML structure

```
<MQC>
  <TapInterfacePolicy>
    <Application>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PolicyName></PolicyName>
      <Mode></Mode>
    </Application>
  </TapInterfacePolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	TapInterfacePolicy
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Inbound.</li><li>• <b>1</b>—Outbound.</li></ul>	N/A
PolicyName	Policy name	N/A	String. Length: 1 to 31 characters.	Required.
Mode	Mode of policies applied to interfaces.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>1</b>—extension.</li><li>• <b>2</b>—inner-match.</li></ul>	When the <b>Direction</b> column is <b>0</b> , configure the Mode.

## MQC/IfAccountPolicyCBMap

This table contains information about class-behavior associations running information applied to interfaces.

# XML structure

```
<MQC>
  <IfAccountPolicyCMap>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <ClassName></ClassName>
      <BehaviorName></BehaviorName>
      <Mode></Mode>
      <Status></Status>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>
    </Interface>
  </IfAccountPolicyCMap>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	IfAccountPolicyCMap
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>0—Inbound.</li><li>1—Outbound.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ClassName	Traffic classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Traffic behavior name	N/A	String. Length: 1 to 31 characters.	N/A
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>2—Qppb.</li> <li>16—Dcbx.</li> </ul>	When the Mode column is 0, there is no restriction on the classifier-behavior association.  When the Mode column is 2, the classifier-behavior association applies only to QPPB.  When the Mode column is 16, the classifier-behavior association applies only to the Data Center Bridging Exchange Protocol (DCBX).
Status	Class-Behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> </ul>	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfRemarkPolicyCMap

This table contains information about class-behavior associations running information applied to interfaces.

### XML structure

```

<MQC>
  <IfRemarkPolicyCMap>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <ClassName></ClassName>
      <BehaviorName></BehaviorName>

```

```

    <Mode></Mode>
    <Status></Status>
    <MatchedPackets></MatchedPackets>
    <MatchedBytes></MatchedBytes>
  </Interface>
</IfRemarkPolicyCMap>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfRemarkPolicyCMap
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Behavior name	N/A	String. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	Mode of the class-behavior association	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None.</li> <li>• 2—Qppb.</li> <li>• 16—Dcbx.</li> </ul>	When the Mode column is 0, there is no restriction on the classifier-behavior or association.  When the Mode column is 2, the classifier-behavior or association applies only to QPPB.  When the Mode column is 16, the classifier-behavior or association applies only to the Data Center Bridging Exchange Protocol (DCBX).
Status	Class-Behavior association application status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Succeeded.</li> <li>• 2—Failed.</li> </ul>	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/IfTapPolicyCBMap

This table contains information about class-behavior associations running information applied to interfaces.

### XML structure

```

<MQC>
  <IfTapPolicyCBMap>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <ClassName></ClassName>
      <BehaviorName></BehaviorName>
      <Mode></Mode>
      <Status></Status>
      <MatchedPackets></MatchedPackets>
      <MatchedBytes></MatchedBytes>

```

```

    </Interface>
  </IfTapPolicyCMap>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	IfTapPolicyCMap
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
BehaviorName	Behavior name	N/A	String. Length: 1 to 31 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	Mode of the class-behavior association	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 0—None.</li> <li>• 2—Qppb.</li> <li>• 16—Dcbx.</li> </ul>	<p>When the Mode column is 0, there is no restriction on the classifier-behavior or association.</p> <p>When the Mode column is 2, the classifier-behavior or association applies only to QPPB.</p> <p>When the Mode column is 16, the classifier-behavior or association applies only to the Data Center Bridging Exchange Protocol (DCBX).</p>
Status	Class-Behavior association application status	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• 1—Succeeded.</li> <li>• 2—Failed.</li> </ul>	N/A
MatchedPackets	Matched Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
MatchedBytes	Matched Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

# Contents

- MQC .....1
  - MQC.....1
  - MQC/Redirect .....3
  - MQC/SQ .....4

# MQC

## MQC

Message	Explanation
System-defined classifiers can't be modified or deleted. 系统预定义的类不能被修改或删除。	System-defined classifiers can't be modified or deleted. 不能修改、删除系统预定义的流分类。
System-defined behaviors can't be modified or deleted. 系统预定义的流行为不能被修改或删除。	System-defined behaviors can't be modified or deleted. 不能修改、删除系统预定义的流行为。
System-defined policies can't be modified or deleted. 系统预定义的策略不能被修改或删除。	System-defined policies can't be modified or deleted. 不能修改、删除系统预定义的QoS策略。
Maximum number of classifiers already reached. 类的配置数已达到最大值。	Maximum number of classifiers already reached, can't create. 流分类的配置数目达到上限，不能再创建。
Maximum number of match criteria already reached. 规则的配置数已达到最大值。	Maximum number of match criteria already reached, can't create. 匹配数据包规则的配置数目达到上限，不能再创建。
Maximum number of QoS policies already reached. 策略的配置数已达到最大值。	Maximum number of QoS policies already reached can't create. QoS策略的配置数目达到上限，不能再创建。
Can't delete the policy because it has been applied. 该策略已经被应用，无法删除。	Can't delete the policy because it has been applied. QoS策略已经被应用，不能删除该QoS策略。
The QoS policy doesn't exist. 该策略不存在。	The QoS policy doesn't exist. QoS策略不存在。
The classifier is being used by a QoS policy. 该类正在被策略使用。	The classifier is being used by a QoS policy. 流分类被QoS策略使用时，不能删除。
Maximum number of behaviors already reached. 流行为的配置数已达到最大值。	Maximum number of behaviors already reached can't create. 流行为的配置数目达到上限，不能再创建。
The behavior is being used by a QoS policy. 该流行为正在被策略使用。	The behavior is being used by a QoS policy can't delete. 流行为被QoS策略使用时，不能删除。
Another QoS policy has already been applied. Please view the current configuration. 已经应用了其他策略，请查看当前配置。	Another QoS policy has already been applied can apply. Please view the current configuration. 不能在已经应用了QoS策略的对象下再应用QoS策略。
Maximum number of classifiers allowed in one QoS policy already reached. 策略下所配的类的数目已达到最大值。	Maximum number of classifiers allowed in one QoS policy already reached can't create. QoS策略下的流分类数量达到上限，不能再应用。
The QoS policy has already been applied. Please view the current configuration. 该策略已经应用，请查看当前配置。	The QoS policy has already been applied can repeat apply. Please view the current configuration. 不能重复应用QoS策略。
The classifier is being used by another classifier. 该类正被其他类使用。	The classifier is being used by another classifier can't create. 被流分类引用的流分类不允许删除。

Marking dot1p is not supported. 不支持重标记到dot1p。	Marking dot1p is not supported. 某些应用对象不支持重标记到dot1p动作。
Marking dot1p can be applied only in the outbound direction. 重标记到dot1p只能被应用到出方向。	Marking dot1p can be applied only in the outbound direction. 重标记到dot1p只能被应用到出方向。
Marking ATM CLP is supported only on ATM PVCs. 重标记到ATM CLP只支持应用到ATM PVC上。	Marking ATM CLP is supported only on ATM PVCs. 重标记到ATM CLP只支持应用到ATM PVC上。
Marking ATM CLP can be applied only in the outbound direction. 重标记到ATM CLP只能被应用到出方向。	Marking ATM CLP can be applied only in the outbound direction. 重标记到ATM CLP只能被应用到出方向。
The traffic class associated with the traffic behavior already exists. classifier指定的类已存在。	The traffic class associated with the traffic behavior already exists can use insert-before mode. 不能对已应用的流分类指定 <b>insert-before</b> 模式。
The traffic class specified after the insert-before keyword doesn't exist. insert-before指定的类不存在。	The traffic class specified after the insert-before keyword doesn't exist. insert-before指定的类不存在。
Marking service class can be applied only in the inbound direction. 重标记到Service Class只能被应用到入方向。	Marking service class can be applied only in the inbound direction. 重标记到Service Class只能被应用到入方向。
MPLS label value range error. MPLS标签的范围配置有误。	MPLS label value range error. label-value1 should small than label-value2 匹配MPLS标签规则时， <i>label-value1</i> 的值必须小于 <i>label-value2</i> 的值。
The start port can't be greater than the end port. 起始端口号不能比结束端口号大。	The start RTP port can't be greater than the end RTP port. 匹配RTP协议端口规则时，起始RTP端口号必须小于结束RTP端口号。
The minimum packet length can't be greater than the maximum packet length. 报文的最小长度不能大于最大长度。	The minimum packet length can't be greater than the maximum packet length when if-match packet length. 匹配报文长度规则时，报文的最小长度不能大于最大长度。
The classifier doesn't exist. 该类不存在。	The classifier doesn't exist, create rule failed. 添加流分类规则时，若流分类不存在，添加失败。
The behavior doesn't exist. 该流行为不存在。	The behavior doesn't exist, create action failed. 添加流行为动作时，若流行为不存在，添加失败。
A QoS policy can be applied only to the inbound direction of an interface if a behavior in the QoS policy contains the remark tunnel-dscp command. 当QoS策略的流行为中配置了remark tunnel-dscp时，该策略只能应用到接口入方向。	A QoS policy can be applied only to the inbound direction of an interface if a behavior in the QoS policy contains the remark tunnel-dscp command. 当QoS策略的流行为中配置了remark tunnel-dscp时，该策略只能应用到接口入方向。
The remark tunnel-dscp command and the remark dscp or remark ip-precedence command are mutually exclusive in a behavior. 同一个流行为中，如果已配置remark dscp命令或remark ip-precedence命令，则不允许再配置remark tunnel-dscp命令，反之亦然。	The remark tunnel-dscp command and the remark dscp or remark ip-precedence command are mutually exclusive in a behavior. 同一个流行为中，如果已配置remark dscp命令或remark ip-precedence命令，则不允许再配置remark tunnel-dscp命令，反之亦然。
The policy name has been used by another type of policy.	The policy name has been used by another type of policy, create policy failed.

这个策略名称已被其他类型策略使用。	创建策略时，若名称已被其他类型策略使用，创建失败。
Another QoS policy of the same type has already been applied. Please view the current configuration. 已经应用了相同类型的其他策略，请查看当前配置。	Another QoS policy of the same type has already been applied. Please view the current configuration. 已经应用了相同类型的其他策略，请查看当前配置。
The preorder for the applied QoS policy cannot be dynamically modified. 应用策略的匹配优先级不能动态修改。	The preorder for the applied QoS policy cannot be dynamically modified. 应用策略的匹配优先级不能动态修改。
The QoS policy type cannot be dynamically modified. QoS策略类型不支持动态修改。	The QoS policy type cannot be dynamically modified. QoS策略类型不支持动态修改。
Failed to apply the QoS policy, because the preorder value has been specified for another QoS policy that is applied to the same direction of the interface. QoS策略应用失败，同一方向应用不同QoS策略时不能配置相同的preorder-value。	Failed to apply the QoS policy, because the preorder value has been specified for another QoS policy that is applied to the same direction of the interface. QoS策略应用失败，同一方向应用不同QoS策略时不能配置相同的preorder-value。
Failed to apply the QoS policy, because the preorder value has been specified for another QoS policy that is applied to the same direction globally. QoS策略应用失败，同一方向应用不同QoS策略时不能配置相同的preorder-value。	Failed to apply the QoS policy, because the preorder value has been specified for another QoS policy that is applied to the same direction globally. QoS策略应用失败，同一方向应用不同QoS策略时不能配置相同的preorder-value。
The operation is not supported, because the interface belongs to an aggregation group. 设备不支持对加入聚合组的接口执行本操作。	The operation is not supported, because the interface belongs to an aggregation group. 设备不支持对加入聚合组的接口执行应用QoS策略操作。

## MQC/Redirect

Message	Explanation
Another mirroring already exists, delete it first. 另一种镜像配置已经存在，请先删除。	Another mirroring already exists, delete it first. 流行为下只能配置一种类型镜像配置，配置第二种失败。
Conflicts with another interface. 与另一个接口冲突。	Conflicts with another interface when mirror to interface. 配置镜像到接口时，若与已存在的镜像接口配置冲突，配置失败。
The destination MAC address is invalid. 无效的目的MAC地址。	The destination MAC address is invalid when mirror to interface. 镜像到接口时配置的MAC无效，配置失败。
Invalid IP address. 无效的IP地址。	Invalid IP address. 镜像到接口时配置的源IP或目的IP无效，配置失败。
The backup next-hop address or track entry ID can't be the same as the primary one. 备用和主用下一跳的地址或Track索引不能相同。	The backup next-hop address or track entry ID can't be the same as the primary one. 重定向到指定的下一跳时，备用和主用下一跳的地址或Track索引不能相同
The backup slot can't be the same as the primary slot. 主备slot-number不能相同。	The backup slot can't be the same as the primary slot. 重定向到指定单板，主备slot-number不能相同。

The slot has been specified as the backup slot. 主用slot-number已被指定为备用slot-number。	The slot has been specified as the backup slot. 重定向到指定单板，主用slot-number已被指定为备用slot-number。
The specified backup slot has been used. 备用slot-number已经被使用。	The specified backup slot has been used. 重定向到指定单板，备用slot-number已经被使用。
Monitoring group %d is being used by traffic behavior and can't be deleted. 监控组%d已被流行为应用，请勿删除。	Monitoring group %d is being used by traffic behavior and can't be deleted. 监控组%d已被流行为应用，请勿删除。

## MQC/SQ

Message	Explanation
Please remove AF queuing configuration first. 请先删除AF队列的配置。	Please remove AF queuing configuration first, when configure another queuing features. 流行为下已配置 AF 队列再切换其他队列时失败，需要先删除 AF 队列。
Please remove EF queuing configuration first. 请先删除EF队列的配置。	Please remove EF queuing configuration first, when configure another queuing features. 流行为下已配置EF队列再切换其他队列时失败，需要先删除EF队列。
Please remove WFQ configuration first. 请先删除WFQ队列的配置。	Please remove WFQ configuration first, when configure another queuing features. 流行为下已配置WFQ队列再切换其他队列时失败，需要先删除WFQ队列。
In this QoS policy, no more AF queues can be defined. 在此QOS策略中，配置AF队列个数已达上限。	In this QoS policy, no more AF queues can be defined. QoS策略中，配置AF队列个数已达上限
In one QoS policy, the total bandwidth should not exceed 100 percent. 在一个QOS策略中，总带宽百分比不能超过百分之百。	In one QoS policy, the total bandwidth should not exceed 100 percent. 在一个QOS策略中，总带宽百分比不能超过百分之百。
The CBQ behavior in the QoS policy can be applied only in the outbound direction of an interface. 在QOS策略里，包含CBQ的流行为只能应用在接口的出方向上。	The CBQ behavior in the QoS policy can be applied only in the outbound direction of an interface. 在QOS策略里，包含CBQ的流行为只能应用在接口的出方向上。
Please disable other queuing features first. 请先移除其他队列。	Please disable other queuing features first, when configure another queuing features. 配置CBQ时，需要删除应用了改CBQ的对象上的接口队列配置。
Requested bandwidth exceeds the max reserved bandwidth. 请求带宽已超过预留带宽的最大值。	Requested bandwidth exceeds the max reserved bandwidth. 请求带宽已超过预留带宽的最大值。
In one QoS policy, the same bandwidth unit must be used. 在同一QOS策略中，应使用相同的带宽单元。	In one QoS policy, the same bandwidth unit must be used. 在同一QOS策略中，应使用相同的带宽单元。
In this QoS policy, no more EF queues can be defined.	In this QoS policy, no more EF queues can be defined.

在此QOS策略中，EF队列数已达上限。	在此QOS策略中，EF队列数已达上限。
EF queuing can't be configured for the default class. 配置了EF队列的流行为不能与缺省类关联使用。	EF queuing can't be configured for the default class. 配置了EF队列的流行为不能与缺省类关联使用。
WFQ can be configured only for the default class. 配置了WFQ队列的流行为仅可以与缺省类关联使用。	WFQ can be configured only for the default class. 配置了WFQ队列的流行为仅可以与缺省类关联使用。
Please configure GTS in the parent policy first. 请先在父策略中配置GTS。	Please configure GTS in the parent policy first. 嵌套策略配置CBQ，需要父策略配置GTS。
Only percent CBQ can be configured when percent GTS configured. 父策略配置了百分比形式的GTS,则子策略CBQ带宽必须配置成百分比形式。	Only percent CBQ can be configured when percent GTS configured. 父策略配置了百分比形式的GTS,则子策略CBQ带宽必须配置成百分比形式。
CBQ can be applied only in the outbound direction of this interface. CBQ必须应用在接口的出方向。	CBQ can be applied only in the outbound direction of this interface. CBQ必须应用在接口的出方向。
The requested bandwidth of this policy exceeds the available bandwidth on this interface. 此策略的请求带宽已超过接口可用带宽。	The requested bandwidth of this policy exceeds the available bandwidth on this interface. 应用策略配置的请求带宽已超过此接口的可用带宽。
Please remove SP queuing configuration first. 请先删除SP队列配置。	Please remove SP queuing configuration first, when configure another queuing features. 流行为下已配置EF队列再切换其他队列时失败，需要先删除SP队列。

# Contents

Mroute .....	1
Mroute/Ipv4Instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1



# Mroute

## Mroute/Ipv4Instances

This table contains IPv4 Mroute instance information.

### XML structure

```
<Mroute>
  <Ipv4Instances>
    <Instance>
      <VRF></VRF>
    </Instance>
  </Ipv4Instances>
</Mroute>
```

### Table description

Item	Description
Feature name	Mroute
Table name	Ipv4Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	This table supports only default VRF.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN name.	Index	String. Length: 0 to 31 characters.	Empty string indicates default VRF.

# Contents

Mroute .....	1
Mroute/Ipv4Instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Mroute/Ipv4Mroutes .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
Mroute/Ipv4OutIfs .....	2
XML structure .....	3
Table description .....	3
Columns .....	3

# Mroute

## Mroute/Ipv4Instances

This table contains IPv4 Mroute instances information.

### XML structure

```
<Mroute>
  <Ipv4Instances>
    <Instance>
      <VRF></VRF>
    </Instance>
  </Ipv4Instances>
</Mroute>
```

### Table description

Item	Description
Feature name	Mroute
Table name	Ipv4Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	This table supports only default VRF.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN name.	Index	String. Length: 0 to 31 characters.	Empty string indicates default VRF.

## Mroute/Ipv4Mroutes

This table contains IPv4 multicast route information.

### XML structure

```
<Mroute>
  <Ipv4Mroutes>
    <MrouteEntry>
      <VRF></VRF>
    </MrouteEntry>
  </Ipv4Mroutes>
</Mroute>
```

```

    <GroupAddr></GroupAddr>
    <SourceAddr></SourceAddr>
    <InIfIndex></InIfIndex>
    <Uptime></Uptime>
    <Expires></Expires>
    <OutIfNum></OutIfNum>
  </MrouteEntry>
</Ipv4Mroutes>
</Mroute>

```

## Table description

Item	Description
Feature name	Mroute
Table name	Ipv4Mroutes
Table type	Multi-instance table
Row name	MrouteEntry
Restrictions	This table supports only default VRF.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN name.	Index	String. Length: 0 to 31 characters.	Empty string indicates default VRF.
GroupAddr	IPv4 multicast address.	Index	String, dotted decimal notation.	Example: 224.1.1.1.
SourceAddr	IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
InIfIndex	Incoming Interface index of the multicast route.	N/A	Unsigned integer.	N/A
Uptime	Length of time since the multicast route was created.	N/A	Unsigned integer (in seconds).	N/A
Expires	Remaining time of the multicast route.	N/A	Unsigned integer (in seconds).	N/A
OutIfNum	Total number of outgoing interfaces.	N/A	Unsigned integer.	N/A

## Mroute/Ipv4OutIfs

This table contains outgoing interface information of IPv4 multicast routes.

## XML structure

```
<Mroute>
  <Ipv4OutIfs>
    <OutIf>
      <VRF></VRF>
      <GroupAddr></GroupAddr>
      <SourceAddr></SourceAddr>
      <IfIndex></IfIndex>
      <Uptime></Uptime>
      <Expires></Expires>
    </OutIf>
  </Ipv4OutIfs>
</Mroute>
```

## Table description

Item	Description
Feature name	Mroute
Table name	Ipv4OutIfs
Table type	Multi-instance table
Row name	OutIf
Restrictions	This table supports only default VRF.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN name.	Index	String. Length: 0 to 31 characters.	Empty string indicates default VRF.
GroupAddr	IPv4 multicast address.	Index	String, dotted decimal notation.	Example: 224.1.1.1.
SourceAddr	IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
IfIndex	Outgoing Interface index of the multicast route.	Index	Unsigned integer.	N/A
Uptime	Length of time since the outgoing interface was added.	N/A	Unsigned integer (in seconds).	N/A
Expires	Remaining time of the outgoing interface.	N/A	Unsigned integer (in seconds).	N/A



# Contents

- Mroute .....2
  - Mroute/Ipv4Instances.....2
  - Mroute/Ipv4Mroutes.....2
  - Mroute/Ipv4OutIfs .....2

# Mroute

## Mroute/Ipv4Instances

Message	Explanation
MRIB is not configured.. MRIB尚未配置。	During executing set operation, MRIB is not configured. 对该表进行配置时，MRIB 还未配置。
MRIB is not ready. MRIB尚未就绪。	During executing set operation, MRIB is not complete startup. 对该表进行配置时，MRIB还未完全启动。
Maximum number of VRFs that are enabled with IP multicast routing already reached. IPv4组播实例的数量已达到最大值。	During creating a new multicast VRF, maximum number of VRFs that are enabled with IP multicast routing already reached. 创建一个新的实例时，当前组播实例已经达到最大规格数目。
IP multicast routing is not enabled. IP组播路由尚未开启。	During executing set operation, IP multicast routing is not enabled. 对该表进行配置时，当前IP组播路由还未开启。

## Mroute/Ipv4Mroutes

Message	Explanation
MRIB is not configured.. MRIB尚未配置。	During executing set operation, MRIB is not configured. 对该表进行配置时，MRIB 还未配置。
MRIB is not ready. MRIB尚未就绪。	During executing set operation, MRIB is not complete startup. 对该表进行配置时，MRIB还未完全启动。

## Mroute/Ipv4OutIfs

Message	Explanation
MRIB is not configured.. MRIB尚未配置。	During executing set operation, MRIB is not configured. 对该表进行配置时，MRIB 还未配置。
MRIB is not ready. MRIB尚未就绪。	During executing set operation, MRIB is not complete startup. 对该表进行配置时，MRIB还未完全启动。



# Contents

NAT .....	1
NAT/ResetNatStaticLoadBalance .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
NAT/ResetNatDynamicLoadBalance .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
NAT/ResetInboundStaticCount .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
NAT/ResetOutboundStaticCount .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
NAT/ResetInboundDynamicCount .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces. ....	6
NAT/ResetOutboundDynamicCount .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces. ....	7
If you do not specify any ACL, NAT translates all packets, else translates the packets which matches the ACL. ....	8
NAT/ResetServerCount .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces. ....	9
NAT/ResetOutboundPortBlockCount .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces. ....	11
NAT/PolicyRuleMove .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
NAT/ResetPolicyRuleCount .....	13
XML structure .....	13

Table description .....	13
Columns .....	14
NAT/ResetObjServerCount .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
NAT/CreateServer .....	14
XML structure .....	15
Table description .....	15
Columns .....	15
NAT/DeleteServer .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
NAT/CreateOutbound .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
NAT/DeleteOutbound .....	21
XML structure .....	21
Table description .....	22
Columns .....	22

# NAT

## NAT/ResetNatStaticLoadBalance

Re-balance the load of static NAT on multiple CPUs

### XML structure

```
<NAT>
  <ResetNatStaticLoadBalance>
    <Reset></Reset>
  </ResetNatStaticLoadBalance>
</NAT>
```

### Table description

Item	Description
Feature name	NAT
Table name	ResetNatStaticLoadBalance
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Data type and restrictions
Reset	Re-balance the load of static NAT.	This column must be empty.

## NAT/ResetNatDynamicLoadBalance

Re-balance the load of dynamic NAT on multiple CPUs

### XML structure

```
<NAT>
  <ResetNatDynamicLoadBalance>
    <Dynamic>
      <AddrGroupNumber></AddrGroupNumber>
      <Reset></Reset>
    </Dynamic>
  </ResetNatDynamicLoadBalance>
</NAT>
```

```

    </ResetNatDynamicLoadBalance>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	ResetNatDynamicLoadBalance
Table type	Single-instance table
Row name	Dynamic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Reset	Re-balance the load of dynamic NAT.	N/A	This column must be empty.
AddrGroupNumber	NAT address group number	Index	Unsigned integer. Value range: 0 to 65535.

## NAT/ResetInboundStaticCount

This table contains information about one-to-one or net-to-net mappings for inbound static NAT.

## XML structure

```

<NAT>
  <ResetInboundStaticCount>
    <Mapping>
      <GlobalInfo>
        <GlobalVRF></GlobalVRF>
        <StartIpv4Address></StartIpv4Address>
        <EndIpv4Address></EndIpv4Address>
        <GlobalObjGrp></GlobalObjGrp>
      </GlobalInfo>
      <LocalInfo>
        <LocalVRF></LocalVRF>
        <Ipv4Address></Ipv4Address>
        <Ipv4PrefixLength></Ipv4PrefixLength>
        <LocalObjGrp></LocalObjGrp>
      </LocalInfo>
    </Mapping>
  </ResetInboundStaticCount>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	ResetInboundStaticCount
Table type	Single-instance table
Row name	Mapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalInfo	External network address pool information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>StartIpv4Address.</li> <li>EndIpv4Address.</li> <li>GlobalObjGrp</li> </ul>	EndIpv4Address is optional when configure one-to-one mapping for inbound static NAT.
GlobalVRF	VRF of external address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
StartIpv4Address	Start IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1. The StartIpv4Address cannot be greater than the EndIpv4Address. If they are the same, the external address pool has only one address. The external address pool can contain a maximum of 255 addresses.
EndIpv4Address	End IPv4 address of the external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6.
GlobalObjGrp	Object group of external address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
LocalInfo	Internal network address information	Data structure.	Members include: <ul style="list-style-type: none"> <li>LocalVRF.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> <li>LocalObjGrp</li> </ul>	N/A
LocalVRF	VRF of internal address	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4Address	An internal network address	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	The prefix length of the internal network address	Index	Unsigned integer. Value range: 8 to 32.	Value 32 indicates one-to-one mapping for inbound static NAT.
LocalObjGrp	Object group of internal address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A

## NAT/ResetOutboundStaticCount

This table contains information about one-to-one or net-to-net mappings for outbound static NAT.

### XML structure

```

<NAT>
  <ResetOutboundStaticCount>
    <Mapping>
      <LocalInfo>
        <LocalVRF></LocalVRF>
        <StartIpv4Address></StartIpv4Address>
        <EndIpv4Address></EndIpv4Address>
        <LocalObjGrp></LocalObjGrp>
      </LocalInfo>
      <GlobalInfo>
        <GlobalVRF></GlobalVRF>
        <Ipv4Address></Ipv4Address>
        <Ipv4PrefixLength></Ipv4PrefixLength>
        <GlobalObjGrp></GlobalObjGrp>
      </GlobalInfo>
    </Mapping>
  </ResetOutboundStaticCount>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	ResetOutboundStaticCount
Table type	Single-instance table
Row name	Mapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalInfo	Internal network address pool information	Data structure.	Members include: <ul style="list-style-type: none"> <li>LocalVRF.</li> <li>StartIpv4Address.</li> <li>EndIpv4Address.</li> <li>LocalObjGrp.</li> </ul>	EndIpv4Address is optional when configure one-to-one mapping for outbound static NAT.
LocalVRF	VRF of internal address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
StartIpv4Address	Start IPv4 address of an internal address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1. The StartIpv4Address cannot be greater than the EndIpv4Address. If they are the same, the internal address pool has only one address. The internal address pool can contain a maximum of 255 addresses.
EndIpv4Address	End IPv4 address of the internal address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6.
LocalObjGrp	Object group of internal address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
GlobalInfo	External network address information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> <li>GlobalObjGrp.</li> </ul>	N/A
GlobalVRF	VRF of external address	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
Ipv4Address	An external network address	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	The prefix length of the external network address	Index	Unsigned integer. Value range: 8 to 32.	Value 32 indicates one-to-one mapping for outbound static NAT.
GlobalObjGrp	Object group of external address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A

# NAT/ResetInboundDynamicCount

This table contains the inbound dynamic NAT rules on interfaces.

## XML structure

```
<NAT>
  <ResetInboundDynamicCount>
    <Interface>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>
    </Interface>
  </ResetInboundDynamicCount>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	ResetInboundDynamicCount
Table type	Single-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index or interface name	N/A	String. case-sensitive. Length: 1 to 99 characters.	This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 3999.	An ACL can be used by only one inbound



Column name	Column description	Column type	Data type and restrictions	Remarks
				dynamic NAT rule on interface.

## NAT/ResetOutboundDynamicCount

This table contains the outbound dynamic NAT rules on interfaces.

### XML structure

```

<NAT>
  <ResetOutboundDynamicCount>
    <Interface>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>
    </Interface>
  </ResetOutboundDynamicCount>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	ResetOutboundDynamicCount
Table type	Single-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index or interface name	N/A	String. case-sensitive. Length: 1 to 99 characters.	<p>This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.</p> <p>Some versions support interface name. For relevant information, see the XSD document of your product. For information about</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 3999.	<p>If you do not specify any ACL, NAT translates all packets, else translates the packets which matches the ACL.</p> <p>Outbound dynamic NAT rules with ACLs configured on an interface takes precedence over those without ACLs. An outbound dynamic NAT rule with a high ACL number takes effect over that with a low ACL number.</p> <p>An ACL can be used by only one outbound dynamic NAT rule on an interface.</p> <p>This column can be null.</p>

## NAT/ResetServerCount

This table contains information about mappings between the IP address and port of internal servers to NAT address and port for the internal servers.

### XML structure

```

<NAT>
  <ResetServerCount>
    <Interface>
      <IfIndex></IfIndex>
      <ProtocolType></ProtocolType>
      <GlobalInfo>
        <GlobalVRF></GlobalVRF>
        <GlobalStartIpv4Address></GlobalStartIpv4Address>
        <GlobalEndIpv4Address></GlobalEndIpv4Address>
        <GlobalStartPortNumber></GlobalStartPortNumber>
        <GlobalEndPortNumber></GlobalEndPortNumber>
        <GlobalIfIndex></GlobalIfIndex>
      </GlobalInfo>
    </Interface>
  </ResetServerCount>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	ResetServerCount
Table type	Single-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index or interface name	N/A	String, case-sensitive. Length: 1 to 99 characters.	This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
ProtocolType	Protocol type	Index	Unsigned integer. Value range: 1 to 255.	If the protocol is not TCP or UDP, NAT Server is configured without port information.
GlobalInfo	External network information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>GlobalStartIpv4Address.</li> <li>GlobalEndIpv4Address.</li> <li>GlobalStartPortNumber.</li> <li>GlobalEndPortNumber.</li> <li>GlobalIfIndex.</li> </ul>	The mapping between the protocol type, external address, and external port number must be unique for an internal server on an interface.
GlobalVRF	VRF of external network	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this option.
GlobalStartIpv4Address	Start IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1.  The GlobalStartIpv4Address cannot be greater

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>than the GlobalEndIpv4Address. If they are the same, the external address pool has only one address.</p> <p>The external address pool can contain a maximum of 255 addresses.</p> <p>This index can be null.</p>
GlobalEndIpv4Address	End IPv4 address of an external address pool	Index	String, dotted decimal notation.	<p>Example: 1.1.1.6.</p> <p>This index can be null.</p>
GlobalStartPortNumber	Start port of an external port number range	Index	Unsigned integer. Value range: 1 to 65535.	<p>The GlobalStartPortNumber cannot be greater than the GlobalEndPortNumber. If they are the same, the external port number range has only one port.</p> <p>The external port number range can include a maximum of 255 ports.</p> <p>This index can be null.</p>
GlobalEndPortNumber	End port of an external port number range	Index	Unsigned integer. Value range: 1 to 65535.	This index can be null.
GlobalIfIndex	External interface index or interface name, The IP address of the interface is used as the NAT address for the internal server.	N/A	String, case-sensitive. Length: 1 to 99 characters.	<p>Only loopback interfaces and " IfIndex " are supported. Some versions support interface name. For relevant information,</p> <p>The IP address of the interface is used as the NAT address. Easy IP is used.</p> <p>If the IP address of an interface used by Easy IP changes and conflicts with the IP address of an internal server not using Easy IP, the Easy IP configuration becomes invalid. If the conflicted address is modified to an unconflicted address or the internal server configuration without Easy IP is removed, the Easy IP configuration</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				takes effect. This index can be null.

## NAT/ResetOutboundPortBlockCount

This table contains the port block groups applied to the outbound direction of the interfaces.

### XML structure

```

<NAT>
  <ResetOutboundPortBlockCount>
    <Interface>
      <IfIndex></IfIndex>
      <GroupNumber></GroupNumber>
    </Interface>
  </ResetOutboundPortBlockCount>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	ResetOutboundPortBlockCount
Table type	Single-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index or interface name	N/A	String. case-sensitive. Length: 1 to 99 characters.	This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about

Column name	Column description	Column type	Data type and restrictions	Remarks
				IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
GroupNumber	NAT port block group number.	Index	Unsigned integer. Value range: 0 to 65535.	You can apply multiple port block groups to one interface.  After you apply a port block group to an interface, the system automatically computes the IP-to-port block mappings and creates entries for them. When a private IP address accesses the public network, the private IP address is translated to the mapped public IP address and the ports are translated to ports in the mapped port block.

## NAT/PolicyRuleMove

Move the policy rules of order.

### XML structure

```

<NAT>
  <PolicyRuleMove>
    <Rule>
      <SrcRuleName></SrcRuleName>
      <DstRuleName></DstRuleName>
      <Direction></Direction>
    </Rule>
  </PolicyRuleMove>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	PolicyRuleMove
Table type	Muilt-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcRuleName	source policy rule	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
DstRuleName	destination policy rule	Index	String, case insensitive. Length: 1 to 63 characters.	This column can be null.
Direction	Move the rule to before or after the objective rule	Index	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>	If the direction is false and the DstRuleName is null, the srcRuleName is moved to the front  If the direction is true and the DstRuleName is null, the srcRuleName is moved to the end.

## NAT/ResetPolicyRuleCount

This table contains NAT policy information.

## XML structure

```
<NAT>
  <ResetPolicyRuleCount>
    <Rule>
      <RuleName></RuleName>
    </Rule>
  </ResetPolicyRuleCount>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	ResetPolicyRuleCount
Table type	Single-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy rule	Index	String, case insensitive. Length: 1 to 63 characters.	N/A

## NAT/ResetObjServerCount

This table contains the object server NAT rules on interfaces.

## XML structure

```
<NAT>
  <ResetObjServerCount>
    <Rule>
      <RuleName></RuleName>
    </Rule>
  </ResetObjServerCount>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	ResetObjServerCount
Table type	Single-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT Object Server	Index	String, case insensitive. Length: 1 to 63 characters.	N/A

## NAT/CreateServer

This table contains information about mappings between the private IP address and port of internal servers to NAT address and port for the internal servers.



## XML structure

```
<NAT>
  <CreateServer>
    <Interface>
      <IfIndex></IfIndex>
      <ProtocolType></ProtocolType>
      <GlobalInfo>
        <GlobalVRF></GlobalVRF>
        <GlobalStartIpv4Address></GlobalStartIpv4Address>
        <GlobalEndIpv4Address></GlobalEndIpv4Address>
        <GlobalStartPortNumber></GlobalStartPortNumber>
        <GlobalEndPortNumber></GlobalEndPortNumber>
        <GlobalIfIndex></GlobalIfIndex>
      </GlobalInfo>
      <LocalInfo>
        <LocalVRF></LocalVRF>
        <LocalStartIpv4Address></LocalStartIpv4Address>
        <LocalEndIpv4Address></LocalEndIpv4Address>
        <LocalStartPortNumber></LocalStartPortNumber>
        <LocalEndPortNumber></LocalEndPortNumber>
      </LocalInfo>
    </Interface>
  </CreateServer>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	CreateServer
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interfaces.

Column name	Column description	Column type	Data type and restrictions	Remarks
ProtocolType	Protocol type	Index	Unsigned integer. Value range: 1 to 255.	If the protocol is not TCP or UDP, NAT Server is configured without port information.
GlobalInfo	External network information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>GlobalStartIpv4Address.</li> <li>GlobalEndIpv4Address.</li> <li>GlobalStartPortNumber.</li> <li>GlobalEndPortNumber.</li> <li>GlobalIfIndex.</li> </ul>	The mapping between the protocol type, external address, and external port number must be unique for an internal server on an interface.
GlobalVRF	VRF of external network	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this option.
GlobalStartIpv4Address	Start IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1. The GlobalStartIpv4Addresses cannot be greater than the GlobalEndIpv4Address. If they are the same, the external address pool has only one address. The external address pool can contain a maximum of 255 addresses. This index can be null.
GlobalEndIpv4Address	End IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6. This index can be null.
GlobalStartPortNumber	Start port of an external port number range	Index	Unsigned integer. Value range: 1 to 65535.	The GlobalStartPortNumber cannot be greater than the GlobalEndPortNumber. If they are the same, the external port number range has only one port. The external port number range can include a maximum of 255 ports. This index can be null.
GlobalEndPortNumber	End port of an external port number range	Index	Unsigned integer. Value range: 1 to 65535.	This index can be null.
GlobalIfIndex	External interface index.	Index	Unsigned integer.	Only loopback interfaces and "IfIndex"

Column name	Column description	Column type	Data type and restrictions	Remarks
	The IP address of the interface is used as the NAT address of the internal server.			<p>are supported.</p> <p>If the eIP address of the interface is used as the NAT address, Easy IP is used.</p> <p>If the IP address of an interface used by Easy IP changes and conflicts with the IP address of an internal server not using Easy IP, the Easy IP configuration becomes invalid. If the conflicted address is modified to an unconflicting address or the internal server configuration without Easy IP is removed, the Easy IP configuration takes effect.</p> <p>This index can be null.</p>
LocalInfo	Internal network address information	Data structure.	<p>Members include:</p> <ul style="list-style-type: none"> <li>LocalVRF.</li> <li>LocalStartIpv4Address.</li> <li>LocalEndIpv4Address.</li> <li>LocalStartPortNumber.</li> <li>LocalEndPortNumber.</li> <li>LocalSrvGroupNumber.</li> </ul>	The number of addresses in the range must match that of the external port number range.
LocalVRF	VRF of internal address	N/A	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this option.
LocalStartIpv4Address	Start IPv4 address of the internal address pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LocalEndIpv4Address	End IPv4 address of the internal address pool	N/A	String, dotted decimal notation.	Example: 1.1.1.6.
LocalStartPortNumber	Start port of an internal port number range	N/A	Unsigned integer. Value range: 1 to 65535.	<p>The <i>LocalStartPortNumber</i> cannot be greater than the <i>LocalEndPortNumber</i>. If they are the same, the internal port number range has only one port.</p> <p>The internal port number range can include a maximum of 255 ports.</p>
LocalEndPort	End port number	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Number	of an internal port range		Value range: 1 to 65535.	

## NAT/DeleteServer

This table contains information about mappings between the private IP address and port of internal servers to NAT address and port for the internal servers.

## XML structure

```

<NAT>
  <DeleteServer>
    <Interface>
      <IfIndex></IfIndex>
      <ProtocolType></ProtocolType>
      <GlobalInfo>
        <GlobalVRF></GlobalVRF>
        <GlobalStartIpv4Address></GlobalStartIpv4Address>
        <GlobalEndIpv4Address></GlobalEndIpv4Address>
        <GlobalStartPortNumber></GlobalStartPortNumber>
        <GlobalEndPortNumber></GlobalEndPortNumber>
        <GlobalIfIndex></GlobalIfIndex>
      </GlobalInfo>
    </Interface>
  </DeleteServer>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	DeleteServer
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer

Column name	Column description	Column type	Data type and restrictions	Remarks
				interface except loopback, NULL, FC, FCB and encrypt interface.
ProtocolType	Protocol type	Index	Unsigned integer. Value range: 1 to 255.	If the protocol is not TCP or UDP, NAT Server is configured without port information.
GlobalInfo	External network information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>GlobalStartIpv4Address.</li> <li>GlobalEndIpv4Address.</li> <li>GlobalStartPortNumber.</li> <li>GlobalEndPortNumber.</li> <li>GlobalIfIndex.</li> </ul>	The mapping between the protocol type, external address, and external port number must be unique for an internal server on an interface.
GlobalVRF	VRF of external network	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this option.
GlobalStartIpv4Address	Start IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1. The GlobalStartIpv4Address cannot be greater than the GlobalEndIpv4Address. If they are the same, the external address pool has only one address. The external address pool can contain a maximum of 255 addresses. This index can be null.
GlobalEndIpv4Address	End IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6. This index can be null.
GlobalStartPortNumber	Start port of an external port number range	Index	Unsigned integer. Value range: 1 to 65535.	The GlobalStartPortNumber cannot be greater than the GlobalEndPortNumber. If they are the same, the external port number range has only one port. The external port number range can include a maximum of 255 ports. This index can be null.
GlobalEndPortNumber	End port of an external port	Index	Unsigned integer.	This index can be null.

Column name	Column description	Column type	Data type and restrictions	Remarks
	number range		Value range: 1 to 65535.	
GlobalIfIndex	External interface index, The IP address of the interface is used as the NAT address for the internal server.	Index	Unsigned integer.	<p>Only loopback interfaces and " IfIndex " are supported.</p> <p>The IP address of the interface is used as the NAT address. Easy IP is used.</p> <p>If the IP address of an interface used by Easy IP changes and conflicts with the IP address of an internal server not using Easy IP, the Easy IP configuration becomes invalid. If the conflicted address is modified to an unconflicted address or the internal server configuration without Easy IP is removed, the Easy IP configuration takes effect.</p> <p>This index can be null.</p>

## NAT/CreateOutbound

This table contains the outbound dynamic NAT rules on interfaces.

### XML structure

```

<NAT>
  <CreateOutbound>
    <Interface>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>
      <VRF></VRF>
    </Interface>
  </CreateOutbound>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	CreateOutbound
Table type	Multi-instance table

Item	Description
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	NAT translates the packets that match the ACL. If you do not specify any ACL, NAT translates all packets. Outbound dynamic NAT rules with ACLs configured on an interface takes precedence over those without ACLs. An outbound dynamic NAT rule with a high ACL number takes effect over that with a low ACL number. An ACL can be used by only one outbound dynamic NAT rule on an interface. This column can be null.
VRF	VRF	N/A	String, case-sensitive. Length: 1 to 31 characters.	To specify addresses in the public network, do not use this option.

## NAT/DeleteOutbound

This table contains the outbound dynamic NAT rules on interfaces.

## XML structure

```

<NAT>
  <DeleteOutbound>
    <Interface>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>

```

```

    </Interface>
  </DeleteOutbound>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	DeleteOutbound
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	NAT translates the packets that match the ACL. If you do not specify any ACL, NAT translates all packets. Outbound dynamic NAT rules with ACLs configured on an interface takes precedence over those without ACLs. An outbound dynamic NAT rule with a high ACL number takes effect over that with a low ACL number. An ACL can be used by only one outbound dynamic NAT rule on an interface. This column can be null.



# Contents

NAT .....	1
NAT/AddrGroups .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
NAT/AddrGroupMembers .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
NAT/InboundDynamicRules .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
NAT/OutboundDynamicRules .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
NAT/InboundStaticMappings .....	9
XML structure .....	10
Table description .....	10
Columns .....	10
NAT/OutboundStaticMappings .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
NAT/StaticOnInterfaces .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
NAT/ServerGroups .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
NAT/ServerGroupMembers .....	17
XML structure .....	18
Table description .....	18
Columns .....	18
NAT/ServerOnInterfaces .....	18
XML structure .....	19
Table description .....	19
Columns .....	20
NAT/PortBlockGroups .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
NAT/PortBlockGroupLocalMembers .....	26
XML structure .....	26
Table description .....	26
Columns .....	26
NAT/PortBlockGroupGlobalMembers .....	27
XML structure .....	27
Table description .....	28
Columns .....	28
NAT/OutboundPortBlockOnInterfaces .....	29
XML structure .....	29
Table description .....	29
Columns .....	29

NAT/DNSMappings .....	30
XML structure .....	30
Table description .....	30
Columns .....	31
NAT/ALG .....	31
XML structure .....	31
Table description .....	32
Columns .....	32
NAT/EIM .....	33
XML structure .....	33
Table description .....	33
Columns .....	33
NAT/HairpinOnInterfaces .....	34
XML structure .....	34
Table description .....	35
Columns .....	35
NAT/LogRule .....	35
XML structure .....	35
Table description .....	36
Columns .....	36
NAT/HotBackup .....	37
XML structure .....	37
Table description .....	38
Columns .....	38
NAT/StaticLoadBalance .....	38
XML structure .....	38
Table description .....	38
Columns .....	39
NAT/ReplyRedirectOnInterfaces .....	39
XML structure .....	39
Table description .....	39
Columns .....	39
NAT/NATPolicy .....	40
XML structure .....	40
Table description .....	40
Columns .....	40
NAT/PolicyRules .....	41
XML structure .....	41
Table description .....	41
Columns .....	41
NAT/PolicyRuleMembers .....	41
XML structure .....	41
Table description .....	42
Columns .....	42
NAT/PolicyRuleMemberSrcObj .....	44
XML structure .....	44
Table description .....	44
Columns .....	44
NAT/PolicyRuleMemberDstObj .....	45
XML structure .....	45
Table description .....	45
Columns .....	45
NAT/PolicyRuleMemberSrvObj .....	46
XML structure .....	46
Table description .....	46
Columns .....	46
NAT/DestinationNatOnInterfaces .....	47
XML structure .....	47
Table description .....	47
Columns .....	47
NAT/ObjServer .....	49
XML structure .....	49

Table description .....	49
Columns .....	50
NAT/ObjServerName .....	51
XML structure .....	51
Table description .....	51
Columns .....	52

# NAT

## NAT/AddrGroups

This table contains information about NAT address groups.

### XML structure

```
<NAT>
  <AddrGroups>
    <AddrGroup>
      <GroupNumber></GroupNumber>
      <VRID></VRID>
      <PortBlockSize></PortBlockSize>
      <ExtendedBlockNumber></ExtendedBlockNumber>
      <StartPort></StartPort>
      <EndPort></EndPort>
    </AddrGroup>
  </AddrGroups>
</NAT>
```

### Table description

Item	Description
Feature name	NAT
Table name	AddrGroups
Table type	Multi-instance table
Row name	AddrGroup
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT address group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	Master/backup mode: No VRRP keyword is required. Load sharing method: Under normal

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>circumstances, there is no need to configure VRRP keywords. The system automatically binds the backup group with the smallest VRID on the same network segment as the virtual IP address and NAT address pool address, so that traffic is transmitted on the active device in the backup group.</p> <p>When multiple VRRP backup groups exist at the same time, you can configure the VRRP keyword to explicitly guide the traffic flow to be transmitted on the active device in the specified VRRP backup group.</p>
PortBlockSize	The number of ports included in a port block.	N/A	Unsigned integer. Value range: 1 to 65535.	<p>To configure dynamic NAT444, you must configure port block for the referenced NAT address group.</p> <p>With dynamic NAT444 configured, when a private IP address initiates a connection to the public network, the NAT444 gateway assigns it a public IP address and a port block, and creates an entry for the mapping. For subsequent connections from the private IP address, the NAT444 gateway translates the private IP address to the mapped public IP address and the ports to ports in the mapped port block.</p> <p>In a NAT address group, the port block size cannot be larger than the number of ports in the port range.</p> <p>Configure this item before configuring <i>ExtendedBlockNumber</i>, deleting this item also deletes <i>ExtendedBlockNumber</i>.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
ExtendedBlockNumber	The number of extended port blocks.	N/A	Unsigned integer. Value range: 1 to 5.	With this parameter specified, when a private IP address accesses the public network, but the ports in the mapped port block are all occupied, the NAT gateway extends port blocks for the private IP address.  A user can contain up to <i>ExtendedBlockNumber+1</i> port blocks at the same time.  If you want to configure this you must first configure the <i>PortBlocksize</i> .
StartPort	Start port of the port range.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 1.	Set <i>StartPort</i> and <i>EndPort</i> to their default values to define a default port range.  The <i>StartPort</i> cannot be greater than the <i>EndPort</i> .  The number of ports in a port range cannot be smaller than the port block size.
EndPort	End port of the port range.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 65535.	N/A

## NAT/AddrGroupMembers

This table contains information about the NAT address group members.

### XML structure

```

<NAT>
  <AddrGroupMembers>
    <GroupMember>
      <GroupNumber></GroupNumber>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
    </GroupMember>
  </AddrGroupMembers>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	AddrGroupMembers
Table type	Multi-instance table
Row name	GroupMember
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT address group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
StartIpv4Address	Start IPv4 address of the address group member	Index	String, dotted decimal notation.	Example: 1.1.1.1. The <i>StartIpv4Address</i> cannot be greater than the <i>EndIpv4Address</i> . If they are the same, the group member has only one IP address. The IP addresses of address members on the device must not overlap. The source address in a packet destined for an external network is translated into an address in one of group members.
EndIpv4Address	End IPv4 address of the address group member	Index	String, dotted decimal notation.	Example: 1.1.1.6.

## NAT/InboundDynamicRules

This table contains the inbound dynamic NAT rules on interfaces.

## XML structure

```
<NAT>
  <InboundDynamicRules>
```

```

<Interface>
  <IfIndex></IfIndex>
  <ACLNumber></ACLNumber>
  <AddrGroupNumber></AddrGroupNumber>
  <VRF></VRF>
  <NoPAT></NoPAT>
  <Reversible></Reversible>
  <AutoAddRoute></AutoAddRoute>
  <RuleName></RuleName>
  <RulePriority></RulePriority>
  <Counting></Counting>
</Interface>
</InboundDynamicRules>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	InboundDynamicRules
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	An ACL can be used by only one inbound dynamic NAT rule on an interface.
AddrGroupNumber	NAT address group number	N/A	Unsigned integer. Value range: 0 to 65535.	An address group cannot be used by both the nat inbound and nat outbound configuration. It cannot be used by the



Column name	Column description	Column type	Data type and restrictions	Remarks
				nat inbound configuration in both PAT and NO-PAT modes.  This column is affirmatively chosen item.
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	To specify addresses in the public network, do not use this option.
NoPAT	Whether performs only IP address translation.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	PAT supports only TCP, UDP, and ICMP query packets. For an ICMP packet, the ICMP ID is used as its source port number.
Reversible	Whether translates the destination address of a packet that originates from internal hosts to the external host if the packet is permitted by ACL reverse matching in NO-PAT mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	NAT translates the destination IP address of the packets of a connection originating from an internal host to the NAT address based on the existing NO-PAT entry.  This column can only be configured in NO-PAT mode.
AutoAddRoute	Whether adds a route to the NAT address when address translation is performed for a packet.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	The output interface is the NAT interface and the next-hop is the source address before translation. If you do not specify this keyword, you must manually add the route. It is recommended that you specify this keyword.  This column can only be configured in NO-PAT mode.
RuleName	Name of the dynamic mapping	N/A	String, case sensitive. Length: 1 to 63 characters.	The name is optional. Make sure the rule name is unique. The name cannot contain a forward slash (/), backslash (\), vertical bar ( ), quotation mark ("), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).
RulePriority	Priority of the dynamic	N/A	Unsigned integer. Value range: 0 to	The smaller the value, the higher the mapping

Column name	Column description	Column type	Data type and restrictions	Remarks
	mapping		2147483647.	priority. If you do not assign a value, the priority is lowest.
Counting	Whether open the switch of matching the inbound dynamic NAT rule statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default)</li> </ul>	N/A

## NAT/OutboundDynamicRules

This table contains the outbound dynamic NAT rules on interfaces.

### XML structure

```

<NAT>
  <OutboundDynamicRules>
    <Interface>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>
      <AddrGroupNumber></AddrGroupNumber>
      <VRF></VRF>
      <NoPAT></NoPAT>
      <Reversible></Reversible>
      <PortPreserved></PortPreserved>
      <RuleName></RuleName>
      <RulePriority></RulePriority>
      <Counting></Counting>
    </Interface>
  </OutboundDynamicRules>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	OutboundDynamicRules
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	<p>If you do not specify any ACL, NAT translates all packets, else translates the packets which matches the ACL.</p> <p>Outbound dynamic NAT rules with ACLs configured on an interface takes precedence over those without ACLs. An outbound dynamic NAT rule with a high ACL number takes effect over that with a low ACL number.</p> <p>An ACL can be used by only one outbound dynamic NAT rule on an interface.</p> <p>This column can be null.</p>
AddrGroupNumber	NAT address group number	N/A	Unsigned integer. Value range: 0 to 65535.	<p>An address group cannot be used by both the nat inbound and nat outbound configurations. It cannot be used by the nat outbound configuration in both PAT and NO-PAT modes.</p> <p>If you do not specify any address group, the IP address of the interface is used as the NAT address. Easy IP is used.</p> <p>This column is affirmatively chosen item.</p>
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	To specify addresses in the public network, do not use this option.
NoPAT	Whether performs only IP	N/A	Boolean:	NO-PAT mode can't be configured without

Column name	Column description	Column type	Data type and restrictions	Remarks
	address translation.		<ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	AddrGroupNumber. PAT only supports TCP, UDP, and ICMP query packets. For an ICMP packet, the ICMP ID is used as its source port number.
Reversible	Whether translates the destination address of a packet that originates from external hosts to the internal host if the packet is permitted by ACL reverse matching in NO-PAT mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	This column can only be configured in NO-PAT mode.
PortPreserved	Whether tries to preserve port number for PAT.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	This column can only be configured in PAT mode.
RuleName	Name of the dynamic mapping	N/A	String, case sensitive. Length: 1 to 63 characters.	The name is optional. Make sure the rule name is unique. The name cannot contain a forward slash (/), backslash (\), vertical bar ( ), quotation mark ("), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).
RulePriority	Priority of the dynamic mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is lowest.
Counting	Whether open the switch of matching the outbound dynamic NAT rule statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

## NAT/InboundStaticMappings

This table contains information about one-to-one or **net-to-net** mappings for inbound static NAT.

## XML structure

```
<NAT>
  <InboundStaticMappings>
    <Mapping>
      <GlobalInfo>
        <GlobalVRF></GlobalVRF>
        <StartIpv4Address></StartIpv4Address>
        <EndIpv4Address></EndIpv4Address>
      </GlobalInfo>
      <LocalInfo>
        <LocalVRF></LocalVRF>
        <Ipv4Address></Ipv4Address>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </LocalInfo>
      <ACLNumber></ACLNumber>
      <Reversible></Reversible>
      <RuleName></RuleName>
      <RulePriority></RulePriority>
      <Description></Description>
      <Counting></Counting>
    </Mapping>
  </InboundStaticMappings>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	InboundStaticMappings
Table type	Multi-instance table
Row name	Mapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalInfo	External network address pool information	Data structure.	Members include: <ul style="list-style-type: none"><li>GlobalVRF.</li><li>StartIpv4Address.</li><li>EndIpv4Address.</li></ul>	EndIpv4Address is optional when configure one-to-one mapping for inbound static NAT.

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalVRF	VRF of external address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
StartIpv4Address	Start IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1.  The StartIpv4Address cannot be greater than the EndIpv4Address. If they are the same, the external address pool has only one address.  The external address pool can contain a maximum of 255 addresses.
EndIpv4Address	End IPv4 address of the external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6.
LocalInfo	Internal network address information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
LocalVRF	VRF of internal address	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
Ipv4Address	An internal network address	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	The prefix length of the internal network address	Index	Unsigned integer. Value range: 8 to 32.	Value 32 indicates one-to-one mapping for inbound static NAT.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	If you do not specify an ACL, the source addresses of all incoming packets and the destination addresses of all outgoing packets are translated.  If you specify an ACL and do not specify the reversible keyword, the source addresses of incoming packets permitted by the ACL are translated. The destination addresses of packets originating from internal hosts to the external are not translated.  If you specify both an ACL and the reversible keyword, the source addresses of incoming packets permitted by

Column name	Column description	Column type	Data type and restrictions	Remarks
				the ACL are translated. If packets originating from internal hosts to the external are permitted by ACL reverse matching, the destination address is translated.
Reversible	Whether translates the destination address of a packet that originates from internal hosts to the external host if the packet is permitted by ACL reverse matching.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	Support for this keyword depends on the device model.  This column can only be configured when <i>ACLNumber</i> is also configured.
RuleName	Name of the static mapping	N/A	String, case sensitive. Length: 1 to 63 characters.	The name is optional. Make sure the rule name is unique. The name cannot contain a forward slash (/), backslash (\), vertical bar ( ), quotation mark ("), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).
RulePriority	Priority of the static mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is lowest.
Description	Rule description	N/A	String, case sensitive. Length: 1 to 63 characters.	N/A
Counting	Whether open the switch of matching the NAT inbound static mapping statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

## NAT/OutboundStaticMappings

This table contains information about one-to-one or **net-to-net** mappings for outbound static NAT.

### XML structure

```
<NAT>
  <OutboundStaticMappings>
```

```

<Mapping>
  <LocalInfo>
    <LocalVRF></LocalVRF>
    <StartIpv4Address></StartIpv4Address>
    <EndIpv4Address></EndIpv4Address>
  </LocalInfo>
  <GlobalInfo>
    <GlobalVRF></GlobalVRF>
    <Ipv4Address></Ipv4Address>
    <Ipv4PrefixLength></Ipv4PrefixLength>
  </GlobalInfo>
  <ACLNumber></ACLNumber>
  <Reversible></Reversible>
  <VRID></VRID>
  <RuleName></RuleName>
  <RulePriority></RulePriority>
  <Description></Description>
  <Counting></Counting>
</Mapping>
</OutboundStaticMappings>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	OutboundStaticMappings
Table type	Multi-instance table
Row name	Mapping
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalInfo	Internal network address pool information	Data structure.	Members include: <ul style="list-style-type: none"> <li>LocalVRF.</li> <li>StartIpv4Address.</li> <li>EndIpv4Address.</li> </ul>	EndIpv4Address is optional when configure one-to-one mapping for outbound static NAT.
LocalVRF	VRF of internal address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.



Column name	Column description	Column type	Data type and restrictions	Remarks
StartIpv4Address	Start IPv4 address of an internal address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1.  The StartIpv4Address cannot be greater than the EndIpv4Address. If they are the same, the internal address pool has only one address.  The internal address pool can contain a maximum of 255 addresses.
EndIpv4Address	End IPv4 address of the internal address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6.
GlobalInfo	External network address information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
GlobalVRF	VRF of external address	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
Ipv4Address	An external network address	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	The prefix length of the external network address	Index	Unsigned integer. Value range: 8 to 32.	Value 32 indicates one-to-one mapping for outbound static NAT.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	If you do not specify an ACL, the source addresses of all outgoing packets and the destination addresses of all incoming packets are translated.  If you specify an ACL and do not specify the reversible keyword, the source addresses of outgoing packets permitted by the ACL are translated. The destination addresses of packets originating from external hosts to the internal are not translated.  If you specify both an ACL and the reversible keyword, the source addresses of outgoing packets permitted by the ACL are translated. If packets originating from external hosts to

Column name	Column description	Column type	Data type and restrictions	Remarks
				the internal are permitted by ACL reverse matching, the destination address is translated.
Reversible	Whether translates the destination address of a packet that originates from internal hosts to the external host if the packet is permitted by ACL reverse matching.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	Support for this keyword depends on the device model.  This column can only be configured when <i>ACLNumber</i> is also configured.
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	Because the system automatically binds the static NAT on the same address segment to the VRRP backup group with the smallest VRID, in the active/standby backup mode, you do not need to manually configure the VRRP backup group to bind to the static NAT. In dual-system hot backup with load balancing, if the static NAT address and the VRRP backup group address are in the same network segment, you need to manually configure static NAT and VRRP binding.
RuleName	Name of the static mapping	N/A	String, case sensitive. Length: 1 to 63 characters.	The name is optional. Make sure the rule name is unique. The name cannot contain a forward slash (/), backslash (\), vertical bar ( ), quotation mark ("), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).
RulePriority	Priority of the static mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is lowest.
Description	Rule description	N/A	String, case sensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Counting	Whether open the switch of matching the NAT outbound static mapping statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

## NAT/StaticOnInterfaces

This table contains the interfaces where static NAT is enabled.

### XML structure

```

<NAT>
  <StaticOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <EnableStatic></EnableStatic>
    </Interface>
  </StaticOnInterfaces>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	StaticOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
EnableStatic	Whether enable	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	static NAT on the interface		<ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	

## NAT/ServerGroups

This table contains the information of NAT internal server groups.

### XML structure

```

<NAT>
  <ServerGroups>
    <ServerGroup>
      <GroupNumber></GroupNumber>
    </ServerGroup>
  </ServerGroups>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	ServerGroups
Table type	Multi-instance table
Row name	ServerGroup
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	The internal server group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A

## NAT/ServerGroupMembers

This table contains the information of members in the NAT internal server groups.

## XML structure

```
<NAT>
  <ServerGroupMembers>
    <GroupMember>
      <GroupNumber></GroupNumber>
      <Ipv4Address></Ipv4Address>
      <PortNumber></PortNumber>
      <Weight></Weight>
    </GroupMember>
  </ServerGroupMembers>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	ServerGroupMembers
Table type	Multi-instance table
Row name	GroupMember
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT internal server group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Ipv4Address	IP address of an internal server.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
PortNumber	Port number of an internal server	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Weight	Weight of the internal server	N/A	Unsigned integer. Value range: 1 to 1000. Default: 100.	N/A

## NAT/ServerOnInterfaces

This table contains information about mappings between the IP address and port of internal servers to NAT address and port for the internal servers.

# XML structure

```
<NAT>
  <ServerOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <ProtocolType></ProtocolType>
      <GlobalInfo>
        <GlobalVRF></GlobalVRF>
        <GlobalStartIpv4Address></GlobalStartIpv4Address>
        <GlobalEndIpv4Address></GlobalEndIpv4Address>
        <GlobalStartPortNumber></GlobalStartPortNumber>
        <GlobalEndPortNumber></GlobalEndPortNumber>
        <GlobalIfIndex></GlobalIfIndex>
      </GlobalInfo>
      <LocalInfo>
        <LocalVRF></LocalVRF>
        <LocalStartIpv4Address></LocalStartIpv4Address>
        <LocalEndIpv4Address></LocalEndIpv4Address>
        <LocalStartPortNumber></LocalStartPortNumber>
        <LocalEndPortNumber></LocalEndPortNumber>
        <LocalSrvGroupNumber></LocalSrvGroupNumber>
      </LocalInfo>
      <ACLNumber></ACLNumber>
      <Reversible></Reversible>
      <VRID></VRID>
      <Description></Description>
      <Counting></Counting>
      <RuleName></RuleName>
      <RulePriority></RulePriority>
    </Interface>
  </ServerOnInterfaces>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	ServerOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
ProtocolType	Protocol type	Index	Unsigned integer. Value range: 1 to 255.	If the protocol is not TCP or UDP, NAT Server is configured without port information.
GlobalInfo	External network information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>GlobalStartIpv4Address.</li> <li>GlobalEndIpv4Address.</li> <li>GlobalStartPortNumber.</li> <li>GlobalEndPortNumber.</li> <li>GlobalIfIndex.</li> </ul>	The mapping between the protocol type, external address, and external port number must be unique for an internal server on an interface.
GlobalVRF	VRF of external network	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this option.
GlobalStartIpv4Address	Start IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1. The GlobalStartIpv4Address cannot be greater than the GlobalEndIpv4Address. If they are the same, the external address pool has only one address. The external address pool can contain a maximum of 255 addresses. This index can be null.
GlobalEndIpv4Address	End IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6. This index can be null.
GlobalStartPortNumber	Start port of an external port number range	Index	Unsigned integer. Value range: 1 to 65535.	The GlobalStartPortNumber cannot be greater than the GlobalEndPortNumber. If they are the same, the external port number range has only one port. The external port number range can include a maximum of 255 ports.

Column name	Column description	Column type	Data type and restrictions	Remarks
				This index can be null.
GlobalEndPortNumber	End port of an external port number range	Index	Unsigned integer. Value range: 1 to 65535.	This index can be null.
GlobalIfIndex	External interface index, The IP address of the interface is used as the NAT address for the internal server.	Index	Unsigned integer.	Only loopback interfaces and " IfIndex " are supported. The IP address of the interface is used as the NAT address. Easy IP is used. If the IP address of an interface used by Easy IP changes and conflicts with the IP address of an internal server not using Easy IP, the Easy IP configuration becomes invalid. If the conflicted address is modified to an unconflicted address or the internal server configuration without Easy IP is removed, the Easy IP configuration takes effect. This index can be null.
LocalInfo	Internal network address information	Data structure.	Members include: <ul style="list-style-type: none"> <li>LocalVRF.</li> <li>LocalStartIpv4Address.</li> <li>LocalEndIpv4Address.</li> <li>LocalStartPortNumber.</li> <li>LocalEndPortNumber.</li> <li>LocalSrvGroupNumber.</li> </ul>	The number of addresses in the range must match that of the external port number range.
LocalVRF	VRF of internal address	N/A	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this option.
LocalStartIpv4Address	Start IPv4 address of the internal address pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LocalEndIpv4Address	End IPv4 address of the internal address pool	N/A	String, dotted decimal notation.	Example: 1.1.1.6.
LocalStartPortNumber	Start port of an internal port number range	N/A	Unsigned integer. Value range: 1 to 65535.	The <i>LocalStartPortNumber</i> cannot be greater than the <i>LocalEndPortNumber</i> . If they are the same, the internal port number range has only one port.



Column name	Column description	Column type	Data type and restrictions	Remarks
				The internal port number range can include a maximum of 255 ports.
LocalEndPort Number	End port of an internal port number range	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
LocalSrvGroupNumber	The internal server group to which the internal server belongs.	N/A	Unsigned integer. Value range: 0 to 65535.	With this parameter, the load sharing NAT Server feature is configured. Support for the value range depends on the device model.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	If you specify an ACL, only packets permitted by the ACL can be translated by using the mapping. Support for this parameter depends on the device model.
Reversible	Whether reverse address translation is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default)</li> </ul>	Reverse address translation applies to connections actively initiated by internal hosts to the external host. It uses existing mappings to translate the destination address for packets of these connections if the packets are permitted by ACL reverse matching.
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	Because the system automatically binds the NAT server on the same address segment to the VRRP backup group with the smallest VRID, in the active/standby backup mode, you do not need to manually configure the VRRP backup group to bind to the NAT server.  In dual-system hot backup with load balancing, if the address of the NAT server and the address of the VRRP backup group are on the same network segment, manually configure the binding between the NAT server and the VRRP.

Column name	Column description	Column type	Data type and restrictions	Remarks
Description	Rule description	N/A	String, case sensitive. Length: 1 to 63 characters.	N/A
Counting	Whether open the switch of matching the NAT server statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default)</li> </ul>	N/A
RuleName	Name of the NAT Server	N/A	String, case insensitive. Length:1 to 63 characters.	N/A
RulePriority	Priority of the server mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is the lowest.

The following table describes the address-port mappings between an external network and an internal network for NAT Server. The mappings which is not listed is not supported and will be treated as configuration conflict.

**Noun explanation:**

**Consecutive external addresses:** *GlobalEndIpv4Address* is greater than *GlobalStartIpv4Address*.

**Single external address:** *GlobalEndIpv4Address* is equal to *GlobalStartIpv4Address*, or *GlobalEndIpv4Address* is null.

**Consecutive external ports:** *GlobalEndPortNumber* is greater than *GlobalStartPortNumber*.

**Single external port:** *GlobalEndPortNumber* is equal to *GlobalStartPortNumber*, or *GlobalEndPortNumber* is null.

**Consecutive internal addresses:** *LocalEndIpv4Address* is greater than *LocalStartIpv4Address*.

**Single internal address:** *LocalEndIpv4Address* is equal to *LocalStartIpv4Address*, or *LocalEndIpv4Address* is null.

**Consecutive internal ports:** *LocalEndPortNumber* is greater than *LocalStartPortNumber*.

**Single internal port:** *LocalEndPortNumber* is equal to *LocalStartPortNumber*, or *LocalEndPortNumber* is null.

External network	Internal network
An external address	An internal address.
An external address and an external port number	An internal address and an internal port number.
An external address and <i>N</i> consecutive external port numbers	An internal address and an internal port number.
	<i>N</i> consecutive internal addresses and an internal port number.
	An internal address and <i>N</i> consecutive internal port numbers.
<i>N</i> consecutive external addresses	An internal address.
	<i>N</i> consecutive internal addresses.
<i>N</i> consecutive external addresses and an external port number	An internal address and an internal port number.

External network	Internal network
	<i>N</i> consecutive external addresses and an internal port number.
	An internal address and <i>N</i> consecutive internal port numbers.
An external address and an external port number	
An external address and <i>N</i> consecutive external port numbers	An internal server group.
<i>N</i> consecutive external addresses and an external port number	

## NAT/PortBlockGroups

This table contains the information about NAT port block groups.

### XML structure

```

<NAT>
  <PortBlockGroups>
    <Group>
      <GroupNumber></GroupNumber>
      <VRID></VRID>
      <PortBlockSize></PortBlockSize>
      <GlobalStartPort></GlobalStartPort>
      <GlobalEndPort></GlobalEndPort>
    </Group>
  </PortBlockGroups>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	PortBlockGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT port block group number.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	<p>Master/Backup mode: No VRRP keyword is required.</p> <p>Load sharing method: Under normal circumstances, there is no need to configure VRRP keywords. The system automatically binds the backup group with the smallest VRID on the same network segment as the virtual IP address and NAT port group address so that the traffic is transmitted on the active device in the backup group.</p> <p>When multiple VRRP backup groups exist at the same time, you can configure the VRRP keyword to explicitly guide the traffic flow to be transmitted on the active device in the specified VRRP backup group.</p>
PortBlockSize	The number of ports included in a port block.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 256.	When you set a port block size, give consideration to the number of private IP addresses, the number of public IP addresses, and the port range. The port block size cannot be larger than the number of ports in the port range.
GlobalStartPort	Start port of the port range.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 1.	<p>Set <i>GlobalStartPort</i> and <i>GlobalEndPort</i> to their default values to define a default port range.</p> <p>The <i>GlobalStartPort</i> cannot be greater than the <i>GlobalEndPort</i>.</p> <p>The port range must include all ports that the public IP addresses use for address translation.</p> <p>The number of ports in</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				a port range cannot be smaller than the port block size.
GlobalEndPort	End port of the port range.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 65535.	N/A

## NAT/PortBlockGroupLocalMembers

This table contains the information of private IP address members in NAT port block groups.

### XML structure

```

<NAT>
  <PortBlockGroupLocalMembers>
    <LocalMember>
      <GroupNumber></GroupNumber>
      <VRF></VRF>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
    </LocalMember>
  </PortBlockGroupLocalMembers>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	PortBlockGroupLocalMembers
Table type	Multi-instance table
Row name	LocalMember
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT port block group number.	Index	Unsigned integer. Value range: 0 to 65535.	You can specify multiple private IP address members in a port block group, but

Column name	Column description	Column type	Data type and restrictions	Remarks
				they cannot overlap. Private IP address members in different port block groups can overlap. For static NAT444, in a port block group, the number of private IP addresses cannot be larger than the number of assignable port blocks. Otherwise, some private IP addresses cannot obtain port blocks.
VRF	VRF to which the private IP address member belong.	Index	String, case-sensitive. Length: 1 to 31 characters.	Do not specify this parameter if the private IP address member does not belong to any VPN.
StartIpv4Address	Start IPv4 address of the private IP address member.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
EndIpv4Address	End IPv4 address of the private IP address member.	Index	String, dotted decimal notation.	Example: 1.1.1.6. The end IP address cannot be smaller than the start IP address. If the start and end IP addresses are the same, you specifies only one private IP address.

## NAT/PortBlockGroupGlobalMembers

This table contains the information of public IP address members in NAT port block groups.

### XML structure

```

<NAT>
  <PortBlockGroupGlobalMembers>
    <GlobalMember>
      <GroupName></GroupName>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
    </GlobalMember>
  </PortBlockGroupGlobalMembers>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	PortBlockGroupGlobalMembers
Table type	Multi-instance table
Row name	GlobalMember
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT port block group number.	Index	Unsigned integer. Value range: 0 to 65535.	<p>You can specify multiple public IP address members in a port block group, but they cannot overlap.</p> <p>Public IP address members in different port block groups can overlap. But the port ranges for overlapped members in different port block groups cannot overlap.</p> <p>The number of port blocks that a public IP address can assign is determined by dividing the number of ports in its port range by the port block size.</p>
StartIpv4Address	Start IPv4 address of the public IP address member.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
EndIpv4Address	End IPv4 address of the public IP address member.	Index	String, dotted decimal notation.	<p>Example: 1.1.1.6.</p> <p>The end IP address cannot be smaller than the start IP address. If the start and end IP addresses are the same, you specifies only one public IP address.</p>

# NAT/OutboundPortBlockOnInterfaces

This table contains the port block groups applied to the outbound direction of the interfaces.

## XML structure

```
<NAT>
  <OutboundPortBlockOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <GroupNumber></GroupNumber>
      <Counting></Counting>
    </Interface>
  </OutboundPortBlockOnInterfaces>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	OutboundPortBlockOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
GroupNumber	NAT port block group number.	Index	Unsigned integer. Value range: 0 to 65535.	You can apply multiple port block groups to one interface. After you apply a port block group to an interface, the system automatically computes the IP-to-port block mappings and creates entries for them. When



Column name	Column description	Column type	Data type and restrictions	Remarks
				a private IP address accesses the public network, the private IP address is translated to the mapped public IP address and the ports are translated to ports in the mapped port block.
Counting	Whether open the switch of matching the NAT portblock group statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

## NAT/DNSMappings

This table contains the mappings about the domain name of an internal server to the public IP address, public port number, and protocol type of the server.

### XML structure

```

<NAT>
  <DNSMappings>
    <MapInfo>
      <Domain></Domain>
      <Protocol></Protocol>
      <Ipv4Address></Ipv4Address>
      <IfIndex></IfIndex>
      <PortNumber></PortNumber>
    </MapInfo>
  </DNSMappings>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	DNSMappings
Table type	Multi-instance table
Row name	MapInfo
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The domain name of an internal server.	Index	String, case-sensitive. Length: 1 to 253 characters.	A domain name is a dot-separated that can include letters, digits, hyphens (-), underscores (_), and dots (.) (for example, aabbcc.com). The domain name suffix can contain at most 253 characters, and each separated string contains no more than 63 characters.
Protocol	The type of the protocol used by the internal server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP.</li> <li>17—UDP.</li> </ul>	This column is affirmatively chosen item.
Ipv4Address	The public IP address used by the internal server to provide services to the external network.	N/A	String, dotted decimal notation.	Example: 1.1.1.6. The Ipv4Address and IfIndex are two configuration modes, only one mode must be configured.
IfIndex	Interface index	N/A	Unsigned integer.	Enables Easy IP to use the IP address of the interface specified by its index as the public address of the internal server. Only loopback interfaces are supported.
PortNumber	The public port number used by the internal server to provide services to the external network.	N/A	Unsigned integer. Value range: 1 to 65535.	This column is affirmatively chosen item.

## NAT/ALG

This table contains the protocols for which NAT with ALG is enabled.

## XML structure

```

<NAT>
  <ALG>
    <ALGInfo>
      <AppID></AppID>

```

```

    <EnableALG></EnableALG>
  </ALGInfo>
</ALG>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	ALG
Table type	Multi-instance table
Row name	ALGInfo
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppID	Protocol ID for which NAT with ALG is enabled.	Index	Unsigned integer. Value range: 0 to 14. <ul style="list-style-type: none"> <li>0—DNS</li> <li>1—FTP.</li> <li>2—ICMP-ERROR</li> <li>3—H.323</li> <li>4—SIP</li> <li>5—TFTP</li> <li>6—RTSP</li> <li>7—SQLNET</li> <li>8—XDMCP</li> <li>9—ILS</li> <li>10—MGCP</li> <li>11—NBT</li> <li>12—PPTP</li> <li>13—RSH</li> <li>14—SCCP</li> </ul>	Use ALG with NAT to translate the payload information to ensure the establishment of data connections. NAT translates IP address and port information in packet headers, and ALG processes the fields in application layer payloads. The packet payloads of some protocols might contain IP address or port information for connection establishment. If this information is not translated, problems might occur. For example, an FTP application involves both data connection and control connection. The data connection establishment dynamically depends on the payload information for the control connection.
EnableALG	Whether enable NAT with ALG.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

# NAT/EIM

This table is about the mapping behavior mode for PAT.

## XML structure

```
<NAT>
  <EIM>
    <EnableEIM></EnableEIM>
    <ACLNumber></ACLNumber>
  </EIM>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	EIM
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EnableEIM	Whether enable <b>Endpoint-Independent Mapping</b> (EIM).	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>	<ul style="list-style-type: none"><li>•<b>Endpoint-Independent Mapping</b>—EIM uses the same IP and port mapping for packets from the same source and port to any destination IP and port. An EIM entry is generated to record the IP and port mapping. This behavior allows packets from any external host to access the internal user by using the NAT address and port. This behavior facilitates communication among hosts that connect to different NAT gateways.</li><li>•<b>Address and</b></li></ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p><b>Port-Dependent Mapping</b>—Uses different IP and port mappings for packets with the same source IP and port to different destination IP addresses and ports. This behavior does not allow packets from an external host to be sent to any NAT address and port unless the internal host has previously sent a packet of the same protocol to that external host. This behavior is secure but inconvenient for communication among hosts connecting to different NAT gateways.</p> <p>This configuration takes effect only on outbound PAT. Address and Port-Dependent Mapping always applies to inbound PAT.</p>
ACLNumber	ACL number	N/A	<p>Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.</p>	<p>Applies the NAT mapping behavior to packets that are permitted by the ACL. If no ACL is specified, the Endpoint-Independent Mapping applies to all packets.</p> <p>This field is available only when <i>EnableEIM</i> is set to true.</p>

## NAT/HairpinOnInterfaces

This table contains the interfaces where hairpin is enabled.

### XML structure

```

<NAT>
  <HairpinOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <EnableHairpin></EnableHairpin>
    </Interface>
  </HairpinOnInterfaces>

```

</NAT>

## Table description

Item	Description
Feature name	NAT
Table name	HairpinOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
EnableHairpin	Whether enable hairpin on the interface	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>	NAT hairpin allows internal hosts behind the same NAT device to access each other only after they use the NAT addresses. NAT hairpin functions on the interface that connects the internal network and translates the source and destination IP addresses of a packet on the interface. NAT hairpin typically operates with NAT Server, outbound dynamic NAT, or outbound static NAT.

## NAT/LogRule

This table contains NAT log configurations.

## XML structure

```
<NAT>
  <LogRule>
```

```

<GlobalLog>
  <EnableGlobalLog></EnableGlobalLog>
  <ACLNumber></ACLNumber>
</GlobalLog>
<EnableFlowBeginLog></EnableFlowBeginLog>
<EnableFlowEndLog></EnableFlowEndLog>
<ActiveFlowLog>
  <EnableActiveFlowLog></EnableActiveFlowLog>
  <Interval></Interval>
</ActiveFlowLog>
<EnablePortBlockAssignLog></EnablePortBlockAssignLog>
<EnablePortBlockWithDrawLog></EnablePortBlockWithDrawLog>
<EnableAlarmLog></EnableAlarmLog>
</LogRule>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	LogRule
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalLog	Global log configuration.	Data structure.	Members include: <ul style="list-style-type: none"> <li>EnableGlobalLog.</li> <li>ACLNumber.</li> </ul>	N/A
EnableGlobalLog	Whether enable the NAT logging function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	Other column takes effect only after you enable NAT logging.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	If an ACL is specified, this command logs NAT flows that match the permit statements in the ACL. If no ACL is specified, this configuration logs all NATed data flows. This field is available only when

Column name	Column description	Column type	Data type and restrictions	Remarks
				<i>EnableGlobalLog</i> is set to true.
EnableFlowBeginLog	Whether enable logging for NAT session establishment events.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	When a NAT session is established, this function outputs a NAT log.
EnableFlowEndLog	Whether enable logging for NAT session removal events.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
ActiveFlowLog	Active flow log configuration.	Data structure.	Members include: <ul style="list-style-type: none"> <li>EnableActiveFlowLog.</li> <li>Interval.</li> </ul>	N/A
EnableActiveFlowLog	Whether enable logging for active NAT flows.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	Configure this column must also configure the <i>Interval</i> .
Interval	The interval for logging active NAT flows ( minutes).	N/A	Unsigned integer. Value range: 10 to 20.	Configure <i>EnableActiveFlowLog</i> to true to configure this item.
EnablePortBlockAssignLog	Whether enable logging for port block assigning.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
EnablePortBlockWithdrawLog	Whether enable logging for port block withdrawing.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
EnableAlarmLog	Whether enable logging for alarm.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

## NAT/HotBackup

This table contains NAT hot backuping configurations.

### XML structure

```

<NAT>
  <HotBackup>
    <EnablePortBlock></EnablePortBlock>
  </HotBackup>
</NAT>

```



## Table description

Item	Description
Feature name	NAT
Table name	HotBackup
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EnablePortBlock	Whether enable hot backuping for port block.	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default)</li></ul>	N/A

## NAT/StaticLoadBalance

This table contains NAT static load balance configurations.

## XML structure

```
<NAT>
  <StaticLoadBalance>
    <EnableStaticLoadBalance></EnableStaticLoadBalance>
  </StaticLoadBalance>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	StaticLoadBalance
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StaticLoadBalance	Whether enable load balance function for nat static configure.	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>	N/A

## NAT/ReplyRedirectOnInterfaces

This table contains the interfaces where redirect reply-route is enabled.

## XML structure

```
<NAT>
  <ReplyRedirectOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <EnableReplyRedirect></EnableReplyRedirect >
    </Interface>
  </ReplyRedirectOnInterfaces >
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	ReplyRedirectOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	<ul style="list-style-type: none"><li>Unsigned integer.</li></ul>	This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.

Column name	Column description	Column type	Data type and restrictions	Remarks
				Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
EnableReply Redirect	Whether enable redirect reply-route on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

## NAT/NATPolicy

This table contains informations about NAT policy.

### XML structure

```

<NAT>
  <NatPolicy>
    <Policy></Policy>
  </NatPolicy>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	NatPolicy
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	Whether enable NAT policy	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default)</li> </ul>	N/A

# NAT/PolicyRules

This table contains informations about NAT policy rules

## XML structure

```
<NAT>
  <PolicyRules>
    <Rule>
      <RuleName></RuleName>
    </Rule>
  </PolicyRules>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	PolicyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy rule	Index	String. case insensitive. Length:1 to 63 characters.	N/A

# NAT/PolicyRuleMembers

This table contains information about the NAT policy rule members.

## XML structure

```
<NAT>
  <PolicyRuleMembers>
    <Rule>
      <RuleName></RuleName>
      <Description></Description>
    </Rule>
  </PolicyRuleMembers>
</NAT>
```

```

    <OutboundInterface><OutboundInterface>
    <Action></Action>
    <AddrGroupNumber></AddrGroupNumber>
    <AddrGroupName></AddrGroupName>
    <Reversible></Reversible>
    <PortPreserved></PortPreserved>
    <Disable></Disable>
    <Counting></Counting>
  </Rule>
</PolicyRuleMembers>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	PolicyRuleMembers
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy	Index	String. case insensitive. Length:1 to 63 characters.	N/A
Description	Rule description	N/A	String.case-sensitive. Length: 1 to 63 characters.	N/A
OutboundInterface	Interface index or interface name	N/A	String.case-sensitive. Length: 1 to 99 characters.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Action on packets matching the rule	N/A	Enumeration 0—NO-PAT 1—PAT. 2—EasyIp 3—NO-Nat.	You cannot specify an action when you remove or delete a rule . You must specify an action when you replace a rule.or when you merge or create a rule that does not exist. The address of the interface will be used when you chose the EasyIp. Choose NO-Nat when Perform no address translation.
AddrGroupNumber	NAT address group number	N/A	Unsigned integer. Value range: 0 to 65535	When you choose the EasyIP mode,The value of the column must be invalid. An address group cannot be used by both the nat inbound and nat outbound configuration. It cannot be used by the nat outbound configuration in both PAT and NO-PAT modes.
AddrGroupName	NAT address group name	N/A	String.case-sensitive. Length: 1 to 63 characters.	Both AddrGroupName and AddrNumber has been configured, the AddrGroupName will be used.
Reversible	Whether translates the destination address of a packet that originates from internal hosts to the external host if the packet is permitted by ACL reverse matching.	N/A	Boolean: • true—YES • false—NO(default).	Support for this keyword depends on the device model.  This column can only be configured in NO-PAT mode.
PortPreserved	Whether tries to preserve port number for PAT.	N/A	Boolean: • true—YES • false—NO(default).	This column can only be configured in PAT mode and EasyIP mode.
Disable	Disable the rule.	N/A	Boolean: • true—YES • false—NO(default)	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Counting	Enabling status of NAT policy match counting	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default)</li> </ul>	N/A

## NAT/PolicyRuleMemberSrcObj

This table contains information about the NAT policy rule source object-group.

### XML structure

```

<NAT>
  <PolicyRuleMemberSrcObj>
    <Rule>
      <RuleName></RuleName>
      <SrcObjGrpList>
        <SrcIpObj></SrcIpObj>
      </SrcObjGrpList>
    </Rule>
  </PolicyRuleMemberSrcObj>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	PolicyRuleMemberSrcObj
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy	Index	String. case insensitive. Length:1 to 63 characters.	N/A
SrcObjGrpList	Policy rule source objectgroup	Data structure	Members include: <ul style="list-style-type: none"> <li>SrclpObj.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIpObj	Name of the Source IP objectgroup	N/A	String. case insensitive. Length: 1 to 31 characters.	N/A

## NAT/PolicyRuleMemberDstObj

This table contains information about the NAT policy rule destination object-group.

### XML structure

```

<NAT>
  <PolicyRuleMemberDstObj>
    <Rule>
      <RuleName></RuleName>
      <DstObjGrpList>
        <DstIpObj></DstIpObj>
      </DstObjGrpList>
    </Rule>
  </PolicyRuleMemberDstObj>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	PolicyRuleMemberDstObj
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy	Index	String. case insensitive. Length:1 to 63 characters.	N/A
DstObjGrpList	Policy rule destination objectgroup	Data structure	Members include: <ul style="list-style-type: none"> <li>DstIpObj.</li> </ul>	N/A
DstIpObj	Name of the Destination IP	N/A	String. case insensitive.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	objectgroup		Length: 1 to 31 characters	

## NAT/PolicyRuleMemberSrvObj

This table contains information about the NAT policy rule service object-group.

### XML structure

```

<NAT>
  <PolicyRuleMemberSrvObj>
    <Rule>
      <RuleName></RuleName>
      <SrvObjGrpList>
        <SrvObj></SrvObj>
      </SrvObjGrpList>
    </Rule>
  </PolicyRuleMemberSrvObj>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	PolicyRuleMemberSrvObj
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy	Index	String. case insensitive. Length:1 to 63 characters.	N/A
SrvObjGrpList	Policy rule service objectgroup	Data structure	Members include: <ul style="list-style-type: none"> <li>SrvObj</li> </ul>	N/A
SrvObj	Name of the Service objectgroup	N/A	String. case insensitive. Length: 1 to 31 characters.	N/A

# NAT/DestinationNatOnInterfaces

This table contains information about the NAT acl server.

## XML structure

```
<NAT>
  <DestinationNatOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>
      <LocalInfo>
        <LocalVRF></LocalVRF>
        <LocalIpv4Address></LocalIpv4Address>
        <LocalPortNumber></LocalPortNumber>
      </LocalInfo>
      <Action></Action>
      <VRID></VRID>
      <Disable></Disable>
      <Description></Description>
      <RuleName></RuleName>
      <RulePriority></RulePriority>
    </Interface>
  </DestinationNatOnInterfaces>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	DestinationNatOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except

Column name	Column description	Column type	Data type and restrictions	Remarks
				loopback, NULL, FC, FCB and encrypt interface.
ACLNumber	ACL number	index	Unsigned integer. Value range: 2000 to 3999	N/A
LocalInfo	Internal network address information	Data structure	Members include: <ul style="list-style-type: none"> <li>LocalVRF</li> <li>LocalIpv4Address</li> <li>LocalPortNumber</li> </ul>	N/A
LocalVRF	VRF of internal address	N/A	String. case-sensitive Length: 1 to 31 characters.	N/A
LocalIpv4Address	IPv4 address of the internal address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LocalPortNumber	An internal port number	N/A	Unsigned integer. Value range: 1 to 65535	N/A
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	Because the system automatically binds the NAT server on the same address segment to the VRRP backup group with the smallest VRID, in the active/standby backup mode, you do not need to manually configure the VRRP backup group to bind to the NAT server.  In dual-system hot backup with load balancing, if the address of the NAT server and the address of the VRRP backup group are on the same network segment, manually configure the binding between the NAT server and the VRRP.
Disable	Disable the rule.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
Description	Rule description	N/A	String.case-sensitive. Length: 1 to 63 characters.	N/A
RuleName	Name of the NAT acl server	N/A	String. case insensitive. Length:1 to 63 characters.	N/A
RulePriority	Priority of the server mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not

Column name	Column description	Column type	Data type and restrictions	Remarks
				assign a value, the priority is the lowest.

## NAT/ObjServer

This table contains information about the NAT object server.

### XML structure

```

<NAT>
  <ObjServer>
    <Rule>
      <RuleName></RuleName>
      <IfIndex></IfIndex>
      <DstObjGrpList>
        <DstObjGrp></DstObjGrp>
      </DstObjGrpList>
      <SrvObjGrpList>
        <SrvObjGrp></SrvObjGrp>
      </SrvObjGrpList>
      <Action></Action>
      <LocalInfo>
        <LocalIP></LocalIP>
        <LocalPort></LocalPort>
      </LocalInfo>
      <VRID></VRID>
      <Disable></Disable>
      <Counting></Counting>
    </Rule>
  </ObjServer>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	ObjServer
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT object server	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IfIndex	Interface index or interface name	N/A	String, case-sensitive. Length: 1 to 99 characters.	This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
DstObjGrpList	Destination object group	Data structure	Members include: DstObjGrp	N/A
DstObjGrp	Name of the destination object group	N/A	String, case insensitive. Length: 1 to 31 characters.	The column is repeatable. The maximum is 5.
SrvObjGrpList	Service object group	Data structure	Members include: SrvObjGrp	N/A
SrvObjGrp	Service object group	N/A	String, case insensitive. Length: 1 to 31 characters.	The column is repeatable. The maximum is 1.
Action	Action on packets matching the rule	N/A	Enumeration 0—net-to-single.	You cannot specify an action when you remove or delete a rule. You must specify an action when you replace a rule, or when you merge or create a rule that does not exist.
LocalInfo	Internal network address information	Data structure	Members include: • LocalIP LocalPort	N/A
LocalIP	IPv4 address of the internal address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LocalPort	Internal port number	N/A	Unsigned integer. Value range: 1 to 65535	N/A
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	Because the system automatically binds the NAT server on the

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>same address segment to the VRRP backup group with the smallest VRID, in the active/standby backup mode, you do not need to manually configure the VRRP backup group to bind to the NAT server.</p> <p>In dual-system hot backup with load balancing, if the address of the NAT server and the address of the VRRP backup group are on the same network segment, manually configure the binding between the NAT server and the VRRP.</p>
Disable	Disable the rule.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default)</li> </ul>	N/A
Counting	Whether enabling counting NAT obj server statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default)</li> </ul>	N/A

## NAT/ObjServerName

This table contains information about the name of NAT object server.

### XML structure

```

<NAT>
  <ObjServerName>
    <Rule>
      <RuleName></RuleName>
    </Rule>
  </ObjServerName>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	ObjServerName

Item	Description
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT object server	Index	String, case insensitive. Length: 1 to 63 characters.	N/A

# Contents

NAT .....	1
NAT/AddrGroups .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
NAT/AddrGroupMembers .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
NAT/AddrPoolAlloc .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
NAT/InboundDynamicRules .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
NAT/OutboundDynamicRules .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
NAT/InboundStaticMappings .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
NAT/OutboundStaticMappings .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
NAT/StaticOnInterfaces .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
NAT/ServerGroups .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
NAT/ServerGroupMembers .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
NAT/ServerOnInterfaces .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
NAT/PortBlockGroups .....	26
XML structure .....	26
Table description .....	26
Columns .....	27
NAT/PortBlockGroupLocalMembers .....	28
XML structure .....	28
Table description .....	28
Columns .....	29
NAT/PortBlockGroupGlobalMembers .....	29
XML structure .....	29
Table description .....	30
Columns .....	30



NAT/OutboundPortBlockOnInterfaces .....	31
XML structure .....	31
Table description .....	31
Columns .....	31
NAT/DNSMappings .....	32
XML structure .....	32
Table description .....	32
Columns .....	33
NAT/ALG .....	33
XML structure .....	33
Table description .....	34
Columns .....	34
NAT/EIM .....	35
XML structure .....	35
Table description .....	35
Columns .....	35
NAT/HairpinOnInterfaces .....	36
XML structure .....	36
Table description .....	37
Columns .....	37
NAT/LogRule .....	37
XML structure .....	37
Table description .....	38
Columns .....	38
NAT/HotBackup .....	39
XML structure .....	39
Table description .....	39
Columns .....	40
NAT/Statistics .....	40
XML structure .....	40
Table description .....	41
Columns .....	41
NAT/StaticLoadBalance .....	42
XML structure .....	42
Table description .....	42
Columns .....	42
NAT/Capabilities .....	43
XML structure .....	43
Table description .....	43
Columns .....	43
NAT/ReplyRedirectOnInterfaces .....	43
XML structure .....	43
Table description .....	44
Columns .....	44
NAT/NATPolicy .....	44
XML structure .....	44
Table description .....	45
Columns .....	45
NAT/PolicyRules .....	45
XML structure .....	45
Table description .....	45
Columns .....	46
NAT/PolicyRuleMembers .....	46
XML structure .....	46
Table description .....	47
Columns .....	47
NAT/PolicyRuleMemberSrcObj .....	49
XML structure .....	49
Table description .....	49
Columns .....	50
NAT/PolicyRuleMemberDstObj .....	50
XML structure .....	50

Table description .....	50
Columns .....	51
NAT/PolicyRuleMemberSrvObj .....	51
XML structure .....	51
Table description .....	51
Columns .....	52
NAT/DestinationNatOnInterfaces .....	52
XML structure .....	52
Table description .....	52
Columns .....	53
NAT/ObjServer .....	54
XML structure .....	54
Table description .....	55
Columns .....	55

# NAT

## NAT/AddrGroups

This table contains information about NAT address groups.

### XML structure

```
<NAT>
  <AddrGroups>
    <AddrGroup>
      <GroupNumber></GroupNumber>
      <VRID></VRID>
      <PortBlockSize></PortBlockSize>
      <ExtendedBlockNumber></ExtendedBlockNumber>
      <StartPort></StartPort>
      <EndPort></EndPort>
    </AddrGroup>
  </AddrGroups>
</NAT>
```

### Table description

Item	Description
Feature name	NAT
Table name	AddrGroups
Table type	Multi-instance table
Row name	AddrGroup
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT address group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	<ul style="list-style-type: none"><li>Master/backup mode: No VRRP keyword is required.</li><li>Load sharing method:</li></ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>Under normal circumstances, there is no need to configure VRRP keywords. The system automatically binds the backup group with the smallest VRID on the same network segment as the virtual IP address and NAT address pool address, so that traffic is transmitted on the active device in the backup group.</p> <p>When multiple VRRP backup groups exist at the same time, you can configure the VRRP keyword to explicitly guide the flow of traffic and enable traffic to be transmitted on the active device in the specified VRRP backup group.</p>
PortBlockSize	The number of ports included in a port block.	N/A	Unsigned integer. Value range: 1 to 65535.	<p>To configure dynamic NAT444, you must configure port block for the referenced NAT address group.</p> <p>With dynamic NAT444 configured, when a private IP address initiates a connection to the public network, the NAT444 gateway assigns it a public IP address and a port block, and creates an entry for the mapping. For subsequent connections from the private IP address, the NAT444 gateway translates the private IP address to the mapped public IP address and the ports to ports in the mapped port block.</p> <p>In a NAT address group, the port block size cannot be larger than the number of ports in the port range.</p> <p>Configure this item before configuring <i>ExtendedBlockNumber</i>, deleting this item also deletes</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<i>ExtendedBlockNumber</i> .
ExtendedBlockNumber	The number of extended port blocks.	N/A	Unsigned integer. Value range: 1 to 5.	With this parameter specified, when a private IP address accesses the public network, but the ports in the mapped port block are all occupied, the NAT gateway extends port blocks for the private IP address. A user can contain up to <i>ExtendedBlockNumber</i> +1 port blocks at the same time. If you want to configure this you must first configure the <i>PortBlocksize</i> .
StartPort	Start port of the port range.	N/A	Unsigned integer. Value range: 1 to 65535.	Set <i>StartPort</i> and <i>EndPort</i> to their default values to define a default port range. The <i>StartPort</i> cannot be greater than the <i>EndPort</i> . The number of ports in a port range cannot be smaller than the port block size.
EndPort	End port of the port range.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

## NAT/AddrGroupMembers

This table contains information about the NAT address group members.

### XML structure

```

<NAT>
  <AddrGroupMembers>
    <GroupMember>
      <GroupNumber></GroupNumber>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
    </GroupMember>
  </AddrGroupMembers>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	AddrGroupMembers
Table type	Multi-instance table
Row name	GroupMember
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT address group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
StartIpv4Address	Start IPv4 address of the address group member	Index	String, dotted decimal notation.	Example: 1.1.1.1. The <i>StartIpv4Address</i> cannot be greater than the <i>EndIpv4Address</i> . If they are the same, the group member has only one IP address. The IP addresses of address members on the device must not overlap. The source address in a packet destined for an external network is translated into an address in one of group members.
EndIpv4Address	End IPv4 address of the address group member	Index	String, dotted decimal notation.	Example: 1.1.1.6.

## NAT/AddrPoolAlloc

This table contains address pool allocation information about the NAT address pool.

## XML structure

```
<NAT>
  <AddrPoolAlloc>
    <AddrBlock>
      <AddrPoolName></AddrPoolName>
```

```

    <VxLanID></VxLanID>
    <DPAAddress></DPAAddress>
    <StartIpv4Address></StartIpv4Address>
    <EndIpv4Address></EndIpv4Address>
  </AddrBlock>
</AddrPoolAlloc>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	AddrPoolAlloc
Table type	Multi-instance table
Row name	AddrBlock
Restrictions	None

## Columns

	Column description	Column type	Data type and restrictions	Remarks
AddrPoolName	NAT address pool name	Index	String, case-sensitive. Length:1 to31characters.	N/A
VxLanID	VXLAN ID	Index	Unsigned integer, Value range: 0-16777215.	N/A
DPAAddress	DP address	Index	String, dotted decimal notation.	Example: 11.1.1.2.
StartIpv4Address	Start IPv4 address of the dynamic address block	Index	String, dotted decimal notation.	<p>Example: 1.1.1.1.</p> <p>The <i>StartIpv4Address</i> cannot be greater than the <i>EndIpv4Address</i>. If they are same, the block member has only one IP address.</p> <p>The IP addresses of address members on the device must not overlap.</p> <p>The source address in</p>

	Column description	Column type	Data type and restrictions	Remarks
				a packet destined for an external network is translated into an address in one of block members.
EndIpv4Address	End IPv4 address of the dynamic address block		String, dotted decimal notation.	Example: 1.1.1.6.

## NAT/InboundDynamicRules

This table contains the inbound dynamic NAT rules on interfaces.

### XML structure

```

<NAT>
  <InboundDynamicRules>
    <Interface>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>
      <AddrGroupNumber></AddrGroupNumber>
      <VRF></VRF>
      <NoPAT></NoPAT>
      <Reversible></Reversible>
      <AutoAddRoute></AutoAddRoute>
      <RuleName></RuleName>
      <RulePriority></RulePriority>
      <MatchingCount></MatchingCount>
      <Counting></Counting>
    </Interface>
  </InboundDynamicRules>
</NAT>

```

### Table description

Item	Description
Feature name	NAT



Item	Description
Table name	InboundDynamicRules
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	An ACL can be used by only one inbound dynamic NAT rule on an interface.
AddrGroupNumber	NAT address group number	N/A	Unsigned integer. Value range: 0 to 65535.	An address group cannot be used by both the NAT inbound and NAT outbound configuration. It cannot be used by the NAT inbound configuration in both PAT and NO-PAT modes.  This column is affirmatively chosen item.
VRF	VRF.	N/A	String, case-sensitive. Length: 1 to 31 characters.	To specify addresses in the public network, do not use this option.
NoPAT	Whether performs only IP address translation.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	PAT supports only TCP, UDP, and ICMP query packets. For an ICMP packet, the ICMP ID is used as its source port number.
Reversible	Whether translates the destination address of a packet that originates from internal hosts to the external host if the packet is permitted by	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	NAT translates the destination IP address of the packets of a connection originating from an internal host to the NAT address based on the existing NO-PAT entry.  This column can only

Column name	Column description	Column type	Data type and restrictions	Remarks
	ACL reverse matching in NO-PAT mode.			be configured in NO-PAT mode.
AutoAddRoute	Whether adds a route to the NAT address when address translation is performed for a packet.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	The output interface is the NAT interface and the next-hop is the source address before translation. If you do not specify this keyword, you must manually add the route. It is recommended that you specify this keyword.  This column can only be configured in NO-PAT mode.
RuleName	Name of the dynamic mapping	N/A	String, case sensitive. Length: 1 to 63 characters.	The name is optional. Make sure the rule name is unique. The name cannot contain a forward slash (/), backslash (\), vertical bar ( ), quotation mark ("), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).
RulePriority	Priority of the dynamic mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is lowest.
MatchingCount	Number of packets matching the inbound dynamic NAT rule.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Counting	Whether open the switch of matching the inbound dynamic NAT rule statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

## NAT/OutboundDynamicRules

This table contains the outbound dynamic NAT rules on interfaces.

### XML structure

```
<NAT>
  <OutboundDynamicRules>
```

```

<Interface>
  <IfIndex></IfIndex>
  <ACLNumber></ACLNumber>
  <AddrGroupNumber></AddrGroupNumber>
  <VRF></VRF>
  <NoPAT></NoPAT>
  <Reversible></Reversible>
  <PortPreserved></PortPreserved>
  <RuleName></RuleName>
  <RulePriority></RulePriority>
  <MatchingCount></MatchingCount>
  <Counting></Counting>
  <WhetherPersistConfig></WhetherPersistConfig>
</Interface>
</OutboundDynamicRules>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	OutboundDynamicRules
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
ACLNumber	ACL number	Index	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	If you do not specify any ACL, NAT translates all packets, else translates the packets which matches the ACL.  Outbound dynamic NAT rules with ACLs configured on an interface takes precedence over those without ACLs. An

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>outbound dynamic NAT rule with a high ACL number takes effect over that with a low ACL number.</p> <p>An ACL can be used by only one outbound dynamic NAT rule on an interface.</p> <p>This column can be null.</p>
AddrGroupNumber	NAT address group number	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 65535.</p>	<p>An address group cannot be used by both the NAT inbound and NAT outbound configurations. It cannot be used by the NAT outbound configuration in both PAT and NO-PAT modes.</p> <p>If you do not specify any address group, the IP address of the interface is used as the NAT address. Easy IP is used.</p> <p>This column is affirmatively chosen item.</p>
VRF	VRF.	N/A	<p>String, case-sensitive.</p> <p>Length: 1 to 31 characters.</p>	To specify addresses in the public network, do not use this option.
NoPAT	Whether performs only IP address translation.	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	<p>NO-PAT mode can't be configured without AddrGroupNumber.</p> <p>PAT only supports TCP, UDP, and ICMP query packets. For an ICMP packet, the ICMP ID is used as its source port number.</p>
Reversible	Whether translates the destination address of a packet that originates from external hosts to the internal host if the packet is permitted by ACL reverse matching in NO-PAT mode.	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	This column can only be configured in NO-PAT mode.
PortPreserve	Whether tries to	N/A	Boolean:	This column can only

Column name	Column description	Column type	Data type and restrictions	Remarks
d	preserve port number for PAT.		<ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	be configured in PAT mode.
RuleName	Name of the dynamic mapping	N/A	String, case sensitive. Length: 1 to 63 characters.	The name is optional. Make sure the rule name is unique. The name cannot contain a forward slash (/), backslash (\), vertical bar ( ), quotation mark ("), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).
RulePriority	Priority of the dynamic mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is lowest.
MatchingCount	Number of packets matching the outbound dynamic NAT rule.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Counting	Whether open the switch of matching the outbound dynamic NAT rule statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
WhetherPersistConfig	Whether to save the configuration	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

## NAT/InboundStaticMappings

This table contains information about one-to-one or **net-to-net** mappings for inbound static NAT.

### XML structure

```

<NAT>
  <InboundStaticMappings>
    <Mapping>
      <GlobalInfo>
        <GlobalVRF></GlobalVRF>
        <StartIpv4Address></StartIpv4Address>
        <EndIpv4Address></EndIpv4Address>
      </GlobalInfo>
      <LocalInfo>

```

```

    <LocalVRF></LocalVRF>
    <Ipv4Address></Ipv4Address>
    <Ipv4PrefixLength></Ipv4PrefixLength>
  </LocalInfo>
  <ACLNumber></ACLNumber>
  <Reversible></Reversible>
  <RuleName></RuleName>
  <RulePriority></RulePriority>
  <Description></Description>
  <MatchingCount></MatchingCount>
  <Counting></Counting>
</Mapping>
</InboundStaticMappings>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	InboundStaticMappings
Table type	Multi-instance table
Row name	Mapping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalInfo	External network address pool information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>StartIpv4Address.</li> <li>EndIpv4Address.</li> </ul>	EndIpv4Address is optional when configure one-to-one mapping for inbound static NAT.
GlobalVRF	VRF of external address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
StartIpv4Address	Start IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1. The StartIpv4Address cannot be greater than the EndIpv4Address. If they are the same, the external address pool has only one address. The external address pool can contain a maximum of 255 addresses.

Column name	Column description	Column type	Data type and restrictions	Remarks
EndIpv4Address	End IPv4 address of the external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6.
LocalInfo	Internal network address information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
LocalVRF	VRF of internal address	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
Ipv4Address	An internal network address	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	The prefix length of the internal network address	Index	Unsigned integer. Value range: 8 to 32.	Value 32 indicates one-to-one mapping for inbound static NAT.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	<p>If you do not specify an ACL, the source addresses of all incoming packets and the destination addresses of all outgoing packets are translated.</p> <p>If you specify an ACL and do not specify the reversible keyword, the source addresses of incoming packets permitted by the ACL are translated. The destination addresses of packets originating from internal hosts to the external are not translated.</p> <p>If you specify both an ACL and the reversible keyword, the source addresses of incoming packets permitted by the ACL are translated. If packets originating from internal hosts to the external are permitted by ACL reverse matching, the destination address is translated.</p>
Reversible	Whether translates the destination address of a packet that originates from internal hosts to	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	<p>Support for this keyword depends on the device model.</p> <p>This column can only be configured when <i>ACLNumber</i> is also</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
	the external host if the packet is permitted by ACL reverse matching.			configured.
RuleName	Name of the static mapping	N/A	String, case sensitive. Length: 1 to 63 characters.	The name is optional. Make sure the rule name is unique. The name cannot contain a forward slash (/), backslash (\), vertical bar ( ), quotation mark ("), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).
RulePriority	Priority of the static mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is lowest.
Description	Rule description	N/A	String, case sensitive. Length: 1 to 63 characters.	N/A
MatchingCount	Number of packets matching the NAT inbound static mapping	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Counting	Whether open the switch of matching the NAT inbound static mapping statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

## NAT/OutboundStaticMappings

This table contains information about one-to-one or **net-to-net** mappings for outbound static NAT.

### XML structure

```

<NAT>
  <OutboundStaticMappings>
    <Mapping>
      <LocalInfo>
        <LocalVRF></LocalVRF>
        <StartIpv4Address></StartIpv4Address>
        <EndIpv4Address></EndIpv4Address>
      </LocalInfo>
    </Mapping>
  </OutboundStaticMappings>
</NAT>

```



```

<GlobalInfo>
  <GlobalVRF></GlobalVRF>
  <Ipv4Address></Ipv4Address>
  <Ipv4PrefixLength></Ipv4PrefixLength>
</GlobalInfo>
<ACLNumber></ACLNumber>
<Reversible></Reversible>
<VRID></VRID>
<RuleName></RuleName>
<RulePriority></RulePriority>
<Description></Description>
<MatchingCount></MatchingCount>
<Counting></Counting>
</Mapping>
</OutboundStaticMappings>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	OutboundStaticMappings
Table type	Multi-instance table
Row name	Mapping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalInfo	Internal network address pool information	Data structure.	Members include: <ul style="list-style-type: none"> <li>LocalVRF.</li> <li>StartIpv4Address.</li> <li>EndIpv4Address.</li> </ul>	EndIpv4Address is optional when configure one-to-one mapping for outbound static NAT.
LocalVRF	VRF of internal address pool	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
StartIpv4Address	Start IPv4 address of an internal address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1. The StartIpv4Address cannot be greater than the EndIpv4Address. If they are the same, the internal address pool has only one address. The internal address pool can contain a

Column name	Column description	Column type	Data type and restrictions	Remarks
				maximum of 255 addresses.
EndIpv4Address	End IPv4 address of the internal address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6.
GlobalInfo	External network address information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
GlobalVRF	VRF of external address	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this parameter.
Ipv4Address	An external network address	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	The prefix length of the external network address	Index	Unsigned integer. Value range: 8 to 32.	Value 32 indicates one-to-one mapping for outbound static NAT.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	<p>If you do not specify an ACL, the source addresses of all outgoing packets and the destination addresses of all incoming packets are translated.</p> <p>If you specify an ACL and do not specify the reversible keyword, the source addresses of outgoing packets permitted by the ACL are translated. The destination addresses of packets originating from external hosts to the internal are not translated.</p> <p>If you specify both an ACL and the reversible keyword, the source addresses of outgoing packets permitted by the ACL are translated. If packets originating from external hosts to the internal are permitted by ACL reverse matching, the destination address is translated.</p>
Reversible	Whether translates the destination address of a packet that	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	Support for this keyword depends on the device model. This column can only

Column name	Column description	Column type	Data type and restrictions	Remarks
	originates from internal hosts to the external host if the packet is permitted by ACL reverse matching.			be configured when <i>ACLNumber</i> is also configured.
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	Because the system automatically binds the static NAT on the same address segment to the VRRP backup group with the smallest VRID, in the active/standby backup mode, you do not need to manually configure the VRRP backup group to bind to the static NAT. In dual-system hot backup with load balancing, if the static NAT address and the VRRP backup group address are in the same network segment, you need to manually configure static NAT and VRRP binding.
RuleName	Name of the static mapping	N/A	String, case sensitive. Length: 1 to 63 characters.	The name is optional. Make sure the rule name is unique. The name cannot contain a forward slash (/), backslash (\), vertical bar ( ), quotation mark ("), colon (:), asterisk (*), question mark (?), left angle bracket (<), right angle bracket (>), or an at sign (@).
RulePriority	Priority of the static mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is lowest.
Description	Rule description	N/A	String, case sensitive. Length: 1 to 63 characters.	N/A
MatchingCount	Number of packets matching the NAT outbound static mapping	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Counting	Whether open the switch of matching the NAT outbound static mapping	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	statistics			

## NAT/StaticOnInterfaces

This table contains the interfaces where static NAT is enabled.

### XML structure

```

<NAT>
  <StaticOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <EnableStatic></EnableStatic>
    </Interface>
  </StaticOnInterfaces>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	StaticOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
EnableStatic	Whether enable static NAT on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

# NAT/ServerGroups

This table contains the information of NAT internal server groups.

## XML structure

```
<NAT>
  <ServerGroups>
    <ServerGroup>
      <GroupNumber></GroupNumber>
    </ServerGroup>
  </ServerGroups>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	ServerGroups
Table type	Multi-instance table
Row name	ServerGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	The internal server group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A

# NAT/ServerGroupMembers

This table contains the information of members in the NAT internal server groups.

## XML structure

```
<NAT>
  <ServerGroupMembers>
    <GroupMember>
      <GroupNumber></GroupNumber>
      <Ipv4Address></Ipv4Address>
      <PortNumber></PortNumber>
    </GroupMember>
  </ServerGroupMembers>
</NAT>
```

```

    <Weight></Weight>
    <Sessions></Sessions>
  </GroupMember>
</ServerGroupMembers>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	ServerGroupMembers
Table type	Multi-instance table
Row name	GroupMember
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT internal server group number	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Ipv4Address	IP address of an internal server.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
PortNumber	Port number of an internal server	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Weight	Weight of the internal server	N/A	Unsigned integer. Value range: 1 to 1000.	N/A
Sessions	Connections to the members in the server group	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

## NAT/ServerOnInterfaces

This table contains information about mappings between the IP address and port of internal servers to NAT address and port for the internal servers.

## XML structure

```

<NAT>
  <ServerOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <ProtocolType></ProtocolType>
    </Interface>
  </ServerOnInterfaces>
</NAT>

```

```

<GlobalInfo>
  <GlobalVRF></GlobalVRF>
  <GlobalStartIpv4Address></GlobalStartIpv4Address>
  <GlobalEndIpv4Address></GlobalEndIpv4Address>
  <GlobalStartPortNumber></GlobalStartPortNumber>
  <GlobalEndPortNumber></GlobalEndPortNumber>
  <GlobalIfIndex></GlobalIfIndex>
</GlobalInfo>
<LocalInfo>
  <LocalVRF></LocalVRF>
  <LocalStartIpv4Address></LocalStartIpv4Address>
  <LocalEndIpv4Address></LocalEndIpv4Address>
  <LocalStartPortNumber></LocalStartPortNumber>
  <LocalEndPortNumber></LocalEndPortNumber>
  <LocalSrvGroupNumber></LocalSrvGroupNumber>
</LocalInfo>
<ACLNumber></ACLNumber>
<Reversible></Reversible>
<VRID></VRID>
<Description></Description>
<MatchingCount></MatchingCount>
<Counting></Counting>
<RuleName></RuleName>
<RulePriority></RulePriority>
<WhetherPersistConfig></WhetherPersistConfig>
</Interface>
</ServerOnInterfaces>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	ServerOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except

Column name	Column description	Column type	Data type and restrictions	Remarks
				loopback, NULL, FC, FCB and encrypt interface.
ProtocolType	Protocol type	Index	Unsigned integer. Value range: 1 to 255.	If the protocol is not TCP or UDP, NAT Server is configured without port information.
GlobalInfo	External network information	Data structure.	Members include: <ul style="list-style-type: none"> <li>GlobalVRF.</li> <li>GlobalStartIpv4Address.</li> <li>GlobalEndIpv4Address.</li> <li>GlobalStartPortNumber.</li> <li>GlobalEndPortNumber.</li> <li>GlobalIfIndex.</li> </ul>	The mapping between the protocol type, external address, and external port number must be unique for an internal server on an interface.
GlobalVRF	VRF of external network	Index	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this option.
GlobalStartIpv4Address	Start IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.1. The GlobalStartIpv4Address cannot be greater than the GlobalEndIpv4Address. If they are the same, the external address pool has only one address. The external address pool can contain a maximum of 255 addresses. This index can be null.
GlobalEndIpv4Address	End IPv4 address of an external address pool	Index	String, dotted decimal notation.	Example: 1.1.1.6. This index can be null.
GlobalStartPortNumber	Start port of an external port number range	Index	Unsigned integer. Value range: 1 to 65535.	The GlobalStartPortNumber cannot be greater than the GlobalEndPortNumber. If they are the same, the external port number range has only one port. The external port number range can include a maximum of 255 ports. This index can be null.
GlobalEndPortNumber	End port of an external port number range	Index	Unsigned integer. Value range: 1 to 65535.	This index can be null.



Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalIfIndex	External interface index, The IP address of the interface is used as the NAT address for the internal server.	Index	Unsigned integer.	<p>Only loopback interfaces and " IfIndex " are supported.</p> <p>The IP address of the interface is used as the NAT address. Easy IP is used.</p> <p>If the IP address of an interface used by Easy IP changes and conflicts with the IP address of an internal server not using Easy IP, the Easy IP configuration becomes invalid. If the conflicted address is modified to an unconflicted address or the internal server configuration without Easy IP is removed, the Easy IP configuration takes effect.</p> <p>This index can be null.</p>
LocalInfo	Internal network address information	Data structure.	<p>Members include:</p> <ul style="list-style-type: none"> <li>LocalVRF.</li> <li>LocalStartIpv4Address.</li> <li>LocalEndIpv4Address.</li> <li>LocalStartPortNumber.</li> <li>LocalEndPortNumber.</li> <li>LocalSrvGroupNumber.</li> </ul>	The number of addresses in the range must match that of the external port number range.
LocalVRF	VRF of internal address	N/A	String, case-sensitive. Length: 1 to 31 characters.	To specify a public IP address, do not use this option.
LocalStartIpv4Address	Start IPv4 address of the internal address pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LocalEndIpv4Address	End IPv4 address of the internal address pool	N/A	String, dotted decimal notation.	Example: 1.1.1.6.
LocalStartPortNumber	Start port of an internal port number range	N/A	Unsigned integer. Value range: 1 to 65535.	<p>The <i>LocalStartPortNumber</i> cannot be greater than the <i>LocalEndPortNumber</i>. If they are the same, the internal port number range has only one port.</p> <p>The internal port number range can include a maximum of 255 ports.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalEndPort Number	End port of an internal port number range	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
LocalSrvGroupNumber	The internal server group to which the internal server belongs.	N/A	Unsigned integer. Value range: 0 to 65535.	With this parameter, the load sharing NAT Server feature is configured. Support for the value range depends on the device model.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	If you specify an ACL, only packets permitted by the ACL can be translated by using the mapping. Support for this parameter depends on the device model.
Reversible	Whether reverse address translation is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES.</li> <li>false—NO.</li> </ul>	Reverse address translation applies to connections actively initiated by internal hosts to the external host. It uses existing mappings to translate the destination address for packets of these connections if the packets are permitted by ACL reverse matching.
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	Because the system automatically binds the NAT server on the same address segment to the VRRP backup group with the smallest VRID, in the active/standby backup mode, you do not need to manually configure the VRRP backup group to bind to the NAT server. In dual-system hot backup with load balancing, if the address of the NAT server and the address of the VRRP backup group are on the same network segment, manually configure the binding between the NAT server and the VRRP.
Description	Rule description	N/A	String, case sensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 63 characters.	
MatchingCount	Number of packets matching the NAT server	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Counting	Whether open the switch of matching the NAT server statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
RuleName	Name of the NAT server	N/A	String, case insensitive. Length: 1 to 63 characters.	N/A
RulePriority	Priority of the server mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is the lowest.
WhetherPersistConfig	Whether to save the configuration	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

The following table describes the address-port mappings between an external network and an internal network for NAT Server. The mappings which is not listed is not supported and will be treated as configuration conflict.

#### Noun explanation:

**Consecutive external addresses:** *GlobalEndIpv4Address* is greater than *GlobalStartIpv4Address*.

**Single external address:** *GlobalEndIpv4Address* is equal to *GlobalStartIpv4Address*, or *GlobalEndIpv4Address* is null.

**Consecutive external ports:** *GlobalEndPortNumber* is greater than *GlobalStartPortNumber*.

**Single external port:** *GlobalEndPortNumber* is equal to *GlobalStartPortNumber*, or *GlobalEndPortNumber* is null.

**Consecutive internal addresses:** *LocalEndIpv4Address* is greater than *LocalStartIpv4Address*.

**Single internal address:** *LocalEndIpv4Address* is equal to *LocalStartIpv4Address*, or *LocalEndIpv4Address* is null.

**Consecutive internal ports:** *LocalEndPortNumber* is greater than *LocalStartPortNumber*.

**Single internal port:** *LocalEndPortNumber* is equal to *LocalStartPortNumber*, or *LocalEndPortNumber* is null.

External network	Internal network
An external address	An internal address.
An external address and an external port number	An internal address and an internal port number.
An external address and <i>N</i> consecutive external port numbers	An internal address and an internal port number. <i>N</i> consecutive internal addresses and an internal port number.

External network	Internal network
	An internal address and <i>N</i> consecutive internal port numbers.
<i>N</i> consecutive external addresses	An internal address. <i>N</i> consecutive internal addresses.
	An internal address and an internal port number.
<i>N</i> consecutive external addresses and an external port number	<i>N</i> consecutive external addresses and an internal port number. An internal address and <i>N</i> consecutive internal port numbers.
An external address and an external port number	
An external address and <i>N</i> consecutive external port numbers	An internal server group.
<i>N</i> consecutive external addresses and an external port number	

## NAT/PortBlockGroups

This table contains the information about NAT port block groups.

### XML structure

```

<NAT>
  <PortBlockGroups>
    <Group>
      <GroupNumber></GroupNumber>
      <VRID></VRID>
      <PortBlockSize></PortBlockSize>
      <GlobalStartPort></GlobalStartPort>
      <GlobalEndPort></GlobalEndPort>
    </Group>
  </PortBlockGroups>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	PortBlockGroups
Table type	Multi-instance table
Row name	Group

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT port block group number.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	<ul style="list-style-type: none"> <li>Master/Backup mode: No VRRP keyword is required.</li> <li>Load sharing method: Under normal circumstances, there is no need to configure VRRP keywords. The system automatically binds the backup group with the smallest VRID on the same network segment as the virtual IP address and NAT port group address so that the traffic is transmitted on the active device in the backup group.</li> <li>When multiple VRRP backup groups exist at the same time, you can configure the VRRP keyword to explicitly guide the flow of traffic and enable traffic to be transmitted on the active device in the specified VRRP backup group.</li> </ul>
PortBlockSize	The number of ports included in a port block.	N/A	Unsigned integer. Value range: 1 to 65535.	When you set a port block size, give consideration to the number of private IP addresses, the number of public IP addresses, and the port range. The port block size cannot be larger than the number of ports in the port range.
GlobalStartPort	Start port of the port range.	N/A	Unsigned integer. Value range: 1 to 65535.	Set <i>GlobalStartPort</i> and <i>GlobalEndPort</i> to their default values to define a default port

				<p>range.</p> <p>The <i>GlobalStartPort</i> cannot be greater than the <i>GlobalEndPort</i>.</p> <p>The port range must include all ports that the public IP addresses use for address translation.</p> <p>The number of ports in a port range cannot be smaller than the port block size.</p>
GlobalEndPort	End port of the port range.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

## NAT/PortBlockGroupLocalMembers

This table contains the information of private IP address members in NAT port block groups.

### XML structure

```

<NAT>
  <PortBlockGroupLocalMembers>
    <LocalMember>
      <GroupNumber></GroupNumber>
      <VRF></VRF>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>
    </LocalMember>
  </PortBlockGroupLocalMembers>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	PortBlockGroupLocalMembers
Table type	Multi-instance table
Row name	LocalMember
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT port block group number	Index	Unsigned integer. Value range: 0 to 65535.	You can specify multiple private IP address members in a port block group, but they cannot overlap.  Private IP address members in different port block groups can overlap.  For static NAT444, in a port block group, the number of private IP addresses cannot be larger than the number of assignable port blocks. Otherwise, some private IP addresses cannot obtain port blocks.
VRF	VRF to which the private IP address member belong	Index	String, case-sensitive. Length: 1 to 31 characters.	Do not specify this parameter if the private IP address member does not belong to any VPN.
StartIpv4Address	Start IPv4 address of the private IP address member	Index	String, dotted decimal notation.	Example: 1.1.1.1.
EndIpv4Address	End IPv4 address of the private IP address member	Index	String, dotted decimal notation.	Example: 1.1.1.6.  The end IP address cannot be smaller than the start IP address. If the start and end IP addresses are the same, you specifies only one private IP address.

## NAT/PortBlockGroupGlobalMembers

This table contains the informations of public IP address members in NAT port block groups.

## XML structure

```

<NAT>
  <PortBlockGroupGlobalMembers>
    <GlobalMember>
      <GroupNumber></GroupNumber>
      <StartIpv4Address></StartIpv4Address>
      <EndIpv4Address></EndIpv4Address>

```

```

    </GlobalMember>
  </PortBlockGroupGlobalMembers>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	PortBlockGroupGlobalMembers
Table type	Multi-instance table
Row name	GlobalMember
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupNumber	NAT port block group number.	Index	Unsigned integer. Value range: 0 to 65535.	<p>You can specify multiple public IP address members in a port block group, but they cannot overlap.</p> <p>Public IP address members in different port block groups can overlap. But the port ranges for overlapped members in different port block groups cannot overlap.</p> <p>The number of port blocks that a public IP address can assign is determined by dividing the number of ports in its port range by the port block size.</p>
StartIpv4Address	Start IPv4 address of the public IP address member.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
EndIpv4Address	End IPv4 address of the public IP address member.	Index	String, dotted decimal notation.	<p>Example: 1.1.1.6.</p> <p>The end IP address cannot be smaller than the start IP address. If the start and end IP addresses are the same, you specifies only one public IP address.</p>



# NAT/OutboundPortBlockOnInterfaces

This table contains the port block groups applied to the outbound direction of the interfaces.

## XML structure

```
<NAT>
  <OutboundPortBlockOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <GroupNumber></GroupNumber>
      <MatchingCount></MatchingCount>
      <Counting></Counting>
    </Interface>
  </OutboundPortBlockOnInterfaces>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	OutboundPortBlockOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
GroupNumber	NAT port block group number.	Index	Unsigned integer. Value range: 0 to 65535.	You can apply multiple port block groups to one interface.  After you apply a port block group to an interface, the system automatically computes the IP-to-port block mappings and creates entries for them. When a private IP address

				accesses the public network, the private IP address is translated to the mapped public IP address and the ports are translated to ports in the mapped port block.
MatchingCount	Number of packets matching the NAT portblock group.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Counting	Whether open the switch of matching the NAT portblock group statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

## NAT/DNSMappings

This table contains the mappings about the domain name of an internal server to the public IP address, public port number, and protocol type of the server.

### XML structure

```

<NAT>
  <DNSMappings>
    <MapInfo>
      <Domain></Domain>
      <Protocol></Protocol>
      <Ipv4Address></Ipv4Address>
      <IfIndex></IfIndex>
      <PortNumber></PortNumber>
    </MapInfo>
  </DNSMappings>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	DNSMappings
Table type	Multi-instance table
Row name	MapInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The domain name of an internal server.	Index	String, case-sensitive. Length: 1 to 253 characters.	A domain name is a dot-separated that can include letters, digits, hyphens (-), underscores (_), and dots (.) (for example, aabbcc.com). The domain name suffix can contain at most 253 characters, and each separated string contains no more than 63 characters.
Protocol	The type of the protocol used by the internal server.	N/A	Enumeration: <ul style="list-style-type: none"><li>6—TCP.</li><li>17—UDP.</li></ul>	This column is affirmatively chosen item.
Ipv4Address	The public IP address used by the internal server to provide services to the external network.	N/A	String, dotted decimal notation.	Example: 1.1.1.6. The Ipv4Address and IfIndex are two configuration modes, only one mode must be configured.
IfIndex	Interface index	N/A	Unsigned integer.	Enables Easy IP to use the IP address of the interface specified by its index as the public address of the internal server. Only loopback interfaces are supported.
PortNumber	The public port number used by the internal server to provide services to the external network.	N/A	Unsigned integer. Value range: 1 to 65535.	This column is affirmatively chosen item.

## NAT/ALG

This table contains the protocols for which NAT with ALG is enabled.

## XML structure

```
<NAT>
  <ALG>
    <ALGInfo>
      <AppID></AppID>
```

```

    <AppName></AppName>
    <EnableALG></EnableALG>
  </ALGInfo>
</ALG>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	ALG
Table type	Multi-instance table
Row name	ALGInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppID	Protocol ID for which NAT with ALG is enabled.	Index	Unsigned integer. Value range: 0 to 14. <ul style="list-style-type: none"> <li>0—DNS</li> <li>1—FTP.</li> <li>2—ICMP-ERROR</li> <li>3—H.323</li> <li>4—SIP</li> <li>5—TFTP</li> <li>6—RTSP</li> <li>7—SQLNET</li> <li>8—XDMCP</li> <li>9—ILS</li> <li>10—MGCP</li> <li>11—NBT</li> <li>12—PPTP</li> <li>13—RSH</li> <li>14—SCCP</li> </ul>	Use ALG with NAT to translate the payload information to ensure the establishment of data connections. NAT translates IP address and port information in packet headers, and ALG processes the fields in application layer payloads. The packet payloads of some protocols might contain IP address or port information for connection establishment. If this information is not translated, problems might occur. For example, an FTP application involves both data connection and control connection. The data connection establishment dynamically depends on the payload information for the control connection.
AppName	Protocol name for which NAT with ALG is enabled.	N/A	String, Case-insensitive. Length: 1 to 63 characters.	N/A

EnableALG	Whether enable NAT with ALG.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
-----------	------------------------------	-----	--	-----

## NAT/EIM

This table is about the mapping behavior mode for PAT.

## XML structure

```

<NAT>
  <EIM>
    <EnableEIM></EnableEIM>
    <ACLNumber></ACLNumber>
  </EIM>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	EIM
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EnableEIM	Whether enable <b>Endpoint-Independent Mapping</b> (EIM).	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	<ul style="list-style-type: none"> <li><b>Endpoint-Independent Mapping</b>—EIM uses the same IP and port mapping for packets from the same source and port to any destination IP and port. An EIM entry is generated to record the IP and port mapping. This behavior allows packets from any external host to access the internal user by using the NAT address and port. This behavior facilitates communication among</li> </ul>

				<p>hosts that connect to different NAT gateways.</p> <p>•<b>Address and Port-Dependent Mapping</b>—Uses different IP and port mappings for packets with the same source IP and port to different destination IP addresses and ports. This behavior does not allow packets from an external host to be sent to any NAT address and port unless the internal host has previously sent a packet of the same protocol to that external host. This behavior is secure but inconvenient for communication among hosts connecting to different NAT gateways.</p> <p>This configuration takes effect only on outbound PAT. Address and Port-Dependent Mapping always applies to inbound PAT.</p>
ACLNumber	ACL number	N/A	<p>Unsigned integer. Value range: 2000 to 3999.</p> <p>OR</p> <p>String, case-sensitive. Length: 1 to 63 characters.</p>	<p>Applies the NAT mapping behavior to packets that are permitted by the ACL. If no ACL is specified, the Endpoint-Independent Mapping applies to all packets.</p> <p>This field is available only when <i>EnableEIM</i> is set to true.</p>

## NAT/HairpinOnInterfaces

This table contains the interfaces where hairpin is enabled.

### XML structure

```

<NAT>
  <HairpinOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <EnableHairpin></EnableHairpin>
    </Interface>
  </HairpinOnInterfaces>
</NAT>

```

```

    </Interface>
  </HairpinOnInterfaces>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	HairpinOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
EnableHairpin	Whether enable hairpin on the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	NAT hairpin allows internal hosts behind the same NAT device to access each other only after they use the NAT addresses. NAT hairpin functions on the interface that connects the internal network and translates the source and destination IP addresses of a packet on the interface.  NAT hairpin typically operates with NAT Server, outbound dynamic NAT, or outbound static NAT.

## NAT/LogRule

This table contains NAT log configurations.

## XML structure

```
<NAT>
```

```

<LogRule>
  <GlobalLog>
    <EnableGlobalLog></EnableGlobalLog>
    <ACLNumber></ACLNumber>
  </GlobalLog>
  <EnableFlowBeginLog></EnableFlowBeginLog>
  <EnableFlowEndLog></EnableFlowEndLog>
  <ActiveFlowLog>
    <EnableActiveFlowLog></EnableActiveFlowLog>
    <Interval></Interval>
  </ActiveFlowLog>
  <EnablePortBlockAssignLog></EnablePortBlockAssignLog>
  <EnablePortBlockWithDrawLog></EnablePortBlockWithDrawLog>
  <EnableAlarmLog></EnableAlarmLog>
</LogRule>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	LogRule
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalLog	Global log configuration.	Data structure.	Members include: <ul style="list-style-type: none"> <li>EnableGlobalLog.</li> <li>ACLNumber.</li> </ul>	N/A
EnableGlobalLog	Whether enable the NAT logging function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	Other column takes effect only after you enable NAT logging.
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999. OR String, case-sensitive. Length: 1 to 63 characters.	If an ACL is specified, this command logs NAT flows that match the permit statements in the ACL. If no ACL is specified, this configuration logs all NATed data flows. This field is available only when



				<i>EnableGlobalLog</i> is set to true.
EnableFlowBeginLog	Whether enable logging for NAT session establishment events.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO</li> </ul>	When a NAT session is established, this function outputs a NAT log.
EnableFlowEndLog	Whether enable logging for NAT session removal events.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
ActiveFlowLog	Active flow log configuration.	Data structure.	Members include: <ul style="list-style-type: none"> <li>EnableActiveFlowLog.</li> <li>Interval.</li> </ul>	N/A
EnableActiveFlowLog	Whether enable logging for active NAT flows.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	Configure this column must also configure the <i>Interval</i> .
Interval	The interval for logging active NAT flows ( minutes).	N/A	Unsigned integer. Value range: 10 to 20.	Configure <i>EnableActiveFlowLog</i> to true to configure this item.
EnablePortBlockAssignLog	Whether enable logging for port block assigning.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
EnablePortBlockWithdrawLog	Whether enable logging for port block withdrawing.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
EnableAlarmLog	Whether enable logging for alarm.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

## NAT/HotBackup

This table contains NAT hot backuping configurations.

### XML structure

```

<NAT>
  <HotBackup>
    <EnablePortBlock></EnablePortBlock>
  </HotBackup>
</NAT>

```

### Table description

Item	Description
Feature name	NAT

Item	Description
Table name	HotBackup
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EnablePortBlock	Whether enable hot backuping for port block.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

## NAT/Statistics

This table contains NAT statistics.

## XML structure

```

<NAT>
  <Statistics>
    <StatisticInfo>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <SessionCount></SessionCount>
      <NatSessionRate></NatSessionRate>
      <EIMCount></EIMCount>
      <InboundNoPATCount></InboundNoPATCount>
      <OutboundNoPATCount></OutboundNoPATCount>
      <PortBlock>
        <StaticCount></StaticCount>
        <ActiveStaticCount></ActiveStaticCount>
        <DynamicCount></DynamicCount>
        <ActiveDynamicCount></ActiveDynamicCount>
      </PortBlock>
    </StatisticInfo>
  </Statistics>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	Statistics
Table type	Multi-instance table
Row name	StatisticInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
SessionCount	Number of NAT session entries.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
NatSessionRate	Establishment rate of NAT sessions (per second).	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
EIMCount	Number of EIM entries.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
InboundNoPATCount	Number of inbound NO-PAT entries.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
OutboundNoPATCount	Number of outbound NO-PAT entries.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
PortBlock	Statistics about port block.	Data structure.	Members include: <ul style="list-style-type: none"> <li>StaticCount.</li> <li>ActiveStaticCount.</li> <li>DynamicCount.</li> <li>ActiveDynamicCount</li> </ul>	N/A
StaticCount	Number of static IP-to-port block mapping entries.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ActiveStaticCount	Number of dynamic IP-to-port block mapping entries that can be	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	It equals the number of port blocks for dynamic assignment, including those have been assigned and those not

Column name	Column description	Column type	Data type and restrictions	Remarks
	created.			assigned yet.
DynamicCount	Number of static IP-to-port block mapping entries that are in current use.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ActiveDynamicCount	Number of dynamic IP-to-port block mapping entries that have been created.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	It equals the number of assigned port blocks.

## NAT/StaticLoadBalance

This table contains NAT static load balance configurations.

### XML structure

```

<NAT>
  <StaticLoadBalance>
    <EnableStaticLoadBalance></EnableStaticLoadBalance>
  </StaticLoadBalance>
</NAT>

```

### Table description

Item	Description
Feature name	NAT
Table name	StaticLoadBalance
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StaticLoadBalance	Whether enable load balance function for NAT static configure.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A

# NAT/Capabilities

This table contains NAT support special capabilities.

## XML structure

```
<NAT>
  <Capabilities>
    <OutboundEasyIP></OutboundEasyIP>
  </Capabilities>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	Capabilities
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
OutboundEasyIP	Whether support EasyIP for NAT dynamic outbound configure.	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO.</li></ul>	N/A

# NAT/ReplyRedirectOnInterfaces

This table contains the interfaces where redirect reply-route is enabled.

## XML structure

```
<NAT>
  <ReplyRedirectOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <EnableReplyRedirect></EnableReplyRedirect>
    </Interface>
  </ReplyRedirectOnInterfaces>
```

</NAT>

## Table description

Item	Description
Feature name	NAT
Table name	ReplyRedirectOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	<p>This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.</p> <p>Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.</p>
EnableReplyRedirect	Whether enable redirect reply-route on the interface	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO.</li></ul>	N/A

## NAT/NATPolicy

This table contains information about NAT policy.

## XML structure

```
<NAT>
  <NatPolicy>
    <Policy></Policy>
  </NatPolicy>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	NatPolicy
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	View of the Nat policy	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO.</li></ul>	N/A

## NAT/PolicyRules

This table contains information about NAT policy rules.

## XML structure

```
<NAT>
  <PolicyRules>
    <Rule>
      <RuleName></RuleName>
    </Rule>
  </PolicyRules>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	PolicyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy rule	Index	String.case insensitive. Length:1 to 63 characters.	N/A

## NAT/PolicyRuleMembers

This table contains information about the NAT policy rule members.

### XML structure

```
<NAT>
  <PolicyRuleMembers>
    <Rule>
      <RuleName></RuleName>
      <Description></Description>
      <OutboundInterface></OutboundInterface>
      <SrcObjGrpList>
        <SrcIpObjGroup></SrcIpObjGroup>
      </SrcObjGrpList>
      <DstObjGrpList>
        <DstIpObjGroup></DstIpObjGroup>
      </DstObjGrpList>
      <SrvObjGrpList>
        <ServiceObjGroup></ServiceObjGroup>
      </SrvObjGrpList>
      <Action></Action>
      <AddrGroupNumber></AddrGroupNumber>
      <AddrGroupName></AddrGroupName>
      <Reversible></Reversible>
      <PortPreserved></PortPreserved>
      <Disable></Disable>
      <Counting></Counting>
      <MatchingCount></MatchingCount>
    </Rule>
  </PolicyRuleMembers>
</NAT>
```



## Table description

Item	Description
Feature name	NAT
Table name	PolicyRuleMembers
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description		Data type and restrictions	Remarks
RuleName	Name of the NAT policy rule	Index	String. case insensitive. Length:1 to 63 characters.	N/A
Description	Rule description	N/A	String. case-sensitive. Length: 1 to 63 characters.	N/A
OutboundInterface	Interface index or interface name	N/A	String. case-sensitive. Length: 1 to 99 characters.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
SrcObjGrpList	Source object group of the policy rule	Data structure	Members include: <ul style="list-style-type: none"> <li>SrclpObjGroup.</li> </ul>	N/A
SrclpObjGroup	Name of the Source IP object group	N/A	String. case insensitive. Length: 1 to 31 characters.	N/A
DstObjGrpList	Destination object group of the policy rule	Data structure	Members include: <ul style="list-style-type: none"> <li>DstlpObjGroup.</li> </ul>	N/A
DstlpObjGroup	Name of the Destination IP object group	N/A	String. case insensitive. Length: 1 to 31 characters.	N/A

Column name	Column description		Data type and restrictions	Remarks
SrvObjGrpList	Service object group of the policy rule	Data structure	Members include: <ul style="list-style-type: none"> <li>ServiceIpObjGroup.</li> </ul>	N/A
ServiceObjGroup	Name of the Service object group	N/A	String. case insensitive.. Length: 1 to 31 characters.	N/A
Action	Action on packets matching the rule	N/A	Enumeration: 0—NO-PAT. 1—PAT. 2—EasyIP. 3—NO-Nat.	You cannot specify an action when you remove or delete a rule . You must specify an action when you replace a rule.or when you merge or create a rule that does not exist. The address of the interface will be used when you chose the EasyIp. Choose NO-Nat when Perform no address translation.
AddrGroupNumber	NAT address group number	N/A	Unsigned integer. Value range: 0 to 65535.	When you choose the EasyIP mode,The value of the column must be invalid. An address group cannot be used by both the nat inbound and nat outbound configuration. It cannot be used by the nat outbound configuration in both PAT and NO-PAT modes.
AddrGroupName	NAT address group name	N/A	String.case-sensitive. Length: 1 to 63 characters.	N/A
Reversible	Whether translates the destination address of a packet that originates from internal hosts to the external host if the packet is permitted by ACL reverse matching.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	Support for this keyword depends on the device model.  This column can only be configured in NO-PAT mode.

Column name	Column description		Data type and restrictions	Remarks
PortPreserved	Whether tries to preserve port number for PAT.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	This column can only be configured in PAT mode and EasyIP mode.
Disable	Disable the rule.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
Counting	Enabling stauts of NAT policy match counting	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
MatchingCount	Number of packets matching the NAT policy.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

## NAT/PolicyRuleMemberSrcObj

This table contains information about the NAT policy rule source object-group.

### XML structure

```

<NAT>
  <PolicyRuleMemberSrcObj>
    <Rule>
      <RuleName></RuleName>
      <SrcObjGrpList>
        <SrcIpObj></SrcIpObj>
      </SrcObjGrpList>
    </Rule>
  </PolicyRuleMemberSrcObj>
</NAT>

```

### Table description

Item	Description
Feature name	NAT

Table name	PolicyRuleMemberSrcObj
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy rule	Index	String. case insensitive. Length:1 to 63 characters.	N/A
SrcObjGrpList	Policy rule source object group	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIpObj.</li> </ul>	N/A
SrcIpObj	Name of the Source IP object group	N/A	String. case insensitive. Length: 1 to 31 characters.	N/A

## NAT/PolicyRuleMemberDstObj

This table contains information about the NAT policy rule destination object-group.

## XML structure

```

<NAT>
  <PolicyRuleMemberDstObj>
    <Rule>
      <RuleName></RuleName>
      <DstObjGrpList>
        <DstIpObj></DstIpObj>
      </DstObjGrpList>
    </Rule>
  </PolicyRuleMemberDstObj>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	PolicyRuleMemberDstObj
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy rule	Index	String. case insensitive. Length:1 to 63 characters.	N/A
DstObjGrpList	Policy rule destination object group	Data structure	Members include: <ul style="list-style-type: none"><li>DstIpObj.</li></ul>	N/A
DstIpObj	Name of the Destination IP object group	N/A	String. case insensitive. Length: 1 to 31 characters.	N/A

## NAT/PolicyRuleMemberSrvObj

This table contains information about the NAT policy rule service object-group.

## XML structure

```
<NAT>
  <PolicyRuleMemberSrvObj>
    <Rule>
      <RuleName></RuleName>
      <SrvObjGrpList>
        <SrvObj></SrvObj>
      </SrvObjGrpList>
    </Rule>
  </PolicyRuleMemberSrcObj>
</NAT>
```

## Table description

Item	Description
Feature name	NAT
Table name	PolicyRuleMemberSrvObj
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT policy rule	Index	String. case insensitive. Length:1 to 63 characters.	N/A
SrvObjGrpList	Policy rule service object group	Data structure	Members include: <ul style="list-style-type: none"> <li>SrvObj.</li> </ul>	N/A
SrvObj	Name of the Service object group	N/A	String. case insensitive. Length: 1 to 31 characters.	N/A

## NAT/DestinationNatOnInterfaces

This table contains information about the NAT acl server.

## XML structure

```

<NAT>
  <DestinationNatOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>
      <LocalInfo>
        <LocalVRF></LocalVRF>
        <LocalIpv4Address></LocalIpv4Address>
        <LocalPortNumber></LocalPortNumber>
      </LocalInfo>
      <Action></Action>
      <VRID></VRID>
      <Disable></Disable>
      <Description></Description>
      <RuleName></RuleName>
      <RulePriority></RulePriority>
    </Interface>
  </DestinationNatOnInterfaces>
</NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	DestinationNatOnInterfaces

Item	Description
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
ACLNumber	ACL number	index	Unsigned integer. Value range: 2000 to 3999	N/A
LocalInfo	Internal network address information	Data structure	Members include: <ul style="list-style-type: none"> <li>LocalVRF.</li> <li>LocalIpv4Address.</li> <li>LocalIpv4Address..</li> </ul>	N/A
LocalVRF	VRF of internal address	N/A	String. case-sensitive Length: 1 to 31 characters.	N/A
LocalIpv4Address	IPv4 address of the internal address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LocalPortNumber	An internal port number	N/A	Unsigned integer. Value range: 1 to 65535	N/A
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	<p>Because the system automatically binds the NAT server on the same address segment to the VRRP backup group with the smallest VRID, in the active/standby backup mode, you do not need to manually configure the VRRP backup group to bind to the NAT server.</p> <p>In dual-system hot backup with load balancing, if the address of the NAT server and the address of the VRRP backup group are on the same network segment, manually configure the binding between the</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				NAT server and the VRRP.
Disable	Disable the rule.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
Description	Rule description	N/A	String.case-sensitive. Length: 1 to 63 characters.	N/A
RuleName	Name of the NAT ACLserver	N/A	String, case insensitive. Length:1 to 63 characters.	N/A
RulePriority	Priority of the server mapping	N/A	Unsigned integer. Value range: 0 to 2147483647.	The smaller the value, the higher the mapping priority. If you do not assign a value, the priority is the lowest.

## NAT/ObjServer

This table contains information about the NAT object server.

### XML structure

```

<NAT>
  <ObjServer>
    <Rule>
      <RuleName></RuleName>
      <IfIndex></IfIndex>
      <DstObjGrpList>
        <DstObjGrp></DstObjGrp>
      </DstObjGrpList>
      <SrvObjGrpList>
        <SrvObjGrp></SrvObjGrp>
      </SrvObjGrpList>
      <Action></Action>
      <LocalInfo>
        <LocalIP></LocalIP>
        <LocalPort></LocalPort>
      </LocalInfo>
      <VRID></VRID>
      <Disable></Disable>
      <Counting></Counting>
      <MatchingCount></MatchingCount>
      <TotalCount></TotalCount>
    </Rule>
  </ObjServer>
</NAT>

```



```

    </ObjServer>
  </NAT>

```

## Table description

Item	Description
Feature name	NAT
Table name	ObjServer
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	Name of the NAT object server	Index	String, case insensitive. Length: 1 to 63 characters.	N/A
IfIndex	Interface index or interface name	N/A	String, case-sensitive.Length: 1 to 99 characters.	This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
DstObjGrpList	Destination object group in the rule	Data structure	Members include: • DstObjGrp.	N/A
DstObjGrp	Name of the destination object group	N/A	String, case insensitive. Length: 1 to 31 characters	The column is repeatable. The maximum is 5.
SrvObjGrpList	Service object group in the rule	Data structure	Members include: • SrvObjGrp.	N/A
SrvObjGrp	Name of the service object group	N/A	String, case insensitive. Length: 1 to 31 characters.	The column is repeatable. The maximum is 1.

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Action on packets matching the rule	N/A	Enumeration 0—net-to-single.	You cannot specify an action when you remove or delete a rule . You must specify an action when you replace a rule.or when you merge or create a rule that does not exist.
LocalInfo	Internal network address information	Data structure	Members include: <ul style="list-style-type: none"> <li>LocalIP.</li> <li>LocalPort.</li> </ul>	N/A
LocalIP	IPv4 address of the internal address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
LocalPort	Internal port	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
VRID	Identifier of the virtual router	N/A	Unsigned integer. Value range: 1 to 255.	Because the system automatically binds the NAT server on the same address segment to the VRRP backup group with the smallest VRID, in the active/standby backup mode, you do not need to manually configure the VRRP backup group to bind to the NAT server.  In dual-system hot backup with load balancing, if the address of the NAT server and the address of the VRRP backup group are on the same network segment, manually configure the binding between the NAT server and the VRRP.
Disable	Disable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
TotalCount	Total number of the NAT object server rule	N/A	Unsigned integer.	The number of query result or total number of the server configurations.
MatchingCount	Number of packets matching obj server	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Counting	Whether enabling	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	counting NAT obj server statistics		<ul style="list-style-type: none"> <li>false—NO.</li> </ul>	

# Contents

Comware 7 NAT NETCONF XML API Error Message Reference .....	1
NAT/InboundDynamicRules .....	1
NAT/OutboundDynamicRules .....	1
NAT/ServerOnInterfaces .....	2
NAT/InboundStaticMappings .....	3
NAT/ OutboundStaticMappings .....	4
NAT/AddrGroupMembers .....	5
NAT/AddrGroups .....	5
NAT/ PortBlockGroupLocalMembers .....	5
NAT/PortBlockGroupGlobalMembers .....	6
NAT/HotBackup .....	6

# Comware 7 NAT NETCONF XML API Error Message Reference

## NAT/InboundDynamicRules

Message	Explanation
The address group is already used by outbound dynamic NAT. 指定的地址组已经被出方向动态NAT引用。	An address group could not be used by outbound or inbound at the same time. 同一个地址池不能同时被inbound和outbound所引用。
The address group is already used by inbound PAT. 指定的地址组已经被入方向PAT模式的动态NAT引用。	An address group could not be used by PAT or NO-PAT at the same time. 同一个地址池不能同时被PAT和NO-PAT所引用。
The address group is already used by inbound NO-PAT. 指定的地址组已经被入方向NO-PAT模式的动态NAT引用。	An address group could not be used by PAT or NO-PAT at the same time. 同一个地址池不能同时被PAT和NO-PAT所引用。
An address group is required. 地址组为必选配置项。	This message means address group not be configured. 这个提示说明地址组没有被配置。
This device doesn't support inbound dynamic NAT rules. 当前设备不支持入方向动态NAT。	This message means device doesn't support inbound dynamic NAT rules. 这个提示说明当前设备不支持入方向动态NAT。

## NAT/OutboundDynamicRules

Message	Explanation
The address group is already used by outbound dynamic NAT. 指定的地址组已经被出方向动态NAT引用。	An address group could not be used by outbound or inbound at the same time. 同一个地址池不能同时被inbound和outbound所引用。
The address group is already used by inbound PAT. 指定的地址组已经被入方向PAT模式的动态NAT引用。	An address group could not be used by PAT or NO-PAT at the same time. 同一个地址池不能同时被PAT和NO-PAT所引用。
The address group is already used by inbound NO-PAT. 指定的地址组已经被入方向NO-PAT模式的动态NAT引用。	An address group could not be used by PAT or NO-PAT at the same time. 同一个地址池不能同时被PAT和NO-PAT所引用。
Only one outbound dynamic NAT rule can be configured for the same flow on the interface. 配置的出方向动态NAT与接口已有配置冲突。	Same ACL has been configured for another outbound dynamic NAT rules on this interface. 当前接口下已经存在另一条ACL相同的出方向NAT规则。
PAT doesn't support reverse address translation. PAT模式的NAT不能配置反向地址转换。	PAT mode doesn't support reverse address translation. PAT模式下不支持反向地址转换。

NO-PAT doesn't support port number preservation. NO-PAT模式的NAT不能配置端口保持功能。	NO-PAT mode doesn't support port number preservation. NO-PAT模式下不支持端口保持功能。
NO-PAT doesn't support Easy IP. Easy IP方式下不能配置NO-PAT模式。	Easy IP and NO-PAT are mutually exclusive. Easy IP和NO-PAT是互斥的。
NO-PAT for outbound NAT is invalid when the EIM mode with 3-tuple entries has been configured on the device. EIM模式下，NO-PAT方式的动态地址转换配置不生效。	NO-PAT entries cannot be created in EIM mode. 在EIM模式下，将无法建立NO-PAT表项。

## NAT/ServerOnInterfaces

Message	Explanation
The public address and port configuration overlaps with existing public address and port configuration on the interface. 指定的外网信息与接口上的已有外网信息配置重叠。	The public address and port already configured by another nat server rules. 同一个接口下已经存在该公网信息的NAT内部服务器配置。
End public address can't be smaller than start public address. 指定的外网结束地址不能小于起始地址。	Global end address could not less than global start address. 公网结束地址不能小于起始地址。
End public port number can't be smaller than start public port number. 指定的外网结束端口不能小于起始端口。	Global end port number could not less than global start port number. 公网结束端口不能小于起始端口。
End private address can't be smaller than start private address. 指定的内网结束地址不能小于起始地址。	Local end address could not less than local start address. 私网结束地址不能小于起始地址。
End private port number can't be smaller than start private port number. 指定的内网结束端口不能小于起始端口。	Local end port number could not less than local start port number. 私网结束端口不能小于起始端口。
Number of addresses in the public IP address range exceeded the limit. 指定的外网地址范围大小超过系统允许的最大值。	Difference between global end address and global start address is greater than 255. 公网结束地址和起始地址之差超过255。
Number of ports in the public port range exceeded the limit. 指定的外网端口范围大小超过系统允许的最大值。	Difference between global end port number and global start port number is greater than 255. 公网结束端口和起始端口之差超过255。
Number of IP addresses is not equal to number of ports. 指定的地址范围与端口范围的大小不一致。	Total global IP numbers must be equal to total local port numbers. 公网地址总数需要和私网可用端口总数相等。
Number of public ports is not equal to number of private ports. 指定的外网端口范围与内网端口范围的大小不一致。	The global port range size must be equal to local port range size. 公网端口范围大小和私网端口范围大小必须一致
Number of public IP addresses is not equal to number of private IP addresses. 指定的外网地址范围与内网地址范围的大小不一	The global IP range size must be equal to local IP range size. 公网地址范围大小和私网地址范围大小必须一致

致。	
The private address configuration overlaps with existing private address configuration. 指定的内网地址与已有内网地址配置重叠。	The local address overlaps with existing configuration. 指定的私网地址与已配置的私网地址重叠。
Please configure both or neither of the private and public ports. 内网端口与外网端口必须同时配置，或者都不配置。	Global port number and local port number must be configured at the same time or not. 公网端口和私网端口同时配置或者同时不配置。
Please specify either public IP addresses or an interface connected to the external network. 外网地址和外网接口必须且只能配置其中一个。	Nat server could specify global adress or an interface as parameter,but only one of them can be configured. 内部服务器可以指定流量的接口或者公网地址作为规则参数，但是只能指定其中一个。
Port numbers can only be configured for TCP or UDP. 只有TCP和UDP协议可以配置端口号。	If the protocol is not TCP or UDP, NAT Server is configured without port information (include global port and local port). 不是TCP或者UDP协议时，不能配置公网端口和私网端口。
Please specify either an internal server group or private IP addresses. 内网地址和内部服务器组必须且只能配置其中一个。	Nat server could specify server group or local address as parameter,but only one of them can be configured. 内部服务器可以指定内部服务器组或者私网地址作为规则参数，但是只能指定其中一个。
Public addresses and public ports can't both be consecutive. 外网地址和外网端口不能同时配置为连续形式。	The continuous global IP and continuous global port could not be configured at the same time. 公网地址和公网端口不能同时配置为连续形式。
Private addresses and private ports can't both be consecutive. 内网地址和内网端口不能同时配置为连续形式。	The continuous local IP and continuous local port could not be configured at the same time. 私网地址和私网端口不能同时配置为连续形式。
Internal server group must be specified with public ports, rather than private ports. 配置内部服务器组的同时必须配置外网端口，但不能同时配置内网端口。	Local server group must be specified with global ports, rather than private ports. 配置内部服务器组的同时必须配置外网端口，但不能同时配置内网端口。
The public address and port configuration conflicts with the private address and port configuration. 外网信息与内网信息冲突。	Global address and ports cannot overlaps with local address and ports. 公网信息和私网信息不能重叠。
End address must be configured together with start address. 配置结束地址必须同时配置起始地址。	If end address have been configured, start address cannot be empty. 配置了结束地址，起始地址就不能为空。
End port must be configured together with start port. 配置结束端口必须同时配置起始端口。	If end ports have been configured, start ports cannot be empty. 配置了结束端口，起始端口就不能为空。

## NAT/InboundStaticMappings

Message	Explanation
End public address can't be smaller than start public address. 指定的外网结束地址不能小于外网起始地址。	Global end address could not less than global start address. 公网结束地址不能小于起始地址。
Number of addresses in the public IP address range exceeded the limit.	Difference between global end address and global start address is greater than 255.

指定的外网地址范围大小超过系统允许的最大值。	公网结束地址和起始地址之差超过255。
Invalid end public address. The end public address can't be greater than 255. 指定的外网结束地址错误，外网结束地址不能大于255。	Global end address and start address must be at the same network segment(mask less than 24). 公网结束地址和起始地址必须在同一网段（掩码小于24）
Public IP addresses are already used by another inbound static NAT mapping. 指定的外网地址已经被其他入方向静态NAT表项引用。	The global address overlaps with existing NAT inbound configuration. 指定的公网地址与已配置的NAT inbound公网地址重叠。
Private IP addresses are already used by another inbound static NAT mapping. 指定的内网地址已经被其他入方向静态NAT表项引用。	The local address overlaps with existing NAT inbound configuration. 指定的私网地址与已配置的NAT inbound公网地址重叠。
This device does not support inbound static NAT rules. 当前设备不支持入方向静态NAT。	This device doesn't support NAT static inbound. 当前设备不支持入方向静态NAT。

## NAT/ OutboundStaticMappings

Message	Explanation
End private address can't be smaller than start private address. 指定的内网结束地址不能小于内网起始地址。	Local end address could not less than local start address. 私网结束地址不能小于起始地址。
Number of addresses in the private address range exceeded the limit. 指定的内网地址范围大小超过系统允许的最大值。	Difference between local end address and local start address is greater than 255. 私网结束地址和起始地址之差超过255。
Invalid end private address. The end private address can't be greater than 255. 指定的内网结束地址错误，内网结束地址不能大于255。	Local end address and start address must be at the same network segment(mask less than 24). 私网结束地址和起始地址必须在同一网段（掩码小于24）
Public IP addresses are already used by another outbound static NAT mapping. 指定的外网地址已经被其他出方向静态NAT表项引用。	The global address overlaps with existing NAT outbound configuration. 指定的公网地址与已配置的NAT outbound公网地址重叠。
Private IP addresses are already used by another outbound static NAT mapping. 指定的内网地址已经被其他出方向静态NAT表项引用。	The local address overlaps with existing NAT outbound configuration. 指定的私网地址与已配置的NAT outbound公网地址重叠。
An ACL is required for reverse address translation. 配置反向地址转时必须指定ACL。	An ACL is required for reversible configured as true. Reversible配置为True时，必须配置ACL规则。



# NAT/AddrGroupMembers

Message	Explanation
End address can't be smaller than start address. 指定的结束地址不能小于起始地址。	End address could not less than start address. 结束地址不能小于起始地址。
Number of addresses in the IP address range exceeded the limit. 地址组成员中的IP地址数已经达到最大值。	Difference between end address and start address is greater than 255. 地址组成员的结束地址和起始地址之差超过255。
The address range overlaps with an existing address range in the same address group. 指定的地址组成员与已有的地址组成员配置重叠。	The address overlaps with existing address at the same address group. 配置的地址与本地地址组中已配置的地址重叠。
The address range overlaps with an existing address range in another address group. 指定的地址组成员与其他地址组中的成员配置重叠。	The address overlaps with existing address at another address group. 配置的地址与其他地址组中已配置的地址重叠。

# NAT/AddrGroups

Message	Explanation
End port number can't be smaller than start port number. 指定的结束端口不能小于起始端口。	End port number can't be smaller than start port number. 指定的结束端口不能小于起始端口。
Port block size can't be greater than number of ports in the port range. 指定的端口块大小值不能大于公网IP地址端口范围。	Port block size can't be greater than port range. 端口块大小不能大于公网地址的端口范围。
The address range overlaps with an existing address range in the same address group. 指定的地址组成员与已有的地址组成员配置重叠。	The address overlaps with existing address at the same address group. 配置的地址与本地地址组中已配置的地址重叠。
The address range overlaps with an existing address range in another address group. 指定的地址组成员与其他地址组中的成员配置重叠。	The address overlaps with existing address at another address group. 配置的地址与其他地址组中已配置的地址重叠。

# NAT/ PortBlockGroupLocalMembers

Message	Explanation
End address can't be smaller than start address. 指定的结束地址不能小于起始地址。	End address could not less than start address. 结束地址不能小于起始地址。
The private address range overlaps with an existing private address range in the same address group. 指定的内网地址与已有内网地址配置重叠。	The local address overlaps with existing local address. 配置的私网地址与已配置的地址重叠。

# NAT/PortBlockGroupGlobalMembers

Message	Explanation
End address can't be smaller than start address. 指定的结束地址不能小于起始地址。	End address could not less than start address. 结束地址不能小于起始地址。
The public address range overlaps with an existing public address range in the same address group. 指定的公网地址成员与已有公网地址成员配置重叠。	The global address overlaps with existing local address. 配置的公网地址与已配置的地址重叠。
Maximum number of addresses in the public IP address range already reached. 端口块组中公网地址成员的数目已经达到最大值。	Difference between end address and start address is greater than 255. 公网地址的结束地址和起始地址之差超过255。

# NAT/HotBackup

Message	Explanation
This device doesn't support nat portblock sync switch. 当前设备不支持更改温备开关。	Not allow to change nat portblock sync switch. 不允许操作温备开关。

# Contents

NBAR .....	1
NBAR/SignatureAutoUpgradeNow.....	1
XML structure .....	1
Table description .....	1
Columns.....	1
NBAR/SignatureManualUpgrading.....	1
XML structure .....	1
Table description .....	2
Columns.....	2
NBAR/SignatureRollback.....	2
XML structure .....	2
Table description .....	2
Columns.....	3

# NBAR

## NBAR/SignatureAutoUpgradeNow

This table contains the information of APR signatures auto upgrading at once.

### XML structure

```
<NBAR>
  <SignatureAutoUpgradeNow>
    <AutoUpgradeNow></AutoUpgradeNow>
  </SignatureAutoUpgradeNow>
</NBAR>
```

### Table description

Item	Description
Feature name	NBAR
Table name	SignatureAutoUpgradeNow
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoUpgradeNow	Update APR signature database immediately	N/A	N/A	This column must be empty.

## NBAR/SignatureManualUpgrading

This table contains the information of APR signatures manual upgrade.

### XML structure

```
<NBAR>
  <SignatureManualUpgrading>
    <URL></URL>
  </SignatureManualUpgrading>
</NBAR>
```

## Table description

Item	Description
Feature name	NBAR
Table name	SignatureManualUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
URL	URL of the upgrade signature file	N/A	String: case-insensitive When the file is remote, Length: 1 to 255 characters. When the file is local, Length: 1 to 127 characters.	URL

## NBAR/SignatureRollback

This table contains the information of APR signatures rollback.

## XML structure

```
<NBAR>
  <SignatureRollback>
    <Rollback></Rollback>
  </SignatureRollback>
</NBAR>
```

## Table description

Item	Description
Feature name	NBAR
Table name	SignatureRollback
Table type	Single-instance table
Row name	None
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Rollback	Rollback APR signature database	N/A	N/A	Boolean: <ul style="list-style-type: none"><li>• true: rollback last version</li><li>• false: rollback original version</li></ul>

# Contents

- NBAR .....1
  - NBAR/SignatureAutoUpgrading .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# NBAR

## NBAR/SignatureAutoUpgrading

This table contains the information of APR signatures auto upgrade.

### XML structure

```
<NBAR>
  <SignatureAutoUpgrading>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrading>
</NBAR>
```

### Table description

Item	Description
Feature name	NBAR
Table name	SignatureAutoUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Enabled or disabled	N/A	Boolean: <ul style="list-style-type: none"><li>• true</li><li>• false</li></ul>	Default is false
StartTime	The time that the system auto upgrading	N/A	Time.	Default is 02:00:00, HH:MM:SS
Type	Type of the system auto upgrading	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Week</li><li>• 1—periodic</li></ul>	Default is 1
Day	Days	N/A	Unsigned integer: 0-6.	When Type is <b>0</b> , the value range is 0 to 6. Otherwise, the value is invalid



# Contents

NBAR .....	1
NBAR/SignatureFileInfos .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
NBAR/SignatureAutoUpgrading .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
NBAR/UpdatePercentage .....	3
XML structure .....	3
Table description .....	3
Columns .....	3

# NBAR

## NBAR/SignatureFileInfos

This table contains the signature file information.

### XML structure

```
<NBAR>
  <SignatureFileInfos>
    <Version></Version>
    <FileName></FileName>
    <PublishedTime></PublishedTime>
    <Updates></Updates>
  </SignatureFileInfos>
</NBAR>
```

### Table description

Item	Description
Feature name	NBAR
Table name	SignatureFileInfos
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Version	Version of the signature file	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—current</li><li>• 2—last</li><li>• 3—factory</li></ul>	N/A
FileName	File name of the signature file	N/A	String: case-insensitive Length: 1 to 31 characters.	N/A
PublishedTime	The time when the signature is published	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	Consider time-zone
Updates	Information of the signature file	N/A	String: case-insensitive Length: 1 to 255	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	

## NBAR/SignatureAutoUpgrading

This table contains the information of APR signatures auto-upgrade settings.

### XML structure

```

<NBAR>
  <SignatureAutoUpgrading>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrading>
</NBAR>

```

### Table description

Item	Description
Feature name	NBAR
Table name	SignatureAutoUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Enabled or disabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default is false
StartTime	The time that the system auto upgrading	N/A	Time.	Default is 02:00:00, HH:MM:SS
Type	Type of the system auto upgrading	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Week</li> <li>1—periodic</li> </ul>	Default is 1
Day	Days	N/A	Unsigned integer: 0-6.	When Type is <b>0</b> , the value range is 0 to 6. Otherwise, the value is invalid

# NBAR/UpdatePercentage

This table contains the percentage of update.

## XML structure

```
<NBAR>
  <UpdatePercentage>
    <Percentage></Percentage>
    <ErrorCode></ErrorCode>
  </UpdatePercentage>
</NBAR>
```

## Table description

Item	Description
Feature name	NBAR
Table name	UpdatePercentage
Table Type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column Type	Data Type and restrictions	Remarks
Percentage	the percentage of update.	N/A	Unsigned integer	When the value range is 0 to 100,it means in upgrading, Otherwise, means error
ErrorCode	the errorcode of update.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Success</li><li>• 1—License check error</li><li>• 2—SigFile check error</li><li>• 3—Server connect error</li></ul>	N/A

# Contents

NBAR .....	1
NBAR/SignatureManualUpgrading.....	1
NBAR/SignatureAutoUpgradeNow.....	1
NBAR/SignatureRollback.....	2
NBAR/SignatureAutoUpgrading .....	3
NBAR/ UserApp .....	3
NBAR/ Usersig .....	3
NBAR/ MatchContents .....	3

# NBAR

## NBAR/SignatureManualUpgrading

Message	Explanation
Operation failed because no valid license could be found. 操作失败：没有找到有效的license。	The manual updating of the signature library fails because there is no valid license. 手动升级特征库时，没有license，升级失败。
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being updated. You can perform another update when this update is completed. 还有特征库正在升级，需等升级处理完才可以进行下一次升级。
Cannot do this operation because of memory alert. 由于内存门限不能执行此操作。	The device is in the memory threshold state and cannot be upgraded. 设备此时处于内存门限状态，不能进行升级
Operation failed because not enough storage space was available. 操作失败：设备空间不足。	Upgrade fails due to insufficient storage space for devices. 由于设备的存储空间不足，导致升级失败。
Operation failed because not enough memory was available. 操作失败：设备内存不足。	The upgrade failed due to insufficient memory on the devices. 由于设备的内存不足，导致升级失败。
Operation failed because signature file was invalid. 操作失败：无效的特征库文件。	The upgrade failed due to invalid signature file. 由于特征库文件无效，导致升级失败。

## NBAR/SignatureAutoUpgradeNow

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being updated. You can perform another update when this update is completed. 还有特征库正在升级，需等升级处理完才可以进行下一次升级。
Operation failed because no valid license could be found. 操作失败：没有找到有效的license。	When manual updating of the signature library fails because there is no license. 手动升级特征库时，没有license，升级失败。

<p>The signature version is latest, No update is needed.</p> <p>特征库已是最新版本，不需要进行升级。</p>	<p>Automatic upgrade is to upgrade the signature library to the latest version released on the official website. If it is the latest version, no upgrade is needed.</p> <p>自动升级是将特征库升级到官网发布的最新版本，如果已经是最新版本就不需要再升级了。</p>
<p>Cannot do this operation because of memory alert.</p> <p>由于内存门限不能执行此操作。</p>	<p>The device is in the memory threshold state and cannot be upgraded.</p> <p>设备此时处于内存门限状态，不能进行升级</p>
<p>Operation failed because not enough storage space was available.</p> <p>操作失败：设备空间不足。</p>	<p>Upgrade fails due to insufficient storage space for devices.</p> <p>由于设备的存储空间不足，导致升级失败。</p>
<p>Operation failed because not enough memory was available.</p> <p>操作失败：设备内存不足。</p>	<p>The upgrade failed due to insufficient memory on the devices.</p> <p>由于设备的内存不足，导致升级失败。</p>
<p>Operation failed because a connection to the signature library server could not be established.</p> <p>操作失败：连接特征库服务器失败。</p>	<p>The connection to <a href="http://www.h3c.com/">http://www.h3c.com/</a> failed. For a successful upgrade, the device must connect to <a href="http://www.h3c.com/">http://www.h3c.com/</a> to get the signature library files.</p> <p>需要连接<a href="http://www.h3c.com/">http://www.h3c.com/</a>网站获取特征库文件才能升级成功，连接<a href="http://www.h3c.com/">http://www.h3c.com/</a>失败。</p>

## NBAR/SignatureRollback

Message	Explanation
<p>Operation failed because no valid license can be found..</p> <p>操作失败：没有找到有效的license。</p>	<p>When manual updating of the signature library fails because there is no license.</p> <p>手动升级特征库时，没有license，升级失败。</p>
<p>The signature file is updating. Please try later.</p> <p>特征库正在升级，请稍后再试。</p>	<p>The signature library is being updated. You can perform another update when this update is completed.</p> <p>还有特征库正在升级，需等升级处理完才可以进行下一次升级。</p>
<p>Cannot do this operation because of memory alert.</p> <p>由于内存门限不能执行此操作。</p>	<p>The device is in the memory threshold state and cannot be upgraded.</p> <p>设备此时处于内存门限状态，不能进行升级</p>
<p>Operation failed because not enough storage space was available.</p> <p>操作失败：设备空间不足。</p>	<p>Upgrade fails due to insufficient storage space for devices.</p> <p>由于设备的存储空间不足，导致升级失败。</p>

Operation failed because not enough memory was available. 操作失败：设备内存不足。	The upgrade failed due to insufficient memory on the devices. 由于设备的内存不足，导致升级失败。
Operation failed because signature file was invalid. 操作失败：无效的特征库文件。	The upgrade failed due to invalid signature file. 由于特征库文件无效，导致升级失败。

## NBAR/SignatureAutoUpgrading

Message	Explanation
The signature file is updating. Please try later. 特征库正在升级，请稍后再试。	The signature library is being updated. You can perform another update when this update is completed. 还有特征库正在升级，需等升级处理完才可以进行下一次升级。

## NBAR/ UserApp

Message	Explanation
Maximum number of user-defined applications already reached. 自定义应用的个数已达上限。	Adding user-defined applications fails because the maximum number of applications has been reached. 由于应用个数达到上限，新增自定义应用失败。

## NBAR/ Usersig

Message	Explanation
Maximum number of NBAR signatures already reached. 自定义特征的个数已达上限。	Adding NBAR signature fails because the maximum number of NBAR signatures has been reached. 由于自定义特征个数达到上限，新增自定义特征失败。

## NBAR/ MatchContents

Message	Explanation
Maximum number of NBAR signature contents already reached. 自定义检查项的个数已达上限。	Adding NBAR signature applications fails because the maximum number of NBAR signature applications has been reached. 由于自定义检查项个数达到上限，新增检查项失败。



# Contents

ND .....	1
ND/NDClearByType .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ND/NDClearByIfIndex .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
ND/NDClearTable .....	2
XML structure .....	2
Table description .....	2
Columns .....	3

# ND

## ND/NDClearByType

This table is used to clear ND entries according to ND entry type.

### XML structure

```
<ND>
  <NDClearByType>
    <Type></Type>
  </NDClearByType >
</ND>
```

### Table description

Item	Description
Feature name	ND
Table name	NDClearByType
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Type	ND entry type	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Static.</li><li>• <b>1</b>—Dynamic.</li><li>• <b>2</b>—All.</li></ul>

## ND/NDClearByIfIndex

This table is used to clear dynamic ND entries according to interface index.

### XML structure

```
<ND>
  <NDClearByIfIndex>
    <ClearByIfIndex>
      <IfIndex></IfIndex>
    </ClearByIfIndex>
  </NDClearByIfIndex>
</ND>
```

```

        </ClearByIfIndex>
    </NDClearByIfIndex>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDClearByIfIndex
Table type	Multi-instance table
Row name	ClearByIfIndex
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface Index	Index	Unsigned integer.

## ND/NDClearTable

This table is used to clear dynamic ND entries.

## XML structure

```

<ND>
  <NDClearTable>
    <ClearEntry>
      <IfIndex></IfIndex>
      <Ipv6Address></Ipv6Address>
    </ClearEntry>
  </NDClearTable>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDClearTable
Table type	Multi-instance table
Row name	ClearEntry
Restrictions	Only Layer 3 interface is supported.

# Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface Index	Index	Unsigned integer.
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.

# Contents

ND .....	1
ND/NDTable .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ND/NDLearnLimit .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
ND/NDInterface .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
ND/NDConfig .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
ND/NDRA .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
ND/NDRAPrefix .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
ND/NDProxy .....	9
XML structure .....	10
Table description .....	10
Columns .....	10
ND/NDStaleAgingTime .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
ND/NDVsiSnooping .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
ND/NDVsiDetection .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
ND/NDVsiDetectionTrust .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
ND/NDSrcmacAtkDetec .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
ND/NDIfAtkSuppression .....	16
XML structure .....	16
Table description .....	16
Columns .....	16

# ND

## ND/NDTable

This table contains information about neighbor entries.

### XML structure

```
<ND>
  <NDTable>
    <NDEntry>
      <IfIndex></IfIndex>
      <Ipv6Address></Ipv6Address>
      <MacAddress></MacAddress>
      <VLANID></VLANID>
      <PortIndex></PortIndex>
      <VrfIndex></VrfIndex>
    </NDEntry>
  </NDTable>
</ND>
```

### Table description

Item	Description
Feature name	ND
Table name	NDTable
Table type	Multi-instance table
Row name	NDEntry
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported. If the specified interface is a VLAN interface, the VLAN ID corresponding to the interface must be consistent with the value of the VLANID column. Some versions support

Column name	Column description	Column type	Data type and restrictions	Remarks
				interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Required.
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	It must be configured together with the PortIndex column.
PortIndex	Port index	N/A	Unsigned integer.	It must be configured together with the VLANID column. The port specified by PortIndex must belong to the VLAN specified by VLANID.
VrfIndex	Index of the VRF	N/A	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. Required. 0 means public network.

## ND/NDLearnLimit

This table contains the information of maximum number of dynamic neighbor entries that an interface can learn.

## XML structure

```

<ND>
  <NDLearnLimit>
    <LearnLimit>
      <IfIndex></IfIndex>
      <LearnMaxNum></LearnMaxNum>
    </LearnLimit>
  </NDLearnLimit>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDLearnLimit
Table type	Multi-instance table
Row name	LearnLimit
Restrictions	This table supports interface types: Layer 2/Layer 3 interface Layer 2/Layer 3 aggregate interface S-channel interface/S-channel aggregate interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
LearnMaxNum	The maximum number of dynamic neighbor entries that an interface can learn	N/A	Unsigned integer. Value range: 1 to LearnMaxNumLimit.	The value of LearnMaxNumLimit depends on the device model.  The default setting varies with device models.

## ND/NDInterface

This table contains neighbor interface information.

## XML structure

```
<ND>
  <NDInterface>
    <Interface>
      <IfIndex></IfIndex>
      <DADAttempts></DADAttempts>
      <ModeUNI></ModeUNI>
    </Interface>
```



```
</NDInterface>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDInterface
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
DADAttempts	The number of attempts to send an NS message for DAD	N/A	Unsigned integer. Value range: 0 to 600. Default: 1.	0 means DAD is disabled. Only Layer 3 interfaces are supported.
ModeUNI	Configure a port as a customer-side port true: Customer-side port false: Network-side port	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	Whether the ModeUNI is supported depends on the device model. Only VLAN interfaces are supported.

## ND/NDConfig

This table contains neighbor configuration information.

## XML structure

```
<ND>
  <NDConfig>
    <StaleAging></StaleAging>
    <LinkLocalMinimize></LinkLocalMinimize>
    <HopLimit></HopLimit>
    <StaleAgingUnit></StaleAgingUnit>
  </NDConfig>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDConfig
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StaleAging	The aging time for ND entries in stale state	N/A	Unsigned integer. Value range: 1 to 1440 minutes. or 60 to 86400 seconds Default: 240 minutes.	The aging time must config together with aging time value
LinkLocalMinimize	Whether minimize link-local ND entries or not	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b> (default)</li></ul>	N/A
HopLimit	The Hop Limit field in the IPv6 header	N/A	Unsigned integer. Value range: 1 to 255. Default: 64.	If the device advertises the hop limit in RA messages, all RA message receivers receiving the RA message fill the value into the Hop Limit field of IPv6 packets to be sent.
StaleAgingUnit	Aging time value type for ND entries in stale state	N/A	Enumeration: <ul style="list-style-type: none"><li><b>0</b>—Aging in minutes.</li><li><b>1</b>—Aging in seconds</li></ul>	The aging time value type must config together with aging time.

# ND/NDRA

This table contains information about neighbor RA.

## XML structure

```
<ND>
  <NDRA>
    <RA>
      <IfIndex></IfIndex>
      <RAHalt></RAHalt>
      <MaxInterval></MaxInterval>
      <MinInterval></MinInterval>
      <NoAdvLinkMTU></NoAdvLinkMTU>
      <HopLimitUnspecified></HopLimitUnspecified>
      <ManagedAddressFlag></ManagedAddressFlag>
      <OtherFlag></OtherFlag>
      <RouterLifetime></RouterLifetime>
      <NSRetransTimer></NSRetransTimer>
      <RouterPreference></RouterPreference>
      <NudReachableTime></NudReachableTime>
    </RA>
  </NDRA>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDRA
Table type	Multi-instance table
Row name	RA
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For

Column name	Column description	Column type	Data type and restrictions	Remarks
				information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
RAHalt	Whether suppress an interface from advertising RA message or not	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b> (default)</li> <li>• <b>false</b>—Disabled.</li> </ul>	N/A
MaxInterval	The maximum interval for advertising RA messages	N/A	Unsigned integer. Value range: 4 to 1800 seconds. Default: 600 seconds.	It must be configured together with the MinInterval column.
MinInterval	The minimum interval for advertising RA messages	N/A	Unsigned integer. Value range: 3 to three-fourths of the MaxInterval. Default: 200 seconds.	It must be configured together with the MaxInterval column.
NoAdvLinkMTU	Whether turn off the MTU option in RA messages or not	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	N/A
HopLimitUnspecified	Whether specify unlimited hops in RA messages or not	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	N/A
ManagedAddressFlag	Whether set the managed address flag to 1 or not	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	N/A
OtherFlag	Whether set the other flag to 1 or not	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default)</li> </ul>	N/A
RouterLifetime	The router lifetime in RA messages	N/A	Unsigned integer. Value range: 0 to 9000 seconds. Default: 1800 seconds.	0 means the router does not serve as the default router
NSRetransTimer	The interval for retransmitting an NS message	N/A	Unsigned integer. Value range: 1000 to 4294967295 milliseconds. Default: 1000 milliseconds.	N/A
RouterPreference	The router preference in RA messages	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—High.</li> <li>• <b>2</b>—Low.</li> <li>• <b>3</b>—Medium (default).</li> </ul>	N/A
NudReachableTime	The neighbor reachable time on	N/A	Unsigned integer. Value range: 1 to	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	an interface		3600000 milliseconds. Default: 30000 milliseconds.	

## ND/NDRAPrefix

This table contains information about neighbor RA prefix.

### XML structure

```

<ND>
  <NDRAPrefix>
    <RAPrefix>
      <IfIndex></IfIndex>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
      <ValidLifetime></ValidLifetime>
      <PreferredLifetime></PreferredLifetime>
      <NoAutoConfig></NoAutoConfig>
      <OffLink></OffLink>
      <NoAdvertise></NoAdvertise>
    </RAPrefix>
  </NDRAPrefix>
</ND>

```

### Table description

Item	Description
Feature name	ND
Table name	NDRAPrefix
Table type	Multi-instance table
Row name	RAPrefix
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces

Column name	Column description	Column type	Data type and restrictions	Remarks
				are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Ipv6Prefix	Ipv6Prefix	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	It must be configured as valid IPv6 prefix.
Ipv6PrefixLength	Length of the IPv6 prefix	Index	Unsigned integer. Value range: 1 to 128.	N/A
ValidLifetime	The valid lifetime of a prefix	N/A	Unsigned integer. Value range: 0 to 4294967295 seconds.	When NoAutoConfig or Offlink is configured, it must be configured. When it is not configured, it is the default value.
PreferredLifetime	The preferred lifetime of a prefix used for stateless autoconfiguration	N/A	Unsigned integer. Value range: 0 to 4294967295 seconds.	When NoAutoConfig or Offlink is configured, it must be configured. When it is not configured, it is the default value..
NoAutoConfig	Whether the function of not to be used for stateless autoconfiguration is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	When NoAdvertise is configured, it can't be configured.
OffLink	Whether the function of the address with the prefix is not directly reachable on the link is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default)</li> </ul>	When NoAdvertise is configured, it can't be configured.
NoAdvertise	Whether not advertising the prefix specified in the command is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	When it is configured, the lifetime can't be configured, and the lifetime is the default value.

## ND/NDProxy

This table contains information about neighbor proxy.

## XML structure

```
<ND>
  <NDProxy>
    <Proxy>
      <IfIndex></IfIndex>
      <ProxyEnable></ProxyEnable>
      <LocalProxyEnable></LocalProxyEnable>
    </Proxy>
  </NDProxy>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDProxy
Table type	Multi-instance table
Row name	Proxy
Restrictions	This table supports interface types: VLAN interface Layer 3 Ethernet interface/ Layer 3 Ethernet subinterface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
ProxyEnable	Whether the function of common ND proxy is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false (default)</li></ul>	N/A
LocalProxyEnable	Whether the function of local ND proxy is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false (default)</li></ul>	N/A

# ND/NDStaleAgingTime

This table contains aging time configuration for ND entries in stale state.

## XML structure

```
<ND>
  <NDStaleAgingTime>
    <StaleAgingTime>
      <IfIndex></IfIndex>
      <AgingTime></AgingTime>
      <StaleAgingUnit></StaleAgingUnit>
    </StaleAgingTime>
  </NDStaleAgingTime>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDStaleAgingTime
Table type	Multi-instance table
Row name	StaleAgingTime
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 • interfaces are • supported.
AgingTime	Aging time for ND entries in	N/A	Unsigned integer. Value range: 1 to 1440 minutes or	The aging time must be configured



	Column description	Column type	Data type and restrictions	Remarks
	stale state		60 to 86400 seconds	together with aging time value type.
StaleAgingUnit	Aging time value type for ND entries in stale state	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Aging in minutes.</li> <li>1—Aging in seconds.</li> </ul>	The aging time value type must be configured together with aging time.

## ND/NDVsiSnooping

This table contains ND snooping configuration information for VSIs.

### XML structure

```

<ND>
  <NDVsiSnooping>
    <VsiSnooping>
      <VsiName></VsiName>
      <SnoopingGlobalEnable></SnoopingGlobalEnable>
      <SnoopingLinklocalEnable></SnoopingLinklocalEnable>
    </VsiSnooping>
  </NDVsiSnooping>
</ND>

```

### Table description

Item	Description
Feature name	ND
Table name	NDVsiSnooping
Table type	Multi-instance table
Row name	VsiSnooping
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
SnoopingGlobalEnable	Whether ND global snooping is enabled for the VSI	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SnoopingLinkLocalEnable	Whether ND link-local snooping is enabled for the VSI	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## ND/NDVsiDetection

This table contains ND detection configuration information for VSIs.

## XML structure

```

<ND>
  <NDVsiDetection>
    <VsiDetection>
      <VsiName></VsiName>
      <DetectionEnable></DetectionEnable>
    </VsiDetection>
  </NDVsiDetection>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDVsiDetection
Table type	Multi-instance table
Row name	VsiDetection
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 31 characters.	
DetectionEnable	Whether ND detection is enabled for the VSI	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## ND/NDVsiDetectionTrust

This table contains ND trusted AC configuration information for Ethernet service instances.

### XML structure

```

<ND>
  <NDVsiDetectionTrust>
    <SRV>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <TrustEnable></TrustEnable>
    </SRV>
  </NDVsiDetectionTrust>
</ND>

```

### Table description

Item	Description
Feature name	ND
Table name	NDVsiDetectionTrust
Table type	Multi-instance table
Row name	SRV
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration

Column name	Column description	Column type	Data type and restrictions	Remarks
				Reference.
SrvID	Ethernet service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
TrustEnable	Whether the Ethernet service instance is configured as an ND trusted AC	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	N/A

## ND/NDSrcmacAtkDetec

This table contains information about ND source MAC attack detection.

### XML structure

```

<ND>
  <NDSrcmacAtkDetec>
    <SrcmacMode></SrcmacMode>
    <SrcmacThreshold></SrcmacThreshold>
  </NDSrcmacAtkDetec>
</ND>

```

### Table description

Item	Description
Feature name	ND
Table name	NDSrcmacAtkDetec
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcmacMode	Enabling status of common ND proxy	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>0</b>---None.</li> <li><b>1</b>---Filter.</li> <li><b>2</b>---Monitor.</li> </ul>	N/A
SrcmacThreshold	Threshold for ND source MAC attack detection	N/A	Unsigned integer. Value range: 1 to 5000. Default: 30.	N/A

# ND/NDIfAtkSuppression

This table contains information about ND interface suppression.

## XML structure

```
<ND>
  <NDIfAtkSuppression>
    <Enable></Enable>
    <Threshold></Threshold>
  </NDIfAtkSuppression>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDIfAtkSuppression
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of ND interface attack suppression	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false (default)</li></ul>	N/A
Threshold	Threshold for ND interface attack suppression.	N/A	Unsigned integer. Value range: 1 to 5000. Default: 1000.	N/A

# Contents

ND .....	1
ND/NDTable .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ND/NDLearnLimit .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
ND/NDInterface .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
ND/NDConfig .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
ND/NDRA .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
ND/NDRAPrefix .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
ND/NDProxy .....	8
XML structure .....	9
Table description .....	9
Columns .....	9
ND/NDSpecification .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
ND/NDStaleAgineTime .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
ND/NDVsiSnooping .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
ND/NDVsiDetection .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
ND/NDVsiDetectionTrust .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
ND/NDSrcmacAtkDetec .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
ND/NDIfAtkSuppression .....	15
XML structure .....	15
Table description .....	15
Columns .....	15



# ND

## ND/NDTable

This table contains information about neighbor entries.

### XML structure

```
<ND>
  <NDTable>
    <NDEntry>
      <IfIndex></IfIndex>
      <Ipv6Address></Ipv6Address>
      <MacAddress></MacAddress>
      <VLANID></VLANID>
      <PortIndex></PortIndex>
      <VrfIndex></VrfIndex>
      <Type></Type>
      <State></State>
      <AgeTime></AgeTime>
    </NDEntry>
  </NDTable>
</ND>
```

### Table description

Item	Description
Feature name	ND
Table name	NDTable
Table type	Multi-instance table
Row name	NDEntry
Restrictions	This table supports only Layer 3 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
PortIndex	Port index	N/A	Unsigned integer.	N/A
VrfIndex	Index of the VRF	N/A	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. 0 means public network
Type	Neighbor information type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Invalid static.</li> <li>2—Static.</li> <li>3—Dynamic.</li> <li>4—OpenFlow.</li> <li>5—Rule.</li> </ul>	N/A
State	State of a neighbor	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—INCMP.</li> <li>2—REACH.</li> <li>3—STALE.</li> <li>4—DELAY.</li> <li>5—PROBE.</li> </ul>	N/A
AgeTime	The elapsed time	N/A	Unsigned integer.	N/A

## ND/NDLearnLimit

This table contains the information of maximum number of dynamic neighbor entries that an interface can learn.

## XML structure

```

<ND>
  <NDLearnLimit>
    <LearnLimit>
      <IfIndex></IfIndex>
      <LearnMaxNum></LearnMaxNum>
    </LearnLimit>
  </NDLearnLimit>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDLearnLimit
Table type	Multi-instance table
Row name	LearnLimit
Restrictions	This table supports interface types: Layer 2/Layer 3 interface Layer 2/Layer 3 aggregate interface S-channel interface/S-channel aggregate interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface Index	Index	Unsigned integer.	N/A
LearnMaxNum	The maximum number of dynamic neighbor entries that an interface can learn	N/A	Unsigned integer. Value range: 1 to LearnMaxNumLimit.	The value of LearnMaxNumLimit depends on the device model.

## ND/NDInterface

This table contains neighbor interface information.

## XML structure

```
<ND>
  <NDInterface>
    <Interface>
      <IfIndex></IfIndex>
      <DADAttempts></DADAttempts>
      <ModeUNI></ModeUNI>
    </Interface>
  </NDInterface>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDInterface

Item	Description
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
DADAttempts	The number of attempts to send an NS message for DAD	N/A	Unsigned integer. Value range: 0 to 600.	0 means DAD is disabled. Only Layer 3 interfaces are supported.
ModeUNI	Configure a port as a customer-side port true: Customer-side port false:Network-side port	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	Only VLAN interfaces are supported

## ND/NDConfig

This table contains neighbor configuration information.

## XML structure

```

<ND>
  <NDConfig>
    <StaleAging></StaleAging>
    <LinkLocalMinimize></LinkLocalMinimize>
    <HopLimit></HopLimit>
    <StaleAgingUnit></StaleAgingUnit>
  </NDConfig>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDConfig
Table type	Single-instance table

Item	Description
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StaleAging	The aging time for ND entries in stale state	N/A	Unsigned integer. Value range: 1 to 1440 minutes. or 60 to 86400 seconds	N/A
LinkLocalMinimize	Whether minimize link-local ND entries or not	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
HopLimit	The Hop Limit field in the IPv6 header	N/A	Unsigned integer. Value range: 1 to 255.	If the device advertises the hop limit in RA messages, all RA message receivers receiving the RA message fill the value into the Hop Limit field of IPv6 packets to be sent.
StaleAgingUnit	Aging time value type for ND entries in stale state	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Aging in minutes.</li> <li><b>1</b>—Aging in seconds..</li> </ul>	N/A

## ND/NDRA

This table contains information about neighbor RA.

## XML structure

```

<ND>
  <NDRA>
    <RA>
      <IfIndex></IfIndex>
      <RAHalt></RAHalt>
      <MaxInterval></MaxInterval>
      <MinInterval></MinInterval>
      <NoAdvLinkMTU></NoAdvLinkMTU>
      <HopLimitUnspecified></HopLimitUnspecified>
      <ManagedAddressFlag></ManagedAddressFlag>
      <OtherFlag></OtherFlag>
      <RouterLifetime></RouterLifetime>
      <NSRetransTimer></NSRetransTimer>
    </RA>
  </NDRA>
</ND>

```

```

    <RouterPreference></RouterPreference>
    <NudReachableTime></NudReachableTime>
  </RA>
</NDRA>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDRA
Table type	Multi-instance table
Row name	RA
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
RAHalt	Whether suppress an interface from advertising RA message or not	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
MaxInterval	The maximum interval for advertising RA messages	N/A	Unsigned integer. Value range: 4 to 1800 seconds.	N/A
MinInterval	The minimum interval for advertising RA messages	N/A	Unsigned integer. Value range: 3 to three-fourths of the MaxInterval.	N/A
NoAdvLinkMTU	Whether turn off the MTU option in RA messages or not	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
HopLimitUnspecified	Whether specify unlimited hops in RA messages or not	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
ManagedAddressFlag	Whether set the managed address flag to 1 or not	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>False</b></li> </ul>	N/A
OtherFlag	Whether set the other flag to 1 or not	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b> (default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RouterLifetime	The router lifetime in RA messages	N/A	Unsigned integer. Value range: 0 to 9000 seconds.	0 means the router does not serve as the default router
NSRetransTimer	The interval for retransmitting an NS message	N/A	Unsigned integer. Value range: 1000 to 4294967295 milliseconds.	N/A
RouterPreference	The router preference in RA messages	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—High.</li> <li>2—Low.</li> <li>3—Medium.</li> </ul>	N/A
NudReachableTime	The neighbor reachable time on an interface	N/A	Unsigned integer. Value range: 1 to 3600000 milliseconds.	N/A

## ND/NDRAPrefix

This table contains information about neighbor RA prefix.

### XML structure

```

<ND>
  <NDRAPrefix>
    <RAPrefix>
      <IfIndex></IfIndex>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
      <ValidLifetime></ValidLifetime>
      <PreferredLifetime></PreferredLifetime>
      <NoAutoConfig></NoAutoConfig>
      <OffLink></OffLink>
      <NoAdvertise></NoAdvertise>
    </RAPrefix>
  </NDRAPrefix>
</ND>

```

### Table description

Item	Description
Feature name	ND
Table name	NDRAPrefix
Table type	Multi-instance table

Item	Description
Row name	RAPrefix
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
Ipv6Prefix	Ipv6Prefix	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	N/A
Ipv6PrefixLength	Length of the IPv6 prefix	Index	Unsigned integer. Value range: 1 to 128.	N/A
ValidLifetime	The valid lifetime of a prefix	N/A	Unsigned integer. Value range: 0 to 4294967295 seconds.	N/A
PreferredLifetime	The preferred lifetime of a prefix used for stateless autoconfiguration	N/A	Unsigned integer. Value range: 0 to 4294967295 seconds.	N/A
NoAutoConfig	Whether the function of not to be used for stateless autoconfiguration is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
OffLink	Whether the function of the address with the prefix is not directly reachable on the link is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
NoAdvertise	Whether not advertising the prefix specified in the command is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## ND/NDProxy

This table contains information about neighbor proxy.

## XML structure

```
<ND>
  <NDProxy>
    <Proxy>
      <IfIndex></IfIndex>
      <ProxyEnable></ProxyEnable>
      <LocalProxyEnable></LocalProxyEnable>
    </Proxy>
  </NDProxy>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDProxy
Table type	Multi-instance table
Row name	Proxy
Restrictions	This table supports interface types: VLAN interface Layer 3 Ethernet interface/ Layer 3 Ethernet subinterface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
ProxyEnable	Whether the function of common ND proxy is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A
LocalProxyEnable	Whether the function of local ND proxy is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false.</li></ul>	N/A

## ND/NDSpecification

This table contains ND specification information.

## XML structure

```
<ND>
  <NDSpecification>
    <LearnMaxNumLimit></LearnMaxNumLimit>
```



```

    <SupportModeUNI></SupportModeUNI>
  </NDSpecification>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
LearnMaxNumLimit	Set the maximum number of dynamic neighbor entries that the interface can learn	N/A	Unsigned integer.
SupportModeUNI	Whether support for configuring a port as a customer-side port or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>

## ND/NDStaleAgingTime

This table contains aging time configuration information for ND entries in stale state.

## XML structure

```

<ND>
  <NDStaleAgingTime>
    <StaleAgingTime>
      <IfIndex></IfIndex>
      <AgingTime></AgingTime>
      <StaleAgingUnit></StaleAgingUnit>
    </StaleAgingTime>
  </NDStaleAgingTime>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDStaleAgingTime
Table type	Multi-instance table
Row name	StaleAgingTime
Restrictions	This table supports only Layer 3 interfaces.

## Columns

	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
AgingTime	Aging time for ND entries in stale state	N/A	Unsigned integer. Value range: 1 to 1440 minutes or 60 to 86400 seconds	N/A
StaleAgingUnit	Aging time value type for ND entries in stale state	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Aging in minutes.</li><li>• <b>1</b>—Aging in seconds.</li></ul>	N/A

## ND/NDVsiSnooping

This table contains ND snooping configuration information for VSIs.

## XML structure

```
<ND>
  <NDVsiSnooping>
    <VsiSnooping>
      <VsiName></VsiName>
      <SnoopingGlobalEnable></SnoopingGlobalEnable>
      <SnoopingLinklocalEnable></SnoopingLinklocalEnable>
```

```

    </VsiSnooping>
  </NDVsiSnooping>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDVsiSnooping
Table type	Multi-instance table
Row name	VsiSnooping
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
SnoopingGlobalEnable	Whether ND global snooping is enabled for the VSI	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
SnoopingLinkLocalEnable	Whether ND link-local snooping is enabled for the VSI	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## ND/NDVsiDetection

This table contains ND detection configuration information for VSIs.

## XML structure

```

<ND>
  <NDVsiDetection>
    <VsiDetection>
      <VsiName></VsiName>
      <DetectionEnable></DetectionEnable>
    </VsiDetection>
  </NDVsiDetection>
</ND>

```

## Table description

Item	Description
Feature name	ND
Table name	NDVsiDetection
Table type	Multi-instance table
Row name	VsiDetection
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
DetectionEnable	Whether ND detection is enabled for the VSI	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

## ND/NDVsiDetectionTrust

This table contains ND trusted AC configuration information for Ethernet service instances.

## XML structure

```
<ND>
  <NDVsiDetectionTrust>
    <SRV>
      <IfIndex></IfIndex>
      <SrvID></SrvID>
      <TrustEnable></TrustEnable>
    </SRV>
  </NDVsiDetectionTrust>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDVsiDetectionTrust
Table type	Multi-instance table
Row name	SRV
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Ethernet service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	N/A
TrustEnable	Whether the Ethernet service instance is configured as an ND trusted AC	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>	N/A

## ND/NDSrcmacAtkDetec

This table contains information about ND source MAC attack detection.

## XML structure

```
<ND>
  <NDSrcmacAtkDetec>
    <SrcmacMode></SrcmacMode>
    <SrcmacThreshold></SrcmacThreshold>
  </NDSrcmacAtkDetec>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDSrcmacAtkDetec
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcmacMode	Enabling status of common ND proxy	N/A	Unsigned integer. <ul style="list-style-type: none"><li>• 0---None.</li><li>• 1---Filter.</li><li>• 2---Monitor.</li></ul>	N/A
SrcmacThreshold	Threshold for ND source MAC attack detection	N/A	Unsigned integer. Value range: 1 to 5000.	N/A

## ND/NDIfAtkSuppression

This table contains information about ND interface suppression.

## XML structure

```
<ND>
  <NDIfAtkSuppression>
    <Enable></Enable>
    <Threshold></Threshold>
  </NDIfAtkSuppression>
</ND>
```

## Table description

Item	Description
Feature name	ND
Table name	NDIfAtkSuppression
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of ND interface attack suppression	N/A	Boolean: true false	N/A
Threshold	Threshold for ND interface attack suppression.	N/A	Unsigned integer. Value range: 1 to 5000.	N/A



# Contents

ND .....	1
ND/NDTable .....	1
ND/NDLearnLimit .....	2
ND/NDConfig .....	2
ND/NDRA .....	2
ND/NDRAPrefix .....	3
ND/NDClearTable .....	3
ND/NDStaleAgingTime .....	3



# ND

## ND/NDTable

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	Invalid configuration, please modify configuration under guidance. 无效配置，请按照配置说明修改
Invalid IPv6 address. 非法的IPv6地址。	Invalid IPv6 address configuration 无效的IPv6地址配置
The S-channel subinterface is not supported. 不支持S通道子接口。	The S-channel subinterface is not supported. 不支持S通道子接口。
The VLAN doesn't exist. 该VLAN不存在。	The VLAN does not exist when set the configuration. 配置时VLAN不存在
The VLAN interface doesn't exist. 该VLAN接口不存在。	The VLAN interface does not exist when set the configuration. 配置时VLAN接口不存在
The VRF doesn't exist. 该VRF实例不存在。	The VRF does not exist when set the configuration. 配置时对应VRF不存在
The port doesn't belong to the VLAN, or the VLAN is not permitted on the port. 该端口或Trunk类型的口不属于指定VLAN。	The port doesn't belong to the VLAN, or the VLAN is not permitted on the port. 该端口或Trunk类型的口不属于指定VLAN。
The interface is not associated with the specified VRF. 该接口未绑定在指定VRF实例上。	The interface is not associated with the specified VRF. 该接口未绑定在指定VRF实例上。
The interface is associated with a VRF. 该接口已经绑定在一个VRF实例上。	The interface is associated with a VRF. 该接口已经绑定在一个VRF实例上。
Maximum number of ND entries already reached. 邻居表项个数超过上限。	Maximum number of ND entries already reached ,please check configuration or specifications 邻居表项个数超过上限，请检查配置或者设备规格
Maximum number of static ND entries already reached. 配置静态邻居表项个数超过上限。	Maximum number of static ND entries already reached ,please check configuration or specifications 配置静态邻居表项个数超过上限，请检查配置或者设备规格
The static ND entry already exists. 该静态邻居表项已经存在。	The static ND configuration has existed when creating a new configuration. 该静态邻居表项已经存在。

The VLAN interface number doesn't match the VLAN ID. 该VLAN接口与VLAN不匹配。	The VLAN interface number doesn't match the VLAN ID. 该VLAN接口与VLAN不匹配。
--	--

## ND/NDLearnLimit

Message	Explanation
The value is out of range. 配置的值超过上限。	The value is out of range ,please check configuration or specifications 配置的值超过上限,请检查配置

## ND/NDConfig

Message	Explanation
The value is out of range. 参数值超出范围。	Invalid configuration. Please modify configuration under guidance. 无效配置，请按照配置说明修改
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	Invalid configuration. Please modify configuration under guidance. 无效配置，请按照配置说明修改

## ND/NDRA

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please modify configuration under guidance. 无效配置，请按照配置说明修改
The maximum interval for advertising RA messages can't be longer than the router lifetime. RA报文最大发布时间间隔不能大于路由器生存时间。	The maximum interval for advertising RA messages can't be longer than the router lifetime, please modify configuration under guidance. RA报文最大发布时间间隔不能大于路由器生存时间，请按照配置说明修改
The router lifetime can't be less than the maximum interval for advertising RA messages. 路由器生存时间不能小于RA报文最大发布时间间隔。	The router lifetime can't be less than the maximum interval for advertising RA messages,please modify configuration under guidance. 路由器生存时间不能小于RA报文最大发布时间间隔，请按照配置说明修改
The minimum interval for advertising RA messages must be in the range of three seconds to three quarters of the maximum interval.	The minimum interval for advertising RA messages must be in the range of three seconds to three quarters of the maximum interval, please modify configuration under

RA报文最小发布时间间隔取值范围是3至RA报文最大发布时间间隔取值的3/4。	guidance. RA报文最小发布时间间隔取值范围是3至RA报文最大发布时间间隔取值的3/4, 请按照配置说明修改
--	---

## ND/NDRAPrefix

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please modify configuration under guidance. 无效配置, 请按照配置说明修改
Invalid IPv6 prefix. 非法的IPv6前缀。	Invalid IPv6 prefix. 非法的IPv6前缀。
Maximum number of IPv6 prefixes for one interface (10) already reached. 一个接口下IPv6前缀的数量不应该超过10个。	Maximum number of IPv6 prefixes for one interface (10) already reached, please check configuration or specifications. 一个接口下IPv6前缀的数量不应该超过10个, 请检查配置或者设备规格
The prefix is already used by another interface. 该IPv6前缀已经配置在另一个接口下。	The prefix is already used by another interface. Please check configuration. 该IPv6前缀已经配置在另一个接口下。
The preferred lifetime can't be longer than the valid lifetime. 首选生命期要小于等于有效生命期。	The preferred lifetime can't be longer than the valid lifetime, please modify configuration under guidance. 首选生命期要小于等于有效生命期, 请按照配置说明修改

## ND/NDClearTable

Message	Explanation
Invalid IPv6 address. 非法的IPv6地址。	Invalid IPv6 address. 非法的IPv6地址。

## ND/NDStaleAgingTime

Message	Explanation
The value is out of range. 参数值超出范围。	Invalid configuration. Please modify configuration under guidance. 无效配置, 请按照配置说明修改
The configuration doesn't meet the	Invalid configuration. Please modify configuration under

requirements.

当前配置不符合配置要求。

guidance.

无效配置，请按照配置说明修改

# Contents

Resource Summary for ND .....	1
ND .....	1
ND/NDTable .....	1
Properties .....	1
Example .....	2
ND/NDLearnLimit .....	4
Properties .....	4
Example .....	4
ND/NDInterface .....	5
Properties .....	6
Example .....	6
ND/NDConfig .....	7
Properties .....	7
Example .....	8
ND/NDRA .....	9
Properties .....	9
Example .....	10
ND/NDRAPrefix .....	12
Properties .....	12
Example .....	13
ND/NDProxy .....	15
Properties .....	15
Example .....	15
ND/NDSpecification .....	17
Properties .....	17
Example .....	17
ND/NDStaleAgingTime .....	17
Properties .....	18
Example .....	18

# Resource Summary for ND

Resource(Table)	Base URL	HTTP Method			
		GET	POST	PUT	DELETE
NDTable	/api/v1/ND/NDTable	Y	Y	Y	Y
NDEarnLimit	/api/v1/ND/NDEarnLimit	Y	Y	Y	Y
NDInterface	/api/v1/ND/NDInterface	Y	Y	Y	Y
NDConfig	/api/v1/ND/NDConfig	Y	N	Y	Y
NDRA	/api/v1/ND/NDRA	Y	Y	Y	Y
NDRAPrefix	/api/v1/ND/NDRAPrefix	Y	Y	Y	Y
NDProxy	/api/v1/ND/NDProxy	Y	Y	Y	Y
NDSpecification	/api/v1/ND/NDSpecification	Y	N	N	N
NDStaleAgingTime	/api/v1/ND/NDStaleAgingTime	Y	Y	Y	Y

## ND

### ND/NDTable

This table contains information about neighbor entries.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported. If the specified interface is a VLAN interface, the VLAN ID corresponding to the interface must be consistent with the value in the VLANID column.
Ipv6Address	IPv6 address	Index	Hexadecimal string, colon-separated.	N/A
MacAddress	MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
VLANID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	It must be configured together with the PortIndex column.
PortIndex	Port index	N/A	Unsigned integer.	It must be configured together with the VLANID column.

Column name	Column description	Column type	Data type and restrictions	Remarks
				The port specified by the PortIndex column must belong to the VLAN specified by the VLANID column.
VrfIndex	Index of the VRF	N/A	Unsigned integer.	Some versions support VRF names. For more information, see the XSD document of your product. Required. 0 represents the public network.
Type	Neighbor type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Invalid static.</li> <li>2—Static.</li> <li>3—Dynamic.</li> <li>4—OpenFlow.</li> <li>5—Rule.</li> </ul>	N/A
State	Neighbor status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—INCOMP.</li> <li>2—REACH.</li> <li>3—STALE.</li> <li>4—DELAY.</li> <li>5—PROBE.</li> </ul>	N/A
AgeTime	Neighbor entry aging time.	N/A	Unsigned integer.	N/A

## Example

Example 1: Get information about neighbor entries.

### JSON Request

```
GET /api/v1/ND/NDTable?index=IfIndex%3D17416%3BIpv6Address%3D1%3A%3A23
```

### JSON Response

200 OK

```
{
  "IfIndex": 17416,
  "Ipv6Address": "1::23",
  "MacAddress": "00-00-00-01-00-02",
  "VLANID": 1,
  "PortIndex": 7,
  "VrfIndex": 0,
  "Type": 1,
```

```
"State": 2
}
```

Example 2: Add a neighbor entry.

#### **JSON Request**

POST /api/v1/ND/NDTable

```
{
  "IfIndex": 17416,
  "Ipv6Address": "1::23",
  "MacAddress": "00-00-00-01-00-03",
  "VLANID": 1,
  "PortIndex": 7,
  "VrfIndex": 0
}
```

#### **JSON Response**

201 Created

Example 3: Modify a neighbor entry.

#### **JSON Request**

PUT /api/v1/ND/NDTable?index=IfIndex%3D17416%3BIpv6Address%3D1%3A%3A23

```
{
  "IfIndex": 17416,
  "Ipv6Address": "1::23",
  "MacAddress": "00-00-00-01-00-03",
  "VLANID": 1,
  "PortIndex": 7,
  "VrfIndex": 0
}
```

#### **JSON Response**

204 No Content

Example 4: Delete a neighbor entry.



### JSON Request

DELETE /api/v1/ND/NDTable?index=IfIndex%3D17416%3BIPv6Address%3D1%3A%3A23

### JSON Response

204 No Content

## ND/NDLearnLimit

This table contains the information about the maximum number of dynamic neighbor entries that an interface can learn.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
LearnMaxNum	Maximum number of dynamic neighbor entries that an interface can learn	N/A	Unsigned integer. Value range: 1 to LearnMaxNumLimit.	The value of LearnMaxNumLimit depends on the device model.  The default setting varies by device model.

### Example

Example 1: Get information about the maximum number of dynamic neighbor entries that an interface can learn.

### JSON Request

GET /api/v1/ND/NDLearnLimit?index=IfIndex%3D17416

### JSON Response

200 OK

```
{  
  "IfIndex": 17416,  
  "LearnMaxNum": 2048  
}
```

Example 2: Set the maximum number of dynamic neighbor entries that an interface can learn.

#### **JSON Request**

POST /api/v1/ND/NDLearnLimit

```
{  
  "IfIndex": 17416,  
  "LearnMaxNum": 2048  
}
```

#### **JSON Response**

201 Created

Example 3: Change the maximum number of dynamic neighbor entries that an interface can learn.

#### **JSON Request**

PUT /api/v1/ND/NDLearnLimit?index=IfIndex%3D17416

```
{  
  "IfIndex": 17416,  
  "LearnMaxNum": 2048  
}
```

#### **JSON Response**

204 No Content

Example 4: Restore the default setting for the maximum number of dynamic neighbor entries that an interface can learn.

#### **JSON Request**

DELETE /api/v1/ND/NDLearnLimit?index=IfIndex%3D17416

#### **JSON Response**

204 No Content

## ND/NDInterface

This table contains neighbor interface information.

# Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see <i>IfMgr in Ifmgr NETCONF XML API Configuration Reference</i> .
DADAttempts	Number of attempts to send an NS message for DAD	N/A	Unsigned integer. Value range: 0 to 600. Default: 1.	0 means that DAD is disabled. Only Layer 3 interfaces are supported.
ModeUNI	Whether the port is configured as a customer-side port	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Customer-side port.</li><li><b>false</b> (default)—Network-side port.</li></ul>	Support for this column depends on the device model. Only VLAN interfaces are supported.

## Example

Example 1: Get neighbor interface information.

### JSON Request

```
GET /api/v1/ND/NDInterface?index=IfIndex%3D17416
```

### JSON Response

200 OK

```
{
  "IfIndex": 17416,
  "DADAttempts": 2
}
```

Example 2: Configure neighbor interface settings.

### JSON Request

```
POST /api/v1/ND/NDInterface
```

```
{
  "IfIndex": 17416,
  "DADAttempts": 2
}
```

```
}
```

### JSON Response

201 Created

Example 3: Modify neighbor interface settings.

### JSON Request

PUT /api/v1/ND/NDInterface?index=IfIndex%3D17416

```
{  
  "IfIndex": 17416,  
  "DADAttempts": 2  
}
```

### JSON Response

204 No Content

Example 4: Restore the default neighbor interface settings.

### JSON Request

DELETE /api/v1/ND/NDInterface?index=IfIndex%3D17416

### JSON Response

204 No Content

## ND/NDConfig

This table contains neighbor configuration information.

## Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
StaleAging	Aging timer for ND entries in stale state	N/A	Unsigned integer. Value range: 1 to 1440 minutes. or 60 to 86400 seconds.	The aging time must be configured together with aging time value type
LinkLocalMini	Whether link-local ND	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
mize	entries are minimized		<ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	
HopLimit	Hop Limit field in the IPv6 header	N/A	Unsigned integer. Value range: 1 to 255.	If the device advertises the hop limit in RA messages, all RA message receivers receiving the RA message fill the value into the Hop Limit field of IPv6 packets to be sent.
StaleAgingUnit	Aging time value type for ND entries in stale state	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Aging in minutes.</li> <li>1—Aging in seconds.</li> </ul>	The aging time value type must be configured together with the aging time.

## Example

Example 1: Get neighbor configuration information.

### JSON Request

GET /api/v1/ND/NDConfig

### JSON Response

200 OK

```
{
  "StaleAging" : "100",
  "LinkLocalMinimize" : "false",
  "HopLimit" : "255"
}
```

Example 2: Modify the neighbor configuration.

### JSON Request

PUT /api/v1/ND/NDConfig

```
{
  "StaleAging" : "1000",
  "LinkLocalMinimize" : "true",
  "HopLimit" : "255"
}
```

### JSON Response

204 No Content

Example 3: Restore the default neighbor settings.

#### JSON Request

DELETE /api/v1/ND/NDConfig

#### JSON Response

204 No Content

## ND/NDRA

This table contains information about RA message settings.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported.  Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
RAHalt	Whether the interface is suppressed from advertising RA messages	N/A	Boolean: <ul style="list-style-type: none"><li>true (default).</li><li>false—Disabled.</li></ul>	N/A
MaxInterval	Maximum interval for advertising RA messages	N/A	Unsigned integer. Value range: 4 to 1800 seconds. Default: 600 seconds.	It must be configured together with the MinInterval column.
MinInterval	Minimum interval for advertising RA messages	N/A	Unsigned integer. Value range: 3 to three-fourths of the MaxInterval. Default: 200 seconds.	It must be configured together with the MaxInterval column.
NoAdvLinkMTU	Whether the MTU option in RA messages is turned off	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false (default).</li></ul>	N/A
HopLimitUnspecified	Whether unlimited hops is specified in RA	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	messages		<ul style="list-style-type: none"> <li>false (default).</li> </ul>	
ManagedAddressFlag	Whether the managed address flag is set to 1	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	N/A
OtherFlag	Whether the other flag is set to 1	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	N/A
RouterLifetime	Router lifetime in RA messages	N/A	Unsigned integer. Value range: 0 to 9000 seconds. Default: 1800 seconds.	0 means that the router does not serve as the default router
NSRetransTimer	Interval for retransmitting an NS message	N/A	Unsigned integer. Value range: 1000 to 4294967295 milliseconds. Default: 1000 milliseconds.	N/A
RouterPreference	Router preference in RA messages	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—High.</li> <li>2—Low.</li> <li>3—Medium (default).</li> </ul>	N/A
NudReachableTime	Neighbor reachable time on an interface	N/A	Unsigned integer. Value range: 1 to 3600000 milliseconds. Default: 30000 milliseconds.	N/A

## Example

Example 1: Get RA message settings.

### JSON Request

GET /api/v1/ND/NDRA?index=IfIndex%3D5

### JSON Response

200 OK

```
{
  "IfIndex" : "10",
  "RAHalt" : "true",
  "MaxInterval" : "600",
  "MinInterval" : "200",
  "NoAdvLinkMTU" : "false",
  "HopLimitUnspecified" : "false",
  "ManagedAddressFlag" : "false",
  "OtherFlag" : "false",
```

```
"RouterLifetime" : "1800",  
"NSRetransTimer" : "1000",  
"RouterPreference" : "3",  
"NudReachableTime" : "30000"  
}
```

Example 2: Configure RA message settings.

#### **JSON Request**

POST /api/v1/ND/NDRA

```
{  
  "IfIndex" : "10",  
  "RAHalt" : "false",  
  "MaxInterval" : "1000",  
  "MinInterval" : "100",  
  "NoAdvLinkMTU" : "true",  
  "HopLimitUnspecified" : "true",  
  "ManagedAddressFlag" : "true",  
  "OtherFlag" : "true",  
  "RouterLifetime" : "2000",  
  "NSRetransTimer" : "10000",  
  "RouterPreference" : "2",  
  "NudReachableTime" : "100000"  
}
```

#### **JSON Response**

201 Created

Example 3: Modify RA message settings.

#### **JSON Request**

PUT /api/v1/ND/NDRA?index=IfIndex%3D10

```
{  
  "IfIndex" : "10",  
  "RAHalt" : "false",  
  "MaxInterval" : "1000",  
  "MinInterval" : "100",  
}
```



```

"NoAdvLinkMTU" : "true",
"HopLimitUnspecified" : "true",
"ManagedAddressFlag" : "true",
"OtherFlag" : "true",
"RouterLifetime" : "2000",
"NSRetransTimer" : "10000",
"RouterPreference" : "2",
"NudReachableTime" : "100000"
}

```

### JSON Response

204 No Content

Example 4: Restore the default RA message settings.

### JSON Request

DELETE /api/v1/ND/NDRA?index=IfIndex%3D10

### JSON Response

204 No Content

## ND/NDRAPrefix

This table contains information about IPv6 prefix settings.

## Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported.  Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Ipv6Prefix	IPv6 prefix	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A
Ipv6Address	IPv6 address	Index	Hexadecimal string,	It must be a valid IPv6

Column name	Column description	Column type	Data type and restrictions	Remarks
	prefix		colon-separated.	address prefix.
Ipv6PrefixLength	Prefix length	Index	Unsigned integer. Value range: 1 to 128.	N/A
ValidLifetime	Valid lifetime of the prefix	N/A	Unsigned integer. Value range: 0 to 4294967295 seconds.	When NoAutoConfig or Offlink is configured, it must be configured. When it is not configured, it is the default value.
PreferredLifetime	Preferred lifetime of the prefix used for stateless autoconfiguration	N/A	Unsigned integer. Value range: 0 to 4294967295 seconds.	When NoAutoConfig or Offlink is configured, it must be configured. When it is not configured, it is the default value.
NoAutoConfig	Whether the prefix is not used for stateless autoconfiguration	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	When NoAdvertise is configured, it can't be configured.
OffLink	Whether the IPv6 address with the prefix is not directly reachable on the link	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	When NoAdvertise is configured, it can't be configured.
NoAdvertise	Whether the prefix specified in this command is not advertised	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false</li> </ul>	When it is configured, the lifetime can't be configured, and the lifetime is the default value.

## Example

Example 1: Get IPv6 prefix settings.

### JSON Request

GET /api/v1/ND/NDRAPrefix

### JSON Response

200 OK

```
{
  "NDRAPrefix": [
    {
      "IfIndex": 258,
      "Ipv6Prefix": {
        "Ipv6Address": "23::",
        "Ipv6PrefixLength": 64
      }
    }
  ]
}
```

```
"ValidLifetime": 2592000,  
"PreferredLifetime": 604800,  
"NoAutoConfig": false,  
"OffLink": false  
}}}
```

Example 2: Add an IPv6 prefix.

#### **JSON Request**

POST /api/v1/ND/NDRAPrefix

```
{  
  "IfIndex": 258,  
  "Ipv6Prefix":  
  {  
    "Ipv6Address": "23::",  
    "Ipv6PrefixLength": 64  
  },  
  "ValidLifetime": 20000,  
  "PreferredLifetime": 6000,  
  "NoAutoConfig": false,  
  "OffLink": false  
}
```

#### **JSON Response**

201 Created

Example 3: Modify an IPv6 prefix.

#### **JSON Request**

PUT /api/v1/ND/NDRAPrefix?index=IfIndex%3D258

```
{  
  "IfIndex": 258,  
  "Ipv6Prefix":  
  {  
    "Ipv6Address": "23::",  
    "Ipv6PrefixLength": 64  
  },  
}
```

```

"ValidLifetime": 20000,
"PreferredLifetime": 6000,
"NoAutoConfig": false,
"OffLink": false
}

```

### JSON Response

204 No Content

Example 4: Delete an IPv6 prefix.

### JSON Request

DELETE /api/v1/ND/NDRAPrefix?index=IfIndex%3D258

### JSON Response

204 No Content

## ND/NDProxy

This table contains information about neighbor proxy settings.

## Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
ProxyEnable	Whether common ND proxy is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	N/A
LocalProxyEnable	Whether local ND proxy is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	N/A

## Example

Example 1: Get ND proxy settings.

**JSON Request**

GET /api/v1/ND/NDProxy?index=IfIndex%3D258

**JSON Response**

200 OK

```
{  
  "IfIndex": 258,  
  "ProxyEnable": false,  
  "LocalProxyEnable": false  
}
```

Example 2: Configure ND proxy.

**JSON Request**

POST /api/v1/ND/NDProxy

```
{  
  "IfIndex": 258,  
  "ProxyEnable": true,  
  "LocalProxyEnable": true  
}
```

**JSON Response**

201 Created

Example 3: Modify ND proxy settings.

**JSON Request**

PUT /api/v1/ND/NDProxy?index=IfIndex%3D10

```
{  
  "IfIndex": 258,  
  "ProxyEnable": true,  
  "LocalProxyEnable": true  
}
```

**JSON Response**

204 No Content

Example 4: Restore the default ND proxy settings.

**JSON Request**

DELETE /api/v1/ND/NDProxy?index=IfIndex%3D10

**JSON Response**

204 No Content

## ND/NDSpecification

This table contains ND specification information.

### Properties

Column name	Column description	Column type	Data type and restrictions
LearnMaxNumLimit	Maximum number of dynamic neighbor entries that an interface can learn	N/A	Unsigned integer.
SupportModeUNI	Support for configuring a port as a customer-side port	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>

### Example

Example 1: Get ND specification information.

**JSON Request**

GET /api/v1/ND/NDSpecification

**JSON Response**

200 OK

```
{  
  "LearnMaxNumLimit" : "4096",  
  "SupportModeUNI" : "true"  
}
```

## ND/NDStaleAgingTime

This table contains aging time configuration information for ND entries in stale state.

# Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
AgingTime	Aging time for ND entries in stale state	N/A	Unsigned integer. Value range: 1 to 1440 minutes. or 60 to 86400 seconds	The aging time must be configured together with aging time value type.
StaleAgingUnit	Aging time value type for ND entries in stale state	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Aging in minutes.</li><li>• 1—Aging in seconds.</li></ul>	The aging time value type must be configured together with the aging time.

## Example

Example 1: Get ND table aging time configuration information.

### JSON Request

GET /api/v1/ND/NDStaleAgingTime

### JSON Response

200 OK

```
{
  "IfIndex" : "1024",
  "AgingTime" : "100",
  "StaleAgingUnit" : "0"
}
```

Example 2: Configure ND aging time.

### JSON Request

POST /api/v1/ND/NDStaleAgingTime

```
{
  "IfIndex" : "1024",
  "AgingTime" : "100",
  "StaleAgingUnit" : "0"
}
```

### JSON Response

201 Created

Example 3: Modify the aging time of ND entries in stale state by interface.

**JSON Request**

PUT /api/v1/ND/NDStaleAgingTime?index=IfIndex%3D1024

```
{  
  "IfIndex" : "1024" ,  
  "AgingTime" : "100",  
  "StaleAgingUnit" : "1"  
}
```

**JSON Response**

204 No Content

Example 4: Restore the default aging time of ND entries in stale state.

**JSON Request**

DELETE /api/v1/ND/NDStaleAgingTime?index=IfIndex%3D1024

**JSON Response**

204 No Content



# Contents

NETCONF .....2

    Common Error Message.....2

# NETCONF

## Common Error Message

Message	Explanation
Invalid value. 非法输入值。	Invalid value. NETCONF处理通用错误，设置操作的值不符合模块要求。
Can't issue the configuration because of configuration conflict. 当前配置与系统已有配置冲突。	Can't issue the configuration because of configuration conflict. NETCONF处理通用错误，设置操作的配置与系统现有配置冲突。
Configuration already exists. 配置已存在。	Configuration already exists. NETCONF处理通用错误，Create操作时，要创建的配置已存在。
Configuration target does not exist. 配置对象不存在。	Configuration target does not exist. NETCONF处理通用错误，SET的对象不存在。
Configuration does not exist. 配置不存在。	Configuration does not exist, delete operation failed. NETCONF处理通用错误，Delete操作，要删除的配置不存在。
The configuration not supported on the specified target. 指定配置对象不支持对应配置。	The configuration not supported on the specified target. NETCONF处理通用错误，当前对象不支持此配置。例如：在一个只支持二层接口的表里面，用户下发了一个三层接口来进行设置操作。
The session does not have the privilege to process the request. 权限不足，不能执行本次操作。	The session does not have the privilege to process the request. NETCONF处理通用错误，当前用户对当前对象没有RBAC权限。
Resources are insufficient for processing the request. 系统资源不足，请求无法完成。	Resources are insufficient for processing the request. NETCONF处理通用错误，系统资源不足，不能完成本次操作。比如配置资源已经达到了系统规格上限。
The system does not support this operation. 系统不支持当前操作。	The system does not support this operation. NETCONF处理通用错误，不支持当前操作。
Operation failed. 操作失败。	Operation failed. NETCONF处理通用错误，上面所述场景之外的错误。
Expecting element '%s': '%s' under element '%s'.	Expecting element ' <i>path</i> '. Schema一般错误，必须的元素缺失,其xpath路径为 <i>path</i>
The element '%s' should have an attribute '%s'.	The element ' <i>a</i> ' should have an attribute ' <i>b</i> '. Schema一般错误，元素 <i>a</i> 必须的属性 <i>b</i> 缺失
The value of element '%s' is invalid. %s	The value of element ' <i>a</i> ' is invalid. <i>Reason</i> Schema一般错误，元素的 <i>a</i> 值无效，具体原因是： <i>reason</i> 。
The value of attribute '%s' for element '%s' is invalid. %s	The value of attribute ' <i>a</i> ' for element ' <i>b</i> ' is invalid. <i>Reason</i> Schema一般错误，元素 <i>b</i> 的属性 <i>a</i> 的值无效，具体原因是： <i>reason</i> 。
The number of occurrences of element '%s/%s' is invalid.	The number of occurrences of element '%s/%s' is invalid. Schema一般错误，元素出现的次数不正确。
Unexpected element '%s': '%s' under element '%s'.	Unexpected element '%s'.

	Schema一般错误，意外出现一个元素。
Unexpected attribute '%s':'%s' of element '%s'.	Unexpected attribute '%s' of element '%s'. Schema一般错误，意外出现一个属性。
The child elements of '%s' are invalid.	The child elements of '%s' are invalid. Schema一般错误，指定位置元素下的子元素出现次数不正确。
Element '%s' can not have a textual child element.	Element '%s' can not have a textual child element. Schema一般错误，元素%s不能出现文本。
Element '%s' can not have a child element.	Element '%s' can not have a child element. Schema一般错误，元素%s不能出现子节点。
%%.%%lus is an invalid value of %%%s type value.	value is an invalid value of type type value. Schema一般错误，元素或者属性的值不是一个有效的XSD类型的值
%s cannot be empty.	%s cannot be empty. Schema一般错误，元素不能为空
The value does not match the regular expression.	The value does not match the regular expression. Schema一般错误，元素值和xsd定义的正则表达式不匹配。
The value does not match the enumeration.	The value does not match the enumeration. Schema一般错误，元素值和xsd定义的enumeration枚举值不匹配。
The length must be equal to %s.	The length must be equal to %s. Schema一般错误，元素长度和xsd定义的长度不相等。
The total digit length must be equal to %s.	The total digit length must be equal to %s. Schema一般错误，元素的数字总长度和xsd定义的长度不相等。
The length must be less than or equal to %s.	The length must be less than or equal to maxLength. Schema一般错误，元素的长度大于xsd定义的maxLength最大长度时。
The length must be greater than or equal to %s.	The length must be greater than or equal to minLength. Schema一般错误，元素的长度小于xsd定义的minLength最小长度时。
The value must be less than %s.	The value must be less than maxExclusive. Schema一般错误，元素的值大于等于xsd定义的最大Exclusive最大值时。
The value must be greater than %s.	The value must be greater than minExclusive. Schema一般错误，元素的值小于等于xsd定义的最小Exclusive最小值时。
The value must be less than or equal to %s.	The value must be less than or equal to maxInclusive. Schema一般错误，元素的值大于xsd定义的最大Inclusive最大值时。
The value must be greater than or equal to %s.	The value must be greater than or equal to minInclusive. Schema一般错误，元素的值小于xsd定义的最小Inclusive最小值时。

# Contents

- NETSHARE .....1
  - NETSHARE/FreezeIP .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - NETSHARE/UnfreezeIP .....2
    - XML structure .....2
    - Table description .....2
    - Columns .....3

# NETSHARE

## NETSHARE/FreezeIP

This table is used to freeze IP addresses.

### XML structure

```
<NETSHARE>
  <FreezeIP>
    <IPAddress></IPAddress>
    <VrfName></VrfName>
    <Freezetime></Freezetime>
  </FreezeIP>
</NETSHARE>
```

### Table description

Item	Description
Feature name	NETSHARE
Table name	FreezeIP
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPAddress	IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Length: 1 to 46 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfName	VRF name	N/A	String: case-insensitive. Length: 1 to 31.	N/A
Freezetime	Freezing time	N/A	Unsigned integer. Unit: Minute. Value range: 5 to 720.	N/A

## NETSHARE/UnfreezeIP

This table is used to unfreeze IP addresses.

### XML structure

```

<NETSHARE>
  <UnfreezeIP>
    <IPAddress></IPAddress>
    <VrfName></VrfName>
  </UnfreezeIP>
</NETSHARE>

```

### Table description

Item	Description
Feature name	NETSHARE
Table name	UnfreezeIP
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPAddress	IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Length: 1 to 46 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
VrfName	VRF name	N/A	String: case-insensitive. Length: 1 to 31.	N/A

# Contents

- NETSHARE .....1
  - NETSHARE/Policies.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....2
  - NETSHARE/PolicyJsonOptions .....2
    - XML structure.....3
    - Table description.....3
    - Columns.....3



# NETSHARE

## NETSHARE/Policies

This table contains netshare control policy information.

### XML structure

```
<NETSHARE>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <PolicyDescription></PolicyDescription>
      <Enable></Enable>
      <IPIDtrailsw></IPIDtrailsw>
      <IPtmmaxnum></IPtmmaxnum>
      <Action></Action>
      <Freezetime></Freezetime>
      <Logging></Logging>
    </Policy>
  </Policies>
</NETSHARE>
```

### Table description

Item	Description
Feature name	NETSHARE
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the netshare control policy	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
PolicyDescription	Description of the policy	N/A	String: case-sensitive. Length: 1 to 127 characters.	N/A
Enable	Enabling status of the policy	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default value is true.
IPIDtrailsw	Enabling status of IPID Trail	N/A	Boolean: <ul style="list-style-type: none"> <li>false</li> <li>true</li> </ul>	The default value is false.
IPtmmaxnum	Max number of terminals for each IP	N/A	Unsigned integer: Value range: 1 to 15.	N/A
Action	Action for shared IP addresses with excessive terminals	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—freeze.</li> </ul>	N/A
Freezetime	Freezing time	N/A	Unsigned integer. Unit: Minute. Value range: 5 to 720.	N/A
Logging	Log the event that a shared IP address has excessive terminals	N/A	Boolean: <ul style="list-style-type: none"> <li>false</li> <li>true</li> </ul>	The default value is false.

## NETSHARE/PolicyJsonOptions

This table contains the match criteria information in the netshare control policy.

## XML structure

```
<NETSHARE>
  <PolicyJsonOptions>
    <OptionJson>
      <PolicyJsonName></PolicyJsonName>
      <OptionJsonType></OptionJsonType>
      <OptionJsonValue></OptionJsonValue>
    </OptionJson>
  </PolicyJsonOptions>
</NETSHARE>
```

## Table description

Item	Description
Feature name	NETSHARE
Table name	PolicyJsonOptions
Table type	Multi-instance table
Row name	Option
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
PolicyJsonName	Name of the netshare control policy	Index	String: case-insensitive. Length: 1 to 63 characters.
OptionJsonType	Type of the criteria in the policy	Index	Enumeration: <ul style="list-style-type: none"><li>1—SourceZones.</li><li>2—DestZones.</li><li>3—SourceAddressSetsIPV4.</li><li>4—SourceAddressSetsIPV6.</li><li>5—DestAddressSetsIPV4.</li><li>6—DestAddressSetsIPV6.</li><li>7—Users.</li></ul>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>8—UserGroups.</li> </ul>
OptionJsonValue	Match criteria content	Index	String, case-insensitive. Length: 1 to 65535.

# Contents

NETSHARE .....	1
NETSHARE/Policies.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
NETSHARE/PolicyOptions.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
NETSHARE/ShareStatusInfors .....	4
XML structure.....	4
Table description.....	4
Columns.....	5

# NETSHARE

## NETSHARE/Policies

This table contains netshare control policy information.

### XML structure

```
<NETSHARE>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <PolicyDescription></PolicyDescription>
      <OptionContent></OptionContent>
      <Enable></Enable>
      <IPIDtrailsw></IPIDtrailsw>
      <IPtmmaxnum></IPtmmaxnum>
      <Action></Action>
      <Freezetime></Freezetime>
      <Logging></Logging>
    </Policy>
  </Policies>
</NETSHARE>
```

### Table description

Item	Description
Feature name	NETSHARE
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
PolicyName	Name of the netshare	Index	String, case-insensitive.

Column name	Column description	Column type	Data type and restrictions
	control policy		Length: 1 to 63 characters.
PolicyDescription	Description of the policy	N/A	String: case-sensitive. Length: 1 to 127 characters.
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 65535.
Enable	Enabling status of the policy	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
IPIDtrailsw	Enabling status of IPID Trail	N/A	Boolean: <ul style="list-style-type: none"> <li>false</li> <li>true</li> </ul>
IPtmmaxnum	Max number of terminals for each IP	N/A	Unsigned integer. Value range: 1 to 15.
Action	Action for shared IP addresses with excessive terminals	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—freeze</li> </ul>
Freezetime	Freezing time	N/A	Unsigned integer Unit: Minute. Value range: 5 to 720.
Logging	Log the event that a shared IP address has excessive terminals	N/A	Boolean: <ul style="list-style-type: none"> <li>false</li> <li>true</li> </ul>

## NETSHARE/PolicyOptions

This table contains the match criteria information in the netshare control policy.

### XML structure

```

<NETSHARE>
  <PolicyOptions>
    <Option>
      <PolicyName></PolicyName>
      <OptionSeqNum></OptionSeqNum>

```

```

    <OptionType></OptionType>
    <OptionValue></OptionValue>
  </Option>
</PolicyOptions>
</NETSHARE>

```

## Table description

Item	Description
Feature name	NETSHARE
Table name	PolicyOptions
Table type	Multi-instance table
Row name	Option
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PolicyName	Name of the netshare control policy	Index	String: case-insensitive. Length: 1 to 63 characters.
OptionSeqNum	Sequence number of the match criterion after which the operation starts	Index	Unsigned integer. Value range: 1 to $2^{32} - 1$ .
OptionType	Type of the criteria in the policy	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—SourceZones.</li> <li>2—DestZones.</li> <li>3—SourceAddressSetsIPV4.</li> <li>4—SourceAddressSetsIPV6.</li> <li>5—DestAddressSetsIPV4.</li> <li>6—DestAddressSetsIPV6.</li> <li>7—Users.</li> <li>8—UserGroups.</li> </ul>
OptionValue	Match criteria content	N/A	String, case-insensitive. Length: 1 to 65535 characters.



# NETSHARE/ShareStatusInfors

This table contains netshare control information.

## XML structure

```
<NETSHARE>
  <ShareStatusInfors>
    <StatusInfors>
      <Chassis></Chassis>
      <Slot></Slot>
      <CpuID></CpuID>
      <TotalCount></TotalCount>
      <PositionOnNode></PositionOnNode>
      <DataType></DataType>
      <Mask></Mask>
      <VrfName></VrfName>
      <IPAddress></IPAddress>
      <Status></Status>
      <User></User>
      <TerminalNum></TerminalNum>
      <Policyname></Policyname>
      <RemainingTime></RemainingTime>
    </StatusInfors>
  </ShareStatusInfors>
</NETSHARE>
```

## Table description

Item	Description
Feature name	NETSHARE
Table name	ShareStatusInfors
Table type	Multi-instance table
Row name	StatusInfors
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Chassis ID	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CpuID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
TotalCount	Total count	Index	Unsigned integer. Value range: 1 to $2^{32} - 1$ .	N/A
PositionOnNode	Sequence number of the netshare control information after which the operation starts	Index	Unsigned integer. Value range: 1 to $2^{32} - 1$ .	N/A
DataType	Type of the filter keyword	Index	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Mask	Mask value of node	Index	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
VrfName	VRF name	N/A	String: case-insensitive. Length: 1 to 31.	N/A
IPAddress	Source IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. Length: 1 to 46 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
Status	Status of the shared IP address	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—invalid.</li> <li>1—frozen.</li> <li>2—unfrozen.</li> </ul>	N/A
User	Username suffixed with	N/A	String: case-insensitive.	N/A

	domain name		Length: 1 to 311	
TerminalNum	Number of terminals	N/A	Unsigned integer. Value range: 1 to 15.	N/A
Policyname	Policy name	N/A	String: case-insensitive. Length: 1 to 63 characters.	N/A
RemainingTime	Remaining freezing time	N/A	Unsigned integer. Unit: Minute. Value range: 0 to 720.	When the status is unfrozen, the remaining time is 0.

# Contents

- Netshare .....2
  - Netshare/Policy .....2
  - Netshare/Policy/Option.....2
  - Netshare/Freeze.....2
  - Netshare/UnFreeze .....3
  - Netshare/ShareStatusInfors .....3

# Netshare

## Netshare/Policy

Message	Explanation
Can't create new NetShare control policy because only one NetShare control policy can be created. 最多可以配置一个共享上网管理策略。	Currently the NetShare module allows only one policy to be created. 目前共享上网模块仅允许配置一个策略。
The policy name already exists. 策略名称已存在。	The policy name is being used by another policy. 当前配置的策略名称已存在。
The specified policy does not exist. 策略不存在。	The policy does not exist. 要操作的策略已不存在。

## Netshare/Policy/Option

Message	Explanation
Maximum number of source IP addresses already reached. 配置的源IP地址数量超过上限。	The number of source IP address referenced by the policy has exceeded the upper limit. The maximum number is 1024. 策略引用的源IP地址数量已超过上限，上限数量为1024。
Maximum number of destination IP addresses already reached. 配置的目的地IP地址数量超过上限。	The number of destination IP address referenced by the policy has exceeded the upper limit. The maximum number is 1024. 策略引用的目的地IP地址数量已超过上限，上限数量为1024。
Maximum number of source security zones already reached. 配置的源安全域数量超过上限。	The number of source security zones referenced by the policy has exceeded the upper limit. The maximum number is 1024. 策略引用的源安全域数量已超过上限，上限数量为1024。
Maximum number of destination security zones already reached. 配置的目的地安全域数量超过上限。	The number of destination security zones referenced by the policy has exceeded the upper limit. The maximum number is 1024. 策略引用的目的地安全域数量已超过上限，上限数量为1024。
Maximum number of users already reached. 配置的用户数量超过上限。	The number of users referenced by the policy has exceeded the upper limit. The maximum number is 1024. 策略引用的用户数量已超过上限，上限数量为1024。
Maximum number of user groups already reached. 配置的用户组数量超过上限。	The number of user groups referenced by the policy has exceeded the upper limit. The maximum number is 1024. 策略引用的用户组数量已超过上限，上限数量为1024。
The specified VPN instance does not exist. VPN实例不存在。	The VPN instance does not exist. VPN实例不存在。

## Netshare/Freeze

Message	Explanation
The IP address is frozen.	The specified IP address is frozen.

IP地址已经被冻结。	想要操作的IP地址已经被冻结
------------	----------------

## Netshare/UnFreeze

Message	Explanation
The IP address is not frozen. 指定的IP地址未被冻结。	The specified IP address is unfrozen. 想要操作的IP地址已经被解冻。

## Netshare/ShareStatusInfor

Message	Explanation
The IP address is not on the shared IP address list. 共享状态列表中不存在该IP地址。	The specified IP address does not exist in the shared status list. 想要操作的IP地址不存在在共享列表中。

# Contents

- NETSTREAM4 .....1
  - NETSTREAM4/ClearNS4Statistics .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# NETSTREAM4

## NETSTREAM4/ClearNS4Statistics

This table is used to clear IPv4 NETSTREAM statistics.

### XML structure

```
<NETSTREAM4>
  <ClearNS4Statistics>
    <Clear></Clear>
  </ClearNS4Statistics>
</NETSTREAM4>
```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	ClearNS4Statistics
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear IP NETStream statistics	N/A	This column must be empty.	This setting ages out all flows in the cache and export NetStream data.



# Contents

NETSTREAM4 .....	1
NETSTREAM4/NS4Enable .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
NETSTREAM4/NS4Sampler .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
NETSTREAM4/NS4Filter .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
NETSTREAM4/NS4V9RefreshTime .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
NETSTREAM4/NS4V9RefreshPacket .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
NETSTREAM4/NS4Host .....	5
XML structure .....	6
Table description .....	6
Columns .....	6
NETSTREAM4/NS4Source .....	6
XML structure .....	7
Table description .....	7
Columns .....	7
NETSTREAM4/NS4ActiveTime .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
NETSTREAM4/NS4InActiveTime .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
NETSTREAM4/NS4MaxEntry .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
NETSTREAM4/NS4Version .....	9
XML structure .....	10
Table description .....	10
Columns .....	10
NETSTREAM4/NS4Rate .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
NETSTREAM4/NS4Aging .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
NETSTREAM4/NS4IPSECRawPacket .....	12
XML structure .....	12
Table description .....	12
Columns .....	12

NETSTREAM4/NS4MPLSCollection .....	13
XML structure .....	13
Table description .....	13
Columns .....	13

# NETSTREAM4

## NETSTREAM4/NS4Enable

This table contains information about enabling NetStream on an interface.

### XML structure

```
<NETSTREAM4>
  <NS4Enable>
    <InterfaceEnable>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </InterfaceEnable>
  </NS4Enable>
</NETSTREAM4>
```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Enable
Table type	Multi-instance table
Row name	InterfaceEnable
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enable	Traffic direction	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable</li><li>• <b>1</b>—Enables NetStream for incoming traffic.</li><li>• <b>2</b>—Enables NetStream</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			for outgoing traffic. <ul style="list-style-type: none"> <li>3—Enables NetStream for incoming and outgoing traffic.</li> </ul>	

## NETSTREAM4/NS4Sampler

This table contains information about enabling NetStream sampling on an interface.

### XML structure

```

<NETSTREAM4>
  <NS4Sampler>
    <InterfaceSampler>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <SamplerName></SamplerName>
    </InterfaceSampler>
  </NS4Sampler>
</NETSTREAM4>

```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Sampler
Table type	Multi-instance table
Row name	InterfaceSampler
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Traffic direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Incoming traffic.</li> <li>2—Outgoing traffic.</li> </ul>	N/A
SamplerName	Sampler name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## NETSTREAM4/NS4Filter

This table contains information about enabling NetStream filtering an interface.

### XML structure

```

<NETSTREAM4>
  <NS4Filter>
    <InterfaceFilter>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <AclNumber></AclNumber>
    </InterfaceFilter>
  </NS4Filter>
</NETSTREAM4>

```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Filter
Table type	Multi-instance table
Row name	InterfaceFilter
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex,

Column name	Column description	Column type	Data type and restrictions	Remarks
				see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Direction	Traffic direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Incoming traffic.</li> <li>2—Outgoing traffic.</li> </ul>	N/A
AcINumber	IPv4 ACL number	N/A	Unsigned integer. For an IPv4 basic ACL, the value range is 2000 to 2999. For an IPv4 advanced ACL, the value range is 3000 to 3999.	NetStream filtering uses an ACL to identify target packets.  If you want to collect data for specific flows, use the ACL permit statements to identify the flows. NetStream collects data only for these flows.  If you do not want to collect data for specific flows, use the ACL deny statements to identify the flows. NetStream does not collect data for these flows.

## NETSTREAM4/NS4V9RefreshTime

This table contains information about the refresh rate of time for the NetStream version 9 template.

### XML structure

```

<NETSTREAM4>
  <NS4V9RefreshTime>
    <Time></Time>
  </NS4V9RefreshTime>
</NETSTREAM4>

```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4V9RefreshTime
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Time	Interval at which the template is sent	N/A	Unsigned integer. The value range is 1 to 3600 minutes. The default time-based refresh interval is 30 minutes.

## NETSTREAM4/NS4V9RefreshPacket

This table contains information about the refresh rate of packet for the NetStream version 9 template.

## XML structure

```
<NETSTREAM4>
  <NS4V9RefreshPacket>
    <Packet></Packet>
  </NS4V9RefreshPacket>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4V9RefreshPacket
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Packet	Number of packets that are sent before the template is sent	N/A	Unsigned integer. The value range is 1 to 600. The default packet count-based refresh rate is 20 packets.

## NETSTREAM4/NS4Host

This table contains the information about the destination host to which the IPv4 NetStream exports.

## XML structure

```
<NETSTREAM4>
  <NS4Host>
    <Host>
      <VrfIndex></VrfIndex>
      <IP></IP>
      <UDPPort></UDPPort>
    </Host>
  </NS4Host>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Host
Table type	Multi-instance table
Row name	Host
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Index of the VRF	Index	Unsigned integer. Value range: 0 to 65535	When vrfIndex is 0, it indicates the host is on public network. This supports name index.
IP	IP address of the host	Index	String, dotted decimal notation.	N/A
UDPPort	UDP port of the host	N/A	Unsigned integer. Value range: 0 to 65535. Default: 0.	N/A

## NETSTREAM4/NS4Source

This table contains the information about the source interface for NetStream data to be sent to NetStream servers.



## XML structure

```
<NETSTREAM4>
  <NS4Source>
    <IfIndex></IfIndex>
  </NS4Source>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Source
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Source interface index	N/A	Unsigned integer.	This supports name index.

## NETSTREAM4/NS4ActiveTime

This table contains the information about the aging time of active flows.

## XML structure

```
<NETSTREAM4>
  <NS4ActiveTime>
    <ActiveTime></ActiveTime>
  </NS4ActiveTime>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4ActiveTime
Table type	Single-instance table

Item	Description
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
ActiveTime	Aging time of active flows	N/A	Unsigned integer. Value range: 1 to 60 minutes. Default: 30 minutes.

## NETSTREAM4/NS4InActiveTime

This table contains the information about the aging time of inactive flows.

## XML structure

```

<NETSTREAM4>
  <NS4InActiveTime>
    <InActiveTime></InActiveTime>
  </NS4InActiveTime>
</NETSTREAM4>

```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4InActiveTime
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
InActiveTime	Aging time of inactive flows	N/A	Unsigned integer. Value range: 10 to 600 seconds. Default: 30 seconds.

# NETSTREAM4/NS4MaxEntry

This table contains the information about the upper limit on IPv4 NetStream entries.

## XML structure

```
<NETSTREAM4>
  <NS4MaxEntry>
    <MaxEntry></MaxEntry>
    <Action></Action>
  </NS4MaxEntry>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4MaxEntry
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxEntry	Maximum number of IP NetStream entries can be cached	N/A	Unsigned integer. Default: User-defined value	N/A.
Action	Processing method when the upper limit is reached	N/A	Boolean: <ul style="list-style-type: none"><li>true—Ages out the oldest entries when the upper limit is reached.</li><li>false (default)—Disables creation of a new entry when the upper limit is reached.</li></ul>	N/A

# NETSTREAM4/NS4Version

This table contains information about the version that IPv4 NetStream uses to export data.

## XML structure

```
<NETSTREAM4>
  <NS4Version>
    <Version></Version>
    <As></As>
    <Nexthop></Nexthop>
  </NS4Version>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4MaxEntry
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Version	Version format	N/A	Enumeration: <ul style="list-style-type: none"><li>• 5</li><li>• 9 (default)</li><li>• 10</li></ul>
As	Autonomous system	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—peer-as (default)</li><li>• 1—origin-as</li></ul>
Nexthop	BGP nexthop	N/A	Boolean: <ul style="list-style-type: none"><li>• true</li><li>• false (default)</li></ul>

## NETSTREAM4/NS4Rate

This table contains information about the export rate.

## XML structure

```
<NETSTREAM4>
  <NS4Rate>
    <Rate></Rate>
  </NS4Rate>
```

</NETSTREAM4>

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NETSTREAM4Rate
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
Rate	Export rate	N/A	Unsigned integer. Value range: 0 to 1000. Default: 0.

## NETSTREAM4/NS4Aging

This table contains information about IPv4 NetStream periodical aging and TCP FIN- and RST-triggered aging.

## XML structure

```
<NETSTREAM4>
  <NS4Aging>
    <AgingEnable></AgingEnable>
  </NS4Aging>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Aging
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
AgingEnable	Enabling status of periodical aging, TCP FIN and RST-triggered aging.	N/A	Boolean: <ul style="list-style-type: none"><li>true (default).</li><li>false.</li></ul>

## NETSTREAM4/NS4IPSECRawPacket

This table contains information about NetStream for outgoing packets before/after IPsec encapsulation.

## XML structure

```
<NETSTREAM4>
  <NS4IPSECRawPacket>
    <IPSECRawPacket>
      <IfIndex></IfIndex>
      <RawPacketEnable></RawPacketEnable>
    </IPSECRawPacket>
  </NS4IPSECRawPacket>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4IPSECRawPacket
Table type	Single-instance table
Row name	IPSECRawPacket
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration

Column name	Column description	Column type	Data type and restrictions	Remarks
				Reference.
RawPacketEnable	Enabling status of NetStream for outgoing packets before IPsec encapsulation	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>	By default, NetStream is enabled for outgoing IPsec encapsulated packets.

## NETSTREAM4/NS4MPLSCollection

This table contains information about MPLS-aware IPv4 NetStream.

### XML structure

```

<NETSTREAM4>
  <NS4MPLSCollection>
    <LabelPosition1></LabelPosition1>
    <LabelPosition2></LabelPosition2>
    <LabelPosition3></LabelPosition3>
    <NoIPFieldsEnable></NoIPFieldsEnable>
  </NS4MPLSCollection>
</NETSTREAM4>

```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4MPLSCollection
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LabelPositions1	Position of the first label in the label stack	N/A	Enumeration: <ul style="list-style-type: none"> <li>0</li> <li>1</li> <li>2</li> <li>3</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 4</li> <li>• 5</li> <li>• 6</li> </ul>	
LabelPositions2	Position of the second label in the label stack	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• 6</li> </ul>	N/A
LabelPositions3	Position of the third label in the label stack	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0.</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• 6</li> </ul>	N/A
NoIPFieldsEnable	Specifies not to count IP fields.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false (default).</li> </ul>	N/A



# Contents

NETSTREAM4 .....	1
NETSTREAM4/NS4Enable .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
NETSTREAM4/NS4Sampler .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
NETSTREAM4/NS4Filter .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
NETSTREAM4/NS4V9RefreshTime .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
NETSTREAM4/NS4V9RefreshPacket .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
NETSTREAM4/NS4Host .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
NETSTREAM4/NS4Source .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
NETSTREAM4/NS4ActiveTime .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
NETSTREAM4/NS4InActiveTime .....	7
XML structure .....	8
Table description .....	8
Columns .....	8
NETSTREAM4/NS4MaxEntry .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
NETSTREAM4/NS4Version .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
NETSTREAM4/NS4Rate .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
NETSTREAM4/NS4Aging .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
NETSTREAM4/NS4IPSECRawPacket .....	11
XML structure .....	11
Table description .....	12
Columns .....	12

NETSTREAM4/NS4MPLSCollection .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
NETSTREAM4/NS4ExportInfo .....	13
XML structure .....	14
Table description .....	14
Columns .....	14
NETSTREAM4/NS4Specification .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
NETSTREAM4/NS4CacheInfo .....	17
XML structure .....	17
Table description .....	18
Columns .....	18

# NETSTREAM4

## NETSTREAM4/NS4Enable

This table contains information about enabling NetStream on an interface.

### XML structure

```
<NETSTREAM4>
  <NS4Enable>
    <InterfaceEnable>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </InterfaceEnable>
  </NS4Enable>
</NETSTREAM4>
```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Enable
Table type	Multi-instance table
Row name	InterfaceEnable
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enable	Traffic direction	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable</li><li>• <b>1</b>—Enables NetStream for incoming traffic.</li><li>• <b>2</b>—Enables NetStream for outgoing traffic.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>3—Enables NetStream for incoming and outgoing traffic.</li> </ul>	

## NETSTREAM4/NS4Sampler

This table contains information about enabling NetStream sampling on an interface.

### XML structure

```

<NETSTREAM4>
  <NS4Sampler>
    <InterfaceSampler>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <SamplerName></SamplerName>
    </InterfaceSampler>
  </NS4Sampler>
</NETSTREAM4>

```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Sampler
Table type	Multi-instance table
Row name	InterfaceSampler
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Direction	Traffic direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Incoming traffic.</li> <li>2—Outgoing traffic.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SamplerName	Sampler name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## NETSTREAM4/NS4Filter

This table contains information about enabling NetStream filtering an interface.

### XML structure

```

<NETSTREAM4>
  <NS4Filter>
    <InterfaceFilter>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <AclNumber></AclNumber>
    </InterfaceFilter>
  </NS4Filter>
</NETSTREAM4>

```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Filter
Table type	Multi-instance table
Row name	InterfaceFilter
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Direction	Traffic direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Incoming traffic.</li> <li>2—Outgoing traffic.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AclNumber	IPv4 ACL number.	N/A	Unsigned integer. For an IPv4 basic ACL, the value range is 2000 to 2999. For an IPv4 advanced ACL, the value range is 3000 to 3999.	NetStream filtering uses an ACL to identify target packets. If you want to collect data for specific flows, use the ACL permit statements to identify the flows. NetStream collects data only for these flows. If you do not want to collect data for specific flows, use the ACL deny statements to identify the flows. NetStream does not collect data for these flows.

## NETSTREAM4/NS4V9RefreshTime

This table contains information about the refresh rate of time for the NetStream version 9 template.

### XML structure

```

<NETSTREAM4>
  <NS4V9RefreshTime>
    <Time></Time>
  </NS4V9RefreshTime>
</NETSTREAM4>

```

### Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4V9RefreshTime
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Time	Interval at which the template is sent	N/A	Unsigned integer. Value range: 1 to 3600 minutes.

# NETSTREAM4/NS4V9RefreshPacket

This table contains information about the refresh rate of packet for the NetStream version 9 template.

## XML structure

```
<NETSTREAM4>
  <NS4V9RefreshPacket>
    <Packet></Packet>
  </NS4V9RefreshPacket>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4V9RefreshPacket
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Packet	Number of packets that are sent before the template is sent	N/A	Unsigned integer. Value range: 1 to 600.

# NETSTREAM4/NS4Host

This table contains the information about the destination host to which the IPv4 NetStream exports.

## XML structure

```
<NETSTREAM4>
  <NS4Host>
    <Host>
      <VrfIndex></VrfIndex>
      <IP></IP>
      <UDPPort></UDPPort>
    </Host>
  </NS4Host>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Host
Table type	Multi-instance table
Row name	Host
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Index of the VRF	Index	Unsigned integer. Value range: 0 to 65535	When vrfIndex is 0, it indicates the host is on public network. This supports name index.
IP	IP address of the host	Index	String, dotted decimal notation.	N/A
UDPPort	UDP port of the host	N/A	Unsigned integer. Value range: 0 to 65535	N/A

## NETSTREAM4/NS4Source

This table contains the information about the source interface for NetStream data to be sent to NetStream servers.

## XML structure

```
<NETSTREAM4>
  <NS4Source>
    <IfIndex></IfIndex>
  </NS4Source>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Source
Table type	Single-instance table
Row name	None



Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Source interface index	N/A	Unsigned integer	This supports name index.

## NETSTREAM4/NS4ActiveTime

This table contains the information about the aging time of active flows.

## XML structure

```
<NETSTREAM4>
  <NS4ActiveTime>
    <ActiveTime></ActiveTime>
  </NS4ActiveTime>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4ActiveTime
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ActiveTime	The active timeout	N/A	Unsigned integer. Value range: 1 to 60 minutes. Default: 30 minutes.

## NETSTREAM4/NS4InActiveTime

This table contains the information about the aging time of inactive flows.

## XML structure

```
<NETSTREAM4>
  <NS4InActiveTime>
    <InActiveTime></InActiveTime>
  </NS4InActiveTime>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4InActiveTime
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
InActiveTime	The Inactive timeout	N/A	Unsigned integer. Value range: 10 to 600 seconds. Default: 30 seconds.

## NETSTREAM4/NS4MaxEntry

This table contains the information about the upper limit on IPv4 NetStream entries.

## XML structure

```
<NETSTREAM4>
  <NS4MaxEntry>
    <MaxEntry></MaxEntry>
    <Action></Action>
  </NS4MaxEntry>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4MaxEntry
Table type	Single-instance table

Item	Description
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxEntry	The MaxEntries of ip netstream	N/A	Unsigned integer	N/A.
Action	Processing method when the upper limit is reached	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Ages out the oldest entries when the upper limit is reached.</li> <li>false (default)—Disables creation of a new entry when the upper limit is reached.</li> </ul>	N/A

## NETSTREAM4/NS4Version

This table contains information about the version that IPv4 NetStream uses to export data.

## XML structure

```

<NETSTREAM4>
  <NS4Version>
    <Version></Version>
    <As></As>
    <NextHop></NextHop>
  </NS4Version>
</NETSTREAM4>

```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4MaxEntry
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Version	The ip netstream version	N/A	Enumeration: <ul style="list-style-type: none"><li>• 5</li><li>• 9</li><li>• 10</li></ul>
As	The autonomous system	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—peer-as</li><li>• 1—origin-as</li></ul>
Nexthop	bgp-nexthop	N/A	Boolean: <ul style="list-style-type: none"><li>• true</li><li>• false</li></ul>

## NETSTREAM4/NS4Rate

This table contains information about the export rate.

## XML structure

```
<NETSTREAM4>
  <NS4Rate>
    <Rate></Rate>
  </NS4Rate>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NETSTREAM4Rate
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Rate	Export rate	N/A	Unsigned integer. Value range: 0 to 1000

# NETSTREAM4/NS4Aging

This table contains information about IPv4 NetStream periodical aging and TCP FIN- and RST-triggered aging.

## XML structure

```
<NETSTREAM4>
  <NS4Aging>
    <AgingEnable></AgingEnable>
  </NS4Aging>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Aging
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
AgingEnable	Enabling status of periodical aging, TCP FIN and RST-triggered aging.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>

# NETSTREAM4/NS4IPSECRawPacket

This table contains information about NetStream for outgoing packets before/after IPsec encapsulation.

## XML structure

```
<NETSTREAM4>
  <NS4IPSECRawPacket>
    <IPSECRawPacket>
      <IfIndex></IfIndex>
      <RawPacketEnable></RawPacketEnable>
    </IPSECRawPacket>
  </NS4IPSECRawPacket>
```

</NETSTREAM4>

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4IPSECRawPacket
Table type	Single-instance table
Row name	IPSECRawPacket
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
RawPacketEnable	Enabling status of NetStream for outgoing packets before IPsec encapsulation	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled (default).</li></ul>	By default, NetStream is enabled for outgoing IPsec encapsulated packets.

## NETSTREAM4/NS4MPLSCollection

This table contains information about MPLS-aware IPv4 NetStream.

## XML structure

```
<NETSTREAM4>
  <NS4MPLSCollection>
    <LabelPosition1></LabelPosition1>
    <LabelPosition2></LabelPosition2>
    <LabelPosition3></LabelPosition3>
    <NoIPFieldsEnable></NoIPFieldsEnable>
  </NS4MPLSCollection>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4MPLSCollection
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LabelPositions1	Position of the first label in the label stack	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0.</li><li>• 1</li><li>• 2</li><li>• 3</li><li>• 4</li><li>• 5</li><li>• 6</li></ul>	N/A
LabelPositions2	Position of the second label in the label stack	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0.</li><li>• 1</li><li>• 2.</li><li>• 3</li><li>• 4</li><li>• 5</li><li>• 6</li></ul>	N/A
LabelPositions3	position of the third label in the label stack.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0.</li><li>• 1</li><li>• 2</li><li>• 3</li><li>• 4</li><li>• 5</li><li>• 6</li></ul>	N/A
NoIPFieldsEnable	Specifies not to count IP fields.	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A

## NETSTREAM4/NS4ExportInfo

This table contains information about the IPv4 NetStream data Export.

# XML structure

```
<NETSTREAM4>
  <NS4ExportInfo>
    <ExportInfo>
      <ExportType></ExportType>
      <Ipv4Address></Ipv4Address>
      <VrfIndex></VrfIndex>
      <UDPPort></UDPPort>
      <IfIndex></IfIndex>
      <V5ExportNum></V5ExportNum>
      <V5UDPDatagramsNum></V5UDPDatagramsNum>
      <V5UDPDatagramsFailed></V5UDPDatagramsFailed>
      <V8ExportNum></V8ExportNum>
      <V8UDPDatagramsNum></V8UDPDatagramsNum>
      <V8UDPDatagramsFailed></V8UDPDatagramsFailed>
      <V9ExportNum></V9ExportNum>
      <V9UDPDatagramsNum></V9UDPDatagramsNum>
      <V9UDPDatagramsFailed></V9UDPDatagramsFailed>
      <V10ExportNum></V10ExportNum>
      <V10UDPDatagramsNum></V10UDPDatagramsNum>
      <V10UDPDatagramsFailed></V10UDPDatagramsFailed>
    </ExportInfo>
  </NS4ExportInfo>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4MPLSCollection
Table type	Multi-instance table
Row name	ExportInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ExportType	Export Type	index	Unsigned integer: <ul style="list-style-type: none"><li>1-17</li></ul>	1-13:aggregation 14:IP 15:MPLS 16:L2 17:IPL2
Ipv4Address	IPv4 address	index	String, dotted decimal notation.	HOST ip address



Column name	Column description	Column type	Data type and restrictions	Remarks
VrfIndex	Index of the VRF	N/A	Unsigned integer.	N/A
UDPPort	UDP Port	N/A	Unsigned integer.	N/A
IfIndex	Interface Index	N/A	Unsigned integer.	N/A
V5ExportNum	Version 5 exported flows number.	N/A	Unsigned integer.	N/A
V5UDPDatagramsNum	Version 5 exported UDP datagram number.	N/A	Unsigned integer.	N/A
V5UDPDatagramsFailed	Version 5 exported UDP datagram failed number.	N/A	Unsigned integer.	N/A
V8ExportNum	Version 8 exported flows number.	N/A	Unsigned integer.	N/A
V8UDPDatagramsNum	Version 8 exported flows number.	N/A	Unsigned integer.	N/A
V8UDPDatagramsFailed	Version 8 exported UDP datagram failed number.	N/A	Unsigned integer.	N/A
V9ExportNum	Version 9 exported flows number.	N/A	Unsigned integer.	N/A
V9UDPDatagramsNum	Version 9 exported UDP datagram number.	N/A	Unsigned integer.	N/A
V9UDPDatagramsFailed	Version 9 exported UDP datagram failed number.	N/A	Unsigned integer.	N/A
V10ExportNum	Version 10 exported flows number.	N/A	Unsigned integer.	Some version may not support.
V10UDPDatagramsNum	Version 10 exported UDP datagram number.	N/A	Unsigned integer.	Some version may not support.
V10UDPDatagramsFailed	Version 10 exported UDP datagram failed number.	N/A	Unsigned integer.	Some version may not support.

# NETSTREAM4/NS4Specification

This table contains information about IPv4 NetStream specification.

## XML structure

```
<NETSTREAM4>
  <NS4Specification>
    <MaxEntryAction></MaxEntryAction>
    <MaxEntryNum></MaxEntryNum>
    <MinEntryNum></MinEntryNum>
    <ActiveMaxTimeOut></ActiveMaxTimeOut>
    <InactiveMaxTimeOut></InactiveMaxTimeOut>
    <NoSupportMPLS></NoSupportMPLS>
    <SupportGlobal></SupportGlobal>
    <NSNoFilter></NSNoFilter>
    <NSSupportMirror></NSSupportMirror>
    <NSNoSampler></NSNoSampler>
    <NS4IfSetConfBitMap></NS4IfSetConfBitMap>
    <NSNoAging></NSNoAging>
    <NsSupportVxlan></NsSupportVxlan>
    <NsIgnoreDirect></NsIgnoreDirect>
    <NsModeRaw></NsModeRaw>
  </NS4Specification>
</NETSTREAM4>
```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4Specification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
MaxEntryAction	Whether the entry action is supported	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>
MaxEntryNum	Max entry number	N/A	Unsigned integer.
MinEntryNum	Min entry number	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
ActiveMaxTimeOut	Active Max TimeOut	N/A	Unsigned integer.
InActiveMaxTimeOut	Inactive Max TimeOut	N/A	Unsigned integer.
NoSupportMPLS	Whether the MPLS is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>
SupportGlobal	Whether enabling IPv4 NetStream globally is supported	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>
NSNoFilter	Whether filter is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>
NSSupportMirror	Whether the mirror is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>
NSNoSampler	Whether the sampler is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>
NS4IfSetConfBitMap	Whether the interface is supported.	N/A	Unsigned integer.
NSNoAging	Whether the aging is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>
NsSupportVxlan	Whether the VXLAN is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>
NsIgnoreDirect	Whether ignore direct.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>
NsModeRaw	Whether the IPsec raw is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>

## NETSTREAM4/NS4CacheInfo

This table contains information about IPv4 NetStream Cache.

### XML structure

```

<NETSTREAM4>
  <NS4CacheInfo>
    <CacheInfo>
      <LipNode></LipNode>

```

```

    <HashIndex></HashIndex>
    <Order></Order>
    <FlowType></FlowType>
    <PacketNum></PacketNum>
    <IfIndex></IfIndex>
    <Direction></Direction>
    <VxlanID></VxlanID>
    <SrcAddress></SrcAddress>
    <SrcPort></SrcPort>
    <DstAddress></DstAddress>
    <DstPort></DstPort>
    <Protocol></Protocol>
    <Tos></Tos>
    <AppID></AppID>
    <MplsTopType></MplsTopType>
    <MplsTopLabelIP></MplsTopLabelIP>
    <MplsTopLabelMaskLen></MplsTopLabelMaskLen>
    <MplsLabel1></MplsLabel1>
    <MplsLabel2></MplsLabel2>
    <MplsLabel3></MplsLabel3>
  </CacheInfo>
</NS4CacheInfo>
</NETSTREAM4>

```

## Table description

Item	Description
Feature name	NETSTREAM4
Table name	NS4CacheInfo
Table type	Multi-instance table
Row name	CacheInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LipNode	The LipNode index	Index	Unsigned integer.	N/A
HashIndex	The hash table index	Index	Unsigned integer Value range: 0 to 65535.	N/A
Order	Position of hash conflict link	Index	Unsigned integer.	N/A
FlowType	NetStream entry type	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—IP</li> <li>2—MPLS</li> <li>3—MIX</li> </ul>	
PacketNum	Total number of packets	N/A	Unsigned integer	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
IfIndex	Interface index	Index	Unsigned integer.	This supports name index
Direction	Direction of the packet	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—OUT</li> <li>1—IN</li> </ul>	N/A
VxlanID	N/A	N/A	Unsigned integer.	N/A
SrcAddress	IP address of the source	N/A	String, dotted decimal notation.	N/A
SrcPort	Port of the source.	N/A	Unsigned integer.	N/A
DstAddress	IP address of the destination	N/A	String, dotted decimal notation.	N/A
DstPort	Port of the destination.	N/A	Unsigned integer.	N/A
Protocol	Protocol type	N/A	Unsigned integer.	N/A
Tos	Service type	N/A	Unsigned integer.	N/A
AppID	Application ID	N/A	Unsigned integer.	N/A
MplsTopType	MPLS top type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—UNKNOWN</li> <li>1—TE_MIDPT</li> <li>2—ATOM</li> <li>3—VPN</li> <li>5—BGP</li> <li>6—LDP</li> </ul>	N/A
MplsTopLabelIP	Label IP address	Index	String, dotted decimal notation.	N/A
MplsTopLabelMaskLen	Label ip mask length	N/A	Unsigned integer.	N/A
MplsLabel1	First mpls label	N/A	Unsigned integer.	N/A
MplsLabel2	Second MPLS label	N/A	Unsigned integer.	N/A
MplsLabel3	Third MPLS label	N/A	Unsigned integer.	N/A

# Contents

NQA .....	1
NQA/Templates .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
NQA/IcmpEchoTemplates .....	5
XML structure .....	6
Table description .....	6
Columns .....	6
NQA/UdpEchoTemplates .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
NQA/TcpTemplates .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
NQA/FtpTemplates .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
NQA/SnmpTemplates .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
NQA/DnsTemplates .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
NQA/HttpTemplates .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
NQA/ImapTemplates .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
NQA/Pop3Templates .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
NQA/RadiusTemplates .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
NQA/RtspTemplates(not supported) .....	23
XML structure .....	23
Table description .....	23
Columns .....	24
NQA/SipTemplates .....	24
XML structure .....	24
Table description .....	24
Columns .....	25
NQA/SslTemplates .....	25
XML structure .....	25
Table description .....	25
Columns .....	26

NQA/SnmpDcaTemplates.....	26
XML structure.....	26
Table description.....	27
Columns.....	27
NQA/WapTemplates.....	28
XML structure.....	29
Table description.....	29
Columns.....	29
NQA/TcpHalfOpenTemplates .....	30
XML structure.....	30
Table description.....	30
Columns.....	31
NQA/Entries .....	31
XML structure.....	31
Table description.....	32
Columns.....	32
NQA/IcmpEchoEntries .....	38
XML structure.....	38
Table description.....	38
Columns.....	38
NQA/IcmpJitterEntries.....	39
XML structure.....	39
Table description.....	39
Columns.....	39
NQA/UdpJitterEntries.....	40
XML structure.....	40
Table description.....	40
Columns.....	41
NQA/Schedules.....	42
XML structure.....	42
Table description.....	42
Columns.....	43
NQA/ReactionTriggerFailltems .....	43
XML structure.....	43
Table description.....	44
Columns.....	44
NQA/Reactions .....	44
XML structure.....	44
Table description.....	45
Columns.....	45
NQA/ClientStatus.....	48
XML structure.....	49
Table description.....	49
Columns.....	49

# NQA

## NQA/Templates

This table contains information about NQA templates.

### XML structure

```
<NQA>
  <Templates>
    <Template>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <Frequency></Frequency>
      <ProbeTimeout></ProbeTimeout>
      <TTL></TTL>
      <ToS></ToS>
      <VRF></VRF>
      <URL></URL>
      <DstIP></DstIP>
      <DstPort></DstPort>
      <SrcIP></SrcIP>
      <SrcPort></SrcPort>
      <NextHop></NextHop>
      <TriggerPassCount></TriggerPassCount>
      <TriggerFailCount></TriggerFailCount>
      <TriggerPerProbe></TriggerPerProbe>
    </Template>
  </Templates>
</NQA>
```

### Table description

Item	Description
Feature name	NQA
Table name	Templates
Table type	Multi-instance table
Row name	Template
Restrictions	None
Support for row creation and deletion	Yes



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Type	Operation type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—ICMP-echo.</li> <li>• 1—UDP-echo.</li> <li>• 2—TCP.</li> <li>• 3—DLSw.</li> <li>• 4—FTP.</li> <li>• 5—DHCP.</li> <li>• 6—SNMP.</li> <li>• 7—DNS.</li> <li>• 8—HTTP.</li> <li>• 9—UDP-jitter.</li> <li>• 10—Voice.</li> <li>• 11—Path-jitter.</li> <li>• 12—UDP-tracert.</li> <li>• 13—ARP.</li> <li>• 14—IMAP.</li> <li>• 15—POP3.</li> <li>• 16—RADIUS.</li> <li>• 17—RTSP.</li> <li>• 18—SIP.</li> <li>• 19—SMTP.</li> <li>• 20—SSL.</li> <li>• 21—HTTPS.</li> <li>• 22—TCP half-open.</li> <li>• 23—Throughput.</li> <li>• 24—Latency.</li> <li>• 25—Frame-loss.</li> <li>• 26—ICMP-jitter.</li> <li>• 27—SNMP-DCA.</li> <li>• 28—WAP.</li> <li>• 29—Y1564.</li> <li>• 30—RADIUS-AC COUNT.</li> <li>• 31—Twamp Light.</li> </ul>	<p>NQA templates are not available for the following types of operations:</p> <ul style="list-style-type: none"> <li>• DLSW.</li> <li>• DHCP.</li> <li>• UDP-jitter.</li> <li>• Voice.</li> <li>• Path-jitter.</li> <li>• UDP-tracert.</li> <li>• Throughput.</li> <li>• Latency.</li> <li>• Frame-loss.</li> <li>• ICMP-jitter.</li> <li>• Y1564.</li> <li>• Twamp Light.</li> </ul> <p>You must specify an operation type when you create a template.</p> <p>You cannot specify an operation type when you remove or delete a template.</p> <p>The operation type of an NQA template cannot be modified.</p>
Description	Description of the template.	N/A	String, case-sensitive. Length: 1 to 200 characters.	By default, no description is specified for an NQA template.
Frequency	Interval in milliseconds at which the NQA operation repeats.	N/A	Unsigned integer. Value range: 0 to 604800000. Default: 5000.	If the operation is not completed when the interval expires, the next operation does not start.

Column name	Column description	Column type	Data type and restrictions	Remarks
ProbeTimeout	Probe timeout time in milliseconds.	N/A	Unsigned integer. Default: 3000.	<p>The value range for the probe timeout time varies by the <b>Type</b> column.</p> <ul style="list-style-type: none"> <li>FTP/HTTP/HTTPS/SNMP-DCA/WAP: 10 to 86400000.</li> <li>ICMP-echo/UDP-echo/TCP/SNMP/DNS/ARP/IMAP/POP3/RADIUS/RTSP/SIP/SMTP/SSL/TCP half-open/RADIUS-ACCOUNT: 10 to 3600000.</li> </ul>
TTL	TTL for probe packets.	N/A	Unsigned integer. Value range: 1 to 255. Default: 20.	The ARP operation does not support this column.
ToS	ToS value in the IP packet header of probe packets.	N/A	Unsigned integer. Value range: 0 to 255. Default: 0.	The ARP operation does not support this column.
VRF	VRF instance where the operation is performed.	N/A	String, case-sensitive. Length: 1 to 31 characters.	By default, no VRF is specified and the operation is performed on the public network.
URL	URL of the destination server.	N/A	String. Length: 1 to 255 characters.	<p>This column cannot be configured with the <b>DstIP</b> or <b>DstPort</b> column simultaneously, except for the WAP operation.</p> <p>Only the FTP, HTTP, HTTPS, RTSP, and WAP operations support this column.</p> <p>By default, no URL is specified for the destination server.</p> <p>Valid URL formats vary by the <b>Type</b> column:</p> <ul style="list-style-type: none"> <li>For FTP operations, enter the URL in one of the following formats: <ul style="list-style-type: none"> <li>ftp://host/filename</li> <li>ftp://host:port/filename</li> </ul> When performing the get operation, the <i>filename</i> argument is required.</li> <li>When performing the put operation, the <i>filename</i> argument does not take effect, even if it is specified. The file name for the put operation is determined by the <b>filename</b> command.</li> <li>For HTTP operations, enter the URL in one of the following formats: <ul style="list-style-type: none"> <li>http://host/resource</li> <li>http://host:port/resource</li> </ul> </li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>For HTTPS operations, enter the URL in one of the following formats: <ul style="list-style-type: none"> <li>https://host/resource</li> <li>https://host:port/resource</li> </ul> </li> <li>For RTSP operations, enter the URL in one of the following formats: <ul style="list-style-type: none"> <li>rtsp://host/resource</li> <li>rtsp://host:port/resource</li> </ul> </li> <li>For WAP operations, enter the URL in one of the following formats: <ul style="list-style-type: none"> <li>http://host/resource</li> <li>http://host:port/resource</li> <li>https://host/resource</li> <li>https://host:port/resource</li> </ul> </li> </ul>
DstIP	Destination IPv4 or IPv6 address for the probe packets.	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	<p>This column cannot be configured with the <b>URL</b> column simultaneously, except for the WAP operation.</p> <p>The FTP, HTTP, HTTPS and RTSP operations do not support this column.</p> <p>By default, no destination address is specified.</p> <p>Destination IP address examples:</p> <ul style="list-style-type: none"> <li>1.1.1.1.</li> <li>1:1::1:1.</li> </ul> <p>This column and the URL column cannot both be configured.</p>
DstPort	Destination port number for the operation.	N/A	Unsigned integer. Value range: 1 to 65535.	<p>This column cannot be configured with the <b>URL</b> column simultaneously, except in the WAP operation.</p> <p>The ICMP-echo, ARP, FTP, HTTP, HTTPS, and RTSP operations do not support this column.</p> <p>The default destination port number varies by the <b>Type</b> column:</p> <ul style="list-style-type: none"> <li>UDP-echo: Not specified.</li> <li>TCP: Not specified.</li> <li>SNMP: 161.</li> <li>DNS: 53.</li> <li>IMAP: 143.</li> <li>POP3: 110.</li> <li>RADIUS: 1812.</li> <li>RTSP: 554.</li> <li>SIP: 5060 (UDP) or 5061 (TCP).</li> <li>SMTP: 25.</li> <li>SSL: Not specified.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>SNMP-DCA: 161.</li> <li>WAP: 9201.</li> <li>RADIUS-ACCOUNT: 1813.</li> </ul>
SrcIP	Source IPv4 or IPv6 address for the probe packets.	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	<p>By default, no source IP address is specified.</p> <p>Source IP address examples:</p> <ul style="list-style-type: none"> <li>1.1.1.1.</li> <li>1:1::1:1.</li> </ul> <p>The source IP address must be the IP address of a local interface, and the interface must be up.</p>
SrcPort	Source port number for the operation.	N/A	Unsigned integer. Value range: 1 to 65535.	<p>Only the DNS operation supports this column.</p> <p>By default, no source port number is specified.</p>
NextHop	Next hop IP address.	N/A	String. Length: 1 to 46 characters.	<p>Only the ICMP-echo, TCP, DNS and TCP half-open operations support this column.</p> <p>Next hop IP address examples:</p> <ul style="list-style-type: none"> <li>1.1.1.1.</li> <li>1:1::1:1.</li> </ul>
TriggerPassCount	Number of consecutive successful probes to determine a successful operation event.	N/A	Unsigned integer. Value range: 1 to 15. Default: 3.	In the same table, TriggerPassCount can be configured only when TriggerPerProbe is set to false. If TriggerPassCount and TriggerPerProbe are configured in different tables, the most recent configuration takes effect.
TriggerFailCount	Number of consecutive probe failures to determine an operation failure.	N/A	Unsigned integer. Value range: 1 to 15. Default: 3.	In the same table, TriggerFailCount can be configured only when TriggerPerProbe is set to false. If TriggerFailCount and TriggerPerProbe are configured in different tables, the most recent configuration takes effect..
TriggerPerProbe	Report the result of each probe.	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li><b>true</b>—Report the result of each probe.</li> <li><b>false</b>—Report according to TriggerPassCount and TriggerFailCount (default).</li> </ul>	<p>In the same table, TriggerPerProbe can be configured only when both TriggerPassCount and TriggerFailCount are set to false. If TriggerPerProbe and TriggerPassCount/TriggerFailCount are configured in different tables, the most recent configuration takes effect.</p> <p>Only the ICMP-echo, DNS and TCP half-open operations support this column.</p>

## NQA/IcmpEchoTemplates

This table contains information about ICMP-echo templates.

## XML structure

```
<NQA>
  <IcmpEchoTemplates>
    <IcmpEchoTemplate>
      <Name></Name>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <SrcIf></SrcIf>
      <OutIf></OutIf>
    </IcmpEchoTemplate>
  </IcmpEchoTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	IcmpEchoTemplates
Table type	Multi-instance table
Row name	IcmpEchoTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	Payload fill string for each request.	N/A	String. Length: 1 to 200 characters.	The default payload fill string is the hexadecimal string 00010203040506070809.
DataSize	Payload size in each request.	N/A	Unsigned integer. Value range: 20 to 65507. Default: 100.	N/A
SrcIf	Source interface whose primary IP address will be used as the source IP address for the requests.	N/A	String. Length: 2 to 47 characters.	By default, no source IP address is specified. The requests use the primary IP address of the outgoing interface as their source IP address.  If both the source IP address and source interface are specified,

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>the most recent configuration takes effect.</p> <p>The specified source interface must be up.</p> <p>The following types of interfaces can be configured as the source interface for the operation:</p> <ul style="list-style-type: none"> <li>• VLAN interface.</li> <li>• Layer 3 Ethernet interface.</li> <li>• Layer 3 aggregate interface.</li> <li>• EFM interface.</li> <li>• Ethernet channel interface.</li> <li>• Management interface.</li> <li>• Layer 3 redundancy interface.</li> </ul> <p>Support for interface types depends on the device model.</p>
OutIf	Output interface.	N/A	String. Length: 2 to 47 characters.	For successful operation, the specified output interface must be up.

## NQA/UdpEchoTemplates

This table contains information about UDP-echo templates.

### XML structure

```

<NQA>
  <UdpEchoTemplates>
    <UdpEchoTemplate>
      <Name></Name>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <ExpectData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
        <HexFlag></HexFlag>
      </ExpectData>
      <ExpectFailedData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>

```

```

        <HexFlag></HexFlag>
    </ExpectFailedData>
    <RequestDataFill>
        <Data></Data>
        <HexFlag></HexFlag>
        <RawFlag></RawFlag>
    </RequestDataFill>
    <ReleaseDataFill>
        <Data></Data>
        <HexFlag></HexFlag>
    </ReleaseDataFill>
</UdpEchoTemplate>
</UdpEchoTemplates>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	UdpEchoTemplates
Table type	Multi-instance table
Row name	UdpEchoTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	Payload fill string for each request.	N/A	String. Length: 1 to 200 characters.	The default payload fill string is the hexadecimal string 00010203040506070809. DataFill is similar to RequestDataFill, and it should not be specified with RequestDataFill simultaneously.
DataSize	Payload size in each request.	N/A	Unsigned integer. Value range: 20 to 65507. Default: 100.	N/A
ExpectData	Data expected in responses to determine a	Data structure	Members include: <ul style="list-style-type: none"> <li>Data.</li> </ul>	By default, no expected data is specified. Both Data and Offset

Column name	Column description	Column type	Data type and restrictions	Remarks
	successful operation.		<ul style="list-style-type: none"> <li>Offset.</li> <li>StrictFlag.</li> <li>HexFlag.</li> </ul>	<p>must be specified.</p> <p>For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.</p>
Data	Expected response string.	N/A	<p>String.</p> <p>Length: 1 to 200 characters.</p>	When HexFlag is specified, the string must be a hexadecimal string and contain an even number of characters.
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 1000.</p> <p>Default: 0</p>	N/A
StrictFlag	<p>Whether the data is matched by exact matching method.</p> <p>Enabling status of the strict offset match.</p>	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
ExpectFailedData	Data expected in responses to determine a failed operation.	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>Data.</li> <li>Offset.</li> <li>StrictFlag.</li> <li>HexFlag.</li> </ul>	<p>By default, no expected data is specified.</p> <p>Both Data and Offset must be specified.</p> <p>For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.</p>
Data	Expected response string.	N/A	<p>String.</p> <p>Length: 1 to 200 characters.</p>	When HexFlag is specified, the string must be a hexadecimal string and contain an even number of characters.
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 1000.</p> <p>Default: 0</p>	N/A
StrictFlag	Whether the data is matched by exact matching method.	N/A	<p>Boolean:</p> <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	Enabling status of the strict offset match.			
RequestDataFill	Payload fill string for each request.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Data.</li> <li>• HexFlag.</li> <li>• RawFlag.</li> </ul>	By default, no payload fill string is specified. All the members must be specified. RequestDataFill is similar to DataFill, and it should not be specified with DataFill simultaneously. For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.
Data	Payload fill string.	N/A	String. Length: 1 to 200 characters.	When HexFlag is specified, the string must be a hexadecimal string and contain an even number of characters.
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—The data is a hexadecimal string.</li> <li>• <b>false</b>—The data is a general string (default).</li> </ul>	N/A
RawFlag	Whether the raw mode is used.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Raw mode.</li> <li>• <b>false</b>—General mode (default).</li> </ul>	N/A
ReleaseDataFill	String to be filled in the payload of resource release notification packets.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Data.</li> <li>• HexFlag</li> </ul>	By default, no payload fill string is specified. Both Data and HexFlag must be specified. For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.
Data	Payload fill string.	N/A	String. Length: 1 to 200 characters.	When HexFlag is specified, the string must be a hexadecimal string and contain an even number of characters.
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—The data is a hexadecimal string.</li> <li>• <b>false</b>—The data is a general string (default).</li> </ul>	N/A

# NQA/TcpTemplates

This table contains information about TCP templates.

## XML structure

```
<NQA>
  <TcpTemplates>
    <TcpTemplate>
      <Name></Name>
      <DataFill></DataFill>
      <ExpectData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
        <HexFlag></HexFlag>
      </ExpectData>
      <ExpectFailedData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
        <HexFlag></HexFlag>
      </ExpectFailedData>
      <RequestDataFill>
        <Data></Data>
        <HexFlag></HexFlag>
      </RequestDataFill >
      <ReleaseDataFill>
        <Data></Data>
        <HexFlag></HexFlag>
      </ReleaseDataFill>
    </TcpTemplate>
  </TcpTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	TcpTemplates
Table type	Multi-instance table
Row name	TcpTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	Payload fill string for each request.	N/A	String. Length: 1 to 200 characters.	The default payload fill string is the hexadecimal string 00010203040506070809. DataFill is similar to RequestDataFill, and it should not be specified with RequestDataFill simultaneously.
ExpectData	Data expected in responses to determine a successful operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Data.</li> <li>• Offset.</li> <li>• StrictFlag.</li> <li>• HexFlag</li> </ul>	By default, no expected data is specified. The expected data is checked only when both data-fill and expect-data are specified. Both Data and Offset must be specified. For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	When HexFlag is specified, the string must be a hexadecimal string and contain an even number of characters
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
StrictFlag	Whether the data is matched by exact matching method. Enabling status of the strict offset match.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
ExpectFailedData	Data expected in responses to determine a failed operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Data.</li> <li>• Offset.</li> <li>• StrictFlag.</li> <li>• HexFlag</li> </ul>	By default, no expected data is specified. Both Data and Offset must be specified. For the get-config and get-bulk-config operations, all members are returned if the default

Column name	Column description	Column type	Data type and restrictions	Remarks
				setting of one member is changed.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	When HexFlag is specified, the string must be a hexadecimal string and contain an even number of characters.
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	Unsigned integer. Value range: 0 to 1000. Default: 0	N/A
StrictFlag	Whether the data is matched by exact matching method.  Enabling status of the strict offset match.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
RequestDataFill	Payload fill string for each request.	Data structure	Members include: <ul style="list-style-type: none"> <li>Data.</li> <li>HexFlag</li> </ul>	By default, no payload fill string is specified.  Both Data and HexFlag must be specified.  RequestDataFill is similar to DataFill, and it should not be specified with DataFill simultaneously.  For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.
Data	Payload fill string.	N/A	String. Length: 1 to 200 characters	When HexFlag is specified, the string must be a hexadecimal string and contain an even number of characters.
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The data is a hexadecimal string.</li> <li><b>false</b>—The data is a general string (default).</li> </ul>	N/A
ReleaseDataFill	String to be filled in the payload of resource release notification packets.	Data structure	Members include: <ul style="list-style-type: none"> <li>Data.</li> <li>HexFlag</li> </ul>	By default, no payload fill string is specified.  Both Data and HexFlag must be specified.  For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.

Column name	Column description	Column type	Data type and restrictions	Remarks
Data	Payload fill string.	N/A	String. Length: 1 to 200 characters	When HexFlag is specified, the string must be a hexadecimal string and contain an even number of characters.
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The data is a hexadecimal string.</li> <li><b>false</b>—The data is a general string (default).</li> </ul>	N/A

## NQA/FtpTemplates

This table contains information about FTP templates.

### XML structure

```

<NQA>
  <FtpTemplates>
    <FtpTemplate>
      <Name></Name>
      <Operation></Operation>
      <UserName></UserName>
      <Password></Password>
      <FileName></FileName>
      <Mode></Mode>
    </FtpTemplate>
  </FtpTemplates>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	FtpTemplates
Table type	Multi-instance table
Row name	FtpTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Operation	FTP operation type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Get operation (default).</li> <li>2—Put operation.</li> </ul>	By default, the FTP operation type is get, which means obtaining files from the FTP server.
UserName	Login username.	N/A	String. Length: 1 to 32 characters.	By default, no FTP login username is specified.
Password	Login password.	N/A	String. Length : 1 to 32 characters.	By default, no FTP login password is specified.
FileName	Name of the file to be transferred.	N/A	String. Length: 1 to 200 characters.	This configuration is required for the put operation and does not take effect for the get operation. By default, no file is specified. The forward slash (/) is not supported in FileName.
Mode	The data transmission mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Active mode (default).</li> <li>1—Passive mode.</li> </ul>	N/A

## NQA/SnmpTemplates

This table contains information about SNMP templates.

### XML structure

```

<NQA>
  <SnmpTemplates>
    <SnmpTemplate>
      <Name></Name>
      <Community></Community>
    </SnmpTemplate>
  </SnmpTemplates>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	SnmpTemplates
Table type	Multi-instance table
Row name	SnmpTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Community	SNMP community name.	N/A	String. Length: 1 to 32 characters.	The default community name is <b>public</b> .

## NQA/DnsTemplates

This table contains information about DNS templates.

## XML structure

```
<NQA>
  <DnsTemplates>
    <DnsTemplate>
      <Name></Name>
      <ResolveTarget></ResolveTarget>
      <ResolveType></ResolveType>
      <ExpectIP></ExpectIP>
      <OutIf></OutIf>
    </DnsTemplate>
  </DnsTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA

Item	Description
Table name	DnsTemplates
Table type	Multi-instance table
Row name	DnsTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ResolveTarget	Domain name that needs to be translated.	N/A	String. Length: 1 to 255 characters.	By default, no domain name is specified.
ResolveType	Domain name resolution type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Type A query (default).</li> <li>28—Type AAAA query.</li> </ul>	A type A query resolves a domain name to a mapped IPv4 address, and a type AAAA query to a mapped IPv6 address.
ExpectIP	The IPv4 or IPv6 address that is expected to be returned.	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	Expected IP address examples: <ul style="list-style-type: none"> <li>1.1.1.1.</li> <li>1:1::1:1.</li> </ul>
OutIf	Output interface.	N/A	String. Length: 2 to 47 characters.	For successful operation, the specified output interface must be up.

## NQA/HttpTemplates

This table contains information about HTTP and HTTPS templates.

## XML structure

```

<NQA>
  <HttpTemplates>
    <HttpTemplate>
      <Name></Name>
      <UserName></UserName>
      <Password></Password>
      <Operation></Operation>
      <Version></Version>
      <RawContent></RawContent>
    </HttpTemplate>
  </HttpTemplates>
</NQA>

```



```

    <ExpectStatus></ExpectStatus>
    <ExpectData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
    </ExpectData>
    <SslClientPolicy></SslClientPolicy>
    <ProxyUrl></ProxyUrl>
</HttpTemplate>
</HttpTemplates>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	HttpTemplates
Table type	Multi-instance table
Row name	HttpTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Login username.	N/A	String. Length: 1 to 32 characters.	By default, no login username is specified.
Password	Login password.	N/A	String. Length: 1 to 32 characters.	By default, no login password is specified.
Operation	Operation type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Get operation (default).</li> <li>2—Post operation.</li> <li>3—Raw Operation.</li> </ul>	By default, the operation type is get, which means obtaining files from the server.  In the raw operation, use the raw-request command to specify the content of the HTTP request to be sent to the server.
Version	Version	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Version1.0 (default).</li> <li>1—Version1.1.</li> </ul>	N/A
RawContent	Raw request	N/A	String.	This step is required for

Column name	Column description	Column type	Data type and restrictions	Remarks
	content.		Length: 1 to 1023 characters.	the raw operation. By default, no contents are specified. The following formats are not supported: Xq/qu/qui/quitX, XquitYaaaX, Xr/re/ret/retu/returnX or XreturnYaaaX(X represents 0 to n spaces, Y represents 1 to n spaces and aaa represents a character string without spaces.) As a best practice, do not configure the alias.
ExpectStatus	List of expected status codes.	N/A	Numeric string. It is a comma-separated list of status items. Length: 1 to 4000 characters.	For example: 200,300-400,500. By default, No expected status code is configured..
ExpectData	Data expected in responses to determine a successful operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>Data.</li> <li>Offset.</li> <li>StrictFlag.</li> </ul>	By default, no expected data is specified. Both Data and Offset must be specified. For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	N/A
Offset	Offset in bytes after which the client starts to search the expected response string.	Offset in bytes after which the client starts to search for the expected string	Unsigned integer. Value range: 0 to 1000. Default: 0	N/A
StrictFlag	Whether the data is matched by exact matching method. Enabling status of the strict offset match.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
SslClientPolicy	SSL client policy used to access the HTTPS server	N/A	String, case-insensitive. Length: 1 to 31 characters.	Only the HTTPS operation supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
				By default, no SSL client policy is specified.
ProxyUrl	URL of the proxy server.	N/A	String. Length: 1 to 255 characters.	<p>ProxyUrl is the address of proxy server, and the client to access the server through proxy server.</p> <p>By default, no ProxyUrl is specified for the proxy server.</p> <p>Valid ProxyUrl formats vary by operations:</p> <ul style="list-style-type: none"> <li>For HTTP operations, enter the URL in one of the following formats: <ul style="list-style-type: none"> <li>http://host</li> <li>http://host:port</li> </ul> </li> <li>For HTTPS operations, enter the URL in one of the following formats: <ul style="list-style-type: none"> <li>https://host</li> <li>https://host:port</li> </ul> </li> </ul>

## NQA/ImapTemplates

This table contains information about IMAP templates.

### XML structure

```

<NQA>
  <ImapTemplates>
    <ImapTemplate>
      <Name></Name>
      <UserName></UserName>
      <Password></Password>
      <Mailbox></Mailbox>
    </ImapTemplate>
  </ImapTemplates>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	ImapTemplates
Table type	Multi-instance table

Item	Description
Row name	ImapTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Login username.	N/A	String. Length: 1 to 40 characters.	By default, no login username is specified.
Password	Login password.	N/A	String. Length: 1 to 40 characters.	By default, no login password is specified.
Mailbox	Mailbox name.	N/A	String. Length: 1 to 64 characters.	By default, the mailbox is <b>INBOX</b> .

## NQA/Pop3Templates

This table contains information about POP3 templates.

## XML structure

```

<NQA>
  <Pop3Templates>
    <Pop3Template>
      <Name></Name>
      <UserName></UserName>
      <Password></Password>
    </Pop3Template>
  </Pop3Templates>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	Pop3Templates
Table type	Multi-instance table
Row name	Pop3Template

Item	Description
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Login username.	N/A	String. Length: 1 to 40 characters.	By default, no login username is specified.
Password	Login password.	N/A	String. Length: 1 to 40 characters.	By default, no login password is specified.

## NQA/RadiusTemplates

This table contains information about RADIUS and RADIUS-ACCOUNT templates.

## XML structure

```

<NQA>
  <RadiusTemplates>
    <RadiusTemplate>
      <Name></Name>
      <UserName></UserName>
      <Password></Password>
      <Key></Key>
    </RadiusTemplate>
  </RadiusTemplates>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	RadiusTemplates
Table type	Multi-instance table
Row name	RadiusTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Login username.	N/A	String. Length: 1 to 253 characters.	By default, no login username is specified.
Password	Login password.	N/A	String. Length: 1 to 64 characters.	The RADIUS-ACCOUNT operation does not support this column. By default, no login password is specified.
Key	Shared key.	N/A	String. Length: 1 to 64 characters.	N/A

## NQA/RtspTemplates(not supported)

This table contains information about RTSP templates.

## XML structure

```
<NQA>
  <RtspTemplates>
    <RtspTemplate>
      <Name></Name>
      <ExpectStatus></ExpectStatus>
      <RequestMethod></RequestMethod>
    </RtspTemplate>
  </RtspTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	RtspTemplates
Table type	Multi-instance table
Row name	RtspTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ExpectStatus	List of expected status codes.	N/A	Numeric string. It is a comma-separated list of status items. Length: 1 to 4000 characters.	For example: 200,300-400,500. By default, no expected status code is configured.
RequestMethod	Request method.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Options method (default).</li><li>2—Describe method.</li></ul>	By default, the request method is options, which means obtaining request methods that available on the server.

## NQA/SipTemplates

This table contains information about SIP templates.

### XML structure

```
<NQA>
  <SipTemplates>
    <SipTemplate>
      <Name></Name>
      <ExpectStatus></ExpectStatus>
      <TransProtocol></TransProtocol>
    </SipTemplate>
  </SipTemplates>
</NQA>
```

### Table description

Item	Description
Feature name	NQA
Table name	SipTemplates
Table type	Multi-instance table
Row name	SipTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ExpectStatus	List of expected status codes.	N/A	Numeric string. It is a comma-separated list of status items. Length: 1 to 4000 characters.	For example: 200,300-400,500. By default, no expected status is specified.
TransProtocol	Transport layer protocol.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>6</b>—TCP.</li><li>• <b>17</b>—UDP (default).</li></ul>	N/A.

## NQA/SslTemplates

This table contains information about SSL templates.

### XML structure

```
<NQA>
  <SslTemplates>
    <SslTemplate>
      <Name></Name>
      <ClientPolicy></ClientPolicy>
    </SslTemplate>
  </SslTemplates>
</NQA>
```

### Table description

Item	Description
Feature name	NQA
Table name	SslTemplates
Table type	Multi-instance table
Row name	SslTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ClientPolicy	SSL client policy	N/A	String, case-insensitive. Length: 1 to 31 characters.	By default, no SSL client policy is specified.

## NQA/SnmpDcaTemplates

This table contains information about SNMP-DCA templates.

Reading of and modification to the table must follow the order of the column in the table.

## XML structure

```
<NQA>
  <SnmpDcaTemplates>
    <SnmpDcaTemplate>
      <Name></Name>
      <Community></Community>
      <Version></Version>
      <AgentType></AgentType>
      <CPU>
        <Threshold></Threshold>
        <Weight></Weight>
      </CPU>
      <Memory>
        <Threshold></Threshold>
        <Weight></Weight>
      </Memory>
      <Disk>
        <Threshold></Threshold>
        <Weight></Weight>
      </Disk>
      <OID>
        <OidString></OidString>
        <Threshold></Threshold>
        <Weight></Weight>
      </OID>
    </SnmpDcaTemplate>
  </SnmpDcaTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	SnmpDcaTemplates
Table type	Multi-instance table
Row name	SnmpDcaTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Community	SNMP community name.	N/A	String. Length: 1 to 32 characters.	The default community name is <b>public</b> .
Version	SNMP version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—SNMPv1 (default).</li> <li>2—SNMPv2c.</li> </ul>	N/A
AgentType	SNMP agent type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Net-Snmp (default).</li> <li>1—Windows.</li> <li>2—UserDefined.</li> </ul>	N/A
CPU	CPU usage information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Threshold.</li> <li>Weight.</li> </ul>	Both Threshold and Weight must be specified. For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.
Threshold	CPU usage threshold.	N/A	Unsigned integer. Value range: 0 to 100. Default: 80.	N/A
Weight	CPU usage weight.	N/A	Unsigned integer. Value range: 0 to 100. Default: 3.	N/A
Memory	Memory usage information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Threshold.</li> <li>Weight.</li> </ul>	Both Threshold and Weight must be specified. For the get-config and get-bulk-config operations, all members are returned if the default

Column name	Column description	Column type	Data type and restrictions	Remarks
				setting of one member is changed.
Threshold	Memory usage threshold.	N/A	Unsigned integer. Value range: 0 to 100. Default: 70.	N/A
Weight	Memory usage weight.	N/A	Unsigned integer. Value range: 0 to 100. Default: 2.	N/A
Disk	Disk usage information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Threshold.</li> <li>Weight.</li> </ul>	Both Threshold and Weight must be specified. For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.
Threshold	Disk usage threshold.	N/A	Unsigned integer. Value range: 0 to 100. Default: 90.	N/A
Weight	Disk usage weight.	N/A	Unsigned integer. Value range: 0 to 100. Default: 4.	N/A
OID	OID information of the MIB object whose statistics the SNMP DCA operation collects.	Data structure	Members include: <ul style="list-style-type: none"> <li>OidString.</li> <li>Threshold.</li> <li>Weight.</li> </ul>	This column can appear at most 8 times in this row. By default, no OID data is specified. All the members must be specified. For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.
OidString	MIB subtree by its root node's OID.	N/A	Dotted numeric string. Length: 1 to 255 characters	Example for OID: 1.3.6.1.4.1.2021.11.11.0.
Threshold	Threshold.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
Weight	Weight.	N/A	Unsigned integer. Value range: 0 to 100.	N/A

## NQA/WapTemplates

This table contains information about WAP templates.

## XML structure

```
<NQA>
  <WapTemplates>
    <WapTemplate>
      <Name></Name>
      <ExpectData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
        <HexFlag></HexFlag>
      </ExpectData>
    </WapTemplate>
  </WapTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	WapTemplates
Table type	Multi-instance table
Row name	WapTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ExpectData	Data expected in responses to determine a successful operation.	Data structure	Members include: <ul style="list-style-type: none"><li>• Data.</li><li>• Offset.</li><li>• StrictFlag.</li><li>• HexFlag.</li></ul>	By default, no expected data is specified. Both Data and Offset must be specified. For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	When HexFlag is specified, the string must be a hexadecimal string and contain an even

Column name	Column description	Column type	Data type and restrictions	Remarks
				number of characters.
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	Unsigned integer. Value range: 0 to 1000. Default: 0	N/A
StrictFlag	Whether the data is matched by exact matching method.  Enabling status of the strict offset match.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The data is a hexadecimal string.</li> <li><b>false</b>—The data is a general string (default).</li> </ul>	N/A

## NQA/TcpHalfOpenTemplates

This table contains information about TCP half-open templates.

### XML structure

```

<NQA>
  <TcpHalfOpenTemplates>
    <TcpHalfOpenTemplate>
      <Name></Name>
      <PortDetectEnable></PortDetectEnable>
      <OutIf></OutIf>
    </TcpHalfOpenTemplate>
  </TcpHalfOpenTemplates>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	TcpHalfOpenTemplates
Table type	Multi-instance table
Row name	TcpHalfOpenTemplate
Restrictions	The row creation and deletion of this table is along with table Templates.

Item	Description
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
PortDetectEnable	Whether the port detection mode is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Port detection mode is enabled.</li> <li><b>false</b>—Port detection mode is disabled (default).</li> </ul>	N/A
OutIf	Output interface.	N/A	String. Length: 2 to 47 characters.	For successful operation, the specified output interface must be up.

## NQA/Entries

This table contains information about NQA entries.

## XML structure

```

<NQA>
  <Entries>
    <Entry>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <Type></Type>
      <Description></Description>
      <DstIP></DstIP>
      <DstPort></DstPort>
      <Frequency></Frequency>
      <HistoryEnable></HistoryEnable>
      <HistoryHoldTime></HistoryHoldTime>
      <HistoryNumber></HistoryNumber>
      <NextHop></NextHop>
      <ProbeCount></ProbeCount>
      <ProbeTimeout></ProbeTimeout>
      <BypassRouteEnable></BypassRouteEnable>
      <SrcIP></SrcIP>
      <SrcPort></SrcPort>
      <StatHoldTime></StatHoldTime>
      <StatInterval></StatInterval>
      <StatMaxGroup></StatMaxGroup>
    
```

```

    <TTL></TTL>
    <ToS></ToS>
    <VRF></VRF>
    <URL></URL>
  </Entry>
</Entries>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	Entries
Table type	Multi-instance table
Row name	Entry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Type	Operation type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—ICMP-echo</li> <li>• 1—UDP-echo</li> <li>• 2—TCP</li> <li>• 3—DLSw</li> <li>• 4—FTP</li> <li>• 5—DHCP</li> <li>• 6—SNMP</li> <li>• 7—DNS</li> <li>• 8—HTTP</li> <li>• 9—UDP-jitter</li> <li>• 10—VOICE</li> <li>• 11—Path-jitter</li> <li>• 12—UDP-tracert</li> <li>• 13—ARP</li> <li>• 14—IMAP</li> <li>• 15—POP3</li> <li>• 16—Radius</li> <li>• 17—RTSP</li> <li>• 18—SIP</li> </ul>	Type ICMP-echo, ICMP-jitter and UDP-jitter are supported. You must specify a type when you create an entry that does not exist. You cannot specify a type when you remove or delete an entry. The type cannot be modified.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 19—SMTP</li> <li>• 20—SSL</li> <li>• 21—HTTPS</li> <li>• 22—TCP Half-open</li> <li>• 23—Throughput</li> <li>• 24—Latency</li> <li>• 25—Frame-Loss</li> <li>• 26—ICMP-jitter</li> <li>• 27—SNMP-DCA</li> <li>• 28—WAP</li> <li>• 29—Y1564</li> <li>• 30—RADIUS-ACCOUNT</li> <li>• 31—Twamp Light</li> </ul>	
Description	Entry description	N/A	String, case-sensitive. Length: 1 to 200 characters.	By default, no description is specified for an entry.
DstIP	Destination IPv4 or IPv6 address for the probe packets	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	<p>This column and the URL column cannot be both configured.</p> <p>The type FTP, HTTP, HTTPS and RTSP types do not support this column.</p> <p>Type ICMP-echo and UDP-jitter support IPv6 address.</p> <p>By default, no destination address is specified.</p> <p>IPv4 example: 1.1.1.1.</p> <p>IPv6 example: 1:1::1:1.</p>
DstPort	Destination port number for the operation	N/A	Unsigned integer. Value range: 1 to 65535.	<p>The type ICMP-echo, ICMP-Jitter and FTP do not support this column.</p> <p>The default value of destination port depend on the Type column.</p> <ul style="list-style-type: none"> <li>• UDP-echo: none.</li> <li>• TCP: none.</li> <li>• SNMP: 161.</li> <li>• DNS: 53.</li> <li>• IMAP: 143.</li> <li>• POP3: 110.</li> </ul>



Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>Radius: 1812.</li> <li>RTSP: 554.</li> <li>SIP: 5060(UDP) or 5061(TCP).</li> <li>SMTP: 25.</li> <li>SSL: none.</li> <li>UDP-jitter:none.</li> </ul>
Frequency	Probe interval in milliseconds	N/A	Unsigned integer. Value range: 0 to 604800000.	<p>The default value of probe interval depend on the Type column.</p> <ul style="list-style-type: none"> <li>Voice/Path-jitter : 60000.</li> <li>ICMP-echo/TC P/UDP-echo/D HCP/DLSw/DN S/FTP/HTTP/S NMP/UDP-trace rt/ICMP-jitter/UDP-jitter: 0.</li> </ul>
HistoryEnable	Whether to enable the saving of history records	N/A	<p>EnableState:</p> <ul style="list-style-type: none"> <li><b>enable</b>—Enable the saving of history records.</li> <li><b>disable</b>—Disable the saving of history records.</li> </ul>	<p>The default state depend on the Type column.</p> <ul style="list-style-type: none"> <li>UDP-tracert: enable.</li> <li>ICMP-echo/TC P/UDP-echo/D HCP/DLSw/DN S/FTP/HTTP/S NMP: disable.</li> </ul>
HistoryHoldTime	History records lifetime in minutes	N/A	Unsigned integer. Value range: 1 to 1440.	The default value is 120.
HistoryNumber	Maximum number of history records that can be saved	N/A	Unsigned integer. Value range: 0 to 50.	The default value is 50.
NextHop	Next hop IPv4 or IPv6 address	N/A	String. Length: 1 to 46 characters.	<p>Only the type ICMP-echo support this column.</p> <p>IPv4 example: 1.1.1.1.</p> <p>IPv6 example: 1:1::1:1.</p>
ProbeCount	Probe times per operation	N/A	Unsigned integer. Value range: 1 to 15.	<p>The default value of probe count depend on the Type column.</p> <ul style="list-style-type: none"> <li>UDP-tracert: 3.</li> <li>ICMP-echo/TC P/UDP-echo/D HCP/DLSw/DN S/FTP/HTTP/S NMP/</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>ICMP-jitter/UDP-jitter: 1.</p> <p>The value ranges of probe count depend on the Type column.</p> <ul style="list-style-type: none"> <li>• UDP-tracert: 1 to 10.</li> <li>• ICMP-echo/TCP/UDP-echo/DHCP/DLSw/DNS//FTP/HTTP/SNMP/ICMP-jitter/UDP-jitter: 1 to 15.</li> </ul>
ProbeTimeout	Probe timeout time in milliseconds	N/A	Unsigned integer. Default: 3000.	<p>The value ranges of probe timeout depends on the Type column.</p> <ul style="list-style-type: none"> <li>• FTP/HTTP/HTTPS: 10 to 86400000.</li> <li>• ICMP-echo/UDP-echo/TCP/SNMP/DNS/ARP/IMAP/POP3/RADIUS/RTSP/SIP/SMTP/SSL/TCP Half-open: 10 to 3600000.</li> </ul>
BypassRoute Enable	Whether to enable the routing table bypass feature to test the connectivity to the direct destination	N/A	<p>EnableState:</p> <ul style="list-style-type: none"> <li>• <b>enable</b>—Enable the routing table bypass feature.</li> <li>• <b>disable</b>—Disable the routing table bypass feature.</li> </ul>	The default state is disable.
SrcIP	Source IPv4 or IPv6 address for the probe packets	N/A	String, dotted decimal notation. Or Hexadecimal string, colon-separated. Length: 1 to 46 characters.	<p>Type ICMP-echo and UDP-jitter support IPv6 address.</p> <p>By default, no source address is specified.</p> <p>IPv4 example: 1.1.1.1.</p> <p>IPv6 example: 1::1:1.</p> <p>The source IPv4 or IPv6 address must be the IPv4 or IPv6 address of a local interface, and the interface must be up.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcPort	Source port number for the operation	N/A	Unsigned integer. Value range: 1 to 65535.	Type ICMP-echo, DHCP, DLSW, DNS, ICMP-jitter, Path-jitter, TCP, FTP and HTTP do not support this column. The default source port number varies by operation type: <ul style="list-style-type: none"> <li>Frame-loss/Throughput/Latency: 49184</li> <li>Udp-echo/Snmp/UDP-tracert/UDP-jitter/Voice: none</li> </ul>
StatHoldTime	Statistics groups hold time in minutes	N/A	Unsigned integer. Value range: 1 to 1440.	The default value is 120.
StatInterval	Statistics collection interval in minutes	N/A	Unsigned integer. Value range: 1 to 35791394.	The default value is 60.
StatMaxGroup	Maximum number of statistics groups	N/A	Unsigned integer. Value range: 0 to 100.	The default value is 2.
TTL	Destination port number for the operation	N/A	Unsigned integer. Value range: 1 to 255.	Type ARP does not support this column. The default value of TTL depend on the Type column. <ul style="list-style-type: none"> <li>UDP-tracert: 30.</li> <li>ICMP-echo/TCP/UDP-echo/DHCP/DLSw/DNS/FTP/HTTP/SNMP/ICMP-jitter/UDP-jitter: 20.</li> </ul>
ToS	ToS value in the IP packet header of probe packets	N/A	Unsigned integer. Value range: 0 to 255. Default: 0.	Type ARP does not support this column.
VRF	VRF instance where the operation is performed	N/A	String, case-sensitive. Length: 0 to 31 characters.	By default, no VRF is specified and the operation is performed on the public network.
URL	URL of the destination server	N/A	String. Length: 1 to 255 characters.	This column and the DstIP, DstPort column cannot be configured simultaneously. Only the types of FTP, HTTP, HTTPS

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>and RTSP support this column.</p> <p>By default, no URL is specified for the destination server.</p> <p>The formats of URL depend on the Type column.</p> <ul style="list-style-type: none"> <li>• FTP</li> </ul> <p>Enter the URL in one of the following formats:</p> <p>ftp://host/filename</p> <p>ftp://host:port/filename</p> <p>When performing the get operation, the file name is required.</p> <p>When performing the put operation, the filename argument does not take effect, even if it is specified. The file name for the put operation is determined by the FileName column.</p> <ul style="list-style-type: none"> <li>• HTTP</li> </ul> <p>Enter the URL in one of the following formats:</p> <p>http://host/resource</p> <p>http://host:port/resource</p> <ul style="list-style-type: none"> <li>• HTTPS</li> </ul> <p>Enter the URL in one of the following formats:</p> <p>https://host/resource</p> <p>https://host:port/resource</p> <ul style="list-style-type: none"> <li>• RTSP</li> </ul> <p>Enter the URL in one of the following formats:</p> <p>rtsp://host/resource</p> <p>rtsp://host:port/resource</p>

# NQA/IcmpEchoEntries

This table contains information about ICMP-Echo entries.

## XML structure

```
<NQA>
  <IcmpEchoEntries>
    <IcmpEchoEntry>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <SrcIf></SrcIf>
      <OutIf></OutIf>
    </IcmpEchoEntry>
  </IcmpEchoEntries>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	IcmpEchoEntries
Table type	Multi-instance table
Row name	IcmpEchoEntry
Restrictions	The row creation and deletion of this table is along with table Entries.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	Payload fill string for probe packets	N/A	String, case-insensitive. Length: 1 to 200 characters.	The default payload fill string varies by device model.
DataSize	Payload size for each probe packet	N/A	Unsigned integer. Value range: 20 to 65507.	The default value is 100.

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIf	Source interface	N/A	String, case-insensitive. Length: 2 to 47 characters.	For successful operation, the specified source interface must be up.
OutIf	Output interface	N/A	String, case-insensitive. Length: 2 to 47 characters.	For successful operation, the specified output interface must be up.

## NQA/IcmpJitterEntries

This table contains information about ICMP-jitter entries.

### XML structure

```

<NQA>
  <IcmpJitterEntries>
    <IcmpJitterEntry>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <PktInterval></PktInterval>
      <PktNumber></PktNumber>
      <PktTimeout></PktTimeout>
    </IcmpJitterEntry>
  </IcmpJitterEntries>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	IcmpJitterEntries
Table type	Multi-instance table
Row name	IcmpJitterEntry
Restrictions	The row creation and deletion of this table is along with table Entries.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 32 characters.	
PktInterval	Packet sending interval in the probe in milliseconds	N/A	Unsigned integer. Value range: 10 to 60000. Default: 20	N/A
PktNumber	Number of packets to be sent per probe	N/A	Unsigned integer. Value range: 10 to 1000. Default: 10	N/A
PktTimeout	Packet time out in milliseconds	N/A	Unsigned integer. Value range: 10 to 3600000. Default: 3000	N/A

## NQA/UdpJitterEntries

This table contains information about UDP-jitter entries.

### XML structure

```

<NQA>
  <UdpJitterEntries>
    <UdpJitterEntry>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <PktInterval></PktInterval>
      <PktNumber></PktNumber>
      <PktTimeout></PktTimeout>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <OutIf></OutIf>
      <HighPerformance></HighPerformance>
      <MplsSimulation>
        <Enable></Enable>
        <Exp></Exp>
      </MplsSimulation>
    </UdpJitterEntry>
  </UdpJitterEntries>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	UdpJitterEntries

Item	Description
Table type	Multi-instance table
Row name	UdpJitterEntry
Restrictions	The row creation and deletion of this table is along with table Entries.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
PktInterval	Packet sending interval in the probe in milliseconds	N/A	Unsigned integer. Value range: 10 to 60000. Default: 20	N/A
PktNumber	Number of packets to be sent per probe	N/A	Unsigned integer. Value range: 10 to 1000. Default: 10	N/A
PktTimeout	Packet time out in milliseconds	N/A	Unsigned integer. Value range: 10 to 3600000. Default: 3000	N/A
DataFill	Payload fill string for probe packets	N/A	String, case-insensitive. Length: 1 to 200 characters.	The default payload fill string varies by device model.
DataSize	Payload size for each probe packet	N/A	Unsigned integer. Value range: 68 to 65507. Default: 100	N/A
OutIf	Output interface	N/A	String, case-insensitive. Length: 2 to 47 characters.	For successful operation, the specified output interface must be up.
HighPerformance	Enabling status of the high performance mode	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>	N/A
MplsSimulation	MPLS emulation test information	Data structure	Members include: <ul style="list-style-type: none"> <li>Enable.</li> <li>Exp.</li> </ul>	The members must both be specified.  For the get-config and get-bulk-config operations, all members are returned if the default setting of one member is changed.



Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of MPLS emulation	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>	N/A
Exp	EXP value for each MPLS probe packet	N/A	Unsigned integer. Value range: 0 to 7. Default: 0	When the value for <b>Enable</b> is false, the system ignores the <b>Exp</b> value setting.

## NQA/Schedules

This table contains information about NQA entry schedules. You cannot edit a Schedules after it is configured.

## XML structure

```

<NQA>
  <Schedules>
    <Schedule>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <StartTime>
        <StartNow></StartNow>
        <Time></Time>
      </StartTime>
      <Lifetime>
        <Forever></Forever>
        <Duration></Duration>
      </Lifetime>
      <Recurring></Recurring>
    </Schedule>
  </Schedules>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	Schedules
Table type	Multi-instance table
Row name	Schedule
Restrictions	The row creation and deletion of this table is along with table Entries.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
StartTime	Start time	N/A	Member include: <ul style="list-style-type: none"> <li>StartNow</li> <li>Time</li> </ul>	When StartNow is true, StartTime cannot be specified. When StartTime is specified, StartNow must be false.
StartNow	Start now	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	True means to start the operation immediately.
Time	Start time and date of an operation	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
Lifetime	The duration of an operation	N/A	Member include: <ul style="list-style-type: none"> <li>Forever</li> <li>Duration</li> </ul>	When Forever is true, Duration cannot be specified. When Duration is specified, Forever must be false.
Forever	Forever	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	True means to perform the operation until you stop it.
Duration	The duration of an operation in seconds	N/A	Unsigned integer. Value range: 1 to 2147483647.	When Recurring is enabled, the value range for Duration is 1 to 86399.
Recurring	Recurring	N/A	EnableState: <ul style="list-style-type: none"> <li><b>enable</b>—Run the operation automatically at the start time and for the specified duration.</li> <li><b>disable</b>—The operation is performed only once at the specified date and time.</li> </ul>	The default state is disable. When Recurring is enable, Forever must be designated as false.

## NQA/ReactionTriggerFailItems

This table contains information about reaction trigger fail items. You cannot edit a reaction trigger failItem after it is configured.

### XML structure

```
<NQA>
  <ReactionTriggerFailItems>
```

```

    <ReactionTriggerFailItem>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <ItemNumber></ItemNumber>
      <Occurrences></Occurrences>
    </ReactionTriggerFailItem>
  </ReactionTriggerFailItems>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	ReactionTriggerFailItems
Table type	Multi-instance table
Row name	ReactionTriggerFailItem
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ItemNumber	Item number	Index	Unsigned integer. Value range: 1 to 10.	N/A
Occurrences	Maximum number of consecutive probe failures	N/A	Unsigned integer. Value range: 1 to 16.	N/A

## NQA/Reactions

This table contains information about reaction items. You cannot edit a reaction item after it is configured.

## XML structure

```

<NQA>
  <Reactions>
    <Reaction>

```

```

    <AdminName></AdminName>
    <OperationTag></OperationTag>
    <ItemNumber></ItemNumber>
    <CheckedElement></CheckedElement>
    <ThresholdType>
      <Type></Type>
      <Occurrences></Occurrences>
    </ThresholdType>
    <ThresholdValue>
      <UpperLimit></UpperLimit>
      <LowerLimit></LowerLimit>
    </ThresholdValue>
    <ActionType></ActionType>
  </Reaction>
</Reactions>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	Reactions
Table type	Multi-instance table
Row name	Reaction
Restrictions	The reaction can be configured only if the corresponding NQA entry is created. If the NQA entry is deleted, all reaction within it will be deleted.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ItemNumber	Item number	Index	Unsigned integer. Value range: 1 to 10.	N/A
CheckedElement	Monitored element	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—probe-duration</li> <li>2—probe-fail</li> <li>3—rtt</li> <li>4—packet-loss</li> <li>5—jitter-sd</li> </ul>	Support for the CheckedElement varies by NQA entry operation type. Details are as follow: <ul style="list-style-type: none"> <li>ICMP-echo: probe-duration/probe-fail</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>6—jitter-ds</li> <li>7—icpif</li> <li>8—mos</li> <li>9—owd-sd</li> <li>10—owd-ds</li> </ul>	<ul style="list-style-type: none"> <li>ICMP-jitter: jitter-sd/jitter-ds/owd-sd/owd-ds/packet-loss/rtt</li> <li>UDP-jitter: jitter-sd/jitter-ds/owd-sd/owd-ds/packet-loss/rtt</li> </ul>
ThresholdType	Threshold type	Data structure	Member include: <ul style="list-style-type: none"> <li>Type</li> <li>Occurrences</li> </ul>	The ThresholdType is valid if monitored element is jitter-sd, jitter-ds, packet-loss, probe-duration, probe-fail or rtt.
Type	Threshold violation type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—average</li> <li>2—consecutive</li> <li>3—accumulate</li> </ul>	Support for the violation type varies by monitored element. Details are as follow: <ul style="list-style-type: none"> <li>jitter-sd/jitter-ds: average/accumulate</li> <li>packet-loss: accumulate.</li> <li>probe-duration: average/consecutive/accumulate.</li> <li>probe-fail: consecutive/accumulate.</li> <li>rtt: accumulate/average</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
Occurrences	Maximum number of threshold violations	N/A	Unsigned integer.	<p>The value of Occurrences is valid if the Type is consecutive or accumulate.</p> <p>The value range of occurrences depends on the NQA entry operation type and the monitored element. Details are as follow:</p> <ul style="list-style-type: none"> <li>jitter-ds/jitter-sd: The value range of accumulate-occurrences is 1 to 14999 for ICMP-jitter and UDP-jitter operations.</li> <li>packet-loss: The value range of accumulate-occurrences is 1 to 15000 for ICMP-jitter and UDP-jitter operations.</li> <li>probe-duration: The value range of accumulate-occurrences is 1 to 15. The value range of consecutive-occurrences is 1 to 16.</li> <li>probe-fail: The value range of accumulate-occurrences is 1 to 15. The value range of consecutive-occurrences is 1 to 16.</li> <li>rtt: The value range of accumulate-occurrences is 1 to 15000 for ICMP-jitter and UDP-jitter operations.</li> </ul>
ThresholdValue	Value range of threshold	Data structure	Member include: <ul style="list-style-type: none"> <li>UpperLimit</li> <li>LowerLimit</li> </ul>	The value range of threshold is valid if the monitored element is jitter-sd, jitter-ds, owd-sd, owd-ds, icpif, mos, probe-duration or RTT.
UpperLimit	Upper limit of threshold	N/A	Unsigned integer.	<p>The value range of threshold depends on the value of CheckedElement. Details are as follow:</p> <ul style="list-style-type: none"> <li>jitter-ds/jitter-sd: 0 to 3600000.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>owd-ds/owd-sd: 0 to 3600000.</li> <li>icpif: 1 to 100.</li> <li>mos: 1 to 500.</li> <li>probe-duration: 0 to 3600000.</li> <li>rtt: 0 to 3600000.</li> </ul>
LowerLimit	Lower limit of threshold	N/A	Unsigned integer.	<p>The value range of threshold depends on the value of CheckedElement. Details are as follow:</p> <ul style="list-style-type: none"> <li>jitter-ds/jitter-sd: 0 to 3600000.</li> <li>owd-ds/owd-sd: 0 to 3600000.</li> <li>icpif: 1 to 100.</li> <li>mos: 1 to 500.</li> <li>probe-duration: 0 to 3600000.</li> <li>rtt: 0 to 3600000.</li> </ul>
ActionType	Action to be triggered	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li><b>0</b>—none</li> <li><b>1</b>—trap-only</li> <li><b>2</b>—trigger-only</li> </ul>	<p>Support for the action varies by monitored element. Details are as follow:</p> <ul style="list-style-type: none"> <li>jitter-ds/jitter-sd/rtt: none/trap-only. The default action is none.</li> <li>owd-ds/owd-sd: not support.</li> <li>icpif: none/trap-only. The default action is none.</li> <li>mos: none/trap-only. The default action is none.</li> <li>packet-loss: none/trap-only. The default action is none.</li> <li>probe-duration: none/trap-only. The default action is none.</li> <li>probe-fail(for trap): none/trap-only. The default action is none.</li> <li>probe-fail(for trigger): trigger-only.</li> </ul>

## NQA/ClientStatus

This table contains information about NQA client enabling status.

## XML structure

```
<NQA>
  <ClientStatus>
    <Enable></Enable>
  </ClientStatus>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	ClientStatus
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of the NQA client	N/A	Enabling status: <ul style="list-style-type: none"><li><b>enable</b>—NQA client is enabled.</li><li><b>disable</b>—NQA client is disabled.</li></ul>	By default, the NQA client is enabled.



# Contents

NQA .....	1
NQA/Templates .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
NQA/IcmpEchoTemplates .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
NQA/UdpEchoTemplates .....	5
XML structure .....	6
Table description .....	6
Columns .....	7
NQA/TcpTemplates .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
NQA/FtpTemplates .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
NQA/SnmpTemplates .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
NQA/DnsTemplates .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
NQA/HttpTemplates .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
NQA/ImapTemplates .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
NQA/Pop3Templates .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
NQA/RadiusTemplates .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
NQA/RtspTemplates .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
NQA/SipTemplates .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
NQA/SslTemplates .....	21
XML structure .....	21
Table description .....	21
Columns .....	21

NQA/SnmpDcaTemplates.....	22
XML structure.....	22
Table description.....	22
Columns.....	23
NQA/WapTemplates.....	24
XML structure.....	24
Table description.....	24
Columns.....	24
NQA/TcpHalfOpenTemplates .....	25
XML structure.....	25
Table description.....	25
Columns.....	26
NQA/Histories .....	26
XML structure.....	26
Table description.....	27
Columns.....	27
NQA/Entries .....	28
XML structure.....	28
Table description.....	28
Columns.....	29
NQA/IcmpEchoEntries .....	32
XML structure.....	32
Table description.....	32
Columns.....	32
NQA/IcmpJitterEntries.....	33
XML structure.....	33
Table description.....	33
Columns.....	33
NQA/UdpJitterEntries.....	34
XML structure.....	34
Table description.....	34
Columns.....	35
NQA/Schedules.....	35
XML structure.....	36
Table description.....	36
Columns.....	36
NQA/ReactionTriggerFailItems .....	37
XML structure.....	37
Table description.....	37
Columns.....	38
NQA/Reactions .....	38
XML structure.....	38
Table description.....	39
Columns.....	39
NQA/ClientStatus.....	40
XML structure.....	40
Table description.....	40
Columns.....	40
NQA/Results.....	40
XML structure.....	41
Table description.....	41
Columns.....	41
NQA/JitterResults .....	42
XML structure.....	42
Table description.....	44
Columns.....	44
NQA/FrameLossResults.....	49
XML structure.....	49
Table description.....	50
Columns.....	50
NQA/FrameLossResults/DetailResults .....	51
XML structure.....	51

Table description .....	51
Columns .....	51
NQA/ThroughputResults .....	52
XML structure .....	52
Table description .....	52
Columns .....	53
NQA/ThroughputResults/DetailResults .....	53
XML structure .....	53
Table description .....	53
Columns .....	54
NQA/LatencyResults .....	54
XML structure .....	54
Table description .....	55
Columns .....	55
NQA/LatencyResults/DetailResults .....	56
XML structure .....	56
Table description .....	56
Columns .....	56
NQA/Y1564Results .....	57
XML structure .....	57
Table description .....	58
Columns .....	58
NQA/Y1564Results/DetailResults .....	59
XML structure .....	59
Table description .....	59
Columns .....	59
NQA/TwamplightLossStats .....	61
XML structure .....	61
Table description .....	62
Columns .....	62
NQA/TwamplightLossStats/DetailStats .....	63
XML structure .....	63
Table description .....	64
Columns .....	64
NQA/TwamplightDelayStats .....	64
XML structure .....	64
Table description .....	65
Columns .....	65
NQA/TwamplightDelayStats/DetailStats .....	66
XML structure .....	66
Table description .....	66
Columns .....	67

# NQA

## NQA/Templates

This table contains information about NQA templates.

### XML structure

```
<NQA>
  <Templates>
    <Template>
      <Name></Name>
      <Type></Type>
      <Description></Description>
      <Frequency></Frequency>
      <ProbeTimeout></ProbeTimeout>
      <TTL></TTL>
      <ToS></ToS>
      <VRF></VRF>
      <URL></URL>
      <DstIP></DstIP>
      <DstPort></DstPort>
      <SrcIP></SrcIP>
      <SrcPort></SrcPort>
      <NextHop></NextHop>
      <TriggerPassCount></TriggerPassCount>
      <TriggerFailCount></TriggerFailCount>
      <TriggerPerProbe></TriggerPerProbe>
      <TestDestination></TestDestination>
    </Template>
  </Templates>
</NQA>
```

### Table description

Item	Description
Feature name	NQA
Table name	Templates
Table type	Multi-instance table
Row name	Template
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Type	Operation type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—ICMP-echo.</li> <li>• 1—UDP-echo.</li> <li>• 2—TCP.</li> <li>• 3—DLSw</li> <li>• 4—FTP.</li> <li>• 5—DHCP</li> <li>• 6—SNMP.</li> <li>• 7—DNS.</li> <li>• 8—HTTP.</li> <li>• 9—UDP-jitter</li> <li>• 10—Voice</li> <li>• 11—Path-jitter</li> <li>• 12—UDP-tracert</li> <li>• 13—ARP.</li> <li>• 14—IMAP.</li> <li>• 15—POP3.</li> <li>• 16—RADIUS.</li> <li>• 17—RTSP.</li> <li>• 18—SIP.</li> <li>• 19—SMTP.</li> <li>• 20—SSL.</li> <li>• 21—HTTPS.</li> <li>• 22—TCP Half-open.</li> <li>• 23—Throughput.</li> <li>• 24—Latency.</li> <li>• 25—Frame-loss.</li> <li>• 26—ICMP-jitter.</li> <li>• 27—SNMP-DCA.</li> <li>• 28—WAP.</li> <li>• 29—Y1564.</li> <li>• 30—RADIUS-ACC OUNT.</li> <li>• 31—Twamp Light.</li> </ul>	NQA templates are not available for the following types of operations: <ul style="list-style-type: none"> <li>• DLSW.</li> <li>• DHCP.</li> <li>• UDP-jitter.</li> <li>• Voice.</li> <li>• Path-jitter.</li> <li>• UDP-tracert.</li> <li>• Throughput.</li> <li>• Latency.</li> <li>• Frame-loss.</li> <li>• ICMP-jitter.</li> <li>• Y1564</li> <li>• Twamp Light.</li> </ul>
Description	Description of the template.	N/A	String, case-sensitive. Length: 1 to 200 characters.	N/A
Frequency	Interval in milliseconds at which the NQA operation repeats.	N/A	Unsigned integer. Value range: 0 to 604800000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ProbeTimeout	Probe timeout time in milliseconds	N/A	Unsigned integer.	<p>The value range for the probe timeout time varies by the <b>Type</b> column.</p> <ul style="list-style-type: none"> <li>FTP/HTTP/HTTPS/SNMP-DCA/WAP: 10 to 86400000.</li> <li>ICMP-echo/UDP-echo/TCP/SNMP/DNS/ARP/IMAP/POP3/RADIUS/RTSP/SIP/SMTP/SSL/TCP half-open/RADIUS-ACCOUNT: 10 to 3600000.</li> </ul>
TTL	TTL for probe packets	N/A	Unsigned integer. Value range: 1 to 255.	The ARP operation does not support this column..
ToS	ToS value in the IP packet header of probe packets	N/A	Unsigned integer. Value range: 0 to 255.	The ARP operation does not support this column.
VRF	VRF instance where the operation is performed.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
URL	URL of the destination server.	N/A	String. Length: 1 to 255 characters.	<p>This column cannot be configured with the <b>DstIP</b> or <b>DstPort</b> column simultaneously, except for the WAP operation.</p> <p>Only the FTP, HTTP, HTTPS, RTSP, and WAP operations support this column.</p>
DstIP	Destination IPv4 or IPv6 address for the probe packets.	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	<p>This column cannot be configured with the <b>URL</b> column simultaneously, except for the WAP operation.</p> <p>The FTP, HTTP, HTTPS and RTSP operations do not support this column.</p>
DstPort	Destination port number for the operation.	N/A	Unsigned integer. Value range: 1 to 65535.	<ul style="list-style-type: none"> <li>This column and the <b>URL</b> column will not be available simultaneously.</li> <li>Type ICMP-echo, ARP, FTP, HTTP, HTTPS and RTSP do not support this column.</li> </ul>
SrcIP	Source IPv4 or IPv6 address for the probe packets.	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	N/A
SrcPort	Source port number for the operation.	N/A	Unsigned integer. Value range: 1 to 65535.	Only the DNS operation supports this column.

Column name	Column description	Column type	Data type and restrictions	Remarks
NextHop	Next hop IP address	N/A	String. Length:1 to 46 characters.	Only the ICMP-echo, TCP, DNS and TCP half-open operations support this column.
TriggerPassCount	Number of consecutive successful probes to determine a successful operation event.	N/A	Unsigned integer. Value range: 1 to 15.	N/A
TriggerFailCount	Number of consecutive probe failures to determine an operation failure.	N/A	Unsigned integer. Value range: 1 to 15.	N/A
TriggerPerProbe	Report the result of each probe.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Report for each probe.</li> <li><b>false</b>—Report according to TriggerPassCount and TriggerFailCount.</li> </ul>	Only the ICMP-echo, DNS and TCP half-open operations support this column.
TestDestination	Destination of the operation.	N/A	String. Length: 1 to 255 characters.	The value can be either of the following: <ul style="list-style-type: none"> <li>Destination IP address.</li> <li>Destination IP address and port number.</li> <li>Destination URL.</li> </ul> This column is not supported currently.

## NQA/IcmpEchoTemplates

This table contains information about ICMP-echo templates.

### XML structure

```

<NQA>
  <IcmpEchoTemplates>
    <IcmpEchoTemplate>
      <Name></Name>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <SrcIf></SrcIf>
      <OutIf></OutIf>
    </IcmpEchoTemplate>
  </IcmpEchoTemplates>
</NQA>

```

```
</IcmpEchoTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	IcmpEchoTemplates
Table type	Multi-instance table
Row name	IcmpEchoTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	Payload fill string for each reqes.	N/A	String. Length: 1 to 200 characters.	N/A
DataSize	Payload size in each request.	N/A	Unsigned integer. Value range: 20 to 65507.	N/A
SrcIf	Full name of an interface, including the interface type and number.  Source interface whose primary IP address will be used as the source IP address for the requests.	N/A	String. Length: 2 to 47 characters.	If both the source IP address and source interface are specified, the most recent configuration takes effect.
OutIf	Output interface including the interface type and number.	N/A	String, case-insensitive. Length: 2 to 47 characters.	N/A

## NQA/UdpEchoTemplates

This table contains information about UDP-echo templates.



# XML structure

```
<NQA>
  <UdpEchoTemplates>
    <UdpEchoTemplate>
      <Name></Name>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <ExpectData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
        <HexFlag></HexFlag>
      </ExpectData>
      <ExpectFailedData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
        <HexFlag></HexFlag>
      </ExpectFailedData>
      <RequestDataFill>
        <Data></Data>
        <HexFlag></HexFlag>
        <RawFlag></RawFlag>
      </RequestDataFill>
      <ReleaseDataFill>
        <Data></Data>
        <HexFlag></HexFlag>
      </ReleaseDataFill>
    </UdpEchoTemplate>
  </UdpEchoTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	UdpEchoTemplates
Table type	Multi-instance table
Row name	UdpEchoTemplate
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	Payload fill string for each request.	N/A	String. Length: 1 to 200 characters.	N/A
DataSize	Payload size in each request.	N/A	Unsigned integer. Value range: 20 to 65507.	N/A
ExpectData	Data expected in responses to determine a successful operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Data.</li> <li>• Offset.</li> <li>• StrictFlag.</li> <li>• HexFlag.</li> </ul>	Both Data and Offset must be specified.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	N/A
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
StrictFlag	Whether the data is matched by exact matching method.  Enabling status of the strict offset match.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—The data is a hexadecimal string.</li> <li>• <b>false</b>—The data is a general string.</li> </ul>	N/A
ExpectFailedData	Data expected in responses to determine a failed operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Data.</li> <li>• Offset.</li> <li>• StrictFlag.</li> <li>• HexFlag.</li> </ul>	Both Data and Offset must be specified.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters.	N/A
Offset	Offset in bytes after which the client starts to	N/A	Unsigned integer. Value range: 0 to 1000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	search for the expected string.			
StrictFlag	Whether the data is matched by exact matching method.  Enabling status of the strict offset match.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The data is a hexadecimal string.</li> <li><b>false</b>—The data is a general string.</li> </ul>	N/A
RequestDataFill	Payload fill string for each request.	Data structure	Members include: <ul style="list-style-type: none"> <li>Data.</li> <li>HexFlag.</li> <li>RawFlag.</li> </ul>	All the members must be specified.
Data	Payload fill string.	N/A	String. Length: 1 to 200 characters	N/A
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The data is a hexadecimal string.</li> <li><b>false</b>—The data is a general string.</li> </ul>	N/A
RawFlag	Whether the raw mode is used.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Raw mode.</li> <li><b>false</b>—General mode.</li> </ul>	N/A
ReleaseDataFill	String to be filled in the payload of resource release notification packets.	Data structure	Members include: <ul style="list-style-type: none"> <li>Data.</li> <li>HexFlag.</li> </ul>	Both Data and HexFlag must be specified.
Data	Payload fill string.	N/A	String. Length: 1 to 200 characters.	N/A
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The data is a hexadecimal string.</li> <li><b>false</b>—The data is a general string.</li> </ul>	N/A

# NQA/TcpTemplates

This table contains information about TCP templates.

## XML structure

```
<NQA>
  <TcpTemplates>
    <TcpTemplate>
      <Name></Name>
      <DataFill></DataFill>
      <ExpectData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
        <HexFlag></HexFlag>
      <ExpectFailedData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
        <HexFlag></HexFlag>
      </ExpectFailedData>
      <RequestDataFill>
        <Data></Data>
        <HexFlag></HexFlag>
      </RequestDataFill>
      <ReleaseDataFill>
        <Data></Data>
        <HexFlag></HexFlag>
      </ReleaseDataFill>
    </ExpectData>
  </TcpTemplate>
</TcpTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	TcpTemplates
Table type	Multi-instance table
Row name	TcpTemplate
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	Payload fill string for each request.	N/A	String. Length: 1 to 200 characters.	N/A
ExpectData	Data expected in responses to determine a successful operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Data.</li> <li>• Offset.</li> <li>• StrictFlag.</li> <li>• HexFlag.</li> </ul>	Both Data and Offset must be specified.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	N/A
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
StrictFlag	Whether the data is matched by exact matching method.  Enabling status of the strict offset match.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—The data is a hexadecimal string.</li> <li>• <b>false</b>—The data is a general string.</li> </ul>	N/A
ExpectFailedData	Data expected in responses to determine a failed operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Data.</li> <li>• Offset.</li> <li>• StrictFlag.</li> <li>• HexFlag.</li> </ul>	Both Data and Offset must be specified.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	N/A
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
StrictFlag	Whether the data is matched by exact matching method.  Enabling status of the strict offset	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled (default). If the value is set to false, the match operation follows the</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	match.		method defined by the offset.	
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The data is a hexadecimal string.</li> <li><b>false</b>—The data is a general string.</li> </ul>	N/A
RequestDataFill	Payload fill string for each request.	Data structure	Members include: <ul style="list-style-type: none"> <li>Data.</li> <li>HexFlag.</li> </ul>	Both Data and HexFlag must be specified.
Data	Payload fill string.	N/A	String. Length: 1 to 200 characters	N/A
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The data is a hexadecimal string.</li> <li><b>false</b>—The data is a general string.</li> </ul>	N/A
ReleaseDataFill	String to be filled in the payload of resource release notification packets.	Data structure	Members include: <ul style="list-style-type: none"> <li>Data.</li> <li>HexFlag.</li> </ul>	Both Data and HexFlag must be specified.
Data	Payload fill string.	N/A	String. Length: 1 to 200 characters	N/A
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The data is a hexadecimal string.</li> <li><b>false</b>—The data is a general string.</li> </ul>	N/A

## NQA/FtpTemplates

This table contains information about FTP templates.

### XML structure

```

<NQA>
  <FtpTemplates>
    <FtpTemplate>
      <Name></Name>
      <Operation></Operation>
      <UserName></UserName>
      <Password></Password>
      <FileName></FileName>
      <Mode></Mode>
    </FtpTemplate>
  </FtpTemplates>

```

</NQA>

## Table description

Item	Description
Feature name	NQA
Table name	FtpTemplates
Table type	Multi-instance table
Row name	FtpTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Operation	FTP operation type.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Get operation.</li><li>2—Put operation.</li></ul>	N/A
UserName	Login username.	N/A	String. Length: 1 to 32 characters.	N/A
Password	Login password.	N/A	String. Length: 1 to 32 characters.	N/A
FileName	Name of the file to be transferred.	N/A	String. Length: 1 to 200 characters.	N/A
Mode	Data transmission mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Active mode.</li><li>1—Passive mode.</li></ul>	N/A

## NQA/SnmpTemplates

This table contains information about SNMP templates.

## XML structure

```
<NQA>
  <SnmpTemplates>
    <SnmpTemplate>
      <Name></Name>
      <Community></Community>
    </SnmpTemplate>
  </SnmpTemplates>
```

</NQA>

## Table description

Item	Description
Feature name	NQA
Table name	SnmpTemplates
Table type	Multi-instance table
Row name	SnmpTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Community	SNMP community name.	N/A	String. Length: 1 to 32 characters.	N/A

## NQA/DnsTemplates

This table contains information about DNS templates.

## XML structure

```
<NQA>
  <DnsTemplates>
    <DnsTemplate>
      <Name></Name>
      <ResolveTarget></ResolveTarget>
      <ResolveType></ResolveType>
      <ExpectIP></ExpectIP>
      <OutIf></OutIf>
    </DnsTemplate>
  </DnsTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	DnsTemplates



Item	Description
Table type	Multi-instance table
Row name	DnsTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ResolveTarget	Domain name that needs to be translated.	N/A	String. Length: 1 to 255 characters.	N/A
ResolveType	Domain name resolution type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Type A query.</li> <li>28—Type AAAA query.</li> </ul>	N/A
ExpectIP	IPv4 or IPv6 address that is expected to be returned.	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	N/A
OutIf	Output interface including the interface type and number.	N/A	String, case-insensitive. Length: 2 to 47 characters.	N/A

## NQA/HttpTemplates

This table contains information about HTTP and HTTPS templates.

### XML structure

```

<NQA>
  <HttpTemplates>
    <HttpTemplate>
      <Name></Name>
      <UserName></UserName>
      <Password></Password>
      <Operation></Operation>
      <Version></Version>
      <RawContent></RawContent>
      <ExpectStatus></ExpectStatus>
      <ExpectData>
        <Data></Data>
      </ExpectData>
    </HttpTemplate>
  </HttpTemplates>
</NQA>

```

```

    <Offset></Offset>
    <StrictFlag></StrictFlag>
  </ExpectData>
  <SslClientPolicy></SslClientPolicy>
  <ProxyUrl></ProxyUrl>
</HttpTemplate>
</HttpTemplates>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	HttpTemplates
Table type	Multi-instance table
Row name	HttpTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Login username.	N/A	String. Length: 1 to 32 characters.	N/A
Password	Login password.	N/A	String. Length: 1 to 32 characters.	N/A
Operation	Operation type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Get operation.</li> <li>2—Post operation.</li> <li>3—Raw Operation.</li> </ul>	N/A
Version	Version	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Version1.0.</li> <li>1—Version1.1.</li> </ul>	N/A
RawContent	Raw request content.	N/A	String. Length: 1 to 1023 characters.	N/A
ExpectStatus	List of expected status codes.	N/A	Numeric string. It is a comma-separated list of status items. Length: 1 to 4000 characters.	N/A
ExpectData	Data expected in responses to	Data structure	Members include:	Both Data and Offset must be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
	determine a successful operation.		<ul style="list-style-type: none"> <li>Data.</li> <li>Offset.</li> <li>StrictFlag.</li> </ul>	
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	N/A
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
StrictFlag	Whether the data is matched by exact matching method.  Enabling status of the strict offset match.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
SslClientPolicy	SSL client policy used to access the HTTPS. server	N/A	String, case-insensitive. Length: 1 to 31 characters.	Only the HTTPS operation supports this column.  By default, no SSL client policy is specified.
ProxyUrl	URL of the proxy server.	N/A	String. Length: 1 to 255 characters.	N/A

## NQA/ImapTemplates

This table contains information about IMAP templates.

### XML structure

```

<NQA>
  <ImapTemplates>
    <ImapTemplate>
      <Name></Name>
      <UserName></UserName>
      <Password></Password>
      <Mailbox></Mailbox>
    </ImapTemplate>
  </ImapTemplates>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	ImapTemplates
Table type	Multi-instance table
Row name	ImapTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Login username.	N/A	String. Length: 1 to 40 characters.	N/A
Password	Login password.	N/A	String. Length: 1 to 40 characters.	N/A
Mailbox	Mailbox name.	N/A	String. Length: 1 to 64 characters.	N/A

## NQA/Pop3Templates

This table contains information about POP3 templates.

## XML structure

```
<NQA>
  <Pop3Templates>
    <Pop3Template>
      <Name></Name>
      <UserName></UserName>
      <Password></Password>
    </Pop3Template>
  </Pop3Templates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA

Item	Description
Table name	Pop3Templates
Table type	Multi-instance table
Row name	Pop3Template
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Login username.	N/A	String. Length: 1 to 40 characters.	N/A
Password	Login password.	N/A	String. Length: 1 to 40 characters.	N/A

## NQA/RADIUS Templates

This table contains information about RADIUS and RADIUS-ACCOUNT templates.

## XML structure

```

<NQA>
  <RadiusTemplates>
    <RadiusTemplate>
      <Name></Name>
      <UserName></UserName>
      <Password></Password>
      <Key></Key>
    </RadiusTemplate>
  </RadiusTemplates>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	RadiusTemplates
Table type	Multi-instance table
Row name	RadiusTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Login username.	N/A	String. Length: 1 to 253 characters.	N/A
Password	Login password.	N/A	String. Length: 1 to 64 characters.	N/A
Key	Shared key.	N/A	String. Length: 1 to 64 characters.	N/A

## NQA/RtspTemplates

This table contains information about RTSP templates.

## XML structure

```
<NQA>
  <RtspTemplates>
    <RtspTemplate>
      <Name></Name>
      <ExpectStatus></ExpectStatus>
      <RequestMethod></RequestMethod>
    </RtspTemplate>
  </RtspTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	RtspTemplates
Table type	Multi-instance table
Row name	RtspTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template	Index	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	name.		Length: 1 to 32 characters.	
ExpectStatus	List of expected status codes.	N/A	Numeric string. It is a comma-separated list of status items. Length: 1 to 4000 characters.	N/A
RequestMethod	Request method.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Options method.</li> <li>2—Describe method.</li> </ul>	N/A

## NQA/SipTemplates

This table contains information about SIP templates.

### XML structure

```

<NQA>
  <SipTemplates>
    <SipTemplate>
      <Name></Name>
      <ExpectStatus></ExpectStatus>
      <TransProtocol></TransProtocol>
    </SipTemplate>
  </SipTemplates>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	SipTemplates
Table type	Multi-instance table
Row name	SipTemplate
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ExpectStatus	List of	N/A	Numeric string.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	expected status codes.		It is a comma-separated list of status items. Length: 1 to 4000 characters.	
TransProtocol	Transport layer protocol.	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP.</li> <li>17—UDP.</li> </ul>	N/A

## NQA/SslTemplates

This table contains information about SSL templates.

### XML structure

```

<NQA>
  <SslTemplates>
    <SslTemplate>
      <Name></Name>
      <ClientPolicy></ClientPolicy>
    </SslTemplate>
  </SslTemplates>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	SslTemplates
Table type	Multi-instance table
Row name	SslTemplate
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ClientPolicy	SSL client policy	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A



# NQA/SnmpDcaTemplates

This table contains information about SNMP-DCA templates.

Reading of and modification to the table must follow the order of the column in the table.

## XML structure

```
<NQA>
  <SnmpDcaTemplates>
    <SnmpDcaTemplate>
      <Name></Name>
      <Community></Community>
      <Version></Version>
      <AgentType></AgentType>
      <CPU>
        <Threshold></Threshold>
        <Weight></Weight>
      </CPU>
      <Memory>
        <Threshold></Threshold>
        <Weight></Weight>
      </Memory>
      <Disk>
        <Threshold></Threshold>
        <Weight></Weight>
      </Disk>
      <OID>
        <OidString></OidString>
        <Threshold></Threshold>
        <Weight></Weight>
      </OID>
    </SnmpDcaTemplate>
  </SnmpDcaTemplates>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	SnmpdcaTemplates
Table type	Multi-instance table
Row name	SnmpdcaTemplate
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Community	SNMP community name.	N/A	String. Length: 1 to 32 characters.	N/A
Version	SNMP version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—SNMPv1.</li> <li>2—SNMPv2c.</li> </ul>	N/A
AgentType	SNMP agent type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Net-Snmp.</li> <li>1—Windows.</li> <li>2—UserDefined.</li> </ul>	N/A
CPU	CPU usage information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Threshold.</li> <li>Weight.</li> </ul>	Both Threshold and Weight must be specified.
Threshold	CPU usage threshold.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
Weight	CPU usage weight.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
Memory	Memory usage information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Threshold.</li> <li>Weight.</li> </ul>	Both Threshold and Weight must be specified.
Threshold	Memory usage threshold.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
Weight	Memory usage weight.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
Disk	Disk usage information.	Data structure	Members include: <ul style="list-style-type: none"> <li>Threshold.</li> <li>Weight.</li> </ul>	Both Threshold and Weight must be specified.
Threshold	Disk usage threshold.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
Weight	Disk usage weight.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
OID	OID information of the MIB object whose statistics the SNMP DCA operation collects.	Data structure	Members include: <ul style="list-style-type: none"> <li>OidString.</li> <li>Threshold.</li> <li>Weight.</li> </ul>	This column can appear at most 8 times in this row.  When the get, get-bulk, get-config, or get-bulk-config operation is issued, the <b>OID</b> column cannot repeat.  All the members must be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
OidString	MIB subtree by its root node's OID.	N/A	Dotted numeric string. Length: 1 to 255 characters	Example for OID, 1.3.6.1.4.1.2021.11.11.0.
Threshold	Threshold.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
Weight	Weight.	N/A	Unsigned integer. Value range: 0 to 100.	N/A

## NQA/WapTemplates

This table contains information about WAP templates.

### XML structure

```

<NQA>
  <WapTemplates>
    <WapTemplate>
      <Name></Name>
      <ExpectData>
        <Data></Data>
        <Offset></Offset>
        <StrictFlag></StrictFlag>
        <HexFlag></HexFlag>
      </ExpectData>
    </WapTemplate>
  </WapTemplates>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	WapTemplates
Table type	Multi-instance table
Row name	WapTemplate
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 32 characters.	
ExpectData	Data expected in responses to determine a successful operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Data.</li> <li>• Offset.</li> <li>• StrictFlag.</li> <li>• HexFlag.</li> </ul>	Both Data and Offset must be specified.
Data	Expected response string.	N/A	String. Length: 1 to 200 characters	N/A
Offset	Offset in bytes after which the client starts to search for the expected string.	N/A	Unsigned integer. Value range: 0 to 1000.	N/A
StrictFlag	Whether the data is matched by exact matching method. Enabling status of the strict offset match.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled (default). If the value is set to false, the match operation follows the method defined by the offset.</li> </ul>	N/A
HexFlag	Whether the data is a hexadecimal string.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—The data is a hexadecimal string.</li> <li>• <b>false</b>—The data is a general string.</li> </ul>	N/A

## NQA/TcpHalfOpenTemplates

This table contains information about TCP half-open templates.

### XML structure

```

<NQA>
  <TcpHalfOpenTemplates>
    <TcpHalfOpenTemplate>
      <Name></Name>
      <PortDetectEnable></PortDetectEnable>
      <OutIf></OutIf>
    </TcpHalfOpenTemplate>
  </TcpHalfOpenTemplates>
</NQA>

```

### Table description

Item	Description
Feature name	NQA

Item	Description
Table name	TcpHalfOpenTemplates
Table type	Multi-instance table
Row name	TcpHalfOpenTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Template name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
PortDetectEnable	Whether the port detection mode is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Port detection mode is enabled.</li> <li><b>false</b>—Port detection mode is disabled.</li> </ul>	N/A
OutIf	Output interface including the interface type and number.	N/A	String, case-insensitive. Length: 2 to 47 characters.	N/A

## NQA/Histories

This table contains information about the history records of NQA operations.

### XML structure

```

<NQA>
  <Histories>
    <History>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <HistoryRecords>
        <Index></Index>
        <TTL></TTL>
        <Response></Response>
        <HopIP></HopIP>
        <Status></Status>
        <Time></Time>
      </HistoryRecords>
    </History>
  </Histories>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	Histories
Table type	Multi-instance table
Row name	History
Restrictions	This table is not available for frame loss, ICMP jitter, latency, path jitter, throughput, UDP jitter, or voice operations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
HistoryRecords	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>Index.</li> <li>TTL.</li> <li>Response.</li> <li>HopIP.</li> <li>Status.</li> <li>Time.</li> </ul>	This column can appear at most 50 times in this row. The most recent operation result is displayed first.
Index	History record ID.	N/A	Unsigned integer. Value range: 1 to 4294967295.	The history records in one UDP tracer operation have the same ID.
TTL	TTL value in the probe packet.	N/A	Unsigned integer. Value range: 1 to 255.	This column is available only for the UDP tracer operation.
Response	Round-trip time for the probe packets in the operation, in milliseconds.	N/A	Unsigned integer.	N/A
HopIP	IP address of the node that sent the reply packet.	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	This column is available only for the UDP tracer operation.
Status	Operation result status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Unknown error.</li> <li>3—Internal error.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>4—Timeout.</li> </ul>	
Time	Time when the operation was completed.	N/A	DateTime.	Example: 2015-09-09T14:23:24.500.

## NQA/Entries

This table contains information about NQA entries.

## XML structure

```

<NQA>
  <Entries>
    <Entry>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <Type></Type>
      <Description></Description>
      <DstIP></DstIP>
      <DstPort></DstPort>
      <Frequency></Frequency>
      <HistoryEnable></HistoryEnable>
      <HistoryHoldTime></HistoryHoldTime>
      <HistoryNumber></HistoryNumber>
      <NextHop></NextHop>
      <ProbeCount></ProbeCount>
      <ProbeTimeout></ProbeTimeout>
      <BypassRouteEnable></BypassRouteEnable>
      <SrcIP></SrcIP>
      <SrcPort></SrcPort>
      <StatHoldTime></StatHoldTime>
      <StatInterval></StatInterval>
      <StatMaxGroup></StatMaxGroup>
      <TTL></TTL>
      <ToS></ToS>
      <VRF></VRF>
      <URL></URL>
    </Entry>
  </Entries>
</NQA>

```

## Table description

Item	Description
Feature name	NQA

Item	Description
Table name	Entries
Table type	Multi-instance table
Row name	Entry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Type	Operation type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—ICMP-echo</li> <li>• 1—UDP-echo</li> <li>• 2—TCP</li> <li>• 3—DLSw</li> <li>• 4—FTP</li> <li>• 5—DHCP</li> <li>• 6—SNMP</li> <li>• 7—DNS</li> <li>• 8—HTTP</li> <li>• 9—UDP-jitter</li> <li>• 10—VOICE</li> <li>• 11—Path-jitter</li> <li>• 12—UDP-tracert</li> <li>• 13—ARP</li> <li>• 14—IMAP</li> <li>• 15—POP3</li> <li>• 16—Radius</li> <li>• 17—RTSP</li> <li>• 18—SIP</li> <li>• 19—SMTP</li> <li>• 20—SSL</li> <li>• 21—HTTPS</li> <li>• 22—TCP Half-open</li> <li>• 23—Throughput</li> <li>• 24—Latency</li> <li>• 25—Frame-Loss</li> <li>• 26—ICMP-jitter</li> <li>• 27—SNMP-DCA</li> <li>• 28—WAP</li> <li>• 29—Y1564</li> <li>• 30—RADIUS-ACCOUNT</li> </ul>	Type ICMP-echo, ICMP-jitter and UDP-jitter are supported.



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>31—Twamp Light</li> </ul>	
Description	Entry description	N/A	String, case-sensitive. Length: 1 to 200 characters.	N/A
DstIP	Destination IPv4 or IPv6 address for the probe packets	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	This column and the URL column will not be available simultaneously. The FTP, HTTP, HTTPS and RTSP types do not support this column.
DstPort	Destination port number for the operation	N/A	Unsigned integer. Value range: 1 to 65535.	This column and the URL column will not be available simultaneously. The types of ICMP-echo, ICMP-Jitter, ARP, FTP, HTTP, HTTPS and RTSP do not support this column.
Frequency	Probe interval in milliseconds	N/A	Unsigned integer. Value range: 0 to 604800000.	N/A
HistoryEnable	Whether to enable the saving of history records	N/A	EnableState: <ul style="list-style-type: none"> <li><b>enable</b>—Enable the saving of history records.</li> <li><b>disable</b>—Disable the saving of history records.</li> </ul>	Type ICMP-echo, DHCP, DLSw, DNS, FTP, HTTP, SNMP, TCP, UDP-echo, and UDP-tracert are supported.
HistoryHoldTime	History records lifetime in minutes	N/A	Unsigned integer. Value range: 1 to 1440.	N/A
HistoryNumber	Maximum number of history records that can be saved	N/A	Unsigned integer. Value range: 0 to 50.	N/A
NextHop	Next hop IPv4 or IPv6 address	N/A	String. Length: 1 to 46 characters.	Only the type ICMP-echo support this column. IPv4 example: 1.1.1.1. IPv6 example: 1:1::1:1.
ProbeCount	Probe times per operation	N/A	Unsigned integer. Value range: 1 to 15.	N/A
ProbeTimeout	Probe timeout time in	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	milliseconds			
BypassRoute Enable	Whether to enable the routing table bypass feature to test the connectivity to the direct destination	N/A	EnableState: <ul style="list-style-type: none"> <li><b>enable</b>—Enable the routing table bypass feature.</li> <li><b>disable</b>—Disable the routing table bypass feature.</li> </ul>	N/A
SrcIP	Source IPv4 or IPv6 address for the probe packets	N/A	String, dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	N/A
SrcPort	Source port number for the operation	N/A	Unsigned integer. Value range: 1 to 65535.	Type ICMP-echo, DHCP, DLSw, DNS, ICMP-jitter, Path-jitter, TCP, ARP, FTP, HTTP, HTTPS and RTSP do not support this column.
StatHoldTime	Statistics groups hold time in minutes	N/A	Unsigned integer. Value range: 1 to 1440.	N/A
StatInterval	Statistics collection interval in minutes	N/A	Unsigned integer. Value range: 1 to 35791394.	N/A
StatMaxGroup	Maximum number of statistics groups	N/A	Unsigned integer. Value range: 0 to 100.	N/A
TTL	TTL for probe packets	N/A	Unsigned integer. Value range: 1 to 255.	The type ARP does not support this column.
ToS	ToS value in the IP packet header of probe packets	N/A	Unsigned integer. Value range: 0 to 255.	The type ARP does not support this column.
VRF	VRF instance where the operation is performed	N/A	String, case-sensitive. Length: 0 to 31 characters.	N/A
URL	URL of the destination server	N/A	String. Length: 1 to 255 characters.	This column and the DstIP, DstPort column will not be available simultaneously. Only the types of FTP, HTTP, HTTPS and RTSP support this column.

# NQA/IcmpEchoEntries

This table contains information about ICMP-Echo entries.

## XML structure

```
<NQA>
  <IcmpEchoEntries>
    <IcmpEchoEntry>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <SrcIf></SrcIf>
      <OutIf></OutIf>
    </IcmpEchoEntry>
  </IcmpEchoEntries>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	IcmpEchoEntries
Table type	Multi-instance table
Row name	IcmpEchoEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
DataFill	Payload fill string for probe packets	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A
DataSize	Payload size for each probe packet	N/A	Unsigned integer. Value range: 20 to 65507.	N/A
SrcIf	Full name of a source interface,	N/A	String, case-insensitive. Length: 2 to 47 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	including the interface type and number			
OutIf	Full name of an output interface, including the interface type and number	N/A	String, case-insensitive. Length: 2 to 47 characters.	N/A

## NQA/IcmpJitterEntries

This table contains information about ICMP-jitter entries.

### XML structure

```

<NQA>
  <IcmpJitterEntries>
    <IcmpJitterEntry>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <PktInterval></PktInterval>
      <PktNumber></PktNumber>
      <PktTimeout></PktTimeout>
    </IcmpJitterEntry>
  </IcmpJitterEntries>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	IcmpJitterEntries
Table type	Multi-instance table
Row name	IcmpJitterEntry
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 32 characters.	
PktInterval	Packet sending interval in the probe in milliseconds	N/A	Unsigned integer. Value range: 10 to 60000.	N/A
PktNumber	Number of packets to be sent per probe	N/A	Unsigned integer. Value range: 10 to 1000.	N/A
PktTimeout	Packet time out in milliseconds	N/A	Unsigned integer. Value range: 10 to 3600000.	N/A

## NQA/UdpJitterEntries

This table contains information about UDP-jitter entries.

### XML structure

```

<NQA>
  <UdpJitterEntries>
    <UdpJitterEntry>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <PktInterval></PktInterval>
      <PktNumber></PktNumber>
      <PktTimeout></PktTimeout>
      <DataFill></DataFill>
      <DataSize></DataSize>
      <OutIf></OutIf>
      <HighPerformance></HighPerformance>
      <MplsSimulation>
        <Enable></Enable>
        <Exp></Exp>
      </MplsSimulation>
    </UdpJitterEntry>
  </UdpJitterEntries>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	UdpJitterEntries
Table type	Multi-instance table
Row name	UdpJitterEntry
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
PktInterval	Packet sending interval in the probe in milliseconds	N/A	Unsigned integer. Value range: 10 to 60000.	N/A
PktNumber	Number of packets to be sent per probe	N/A	Unsigned integer. Value range: 10 to 1000.	N/A
PktTimeout	Packet time out in milliseconds	N/A	Unsigned integer. Value range: 10 to 3600000.	N/A
DataFill	Payload fill string for probe packets	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A
DataSize	Payload size for each probe packet	N/A	Unsigned integer. Value range: 68 to 65507.	N/A
OutIf	Output interface, including the interface type and interface number.	N/A	String, case-insensitive. Length: 2 to 47 characters.	N/A
HighPerformance	Enabling status of the high performance mode	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
MplsSimulation	MPLS emulation test information	Data structure	Members include: <ul style="list-style-type: none"> <li>Enable.</li> <li>Exp.</li> </ul>	The members must both be specified.
Enable	Enabling status of MPLS emulation	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
Exp	EXP value for each MPLS probe packet	N/A	Unsigned integer. Value range: 0 to 7.	N/A

## NQA/Schedules

This table contains information about NQA entry schedules.

## XML structure

```
<NQA>
  <Schedules>
    <Schedule>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <StartTime>
        <StartNow></StartNow>
        <Time></Time>
      </StartTime>
      <Lifetime>
        <Forever></Forever>
        <Duration></Duration>
      </Lifetime>
      <Recurring></Recurring>
    </Schedule>
  </Schedules>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	Schedules
Table type	Multi-instance table
Row name	Schedule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
StartTime	Start time	N/A	Members include: <ul style="list-style-type: none"><li>StartNow</li><li>Time</li></ul>	Time will not be available when StartNow is true
StartNow	Start now	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A
Time	Start time and date of an	N/A	DateTime.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	operation		Format: YYYY-MM-DDTHH:MM:SS.	
Lifetime	The duration of an operation	N/A	Members include: <ul style="list-style-type: none"> <li>Forever</li> <li>Duration</li> </ul>	Duration will not be available when Forever is true or when the entry is not scheduled.
Forever	Forever	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Duration	The duration of an operation in seconds	N/A	Unsigned integer. Value range: 1 to 2147483647.	N/A
Recurring	Recurring	N/A	EnableState: <ul style="list-style-type: none"> <li><b>enable</b>—Run the operation automatically at the start time and for the specified duration.</li> <li><b>disable</b>—The operation is performed only once at the specified date and time.</li> </ul>	N/A

## NQA/ReactionTriggerFailItems

This table contains information about reaction trigger fail items.

### XML structure

```

<NQA>
  <ReactionTriggerFailItems>
    <ReactionTriggerFailItem>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <ItemNumber></ItemNumber>
      <Occurrences></Occurrences>
    </ReactionTriggerFailItem>
  </ReactionTriggerFailItems>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	ReactionTriggerFailItems
Table type	Multi-instance table



Item	Description
Row name	ReactionTriggerFailItem
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ItemNumber	Item number	Index	Unsigned integer. Value range: 1 to 10.	N/A
Occurrences	The maximum number of consecutive probe failures	N/A	Unsigned integer. Value range: 1 to 16.	N/A

## NQA/Reactions

This table contains information about reaction items.

## XML structure

```

<NQA>
  <Reactions>
    <Reaction>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <ItemNumber></ItemNumber>
      <CheckedElement></CheckedElement>
      <ThresholdType>
        <Type></Type>
        <Occurrences></Occurrences>
      </ThresholdType>
      <ThresholdValue>
        <UpperLimit></UpperLimit>
        <LowerLimit></LowerLimit>
      </ThresholdValue>
      <ActionType></ActionType>
    </Reaction>
  </Reactions>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	Reactions
Table type	Multi-instance table
Row name	Reaction
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ItemNumber	Item number	Index	Unsigned integer. Value range: 1 to 10.	N/A
CheckedElement	Monitored element	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—probe-duration</li> <li>2—probe-fail</li> <li>3—rtt</li> <li>4—packet-loss</li> <li>5—jitter-sd</li> <li>6—jitter-ds</li> <li>7—icpif</li> <li>8—mos</li> <li>9—owd-sd</li> <li>10—owd-ds</li> </ul>	N/A
ThresholdType	Threshold type	Data structure	Member include: <ul style="list-style-type: none"> <li>Type</li> <li>Occurrences</li> </ul>	N/A
Type	Threshold violation type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—average</li> <li>2—consecutive</li> <li>3—accumulate</li> </ul>	N/A
Occurrences	Maximum number of threshold violations	N/A	Unsigned integer. Value range: 1 to 15000.	N/A
ThresholdValue	Value range of threshold	Data structure	Member include: <ul style="list-style-type: none"> <li>UpperLimit</li> <li>LowerLimit</li> </ul>	N/A
UpperLimit	Upper limit of	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	threshold			
LowerLimit	Lower limit of threshold	N/A	Unsigned integer.	N/A
ActionType	Action to be triggered	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—none</li> <li>• <b>1</b>—trap-only</li> <li>• <b>2</b>—trigger-only</li> </ul>	N/A

## NQA/ClientStatus

This table contains information about NQA client enabling status.

### XML structure

```

<NQA>
  <ClientStatus>
    <Enable></Enable>
  </ClientStatus>
</NQA>

```

### Table description

Item	Description
Feature name	NQA
Table name	ClientStatus
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of the NQA client	N/A	Enabling status: <ul style="list-style-type: none"> <li>• <b>enable</b>—NQA client is enabled.</li> <li>• <b>disable</b>—NQA client is disabled.</li> </ul>	N/A

## NQA/Results

This table contains information about NQA operation result.

## XML structure

```
<NQA>
  <Results>
    <Result>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <SendTimes></SendTimes>
      <ReceiveTimes></ReceiveTimes>
      <MinRtt></MinRtt>
      <MaxRtt></MaxRtt>
      <AvgRtt></AvgRtt>
      <SquareSumRtt></SquareSumRtt>
      <LastSuccProbeTime></LastSuccProbeTime>
      <LossRatio></LossRatio>
      <TimeOut></TimeOut>
      <Disconnect></Disconnect>
      <NoConnection></NoConnection>
      <InternalError></InternalError>
      <OtherErrors></OtherErrors>
    </Result>
  </Results>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	Results
Table type	Multi-instance table
Row name	Result
Restrictions	This table is not available for UDP tracer, frame loss, latency, path jitter, throughput, y1654, UDP-jitter, ICMP-jitter and voice operations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
SendTimes	Send operation	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	times			
ReceiveTimes	Receive response times	N/A	Unsigned integer.	N/A
MinRtt	Minimum round-trip time in milliseconds	N/A	Unsigned integer.	N/A
MaxRtt	Maximum round-trip time in milliseconds	N/A	Unsigned integer.	N/A
AvgRtt	Average round-trip time in milliseconds	N/A	Unsigned integer.	N/A
SquareSumRtt	Square sum of round-trip time	N/A	Unsigned integer.	N/A
LastSuccessfulTime	Time when the last successful probe was completed	N/A	DateTime.	Example: 2015-09-09T14:23:24.500.
LossRatio	Packet loss ratio	N/A	Unsigned integer.	N/A
TimeOut	Number of timeout occurrences in an operation	N/A	Unsigned integer.	N/A
Disconnect	Number of disconnections by the peer	N/A	Unsigned integer.	Only the TCP, HTTP, DLSW, and FTP operations support this column.
NoConnection	Number of failures to connect to the peer	N/A	Unsigned integer	Only the TCP, HTTP, DLSW, and FTP operations support this column.
InternalError	Number of failures due to internal errors	N/A	Unsigned integer.	N/A
OtherErrors	Failures due to other unknown errors	N/A	Unsigned integer.	N/A

## NQA/JitterResults

This table contains information about NQA jitter operation result.

### XML structure

```

<NQA>
  <JitterResults>
    <JitterResult>

```

```

<AdminName></AdminName>
<OperationTag></OperationTag>
<SendTimes></SendTimes>
<ReceiveTimes></ReceiveTimes>
<MinRtt></MinRtt>
<MaxRtt></MaxRtt>
<AvgRtt></AvgRtt>
<SquareSumRtt></SquareSumRtt>
<LastReceivedTime></LastReceivedTime>
<LossRatio></LossRatio>
<TimeOut></TimeOut>
<InternalError></InternalError>
<OtherErrors></OtherErrors>
<OutSequenceTimes></OutSequenceTimes>
<ArrivedLate></ArrivedLate>
<Jitter>
  <RttNum></RttNum>
  <MinPosSD></MinPosSD>
  <MaxPosSD></MaxPosSD>
  <PosNumSD></PosNumSD>
  <PosSumSD></PosSumSD>
  <PosAvgSD></PosAvgSD>
  <PosSquareSumSD></PosSquareSumSD>
  <MinNegSD></MinNegSD>
  <MaxNegSD></MaxNegSD>
  <NegNumSD></NegNumSD>
  <NegSumSD></NegSumSD>
  <NegAvgSD></NegAvgSD>
  <NegSquareSumSD></NegSquareSumSD>
  <AvgSD></AvgSD>
  <MinPosDS></MinPosDS>
  <MaxPosDS></MaxPosDS>
  <PosNumDS></PosNumDS>
  <PosSumDS></PosSumDS>
  <PosAvgDS></PosAvgDS>
  <PosSquareSumDS></PosSquareSumDS>
  <MinNegDS></MinNegDS>
  <MaxNegDS></MaxNegDS>
  <NegNumDS></NegNumDS>
  <NegSumDS></NegSumDS>
  <NegAvgDS></NegAvgDS>
  <NegSquareSumDS></NegSquareSumDS>
  <AvgDS></AvgDS>
</Jitter>
<OneWay>
  <MaxDelaySD></MaxDelaySD>
  <MinDelaySD></MinDelaySD>
  <NumOfDelaySD></NumOfDelaySD>

```

```

<SumOfDelaySD></SumOfDelaySD>
<SquareSumOfDelaySD></SquareSumOfDelaySD>
<LostPacketSD></LostPacketSD>
<MaxDelayDS></MaxDelayDS>
<MinDelayDS></MinDelayDS>
<NumOfDelayDS></NumOfDelayDS>
<SumOfDelayDS></SumOfDelayDS>
<SquareSumOfDelayDS></SquareSumOfDelayDS>
<LostPacketsDS></LostPacketsDS>
<UnknownLostPackets></UnknownLostPackets>
</OneWay>
</JitterResult>
</JitterResults>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	JitterResults
Table type	Multi-instance table
Row name	JitterResult
Restrictions	This table is available for ICMP jitter or UDP jitter operations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
SendTimes	Number of packets sent per probe	N/A	Unsigned integer.	N/A
ReceiveTimes	Number of responses per probe	N/A	Unsigned integer.	N/A
MinRtt	Minimum round-trip time in milliseconds	N/A	Unsigned integer.	N/A
MaxRtt	Maximum round-trip time in milliseconds	N/A	Unsigned integer.	N/A
AvgRtt	Average	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	round-trip time in milliseconds			
SquareSumRtt	Square sum of round-trip time	N/A	Unsigned integer.	N/A
LastReceivedTime	Last packet received time	N/A	DateTime.	Example: 2015-09-09T14:23:24.500.
LossRatio	Packet loss ratio	N/A	Unsigned integer.	N/A
Timeout	Number of timeout occurrences in an operation	N/A	Unsigned integer.	N/A
InternalError	Number of failures due to internal errors	N/A	Unsigned integer.	N/A
OtherErrors	Failures due to other errors	N/A	Unsigned integer.	N/A
OutSequenceTimes	Number of failures due to out-of-sequence packets	N/A	Unsigned integer.	N/A
ArrivedLate	Number of response packets received after a probe times out	N/A	Unsigned integer.	N/A
Jitter	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>• RttNum.</li> <li>• MinPosSD</li> <li>• MaxPosSD</li> <li>• PosNumSD</li> <li>• PosSumSD</li> <li>• PosAvgSD</li> <li>• PosSquareSumSD</li> <li>• MinNegSD</li> <li>• MaxNegSD</li> <li>• NegNumSD</li> <li>• NegSumSD</li> <li>• NegAvgSD</li> <li>• NegSquareSumSD</li> <li>• AvgSD</li> <li>• MinPosDS</li> <li>• MaxPosDS</li> <li>• PosNumDS</li> <li>• PosSumDS</li> <li>• PosSquareSumDS</li> <li>• MinNegDS</li> <li>• MaxNegDS</li> <li>• NegNumDS</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>NegSumDS</li> <li>NegAvgDS</li> <li>NegSquareSumDS</li> <li>AvgDS</li> </ul>	
RttNum	Number of response packets received	N/A	Unsigned integer.	N/A
MinPosSD	Minimum positive jitter from source to destination	N/A	Unsigned integer.	N/A
MaxPosSD	Maximum positive jitter from source to destination	N/A	Unsigned integer.	N/A
PosNumSD	Number of positive jitters from source to destination	N/A	Unsigned integer.	N/A
PosSumSD	Sum of positive jitters from source to destination	N/A	Unsigned integer.	N/A
PosAvgSD	Average positive jitters from source to destination	N/A	Unsigned integer.	N/A
PosSquareSumSD	Square sum of positive jitters from source to destination	N/A	Unsigned integer.	N/A
MinNegSD	Minimum absolute value among negative jitters from source to destination	N/A	Unsigned integer.	N/A
MaxNegSD	Maximum absolute value among negative jitters from source to destination	N/A	Unsigned integer.	N/A
NegNumSD	Number of negative jitters from source to destination	N/A	Unsigned integer.	N/A
NegSumSD	Sum of absolute values of negative jitters from source to	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	destination			
NegAvgSD	Average absolute value of negative jitters from source to destination	N/A	Unsigned integer.	N/A
NegSquareSumSD	Square sum of negative jitters from source to destination	N/A	Unsigned integer.	N/A
AvgSD	Average value of jitters from source to destination	N/A	Unsigned integer.	N/A
MinPosDS	Minimum positive jitter from destination to source	N/A	Unsigned integer.	N/A
MaxPosDS	Maximum positive jitter from destination to source	N/A	Unsigned integer.	N/A
PosNumDS	Number of positive jitters from destination to source	N/A	Unsigned integer.	N/A
PosSumDS	Sum of positive jitters from destination to source	N/A	Unsigned integer.	N/A
PosAvgDS	Average positive jitters from destination to source	N/A	Unsigned integer.	N/A
PosSquareSumDS	Square sum of positive jitters from destination to source	N/A	Unsigned integer.	N/A
MinNegDS	Minimum absolute value among negative jitters from destination to source	N/A	Unsigned integer.	N/A
MaxNegDS	Maximum absolute value	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	among negative jitters from destination to source			
NegNumDS	Number of negative jitters from destination to source	N/A	Unsigned integer.	N/A
NegSumDS	Sum of absolute values of negative jitters from destination to source	N/A	Unsigned integer.	N/A
NegSquareSumDS	Square sum of negative jitters from destination to source	N/A	Unsigned integer.	N/A
AvgDS	Average value of jitters from destination to source	N/A	Unsigned integer.	N/A
OneWay	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>MaxDelaySD</li> <li>MinDelaySD</li> <li>NumOfDelaySD</li> <li>SumOfDelaySD</li> <li>SquareSumofDelaySD</li> <li>LostPacketSD</li> <li>MaxDelayDS</li> <li>MinDelayDS</li> <li>NumOfDelayDS</li> <li>SumOfDelayDS</li> <li>SquareSumOfDelayDS</li> <li>LostPacketsDS</li> <li>UnknownLostPackets</li> </ul>	N/A
MaxDelaySD	Maximum delay from source to destination	N/A	Unsigned integer.	N/A
MinDelaySD	Minimum delay from source to destination	N/A	Unsigned integer.	N/A
NumOfDelaySD	Number of delays from source to destination	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SumOfDelaySD	Sum of delays from source to destination	N/A	Unsigned integer.	N/A
SquareSumofDelaySD	Square sum of delays from source to destination	N/A	Unsigned integer.	N/A
LostPacketSD	Number of lost packets from the source to the destination	N/A	Unsigned integer.	Only the UDP-jitter operation supports this column.
MaxDelayDS	Maximum delay from destination to source	N/A	Unsigned integer.	N/A
MinDelayDS	Minimum delay from destination to source	N/A	Unsigned integer.	N/A
NumOfDelayDS	Number of delays from destination to source	N/A	Unsigned integer.	N/A
SumOfDelayDS	Sum of delays from destination to source	N/A	Unsigned integer.	N/A
SquareSumOfDelayDS	Square sum of delays from destination to source	N/A	Unsigned integer.	N/A
LostPacketsDS	Number of lost packets from the destination to the source	N/A	Unsigned integer.	Only the UDP-jitter operation support this column.
UnknownLostPackets	Number of lost packets for unknown reasons	N/A	Unsigned integer.	N/A

## NQA/FrameLossResults

This table contains information about NQA frame loss operation result.

### XML structure

```

<NQA>
  <FrameLossResults>
    <FrameLossResult>
      <AdminName></AdminName>
    </FrameLossResult>
  </FrameLossResults>
</NQA>

```

```

<OperationTag></OperationTag>
<ResultIndex></ResultIndex>
<InitialSpeed></InitialSpeed>
<ProbeDuration></ProbeDuration>
<ProbeInterval></ProbeInterval>
<DetailResults>
  <DetailResult>
    <FrameSize></FrameSize>
    <CurrentSpeed></CurrentSpeed>
    <FrameLoss></FrameLoss>
    <Status></Status>
    <OperateTime></OperateTime>
  </DetailResult>
</DetailResults>
</FrameLossResult>
</FrameLossResults>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	FrameLossResults
Table type	Multi-instance table
Row name	FrameLossResult
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ResultIndex	Result history index	Index	Unsigned integer. Value range: 1 to 5.	The latest test results index is the maximum value, and currently it is 5.
InitialSpeed	Initial sending speed in kbps	N/A	Unsigned integer.	N/A
ProbeDuration	Probe duration in seconds	N/A	Unsigned integer. Value range: 10 to 172800.	N/A
ProbeInterval	Probe interval in	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	seconds		Value range: 1 to 60.	
DetailResults	Detailed results	Sublist	N/A	N/A

## NQA/FrameLossResults/DetailResults

This table contains detailed information about NQA frame loss operation result.

### XML structure

See the XML structure of NQA/FrameLossResults.

### Table description

Item	Description
Feature name	NQA
Table name	DetailResults
Table type	Multi-instance table
Row name	DetailResult
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FrameSize	Frame size	Index	Unsigned integer. Value range: 64 to 9600.	N/A
CurrentSpeed	Current speed in kbps	N/A	Unsigned integer.	N/A
FrameLoss	Frame loss ratio	N/A	String. Length: 32 characters.	N/A
Status	Operation result status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Successful.</li> <li>1—Continue</li> <li>2—Abort.</li> <li>3—Timeout.</li> <li>4—Failed.</li> </ul>	The available values in frame loss operation are 0 and 3.
OperateTime	Time when the operation was completed.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A

# NQA/ThroughputResults

This table contains information about NQA throughput operation result.

## XML structure

```
<NQA>
  <ThroughputResults>
    <ThroughputResult>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <ResultIndex></ResultIndex>
      <InitialSpeed></InitialSpeed>
      <SpeedGranularity></SpeedGranularity>
      <ProbeDuration></ProbeDuration>
      <ProbeInterval></ProbeInterval>
      <AllowedLossRatio></AllowedLossRatio>
      <DetailResults>
        <DetailResult>
          <FrameSize></FrameSize>
          <CurrentSpeed></CurrentSpeed>
          <FrameLossCnt></FrameLossCnt>
          <FrameSent></FrameSent>
          <Status></Status>
          <OperateTime></OperateTime>
        </DetailResult>
      </DetailResults>
    </ThroughputResult>
  </ThroughputResults>
</NQA>
```

## Table description

Item	Description
Feature name	NQA
Table name	ThroughputResults
Table type	Multi-instance table
Row name	ThroughputResult
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ResultIndex	Result history result.	Index	Unsigned integer. Value range: 1 to 5.	N/A
InitialSpeed	Initial sending speed in kbps.	N/A	Unsigned integer.	N/A
SpeedGranularity	Speed granularity in Kbps.	N/A	Unsigned integer. Value range: 1 to 10000.	N/A
ProbeDuration	Probe duration in seconds.	N/A	Unsigned integer. Value range: 10 to 172800.	N/A
ProbeInterval	Probe interval in seconds.	N/A	Unsigned integer. Value range: 1 to 60.	N/A
AllowedLossRatio	The packet loss ratio allowed	N/A	String. Length: 32 characters.	N/A
DetailResults	Detailed results	Sublist	N/A	N/A

## NQA/ThroughputResults/DetailResults

This table contains detailed information about NQA throughput operation result.

## XML structure

See the XML structure of NQA/ThroughputsResult.

## Table description

Item	Description
Feature name	NQA
Table name	DetailResults
Table type	Multi-instance table
Row name	DetailResult
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FrameSize	Frame size	Index	Unsigned integer. Value range: 64 to 9600.	N/A
CurrentSpeed	Current speed in kbps	N/A	Unsigned integer.	N/A
Status	Operation result status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Successful.</li> <li>• <b>1</b>—Continue</li> <li>• <b>2</b>—Abort.</li> <li>• <b>3</b>—Timeout</li> <li>• <b>4</b>—Failed.</li> </ul>	The available values in frame loss operation are 0, 1, 3, and 4.
FrameLossCnt	Number of lost frames	N/A	Unsigned integer.	N/A
FrameSent	Number of sent frames	N/A	Unsigned integer.	N/A
OperateTime	Time when the operation was completed	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A

## NQA/LatencyResults

This table contains information about NQA latency operation result.

### XML structure

```

<NQA>
  <LatencyResults>
    <LatencyResult>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <ResultIndex></ResultIndex>
      <InitialSpeed></InitialSpeed>
      <ProbeDuration></ProbeDuration>
      <ProbeInterval></ProbeInterval>
      <DetailResults>
        <DetailResult>
          <FrameSize></FrameSize>
          <Latency>
            <MinValue></MinValue>
            <MaxValue></MaxValue>
            <AvgValue></AvgValue>
          </Latency>
          <Jitter>

```

```

        <MinValue></MinValue>
        <MaxValue></MaxValue>
        <AvgValue></AvgValue>
    </Jitter>
    <SentPackets></SentPackets>
    <ReceivedPackets></ReceivedPackets>
    <Status></Status>
    <OperateTime></OperateTime>
</DetailResult>
</DetailResults>
</LatencyResult>
</LatencyResults>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	LatencyResults
Table type	Multi-instance table
Row name	LatencyResult
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ResultIndex	Result history index.	Index	Unsigned integer. Value range: 1 to 5.	N/A
InitialSpeed	Initial sending speed in kbps	N/A	Unsigned integer.	N/A
ProbeDuration	Probe duration in seconds.	N/A	Unsigned integer. Value range: 10 to 172800.	N/A
ProbeInterval	Probe interval in seconds.	N/A	Unsigned integer. Value range: 1 to 60.	N/A
DetailResults	Detailed results	Sublist	N/A	N/A

# NQA/LatencyResults/DetailResults

This table contains detailed information about NQA latency operation result.

## XML structure

See the XML structure of NQA/LatencyResults.

## Table description

Item	Description
Feature name	NQA
Table name	DetailResults
Table type	Multi-instance table
Row name	DetailResult
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FrameSize	Frame size	Index	Unsigned integer. Value range: 64 to 9600.	N/A
Latency	Frame latency in $\mu$ s	Data structure	Members include: <ul style="list-style-type: none"><li>MinValue.</li><li>MaxValue.</li><li>AvgValue</li></ul>	N/A
MinValue	Minimum latency value	N/A	Unsigned integer.	N/A
MaxValue	Maximum latency value	N/A	Unsigned integer.	N/A
AvgValue	Average latency value	N/A	Unsigned integer.	N/A
Jitter	Frame jitter in ns	Data structure	Members include: <ul style="list-style-type: none"><li>MinValue.</li><li>MaxValue.</li><li>AvgValue</li></ul>	N/A
MinValue	Minimum jitter value	N/A	Unsigned integer.	N/A
MaxValue	Maximum jitter value	N/A	Unsigned integer.	N/A
AvgValue	Average jitter value	N/A	Unsigned integer.	N/A
SentPackets	Number of sent packets	N/A	Unsigned integer. Length:64bits	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ReceivedPackets	Number of received packets	N/A	Unsigned integer. Length:64bits	N/A
Status	Operation result status	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Successful.</li> <li>• 1—Continue</li> <li>• 2—Abort.</li> <li>• 3—Timeout</li> <li>• 4—Failed.</li> </ul>	The available values in latency operation are 0 and 3.
OperateTime	Time when the operation was completed	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A

## NQA/Y1564Results

This table contains information about NQA Y1564 operation result.

### XML structure

```

<NQA>
  <Y1564Results>
    <Y1564Result>
      <AdminName></AdminName>
      <OperationTag></OperationTag>
      <ResultIndex></ResultIndex>
      <Status></Status>
      <LastCompletedTest></LastCompletedTest>
      <EstimatedTotalTime></EstimatedTotalTime>
      <ActualTestTimeUsed></ActualTestTimeUsed>
      <DetailResults>
        <DetailResult>
          <TestType></TestType>
          <Index></Index>
          <StartTime></StartTime>
          <EndTime></EndTime>
          <SendSpeed></SendSpeed>
          <Status></Status>
          <IR>
            <MinValue></MinValue>
            <MaxValue></MaxValue>
            <AvgValue></AvgValue>
          </IR>
          <FTD>
            <MinValue></MinValue>
            <MaxValue></MaxValue>
            <AvgValue></AvgValue>
          </FTD>
        </DetailResult>
      </DetailResults>
    </Y1564Result>
  </Y1564Results>
</NQA>

```

```

</FTD>
<FDV>
  <MinValue></MinValue>
  <MaxValue></MaxValue>
  <AvgValue></AvgValue>
</FDV>
<FLcount></FLcount>
<FLR></FLR>
<PacketsOutOfOrder></PacketsOutOfOrder>
<SeverelyErrSecs></SeverelyErrSecs>
<AVAIL></AVAIL>
</DetailResult>
</DetailResults>
</Y1564Result>
</Y1564Results>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	Y1564Results
Table type	Multi-instance table
Row name	Y1564Result
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdminName	Administrator name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
ResultIndex	Result history index.	Index	Unsigned integer. Value range: 1.	Currently only the last probe is saved, so the ResultIndex is always 1.
Status	Global status of the current test	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Succeeded</li> <li>1—In progress</li> <li>2—Aborted</li> <li>3—Timeout</li> <li>4—Failed</li> <li>5—None</li> <li>6—Unknown error</li> </ul>	The value 5 of <b>Status</b> is inaccessible.

Column name	Column description	Column type	Data type and restrictions	Remarks
LastComplete dTest	Last complete test type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—CIR test.</li> <li>1—PIR test.</li> <li>2—Traffic policing test.</li> <li>3—Service performance test.</li> </ul>	If test <b>status</b> is in progress, this column will not access.
EstimatedTot alTime	Estimated total time of the whole test	N/A	Unsigned integer Unit:second	N/A
ActualTestTi meUsed	Actual test time used	N/A	Unsigned integer Unit:second	If test <b>status</b> is in progress, the value is for reference only.
DetailResults	Detailed results	Sublist	N/A	N/A

## NQA/Y1564Results/DetailResults

This table contains detailed information about NQA Y1564 operation result.

### XML structure

See the XML structure of NQA/Y1564Results.

### Table description

Item	Description
Feature name	NQA
Table name	DetailResults
Table type	Multi-instance table
Row name	DetailResult
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TestType	Type of single test phase	Index	Enumeration: <ul style="list-style-type: none"> <li>0—CIR</li> <li>1—PIRColorBlind</li> <li>2—PIRColorGreen</li> <li>3—PIRColorYellow</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>4—PIRColorSummary</li> <li>5—TrafficColorBlind</li> <li>6—TrafficColorGreen</li> <li>7—TrafficColorYellow</li> <li>8—TrafficColorSummary</li> <li>9—ServicePerformance</li> </ul>	
Index	Step index of <b>TestType</b>	Index	Unsigned integer.	The index is only valid in CIR test.
StartTime	Start time of single test phase	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End time single test phase	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
SendSpeed	Current send packet speed.	N/A	Unsigned integer.Unit: Kbps	It is not supported in <b>PIR Summary</b> and <b>Traffic Summary</b> .
Status	Status of single test phase	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Succeeded</li> <li>1—In progress</li> <li>2—Aborted</li> <li>3—Timeout</li> <li>4—Failed</li> <li>5—None</li> <li>6—Unknown error</li> </ul>	The <b>Status</b> of <b>TestType</b> 3, 4, 7 is meaningless, so the <b>Status</b> value will be 5.
IR	Information rate	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> <li>AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	Unsigned integer. Unit:kbps	N/A
MaxValue	Maxmum value	N/A	Unsigned integer.	N/A
AvgValue	Average value	N/A	Unsigned integer.	N/A
FTD	Frame transmission delay	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> <li>AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	Unsigned integer. Unit:us	N/A
MaxValue	Maxmum value	N/A	Unsigned integer. Unit:us	N/A
AvgValue	Average value	N/A	Unsigned integer. Unit:us	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
FDV	Frame delay vibrate	Data structure	Members include: <ul style="list-style-type: none"> <li>• MinValue.</li> <li>• MaxValue.</li> <li>• AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	Unsigned integer. Unit:us	N/A
MaxValue	Maximum value	N/A	Unsigned integer. Unit:us	N/A
AvgValue	Average value	N/A	Unsigned integer. Unit:us	N/A
FLcount	Frame loss count	N/A	Unsigned integer.	N/A
FLR	Frame loss rate	N/A	String. Length: 15 characters	N/A
PacketsOutOfOrder	Packets out of order count	N/A	Unsigned integer.	N/A
SeverelyErrSecs	Severely errored second	N/A	Unsigned integer.	N/A
AVAIL	The ratio of available time to total time.	N/A	String. Length: 15 characters	N/A

## NQA/TwamplightLossStats

This table contains information about NQA Twamp Light operation loss statistics.

### XML structure

```

<NQA>
  <TwamplightLossStats>
    <TwamplightLossStat>
      <Session></Session>
      <SumLossCount>
        <MinValue></MinValue>
        <MaxValue></MaxValue>
        <AvgValue></AvgValue>
      </SumLossCount>
      <SumLossRatio>
        <MinValue></MinValue>
        <MaxValue></MaxValue>
        <AvgValue></AvgValue>
      </SumLossRatio>
      <SumErrorCount>

```



```

    <MinValue></MinValue>
    <MaxValue></MaxValue>
    <AvgValue></AvgValue>
  </SumErrorCount>
  <SumErrorRatio>
    <MinValue></MinValue>
    <MaxValue></MaxValue>
    <AvgValue></AvgValue>
  </SumErrorRatio>
  <DetailStats>
    <DetailStat>
      <Index></Index>
      <LossCount></LossCount>
      <LossRatio></LossRatio>
      <ErrorCount></ErrorCount>
      <ErrorRatio></ErrorRatio>
    </DetailStat>
  </DetailStats>
</TwamplightLossStat>
</TwamplightLossStats>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	TwamplightLossStats
Table type	Multi-instance table
Row name	TwamplightLossStat
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Session	Session Index	Index	Unsigned integer. MinValue: 1	This parameter supports customization, so only the minimum value is limited.
SumLossCount	Summary of frame loss count	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> <li>AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	Unsigned integer.	N/A
MaxValue	Maximum value	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AvgValue	Average value	N/A	Unsigned integer.	N/A
SumLossRatio	Summary of frame loss ratio	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> <li>AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	String. Length: 15 characters	N/A
MaxValue	Maximum value	N/A	String. Length: 15 characters	N/A
AvgValue	Average value	N/A	String. Length: 15 characters	N/A
SumErrorCount	Summary of error frame count	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> <li>AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	Unsigned integer.	N/A
MaxValue	Maximum value	N/A	Unsigned integer.	N/A
AvgValue	Average value	N/A	Unsigned integer.	N/A
SumErrorRatio	Summary of error frame ratio	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> <li>AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	String. Length: 10 characters	N/A
MaxValue	Maximum value	N/A	String. Length: 10 characters	N/A
AvgValue	Average value	N/A	String. Length: 10 characters	N/A
DetailStats	Details of statistics	SubLists	N/A	N/A

## NQA/TwamplightLossStats/DetailStats

This table contains detailed information about NQA Twamp Light operation result.

### XML structure

See the XML structure of NQA/TwamplightLossStats.

## Table description

Item	Description
Feature name	NQA
Table name	DetailResults
Table type	Multi-instance table
Row name	DetailResult
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Index of statistics information	Index	Unsigned integer.	When the statistics of any group is invalid, only the index column will be displayed.
LossCount	Frame loss count	N/A	Unsigned integer.	N/A
LossRatio	Frame loss ratio	N/A	String. Length: 15 characters.	N/A
ErrorCount	Frame error count	N/A	Unsigned integer.	N/A
ErrorRatio	Frame error ratio	N/A	String. Length: 15 characters.	N/A

## NQA/TwamplightDelayStats

This table contains information about NQA Twamp Light operation delay statistics.

## XML structure

```
<NQA>
  <TwamplightDelayStats>
    <TwamplightDelayStat>
      <Session></Session>
      <AverageDelay>
        <MinValue></MinValue>
        <MaxValue></MaxValue>
        <AvgValue></AvgValue>
      </AverageDelay>
      <AverageJitter>
        <MinValue></MinValue>
        <MaxValue></MaxValue>
```

```

        <AvgValue></AvgValue>
    </AverageJitter>
    <SDJitter>
        <MinValue></MinValue>
        <MaxValue></MaxValue>
        <AvgValue></AvgValue>
    </SDJitter>
    <DSJitter >
        <MinValue></MinValue>
        <MaxValue></MaxValue>
        <AvgValue></AvgValue>
    </DSJitter>
    <DetailStats>
        <DetailStat>
            <Index></Index>
            <Delay></Delay>
            <Jitter></Jitter>
            <SDJitter></SDJitter>
            <DSJitter></DSJitter>
        </DetailStat>
    </DetailStats>
</TwamplightDelayStat>
</TwamplightDelayStats>
</NQA>

```

## Table description

Item	Description
Feature name	NQA
Table name	TwamplightStats
Table type	Multi-instance table
Row name	TwamplightStat
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Session	Twamp-light session Id	Index	Unsigned integer. MinValue: 1	This parameter supports customization, so only the minimum value is limited.
AverageDelay	Average delay	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>AvgValue</li> </ul>	
MinValue	Minimum value	N/A	Unsigned integer.	N/A
MaxValue	Maximum value	N/A	Unsigned integer.	N/A
AvgValue	Average value	N/A	Unsigned integer.	N/A
AverageJitter	Average jitter	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> <li>AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	Unsigned integer.	N/A
MaxValue	Maximum value	N/A	Unsigned integer.	N/A
AvgValue	Average value	N/A	Unsigned integer.	N/A
SDJitter	Average jitter from source to destination	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> <li>AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	Unsigned integer.	N/A
MaxValue	Maximum value	N/A	Unsigned integer.	N/A
AvgValue	Average value	N/A	Unsigned integer.	N/A
DSJitter	Average jitter from destination to source	Data structure	Members include: <ul style="list-style-type: none"> <li>MinValue.</li> <li>MaxValue.</li> <li>AvgValue</li> </ul>	N/A
MinValue	Minimum value	N/A	Unsigned integer.	N/A
MaxValue	Maximum value	N/A	Unsigned integer.	N/A
AvgValue	Average value	N/A	Unsigned integer.	N/A
DetailDelayStats	Details of frame delay statistics	SubLists	N/A	N/A

## NQA/TwamplightDelayStats/DetailStats

This table contains detailed information about NQA Twamp Light operation delay result.

### XML structure

See the XML structure of NQA/TwamplightDelayStats.

### Table description

Item	Description
Feature name	NQA
Table name	DetailStats

Item	Description
Table type	Multi-instance table
Row name	DetailStats
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Index of statistics information	Index	Unsigned integer.	When the statistics of any group is invalid, only the index column will be displayed.
Delay	Average delay	N/A	Unsigned integer.	N/A
Jitter	Average jitter	N/A	Unsigned integer.	N/A
SDJitter	Average jitter from source to destination source	N/A	Unsigned integer.	N/A
DSJitter	Average jitter from destination to source	N/A	Unsigned integer.	N/A

# Contents

NQA .....1

    NQA/Client .....1

# NQA

## NQA/Client

Message	Explanation
The value must not be less than %d or greater than %d. 参数范围从%d至%d。	The specified probe timeout must be within the legal range. 指定的探测超时时间必须在合法的范围内。
Incomplete NQA operation parameters. Can't start the NQA operation. 必配参数不全，无法启动调度。	When starting the NQA test, the selected test parameters must be configured. 启动NQA测试的时候，必选的测试参数必须配置。
The operation time has passed. 时间已是过去。	The start time for starting the NQA test should be less than the current system time. 启动NQA测试的开始时间应小于当前系统的时间。
Can't start the operation. Please enable the NQA client first. 启动测试失败，请先开启NQA客户端。	Before starting the NQA test, you need to start the NQA client first. 在启动NQA测试前，先需要先开启NQA客户端。
Can't modify any existing schedule. 调度已启动，不可以修改。	After the NQA test is started, the scheduling parameters of the scheduling test cannot be modified. NQA测试启动后，不能修改调度测试的调度参数。
Can't modify a scheduled operation. 测试项组已启动调度，不可以修改配置。	After the test group starts the scheduling test, the configuration of the test group is not allowed to be modified. 测试组启动调度测试后，不允许对测试组的配置进行修改。
The lifetime for a recurring NQA operation can't be forever. 已配置recurring，必须配置有限的lifetime。	When the specified NQA test group is scheduled to run every day, the duration of the test cannot be unlimited. 指定NQA测试组每天都被调度运行时，测试的持续时间不能是无限的。
The lifetime for a recurring NQA operation must be less than one day. 已配置recurring，lifetime必须小于一天。	When the specified NQA test group is scheduled to run every day, the duration of the test must be the same day. 指定NQA测试组每天都被调度运行时，测试的持续时间必须小于一天。
The start time is invalid. 配置测试组启动日期，不在有效时间范围内。	The start time of the NQA startup test should be within the valid range. NQA启动测试的开始时间要在有效的范围内。
No operation type is specified. 未配置当前测试组的测试类型。	The type of the specified NQA test group must be configured when the create, merge and replace operations are performed. 当执行create、merge、replace操作时，指定的NQA测试组类型必须已经配置。
The NQA reaction parameter can't be modified. 不支持修改监测参数。	Alarm parameters that already have the same threshold number are not allowed to be modified. 已存在的相同的阈值编号的告警参数不允许修改。



# Contents

- NQAS ..... 1
  - NQAS/ServerStatus ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1
  - NQAS/Servers ..... 1
    - XML structure ..... 1
    - Table description ..... 2
    - Columns ..... 2

# NQAS

## NQAS/ServerStatus

This table contains information about NQA server enabling status.

### XML structure

```
<NQAS>
  <ServerStatus>
    <Enable></Enable>
  </ServerStatus>
</NQAS>
```

### Table description

Item	Description
Feature name	NQAS
Table name	ServerStatus
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of the NQA server	N/A	Enabling status: <ul style="list-style-type: none"><li><b>enable</b>—NQA server is enabled.</li><li><b>disable</b>—NQA server is disabled.</li></ul>	By default, the NQA server is disabled.

## NQAS/Servers

This table contains information about NQA servers. You cannot edit a server after it is configured.

### XML structure

```
<NQAS>
  <Servers>
```

```

<Server>
  <Type></Type>
  <IPAddr></IPAddr>
  <Port></Port>
  <VRF></VRF>
  <ToS></ToS>
  <HighPerformance></HighPerformance>
</Server>
</Servers>
</NQAS>

```

## Table description

Item	Description
Feature name	NQAS
Table name	Servers
Table type	Multi-instance table
Row name	Server
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Service type	Index	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—TCP-connect</li> <li><b>1</b>—UDP-echo</li> </ul>	N/A
IPAddr	IPv4 or IPv6 address for the listening service	Index	String. Dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	N/A
Port	Port number for the listening service	Index	Unsigned integer. Value range: 1 to 65535.	N/A
VRF	VRF instance where the service listens on	Index	String, case-sensitive. Length: 0 to 31 characters.	If it is not specified, the NQA server listens on the public network.
ToS	ToS value in the IP header for reply packets	N/A	Unsigned integer. Value range: 0 to 255.	N/A
HighPerformance	Enabling status of the high performance	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>	Only supported on the NQA UDP echo server.

Column name	Column description	Column type	Data type and restrictions	Remarks
	mode			

# Contents

- NQAS ..... 1
  - NQAS/ServerStatus ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1
  - NQAS/Servers ..... 1
    - XML structure ..... 1
    - Table description ..... 2
    - Columns ..... 2

# NQAS

## NQAS/ServerStatus

This table contains information about NQA server enabling status.

### XML structure

```
<NQAS>
  <ServerStatus>
    <Enable></Enable>
  </ServerStatus>
</NQAS>
```

### Table description

Item	Description
Feature name	NQAS
Table name	ServerStatus
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enabling status of the NQA server.	N/A	Enabling status: <ul style="list-style-type: none"><li>• <b>enable</b>—NQA server is enabled.</li><li>• <b>disable</b>—NQA server is disabled.</li></ul>	N/A

## NQAS/Servers

This table contains information about NQA servers.

### XML structure

```
<NQAS>
  <Servers>
    <Server>
```

```

<Type></Type>
<IPAddr></IPAddr>
<Port></Port>
<VRF></VRF>
<ToS></ToS>
<HighPerformance></HighPerformance>
</Server>
</Servers>
</NQAS>

```

## Table description

Item	Description
Feature name	NQAS
Table name	Servers
Table type	Multi-instance table
Row name	Server
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Service type	Index	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—TCP-connect</li> <li><b>1</b>—UDP-echo</li> </ul>	N/A
IPAddr	IPv4 or IPv6 address for the listening service	Index	String. Dotted decimal notation. Or hexadecimal string, colon-separated. Length: 1 to 46 characters.	N/A
Port	Port number for the listening service	Index	Unsigned integer. Value range: 1 to 65535.	N/A
VRF	VRF instance where the server listens on	Index	String, case-sensitive. Length: 0 to 31 characters.	If the returned value is empty, the NQA server listens on the public network.
ToS	ToS value in the IP header for reply packets	N/A	Unsigned integer. Value range: 0 to 255.	N/A
HighPerformance	Enabling status of the high performance mode	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only supported on the NQA UDP echo server.

# Contents

NQAS .....1

    NQAS/Server .....1



# NQAS

## NQAS/Server

Message	Explanation
The NQA server parameters can't be modified. 不支持修改监听服务器参数。	A listening service has been created that does not allow modification of the parameters of this listening service. 已经创建好的监听服务，不允许修改这个监听服务的参数。
Can't configure more. Maximum number of listening services already reached. 监听服务个数已达上限。	The number of listening services that have been created has reached the number of devices. 已经创建的监听服务的数量，已经达到设备的上限。

# Contents

- NSCollector .....1
  - NSCollector/Collectors .....1
    - XML structure .....1
    - Table description.....1
    - Columns.....1

# NSCollector

## NSCollector/Collectors

This table contains information about the collector to which the Netstream data exports.

### XML structure

```
<NSCollector>
  <Collectors>
    <Collector>
      <AddressType></AddressType>
      <IP></IP>
      <UDPPort></UDPPort>
    </Collector>
  </Collectors>
</NSCollector>
```

### Table description

Item	Description
Feature name	NSCollector
Table name	Collectors
Table type	Multi-instance table
Row name	Collector
Restrictions	None
Support for row creation and deletion	yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	IP address type	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>	Only supports IPv4 addresses.
IP	IP address of the host	Index	String, dotted decimal notation.	N/A
UDPPort	UDP port of the host	Index	Unsigned integer. Value range: 0 to 65535. Default: 0.	N/A

# Contents

- NSCollector .....1
  - NSCollector/Collectors .....1
    - XML structure .....1
    - Table description.....1
    - Columns.....1

# NSCollector

## NSCollector/Collectors

This table contains information about the collector to which the Netstream data exports.

### XML structure

```
<NSCollector>
  <Collectors>
    <Collector>
      <AddressType></AddressType>
      <IP></IP>
      <UDPPort></UDPPort>
    </Collector>
  </Collectors>
</NSCollector>
```

### Table description

Item	Description
Feature name	NSCollector
Table name	Collectors
Table type	Multi-instance table
Row name	Collector
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	IP address type	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>	Only support IPv4
IP	IP address of the host	Index	String, dotted decimal notation.	N/A
UDPPort	UDP port of the host	Index	Unsigned integer. Value range: 0 to 65535	N/A

# Contents

NTOP .....	1
NTOP/ExportTrafficTop .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
NTOP/ExportTrafficTopChart .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
NTOP/ExportThreatTop .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
NTOP/ExportThreatTopChart .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
NTOP/ExportURLTop .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
NTOP/ExportURLTopChart .....	9
XML structure .....	10
Table description .....	10
Columns .....	10
NTOP/ExportFileTop .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
NTOP/ExportFileTopChart .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
NTOP/ExportTrafficHistogram .....	13
XML structure .....	14
Table description .....	14
Columns .....	14
NTOP/ExportTrafficDistribution .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
NTOP/ExportReport .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
NTOP/StorageDevice .....	18
XML structure .....	18
Table description .....	18
Columns .....	19

# NTOP

## NTOP/ExportTrafficTop

This table is used to export the TrafficTop's statistics to PDF.

### XML structure

```
<NTOP>
  <ExportTrafficTop>
    <Top>
      <GroupType></GroupType>
      <ChartType></ChartType>
      <TrafficType></TrafficType>
      <FileName></FileName>
      <TableName></TableName>
      <TopCount></TopCount>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime><EndTime>
      </TimeFilter>
      <MatchFilter>
        <SrcIP></SrcIP>
        <Application></Application>
        <UAppSubCategory></UAppSubCategory>
      </MatchFilter>
    </Top>
  </ExportTrafficTop>
</NTOP>
```

### Table description

Item	Description
Feature name	NTOP
Table name	ExportTrafficTop
Table type	Multi-instance table
Row name	Top
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	Rank type	Index	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Enumeration: <ul style="list-style-type: none"> <li>1—SrcIP</li> <li>4—Application</li> <li>8—User</li> <li>64—Context</li> </ul>	
ChartType	Type of the chart	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Pie chart</li> <li>2—Bar chart</li> </ul>	N/A
TrafficType	Type of the traffic	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Total bytes</li> <li>1—Bytes</li> <li>2—Reply bytes</li> </ul>	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TableName	Name of the table	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TopCount	Query ranking	N/A	Unsigned integer Value range: 0 to 1000.	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
MatchFilter	Filter condition	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIP</li> <li>Application</li> <li>UAppSubCategory</li> </ul>	Only one column at a time.
SrcIP	Source IP address of the session	N/A	String, case insensitive Length: 1 to 63 characters	IPv4 or IPv6 address.
Application	Application of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A
UAppSubCategory	Application category of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A

## NTOP/ExportTrafficTopChart

This table is used to export the TrafficTopChart's statistics to PDF.



# XML structure

```
<NTOP>
  <ExportTrafficTopChart>
    <Chart>
      <GroupType></GroupType>
      <TrafficType></TrafficType>
      <FileName></FileName>
      <TableName></TableName>
      <GroupValueList>
        <GroupValue></GroupValue>
      </GroupValueList>
      <MatchValue>
        <MatchType></MatchType>
        <MatchValue></MatchValue>
      </MatchValue>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
    </Chart>
  </ExportThreatTopChart>
</NTOP>
```

## Table description

Item	Description
Feature name	NTOP
Table name	ExportTrafficTopChart
Table type	Multi-instance table
Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	Rank type	Index	Unsigned integer Enumeration: <ul style="list-style-type: none"><li>• 1—SrcIP</li><li>• 4—Application</li><li>• 8—User</li><li>• 64—Context</li><li>• 256—Appcategory</li><li>• 512—BandWidth</li></ul>	N/A
TrafficType	Type of the traffic	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>0—Total bytes</li> <li>1—Bytes</li> <li>2—Reply bytes</li> </ul>	
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TableName	Name of the table	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
MatchFilter	Filter condition	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIP</li> <li>Application</li> <li>UAppSubCategory</li> </ul>	Only one column at a time.
SrcIP	Source IP address of the session	N/A	String, case insensitive Length: 1 to 63 characters	IPv4 or IPv6 address.
Application	Application of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A
UAppSubCategory	Application category of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A

## NTOP/ExportThreatTop

This table is used to export the ThreatTop's statistics to PDF.

### XML structure

```

<NTOP>
  <ExportThreatTop>
    <Top>
      <GroupType></GroupType>
      <ChartType></ChartType>
      <TableName></TableName>
      <FileName></FileName>
      <TopCount></TopCount>
      <TimeFilter>
        <StartTime></StartTime>

```

```

        <EndTime><EndTime>
    </TimeFilter>
    <MatchFilter>
        <SrcIP></SrcIP>
        <DestIP></DestIP>
        <ThreatType></ThreatType>
        <ThreatID></ThreatID>
    </MatchFilter>
</Top>
</ExportThreatTop>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	ExportThreatTop
Table type	Multi-instance table
Row name	Top
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	Rank type	Index	Unsigned integer Enumeration: <ul style="list-style-type: none"> <li>1—ThreatType</li> <li>2—Application</li> <li>4—Attacker</li> <li>8—AttackerTarget</li> <li>16—ThreatID</li> <li>32—User</li> </ul>	N/A
ChartType	Type of the chart	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Pie chart</li> <li>2—Bar chart</li> </ul>	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TableName	Name of the table	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TopCount	Query ranking	N/A	Unsigned integer Value range: 0 to 1000.	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
MatchFilter	Filter condition	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIP</li> <li>DestIP</li> <li>ThreatType</li> <li>ThreatID</li> </ul>	ThreatType and ThreatID must be issued simultaneously.
SrcIP	Source IP address of the session	N/A	String, case insensitive Length: 1 to 63 characters	IPv4 or IPv6 address.
DestIP	Destination IP address of the session	N/A	String, case insensitive Length: 1 to 63 characters	IPv4 or IPv6 address.
ThreatType	Threat type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPS</li> <li>2—AV</li> </ul>	N/A
ThreatID	Threat ID	N/A	Unsigned integer	N/A

## NTOP/ExportThreatTopChart

This table is used to get the ThreatTopChart's statistics to PDF.

### XML structure

```

<NTOP>
  <ExportThreatTopChart>
    <Chart>
      <GroupType></GroupType>
      <FileName></FileName>
      <TableName></TableName>
      <ThreatType></ThreatType>
      <GroupValueList>
        <GroupValue></GroupValue>
        <ThreatID></ThreatID>
      </GroupValueList>
      <MatchValue>
        <MatchType></MatchType>
        <MatchValue></MatchValue>
        <ThreatType></ThreatType>
        <ThreatID></ThreatID>
      </MatchValue>
    </Chart>
  </ExportThreatTopChart>
</NTOP>

```

```

    <TimeFilter>
      <StartTime></StartTime>
      <EndTime></EndTime>
    </TimeFilter>
  </Chart>
</ExportThreatTopChart>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	ExportThreatTopChart
Table type	Multi-instance table
Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	Trend type	Index	Unsigned integer Enumeration: <ul style="list-style-type: none"> <li>1—ThreatType</li> <li>2—Application</li> <li>4—Attacker</li> <li>8—AttackerTarget</li> <li>16—ThreatID</li> <li>32—User</li> </ul>	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TableName	Name of the table	N/A	String, case insensitive Length: 1 to 63 characters	N/A
ThreatType	Threat type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPS</li> <li>2—AV</li> </ul>	If GroupType is 16, ThreatType must not be NULL.
GroupValueList	Trend value list	Data structure	Members include: <ul style="list-style-type: none"> <li>GroupValue</li> <li>ThreatType</li> <li>ThreatID</li> </ul>	If GroupType is 16, ThreatType must not be NULL.
GroupValue	Trend value	N/A	String, case insensitive Length: 1 to 63 characters	Contains up to 5 GroupValue in GroupValueList.
ThreatID	ThreatID	N/A	Unsigned integer	Contains up to 5 ThreatID in GroupValueList.

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
MatchFilter	Filter condition	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIP</li> <li>DestIP</li> <li>ThreatType</li> <li>ThreatID</li> </ul>	ThreatType and ThreatID must be issued simultaneously.
MatchType	Filter type	N/A	Unsigned integer	N/A
MatchValue	Filter value	N/A	String, case insensitive Length: 1 to 63 characters	N/A
ThreatType	Threat type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPS</li> <li>2—AV</li> </ul>	N/A
ThreatID	Threat ID	N/A	Unsigned integer	N/A

## NTOP/ExportURLTop

This table is used to export the URLTop's statistics to PDF.

### XML structure

```

<NTOP>
  <ExportURLTop>
    <Top>
      <GroupType></GroupType>
      <ChartType></ChartType>
      <FileName></FileName>
      <TableName></TableName>
      <TopCount></TopCount>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime><EndTime>
      </TimeFilter>
    </Top>
  </ExportURLTop>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	ExportUrlTop
Table type	Multi-instance table
Row name	Top
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	Rank type	Index	Unsigned integer Enumeration: <ul style="list-style-type: none"><li>1—Urlcategory</li><li>2—Website</li><li>4—User</li><li>8—SrcIP</li><li>16—DstIP</li></ul>	N/A
ChartType	Type of the chart	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Pie chart</li><li>2—Bar chart</li></ul>	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TableName	Name of the table	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TopCount	Query ranking	N/A	Unsigned integer Value range: 0 to 1000.	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"><li>StartTime</li><li>EndTime</li></ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A

## NTOP/ExportURLTopChart

This table is used to get the URLTopChart's statistics to PDF.

## XML structure

```
<NTOP>
  <ExportURLTopChart>
    <Chart>
      <GroupType></GroupType>
      <FileName></FileName>
      <TableName></TableName>
      <GroupValueList>
        <GroupValue></GroupValue>
      </GroupValueList>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
    </Chart>
  </ExportURLTopChart>
</NTOP>
```

## Table description

Item	Description
Feature name	NTOP
Table name	ExportUrlTopChart
Table type	Multi-instance table
Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	Trend type	Index	Unsigned integer Enumeration: <ul style="list-style-type: none"><li>1—Urlcategory</li><li>2—Website</li><li>4—User</li><li>8—SrcIP</li><li>16—DstIP</li></ul>	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TableName	Name of the table	N/A	String, case insensitive Length: 1 to 63 characters	N/A
GroupValueList	Trend value list	Data structure	Members include: <ul style="list-style-type: none"><li>GroupValue</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
GroupValue	Trend value	N/A	String, case insensitive Length: 1 to 63 characters	Contains up to 5 GroupValue in GroupValueList.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A

## NTOP/ExportFileTop

This table is used to export the FileTop's statistics to PDF.

### XML structure

```

<NTOP>
  <ExportFileTop>
    <Top>
      <GroupType></GroupType>
      <ChartType></ChartType>
      <FileName></FileName>
      <TableName></TableName>
      <TopCount></TopCount>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime><EndTime>
      </TimeFilter>
    </Top>
  </ExportFileTop>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	ExportFileTop
Table type	Multi-instance table
Row name	Top
Restrictions	None

## Columns

Column name	Column description	Column Type	Data Type and restrictions	Remarks
GroupType	Rank type	Index	Unsigned integer Enumeration: <ul style="list-style-type: none"><li>1—FileFilter</li></ul>	N/A
ChartType	Type of the chart	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Pie chart</li><li>2—Bar chart</li></ul>	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TableName	Name of the table	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TopCount	Query ranking	N/A	Unsigned integer Value range: 0 to 1000.	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"><li>StartTime</li><li>EndTime</li></ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A

## NTOP/ExportFileTopChart

This table is used to get the FileTopChart's statistics to PDF.

## XML structure

```
<NTOP>
  <ExportFileTopChart>
    <Chart>
      <GroupType></GroupType>
      <FileName></FileName>
      <TableName></TableName>
      <GroupValueList>
        <GroupValue></GroupValue>
      </GroupValueList>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
```

```

    </Chart>
  </ExportFileTopChart>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	ExportFileTopChart
Table type	Multi-instance table
Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupType	Trend type	Index	Unsigned integer Enumeration: <ul style="list-style-type: none"> <li>1—FileFilter</li> </ul>	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A
TableName	Name of the table	N/A	String, case insensitive Length: 1 to 63 characters	N/A
GroupValueList	Trend value list	Data structure	Members include: <ul style="list-style-type: none"> <li>GroupValue</li> </ul>	N/A
GroupValue	Trend value	N/A	String, case insensitive Length: 1 to 63 characters	Contains up to 5 GroupValue in GroupValue List.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A

## NTOP/ExportTrafficHistogram

This table is used to get the traffic histogram information to PDF.

## XML structure

```
<NTOP>
  <ExportTrafficHistogram>
    <Chart>
      <ContextID></ContextID>
      <AnalyType></AnalyType>
      <TrafficType></TrafficType>
      <FilterType></FilterType>
      <FilterCondition></FilterCondition>
      <FileName></FileName>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
    </Chart>
  </ExportTrafficHistogram>
</NTOP>
```

## Table description

Item	Description
Feature name	NTOP
Table name	ExportTrafficHistogram
Table Type	Multi-instance table
Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AnalyType	Analysis type	Index	Unsigned integer <ul style="list-style-type: none"><li>0—Traffic flow</li><li>1—Traffic flow rate</li></ul>	N/A
TrafficType	Type of the traffic	Index	Enumeration: <ul style="list-style-type: none"><li>0—Total bytes</li><li>1—bytes</li><li>2—Reply bytes</li></ul>	N/A
FilterType	Filter type	N/A	Unsigned integer <ul style="list-style-type: none"><li>1—SrcIP</li><li>4—Application</li><li>8—User</li><li>64—ContextName</li></ul>	For example, to filter the statistics by application, set the GroupType value to 4.
FilterCondition	Filter condition	N/A	String	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 255 characters.	
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
ContextID	Context ID	N/A	Unsigned integer	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A

## NTOP/ExportTrafficDistribution

This table is used to get the traffic distribution statistics to PDF.

### XML structure

```

<NTOP>
  <ExportTrafficDistribution>
    <Chart>
      <ContextID></ContextID>
      <FilterType></FilterType>
      <FilterCondition></FilterCondition>
      <TrafficType></TrafficType>
      <TimeRange></TimeRange>
      <FileName></FileName>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
    </Chart>
  </ExportTrafficDistribution>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	ExportTrafficDistribution
Table Type	Multi-instance table

Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FilterType	Filter type	N/A	Unsigned integer <ul style="list-style-type: none"> <li>1—SrcIP</li> <li>2—Application</li> <li>4—User</li> <li>8—ContextName</li> </ul>	For example, to filter the statistics by application, set the GroupType value to 4.
FilterCondition	Filter condition	N/A	String Length: 1 to 255 characters.	N/A
TrafficType	Type of the traffic	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Total bytes</li> <li>1—Bytes</li> <li>2—Reply bytes</li> </ul>	N/A
TimeRange	Time range	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Hour</li> <li>1—Day</li> <li>2—Week</li> </ul>	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
ContextID	Context ID	N/A	Unsigned integer	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A

## NTOP/ExportReport

This table is used to get the NTOP report to PDF.

## XML structure

```
<NTOP>
  <ExportReport>
```

```

<Chart>
  <ReportType></ReportType>
  <ContextID></ContextID>
  <ReportCustomization></ReportCustomization>
  <TimeFilter>
    <StartTime></StartTime>
    <EndTime><EndTime>
    <CompStartTime></CompStartTime>
    <CompEndTime><CompEndTime>
  </TimeFilter>
  <FileName></FileName>
</Chart>
</ExportReport>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	ExportReport
Table Type	Multi-instance table
Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReportType	Report type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Period report</li> <li>2—Comparison report</li> <li>3—Intelligent report</li> <li>4—Integrated report</li> </ul>	N/A
ReportCustomization	Report customization	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>1—Chapter 1</li> <li>2—Chapter 2</li> <li>4—Chapter 3</li> <li>8—Chapter 4</li> <li>...</li> <li>2<sup>31</sup>—Chapter 32</li> </ul>	Report output selected chapter. By default, all chapters are selected. The chapter name is taken from NETCONF table:NTOP/Report Chapter.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> <li>CompStartTime</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>CompEndTime</li> </ul>	
StartTime	Start time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
CompStartTime	Comparison Start time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
CompEndTime	Comparison End time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
ContextID	ContextID	N/A	Unsigned integer	N/A
FileName	Name of the PDF	N/A	String, case insensitive Length: 1 to 63 characters	N/A

## NTOP/StorageDevice

This table is used to operate the storage device of NTOP.

### XML structure

```

<NTOP>
  <StorageDevice>
    <OperationType></OperationType>
  </StorageDevice>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	StorageDevice
Table Type	Single -instance table
Row name	None
Restrictions	None



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
OperationType	Type of the operation	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Unload the storage device</li></ul>	N/A

# Contents

NTOP/LogAggregations .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
NTOP/PersistCfg .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
NTOP/ReportRss .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
NTOP/PersistDiskCfg .....	4
XML structure .....	4
Table description .....	4
Columns .....	4

# NTOP/LogAggregations

This table contains log aggregation information.

## XML structure

```
<NTOP>
  <LogAggregations>
    <LogAggregation>
      <LogType></LogType>
      <Enabled></Enabled>
      <Time></Time>
    </LogAggregation>
  </LogAggregations>
</NTOP>
```

## Table description

Item	Description
Feature name	NTOP
Table name	LogAggregations
Table type	Multi-instance table
Row name	LogAggregation
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LogType	Log type	Index	Enumeration: <ul style="list-style-type: none"><li>1—ThreatLog</li><li>2—TrafficLog</li><li>3—URLLog</li><li>4—FFilterLog</li></ul>	N/A
Enabled	Whether aggregation is enabled or not	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Enabled
Time	Aggregation time in seconds	N/A	Unsigned integer Value range: 10 to 60.	Default is 60 seconds.

# NTOP/PersistCfg

This table is used to set the persistence configuration.

## XML structure

```
<NTOP>
  <PersistCfg>
    <DBCfg>
      <ServiceType></ServiceType>
      <AutoDeleteEnable></AutoDeleteEnable>
      <LimitTime></LimitTime>
      <LogLimit></LogLimit>
      <TrendLimit></TrendLimit>
      <DBSoftware></DBSoftware>
    </DBCfg>
  </PersistCfg>
</NTOP>
```

## Table description

Item	Description
Feature name	NTOP
Table name	PersistCfg
Table type	Multi-instance table
Row name	DBCfg
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceType	Service type	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Global service</li><li>• 2—Audit service</li><li>• 3—Traffic service</li><li>• 4—Threat service</li><li>• 5—URLFilter service</li><li>• 6—Filefilter service</li></ul>	N/A
AutoDeleteEnable	Whether AutoDelete is enabled or not	N/A	Boolean: <ul style="list-style-type: none"><li>• true</li><li>• false</li></ul>	N/A
LimitTime	Data retention days	N/A	Unsigned integer	Default is 30 days.

Column name	Column description	Column type	Data type and restrictions	Remarks
LogLimit	Log records limit	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ .	N/A
TrendLimit	Trend records limit	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$ .	N/A
DBSoftware	Database software of this service	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Sqlite</li> <li>2—Fastbit</li> </ul>	N/A

## NTOP/ReportRss

This table is used to set the report subscription configuration.

### XML structure

```

<NTOP>
  <ReportRss>
    <Rss>
      <ReportType></ReportType>
      <MailId></ MailId >
      <MailAddr></MailAddr>
    </Rss>
  </ReportRss>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	ReportRss
Table type	Multi-instance table
Row name	Rss
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReportType	Report type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Period report</li> <li>2—Comparison report</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>3—Intelligent report</li> <li>4—Integrated report</li> </ul>	
MailId	Mail Id	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1	N/A
MailAddr	Rss mail address	N/A	String, case insensitive Length: 1 to 127 characters	N/A.

## NTOP/PersistDiskCfg

This table is used to set the persistence disk configuration.

### XML structure

```

<NTOP>
  <PersistDiskCfg>
    <DBCfg>
      <ServiceType></ServiceType>
      <ServiceDiskLimit></ServiceDiskLimit>
      <ServiceAlarmLimit></ServiceAlarmLimit>
    </DBCfg>
  </PersistDiskCfg>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	PersistDiskCfg
Table type	Multi-instance table
Row name	DBCfg
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceAlarmLimit	Alarm limit percent.	N/A	Unsigned integer. Value range: 1 to 100	When disk usage reaches the alarm limit, the system deletes the oldest file.
ServiceType	Service type	Index	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 1—Global service</li> <li>• 2—Audit service</li> <li>• 3—Traffic service</li> <li>• 4—Threat service</li> <li>• 5—URLFilter service</li> <li>• 6—Filefilter service</li> </ul>	
ServiceDiskLimit	Service disk limit percent.	N/A	Unsigned integer. Value range: 1 to 100	Global service disk limit is the maximum percentage of disk occupancy. Other service disk limit is the percentage occupancy in the Global service proportion.。

# Contents

NTOP .....	1
NTOP/TrafficLog .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
NTOP/TrafficTop .....	3
XML structure .....	3
Table description .....	4
Columns .....	5
NTOP/TrafficTopChart .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
NTOP/ThreatLog .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
NTOP/ThreatTop .....	11
XML structure .....	12
Table description .....	12
Columns .....	13
NTOP/ThreatTopChart .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
NTOP/URLLog .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
NTOP/URLTop .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
NTOP/URLTopChart .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
NTOP/FileLog .....	23
XML structure .....	23
Table description .....	24
Columns .....	24
NTOP/FileTop .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
NTOP/FileTopChart .....	26
XML structure .....	26
Table description .....	27
Columns .....	27
NTOP/LogAggregations .....	28
XML structure .....	28
Table description .....	28
Columns .....	28
NTOP/LogPaging .....	29
XML structure .....	29
Table description .....	29
Columns .....	30



NTOP/PersistCfg .....	31
XML structure .....	31
Table description .....	31
Columns .....	31
NTOP/TrafficHistogram .....	32
XML structure .....	32
Table description .....	33
Columns .....	33
NTOP/TrafficDistribution .....	34
XML structure .....	34
Table description .....	34
Columns .....	35
NTOP/TrafficConstant .....	36
XML structure .....	36
Table description .....	36
Columns .....	36
NTOP/ReportRss .....	37
XML structure .....	37
Table description .....	38
Columns .....	38
NTOP/PersistDiskCfg .....	38
XML structure .....	38
Table description .....	39
Columns .....	39
NTOP/ReportChapter .....	39
XML structure .....	39
Table description .....	40
Columns .....	40
NTOP/SecurityScore .....	40
XML structure .....	40
Table description .....	41
Columns .....	41

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# NTOP

## NTOP/TrafficLog

This table contains Traffic log information. When a session ends, a traffic log will be stored locally. This table contains these logs. If there is no hard-disk on device, only 10,000 entries can be stored, and new logs will overwrite the oldest.

### XML structure

```
<NTOP>
  <TrafficLog>
    <Log>
      <ID></ID>
      <UserID></UserID>
      <StartTime></StartTime>
      <EndTime></EndTime>
      <ContextName></ContextName>
      <Protocol></Protocol>
      <Application></Application>
      <SecurityPolicy></SecurityPolicy>
      <SrcZoneName></SrcZoneName>
      <SrcRegion></SrcRegion>
      <SrcIPAddr></SrcIPAddr>
      <SrcPort></SrcPort>
      <NATSrcIP></NATSrcIP>
      <NATSrcPort></NATSrcPort>
      <User></User>
      <DestZoneName></DestZoneName>
      <DestRegion></DestRegion>
      <DestIPAddr></DestIPAddr>
      <DestPort></DestPort>
      <NATDstIP></NATDstIP>
      <NATDstPort></NATDstPort>
      <TrafficPolicy></TrafficPolicy>
      <Bytes></Bytes>
      <ReplyBytes></ReplyBytes>
      <Pkts></Pkts>
      <ReplyPkts></ReplyPkts>
      <SrcInterface></SrcInterface>
      <SrcVrfIndex></SrcVrfIndex>
      <DstInterface></DstInterface>
      <UAppSubCategory></UAppSubCategory>
      <SessionCount></SessionCount>
    </Log>
  </TrafficLog>
</NTOP>
```

```

    </TrafficLog>
  </NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	TrafficLog
Table type	Multi-instance table
Row name	Log
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the TrafficLog	Index	Unsigned integer	N/A
UserID	User ID	Index	Unsigned integer	Used to distinguish different requests.
EndTime	End time of the session	N/A	Format: YYYY-MM-DDTHH:MM:SS	N/A
StartTime	Start time of the session	N/A	Format: YYYY-MM-DDTHH:MM:SS	N/A
ContextName	Name of the context	N/A	String, case insensitive Length: 1 to 15 characters	N/A
Protocol	Protocol	N/A	String, case insensitive Length: 1 to 31 characters	N/A
Application	Application	N/A	String, case insensitive Length: 1 to 63 characters	N/A
SecurityPolicy	Security policy	N/A	String, case insensitive Length: 1 to 63 characters	N/A
SrcZoneName	Source zone name	N/A	String, case insensitive Length: 1 to 31 characters	N/A
SrcRegion	Source region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
SrcIPAddr	Source IP address	N/A	String, case insensitive Length: 1 to 46 characters	N/A
SrcPort	Source port	N/A	Unsigned integer	N/A
NATSrcIP	NAT source IP	N/A	String, case insensitive Length: 1 to 46 characters	N/A
NATSrcPort	NAT source port	N/A	Unsigned integer	N/A
User	Username	N/A	String, case insensitive	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 127 characters	
DestZoneName	Destination zone name	N/A	String, case insensitive Length: 1 to 31 characters	N/A
DestRegion	Destination region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
DestIPAddr	Destination IP address	N/A	String, case insensitive Length: 1 to 46 characters	N/A
DestPort	Destination port	N/A	Unsigned integer	N/A
NATDstIP	NAT destination IP	N/A	String, case insensitive Length: 1 to 46 characters	N/A
NATDstPort	NAT destination port	N/A	Unsigned integer	N/A
Bytes	Bytes	N/A	Unsigned integer	N/A
ReplyBytes	Reply bytes	N/A	Unsigned integer	N/A
Pkts	Packets	N/A	Unsigned integer	N/A
ReplyPkts	Reply packets	N/A	Unsigned integer	N/A
SrcInterface	Source interface	N/A	String, case insensitive Length: 1 to 47 characters	N/A
DstInterface	Destination interface	N/A	String, case insensitive Length: 1 to 47 characters	N/A
SrcVrfIndex	Source VRF index	N/A	Unsigned integer	N/A
UAppSubCategory	Application category of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A

## NTOP/TrafficTop

This table is used to get the top information of TrafficLog table.

The attributes in GroupValue must match the GroupType. For example, if the group-type is SrcIP, the value in GroupValue should be:

```
<SrcIP>1.2.3.4</SrcIP>
```

Other columns in GroupValue must not exist. The ConnCounter is the number of sessions that include this IP as an initiator and BytesCounter is the number of bytes sent and received by this IP. TopNo means the BytesCounter's order in all BytesCounter values.

## XML structure

```
<NTOP>
  <TrafficTop>
    <Top>
```

```

<TopNo></TopNo>
<GroupType></GroupType>
<TrafficType></TrafficType>
<UserID></UserID>
<TimeFilter>
  <StartTime></StartTime>
  <EndTime><EndTime>
</TimeFilter>
<MatchFilter>
  <SrcIP></SrcIP>
  <DstIP></DstIP>
  <Application></Application>
  <User></User>
  <UAppSubCategory></UAppSubCategory>
</MatchFilter>
<GroupValue>
  <SrcIP></SrcIP>
  <DstIP></DstIP>
  <Applicatoin></ Applicatoin >
  <User></User>
  <Bandwidth></Bandwidth>
  <SrcRegion></SrcRegion>
  <DstRegion></DstRegion>
  <ContextName></ContextName>
  <UAppSubCategory></UAppSubCategory>
</GroupValue>
<GroupCounters>
  <BytesCounter></BytesCounter>
  <TotalBytes ></TotalBytes >
  <ReplyBytes></ReplyBytes>
  <ConnCounter></ConnCounter>
</GroupCounters>
<BytesTotal></BytesTotal>
<ConnTotal></ConnTotal>
</Top>
</TrafficTop>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	TrafficTop
Table type	Multi-instance table
Row name	Top
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TopNo	Ranking No	Index	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
GroupType	Ranking type	Index	Unsigned integer <ul style="list-style-type: none"> <li>1—SrcIP</li> <li>4—Application</li> <li>8—User</li> <li>64—ContextName</li> </ul>	For example, to rank the statistics by application, set the GroupType value to 4.
TrafficType	Type of the traffic	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Total bytes</li> <li>1—Bytes</li> <li>2—Reply bytes</li> </ul>	N/A
UserID	User ID	Index	Unsigned integer Value range: 1 to $2^{32}-1$	Used to distinguish different requests.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime.</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
MatchFilter	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIP</li> <li>DstIP</li> <li>Application</li> <li>UAppSubCategory..</li> <li>User</li> </ul>	N/A
SrcIP	Source IP address of the session	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
DstIP	Destination IP address of the session	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
Application	Application of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A
UAppSubCategory	Application category of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A
User	User of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A
GroupValue	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIP</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• DstIP</li> <li>• Application</li> <li>• UAppSubCategory.</li> <li>• User</li> <li>• BandWidth</li> <li>• SrcRegion</li> <li>• DestRegion</li> <li>• ContextName.</li> </ul>	
SrcIP	Source IP address of the session	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
DstIP	Destination IP address of the session	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
Application	Application of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A
UAppSubCategory	Application category of the session	N/A	String, case insensitive Length: 1 to 63 characters	N/A
User	User of the session	N/A	String, case insensitive Length: 1 to 127 characters	N/A
Bandwidth	Bandwidth	N/A	String, case insensitive Length: 1 to 63 characters	N/A
SrcRegion	Source region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
DestRegion	Destination region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
ContextName	Name of the context	N/A	String, case insensitive Length: 1 to 15 characters	N/A
GroupCounters	Group counters	Data structure	Members include: <ul style="list-style-type: none"> <li>• Bytes</li> <li>• TotalBytes</li> <li>• ReplyBytes</li> <li>• ConnCounter.</li> </ul>	N/A
BytesCounter	Bytes within the statistical time of the GroupValue.	N/A	Unsigned integer Value range: 0 to $2^{64}-1$	N/A
TotalBytes	Total bytes within the statistical time of the GroupValue.	N/A	Unsigned integer Value range: 0 to $2^{64}-1$	N/A
ReplyBytes	Reply bytes within the statistical time of the GroupValue.	N/A	Unsigned integer Value range: 0 to $2^{64}-1$	N/A
ConnCounter	Session count within the	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	statistical time of the GroupValue.			
BytesTotal	All bytes within the statistical time.	N/A	Unsigned integer Value range: 0 to $2^{64}-1$	If TrafficType is 1, the BytesTotal is the total number of ReplyBytes. If TrafficType is 2, the BytesTotal is the total number of Bytes. Otherwise BytesTotal is the total number of TotalBytes.
ConnTotal	All session count within the statistical time.	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A

## NTOP/TrafficTopChart

This table is used to get the TrafficLog's byte number distribution every hour.

### XML structure

```

<NTOP>
  <TrafficTopChart>
    <Chart>
      <TrafficType></TrafficType>
      <GroupValue>
        <SrcIP></SrcIP>
        <DstIP></DstIP>
        <Application></Application>
        <UAppSubCategory></UAppSubCategory>
        <User></User>
        <ContextName></ContextName>
        <SrcRegion></SrcRegion>
        <DstRegion></DstRegion>
        <Bandwidth></Bandwidth>
      </GroupValue>
      <GroupCounters>
        <Time></Time>
        <Bytes></Bytes>
        <ReplyBytes></ReplyBytes>
        <TotalBytes></TotalBytes>
      </GroupCounters>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
    </Chart>
  </TrafficTopChart>

```



</NTOP>

## Table description

Item	Description
Feature name	NTOP
Table name	TrafficTopChart
Table type	Multi-instance table
Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TrafficType	Type of the traffic	Index	Enumeration: <ul style="list-style-type: none"><li>0—Total bytes</li><li>1—Bytes</li><li>2—Reply bytes</li></ul>	N/A
GroupValue	Group value	Data structure	Members include: <ul style="list-style-type: none"><li>SrcIP</li><li>DstIP</li><li>Application</li><li>AppSubCategory.</li><li>User</li><li>ContextName</li><li>Bandwidth.</li><li>SrcRegion</li><li>DestRegion</li></ul>	N/A
SrcIP	Source IP address of the session	Index	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
DstIP	Destination IP address of the session	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
Application	Application of the session	Index	String, case insensitive Length: 1 to 63 characters	N/A
UAppSubCategory	Application category of the session	Index	String, case insensitive Length: 1 to 63 characters	N/A
User	User of the session	Index	String, case insensitive Length: 1 to 127 characters	N/A
ContextName	Name of the context	Index	String, case insensitive Length: 1 to 15 characters	N/A
Bandwidth	Bandwidth	N/A	String, case insensitive Length: 1 to 63 characters	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcRegion	Source region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
DestRegion	Destination region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
Bytes	Bytes at this point in Time.	N/A	Unsigned integer Value range: 0 to $2^{64}-1$	Multiple values.
ReplyBytes	Reply bytes at this point in Time.	N/A	Unsigned integer Value range: 0 to $2^{64}-1$	Multiple values.
TotalBytes	Total bytes at this point in Time.	N/A	Unsigned integer Value range: 0 to $2^{64}-1$	Multiple values.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A

## NTOP/ThreatLog

This table contains threat log information.

### XML structure

```

<NTOP>
  <ThreatLog>
    <Log>
      <ID></ID>
      <UserID></UserID>
      <Time></Time>
      <ThreatType></ThreatType>
      <ThreatID></ThreatID>
      <ThreatName></ThreatName>
      <SrcZoneName></SrcZoneName>
      <SrcIPAddr></SrcIPAddr>
      <SrcPort></SrcPort>
      <DestZoneName></DestZoneName>
      <DestIPAddr></DestIPAddr>
      <DestPort></DestPort>
      <Application></Application>
      <Protocol></Protocol>
    </Log>
  </ThreatLog>
</NTOP>

```

```

    <Action></Action>
    <Severity></Severity>
    <RealIP></RealIP>
    <CVE></CVE>
    <BID></BID>
    <MSB></MSB>
    <Policy></Policy>
    <SrcRegion></SrcRegion>
    <DestRegion></DestRegion>
    <ContextName></ContextName>
    <SrcVrfIndex></SrcVrfIndex>
    <AttackCount></AttackCount>
    <User></User>
  </Log>
</ThreatLog>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	ThreatLog
Table type	Multi-instance table
Row name	Log
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the ThreatLog	Index	Unsigned integer	N/A
UserID	User ID	Index	Unsigned integer	Used to distinguish different requests.
Time	Time of the ThreatLog	N/A	Format: YYYY-MM-DDTHH:MM:SS	N/A
ThreatType	Threat type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPS</li> <li>2—AV</li> </ul>	N/A
ThreatID	Threat ID	N/A	Unsigned integer Value range: 1 to 2 <sup>32</sup> -1	N/A
ThreatName	Threat name	N/A	String, case insensitive Length: 1 to 127 characters	N/A
SrcZoneName	Source zone name	N/A	String, case insensitive Length: 1 to 31 characters	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIPAddr	Source IP address	N/A	String, case insensitive Length: 1 to 46 characters	N/A
SrcPort	Source port	N/A	Unsigned integer	N/A
DestZoneName	Destination zone name	N/A	String, case insensitive Length: 1 to 31 characters	N/A
DestIPAddr	Destination IP address	N/A	String, case insensitive Length: 1 to 46 characters	N/A
DestPort	Destination port	N/A	Unsigned integer	N/A
Application	Application	N/A	String, case insensitive Length: 1 to 63 characters	N/A
Protocol	Protocol	N/A	String, case insensitive Length: 1 to 31 characters	N/A
Action	Action of the rule	N/A	Unsigned integer	N/A
Severity	Severity of the rule	N/A	Unsigned integer	N/A
RealIP	Real IP	N/A	String, case insensitive Length: 1 to 127 characters	N/A
CVE	CVE	N/A	String, case insensitive Length: 1 to 127 characters	N/A
BID	BID	N/A	String, case insensitive Length: 1 to 127 characters	N/A
MSB	MSB	N/A	String, case insensitive Length: 1 to 127 characters	N/A
Policy	Name of the threat policy	N/A	String, case insensitive Length: 1 to 15 characters	N/A
SrcRegion	Source region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
DestRegion	Destination region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
SrcVrfIndex	Source VRF index	N/A	Unsigned integer	N/A
AttackCount	Number of attacks	N/A	Unsigned integer	N/A
User	User of the session	Index	String, case insensitive Length: 1 to 127 characters	N/A

## NTOP/ThreatTop

This table contains ThreatLog Top information.

# XML structure

```
<NTOP>
  <ThreatTop>
    <Top>
      <TopNo></TopNo>
      <GroupType></GroupType>
      <UserID></UserID>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
      <MatchFilter>
        <ThreatType></ThreatType>
        <ThreatID></ThreatID>
        <ThreatName></ThreatName>
        <Attacker></Attacker>
        <AttackTarget></AttackTarget>
        <Application></Application>
        <SrcRegion></SrcRegion>
        <DestRegion></DestRegion>
        <User></User>
      </MatchFilter>
      <GroupValue>
        <ThreatType></ThreatType>
        <ThreatID></ThreatID>
        <ThreatName></ThreatName>
        <Application></Application>
        <Attacker></Attacker>
        <AttackTarget></AttackTarget>
        <User></User>
        <SrcRegion></SrcRegion>
        <DestRegion></DestRegion>
      </GroupValue>
      <GroupCounters>
        <ThreatCounter></ThreatCounter>
      </GroupCounters>
      <AttackTotal></AttackTotal>
    </Top>
  </ThreatTop>
</NTOP>
```

## Table description

Item	Description
Feature name	NTOP
Table name	ThreatTop

Table type	Multi-instance table
Row name	Top
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TopNo	Ranking No	Index	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
GroupType	Ranking type	Index	Unsigned integer: <ul style="list-style-type: none"> <li>1—ThreatType</li> <li>2—Application</li> <li>4—Attacker</li> <li>8—AttackTarget</li> <li>16—ThreatID</li> <li>32—User</li> </ul>	For example, to rank the statistics by attacker, set the GroupType value to 4.
UserID	User ID	Index	Unsigned integer Value range: 1 to $2^{32}-1$	Used to distinguish different requests.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
MatchFilter	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>ThreatType</li> <li>ThreatID</li> <li>Attacker</li> <li>AttackTarget</li> <li>Application</li> <li>User.</li> <li>SrcRegion</li> <li>DestRegion</li> </ul>	N/A
ThreatType	Threat type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPS</li> <li>2—AV</li> </ul>	N/A
ThreatID	Threat ID	N/A	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
Attacker	Source IP address	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
AttackTarget	Destination IP address	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.

Column name	Column description	Column type	Data type and restrictions	Remarks
Application	Application	N/A	String, case insensitive Length: 1 to 63 characters	N/A
User	User	N/A	String, case insensitive Length: 1 to 127 characters	N/A
SrcRegion	Source region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
DestRegion	Destination region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
GroupValue	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>ThreatType</li> <li>ThreatID</li> <li>ThreatName</li> <li>Application</li> <li>Attacker</li> <li>AttackTarget</li> <li>User.</li> <li>SrcRegion</li> <li>DestRegion</li> </ul>	N/A
ThreatType	Threat type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPS</li> <li>2—AV</li> </ul>	N/A
ThreatID	Threat ID	N/A	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
ThreatName	Threat name	N/A	String, case insensitive Length: 1 to 127 characters	N/A
Application	Application	N/A	String, case insensitive Length: 1 to 63 characters	N/A
Attacker	Source IP address	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
AttackTarget	Dest IP address	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
User	User	N/A	String, case insensitive Length: 1 to 127 characters	N/A
SrcRegion	Source region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
DestRegion	Destination region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
GroupCounters	Group counters	Data structure	Members include: <ul style="list-style-type: none"> <li>ThreatCounter.</li> </ul>	N/A
ThreatCounter	Threat counter within the statistical time of the GroupValue.	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AttackTotal	All attack count within the statistical time.	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A

## NTOP/ThreatTopChart

This table contains Threat Log Top Chart information.

### XML structure

```

<NTOP>
  <ThreatTopChart>
    <Chart>
      <GroupValue>
        <ThreatType></ThreatType>
        <ThreatID></ThreatID>
        <Application></Application>
        <Attacker></Attacker>
        <AttackTarget></AttackTarget>
        <SrcRegion></SrcRegion>
        <DestRegion></DestRegion>
        <User></User>
      </GroupValue>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
      <GroupCounters>
        <Time></Time>
        <AttackCounter></AttackCounter>
      </GroupCounters>
    </Chart>
  </ThreatTopChart>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	ThreatTopChart
Table type	Multi-instance table
Row name	Chart
Restrictions	None



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupValue	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>ThreatType</li> <li>ThreatID</li> <li>Application</li> <li>Attacker</li> <li>AttackTarget</li> <li>SrcRegion</li> <li>DestRegion</li> <li>User</li> </ul>	N/A
ThreatType	Threat type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPS</li> <li>2—AV</li> </ul>	N/A
ThreatID	Threat ID	Index	Unsigned integer	N/A
Application	Application	Index	String , case insensitive Length: 1 to 63 characters	N/A
Attacker	Source IP	Index	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
AttackTarget	Dest IP	Index	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
SrcRegion	Source region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
DestRegion	Destination region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
User	User	Index	String, case insensitive Length: 1 to 127 characters	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
GroupCounts	Statistic data	Data structure	Members include: <ul style="list-style-type: none"> <li>Time</li> <li>HitCounter</li> </ul>	When the TimeFilter is less than 1 day, the data is collected at an interval of 5 minutes. Otherwise, the interval is 1 hour.  Up to one month's data is collected.
Time	Time of the data	N/A	DateTime.	Multiple values.

Column name	Column description	Column type	Data type and restrictions	Remarks
			Format: YYYY-MM-DDTHH:MM:SS	
AttackCounter	Number of attacks	N/A	Unsigned integer	Multiple values.

## NTOP/URLLog

This table contains URLLog information.

## XML structure

```

<NTOP>
  <URLLog>
    <Log>
      <ID></ID>
      <UserID></UserID>
      <Time></Time>
      <URLCategory></URLCategory>
      <FilterType></FilterType>
      <URL></URL>
      <SrcZoneName></SrcZoneName>
      <SrcIPAddr></SrcIPAddr>
      <SrcPort></SrcPort>
      <DestZoneName></DestZoneName>
      <DestIPAddr></DestIPAddr>
      <DestPort></DestPort>
      <Application></Application>
      <User></User>
      <Action></Action>
      <SecurityPolicy></SecurityPolicy>
      <ContextName></ContextName>
      <SrcVrfIndex></SrcVrfIndex>
      <SrcRegion></SrcRegion>
      <DestRegion></DestRegion>
      <VistCount></VistCount>
    </Log>
  </URLLog>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	URLLog

Table Type	Multi-instance table
Row name	Log
Restrictions	None

## Columns

Column name	Column description	Column Type	Data Type and restrictions	Remarks
ID	ID of the URL log	Index	Unsigned integer	N/A
UserID	User ID	Index	Unsigned integer	Used to distinguish different requests.
Time	Time of the URLLog	N/A	Format: YYYY-MM-DDTHH:MM:SS	N/A
URLCategory	URL category	N/A	String, case insensitive Length: 1 to 63 characters	N/A
URL	URL	N/A	String, case insensitive Length: 1 to 511 characters	N/A
SrcZoneName	Source zone name	N/A	String, case insensitive Length: 1 to 31 characters	N/A
SrcIPAddr	Source IP address	N/A	String, case insensitive Length: 1 to 46 characters	N/A
SrcPort	Source port	N/A	Unsigned integer	N/A
DestZoneName	Destination zone name	N/A	String, case insensitive Length: 1 to 31 characters	N/A
DestIPAddr	Destination IP address	N/A	String, case insensitive Length: 1 to 46 characters	N/A
DestPort	Destination port	N/A	Unsigned integer	N/A
Application	Application	N/A	String, case insensitive Length: 1 to 63 characters	N/A
User	User	N/A	String , case insensitive Length: 1 to 127 characters	N/A
Action	Action of the rule	N/A	Unsigned integer	N/A
SecurityPolicy	Name of the URL policy	N/A	String, case insensitive Length: 1 to 31 characters	N/A
ContextName	Name of the context	N/A	String, case insensitive Length: 1 to 15 characters	N/A
SrcVrfIndex	Source VRF index	N/A	Unsigned integer	N/A
SrcRegion	Source region	N/A	String, case insensitive Length: 1 to 127 characters	N/A
DestRegion	Destination region	N/A	String, case insensitive Length: 1 to 127 characters	N/A

Column name	Column description	Column Type	Data Type and restrictions	Remarks
VistCount	Number of URL visits	N/A	Unsigned integer Value range: 1 to $2^{32}-1$	Whether the URL logs are aggregated depends on table LogAggregations.

## NTOP/URLTop

This table contains URL Log Top information.

### XML structure

```

<NTOP>
  <URLTop>
    <Top>
      <TopNo></TopNo>
      <GroupType></GroupType>
      <UserID></UserID>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime><EndTime>
      </TimeFilter>
      <MatchFilter>
        <User></User>
        <URLCategory></URLCategory>
        <SrcIP></SrcIP>
        <DstIP></DstIP>
        <Website></Website>
      </MatchFilter>
      <GroupValue>
        <User></User>
        <URLCategory></URLCategory>
        <SrcIP></SrcIP>
        <DstIP></DstIP>
        <Website></Website>
      </GroupValue>
      <GroupCounters>
        <URLVistCounter></URLVistCounter>
      </GroupCounters>
      <CountTotal></CountTotal>
    </Top>
  </URLTop>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	URLTop
Table Type	Multi-instance table
Row name	Top
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TopNo	Ranking No	Index	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
GroupType	Ranking type	Index	Unsigned integer <ul style="list-style-type: none"> <li>1—URLCategory</li> <li>2—Website</li> <li>4—User</li> <li>8—SrcIP</li> <li>16—DstIP</li> </ul>	For example, to rank the statistics by user, set the GroupType value to 4.
UserID	User ID	Index	Unsigned integer Value range: 1 to $2^{32}-1$	Used to distinguish different requests.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime.</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
MatchFilter	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>User</li> <li>URLCategory</li> <li>SrcIP</li> <li>DstIP</li> <li>Website.</li> </ul>	N/A
User	User	N/A	String, case insensitive Length: 1 to 127 characters	N/A
URLCategory	URL category	N/A	String, case insensitive Length: 1 to 63 characters	N/A
SrcIP	Source IP address	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
DstIP	Dest IP address	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.

Column name	Column description	Column type	Data type and restrictions	Remarks
Website	Website	N/A	String, case insensitive Length: 1 to 63 characters	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
GroupValue	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>User</li> <li>URLCategory</li> <li>SrcIP</li> <li>DstIP</li> <li>Website.</li> </ul>	N/A
User	User	N/A	String, case insensitive Length: 1 to 127 characters	N/A
URLCategory	URL category	N/A	String, case insensitive Length: 1 to 63 characters	N/A
SrcIP	Source IP address	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
DstIP	Dest IP address	N/A	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
Website	Website	N/A	String, case insensitive Length: 1 to 63 characters	N/A
GroupCounters	Group counters	Data structure	Members include: <ul style="list-style-type: none"> <li>ThreatCounter</li> </ul>	N/A
URLVistCounter	URL visit counter within the statistical time of the GroupValue	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A
CountTotal	All attack count within the statistical time	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A

## NTOP/URLTopChart

This table contains URL Log Top Chart information.

### XML structure

```

<NTOP>
  <URLTopChart>
    <Chart>
      <GroupValue>
        <URLCategory></URLCategory>
        <SrcIP></SrcIP>
        <DstIP></DstIP>
        <Website></Website>

```

```

        <User></User>
    </GroupValue>
    <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
    </TimeFilter>
    <GroupCounters>
        <Time></Time>
        <URLVistCounter></URLVistCounter>
    </GroupCounters>
</Chart>
</URLTopChart>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	URLTopChart
Table Type	Multi-instance table
Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupValue	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>• URLCategory</li> <li>• SrcIP</li> <li>• DstIP</li> <li>• Website</li> <li>• User</li> </ul>	N/A
URLCategory	URL category	Index	String, case insensitive Length: 1 to 63 characters	N/A
SrcIP	Source IP	Index	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
DstIP	Destination IP	Index	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
Website	Website	Index	String, case insensitive Length: 1 to 63 characters	N/A
User	User	Index	String, case insensitive Length: 1 to 127 characters	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>• StartTime</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>EndTime</li> </ul>	
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
GroupCounters	Statistics data	Data structure	Members include: <ul style="list-style-type: none"> <li>Time</li> <li>HitCounter</li> </ul>	When the TimeFilter is less than 1 day, the data is collected at an interval of 5 minutes. Otherwise, the interval is 1 hour.  Up to one month's data can be collected.
Time	Time of the data	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	Multiple values.
URLVistCounter	Number of URL visits	N/A	Unsigned integer	Multiple values.

## NTOP/FileLog

This table contains FileLog information.

### XML structure

```

<NTOP>
  <FileLog>
    <Log>
      <ID></ID>
      <UserID></UserID>
      <Time></Time>
      <FileType></FileType>
      <SrcZoneName></SrcZoneName>
      <DestZoneName></DestZoneName>
      <SrcIPAddr></SrcIPAddr>
      <SrcPort></SrcPort>
      <DestIPAddr></DestIPAddr>
      <DestPort></DestPort>
      <Application></Application>
      <Action></Action>
      <ContextName></ContextName>
      <VistCount></VistCount>
    </Log>
  </FileLog>
</NTOP>

```



```
</FileLog>
</NTOP>
```

## Table description

Item	Description
Feature name	NTOP
Table name	FileLog
Table Type	Multi-instance table
Row name	Log
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Ranking No	Index	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
UserID	User ID	Index	Unsigned integer Value range: 1 to $2^{32}-1$	Used to distinguish different requests.
Time	time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
FileType	Application	N/A	String, case insensitive Length: 1 to 8 characters	N/A
SrcZoneName	Name of source zone	N/A	String, case insensitive Length: 1 to 31 characters	N/A
DestZoneName	Name of destination zone	N/A	String, case insensitive Length: 1 to 31 characters	N/A
SrcIPAddr	Source IP address	Data structure	String, case insensitive Length: 1 to 46 characters	IPv4 or IPv6 address.
SrcPort	Source port	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A
DestIPAddr	Destination IP address	N/A	String, case insensitive Length: 1 to 63 characters	IPv4 or IPv6 address.
DestPort	Destination port	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A
Application	Application	N/A	String, case insensitive Length: 1 to 63 characters	N/A
Action	Action of the rule.	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A
ContextName	Name of the context.	N/A	String, case insensitive Length: 1 to 15 characters	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
VistCount	Number of visits	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	Whether the visit logs are aggregation depends on table LogAggregations.

## NTOP/FileTop

This table contains File Log Top information.

### XML structure

```

<NTOP>
  <FileTop>
    <Top>
      <TopNo></TopNo>
      <GroupType></GroupType>
      <UserID></UserID>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime><EndTime>
      </TimeFilter>
      <GroupValue>
        <FileType></FileType>
      </GroupValue>
      <MatchFilter>
        <FileType></FileType>
      </MatchFilter>
      <GroupCounters>
        <HitCounter></HitCounter>
      </GroupCounters>
      <HitCounterTotal></HitCounterTotal>
    </Top>
  </FileTop>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	FileTop
Table Type	Multi-instance table
Row name	Top

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TopNo	Ranking No	Index	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
GroupType	Ranking type	Index	Unsigned integer <ul style="list-style-type: none"> <li>1—FileFilter</li> </ul>	For example, to rank the statistics by FileType, set the GroupType value to 1.
UserID	User ID	Index	Unsigned integer Value range: 1 to $2^{32}-1$	Used to distinguish different requests.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
GroupValue	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>FileType.</li> </ul>	N/A
FileType	Application	N/A	String, case insensitive Length: 1 to 63 characters	N/A
GroupCounters	Group counters	Data structure	Members include: <ul style="list-style-type: none"> <li>HitCounter</li> </ul>	N/A
HitCounter	Hit counter within the statistical time of the GroupValue.	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A
HitCounterTotal	All hit count within the statistical time.	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	N/A

## NTOP/FileTopChart

This table is used to get the FileLog's byte distribution every hour or five minutes.

## XML structure

```
<NTOP>
  <FileTopChart>
```

```

<Chart>
  <GroupValue>
    <FileType></FileType>
  </GroupValue>
  <TimeFilter>
    <StartTime></StartTime>
    <EndTime></EndTime>
  </TimeFilter>
  <GroupCounters>
    <Time></Time>
    <HitCounter></HitCounter>
  </GroupCounters>
</Chart>
</FileTopChart>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	FileTopChart
Table Type	Multi-instance table
Row name	Chart
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupValue	Group value	Data structure	Members include: <ul style="list-style-type: none"> <li>1—FileFilter</li> </ul>	N/A
FileType	File type	Index	String, case insensitive Length: 1 to 8 characters	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End statistic time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
GroupCounters	Statistic data	Data structure	Members include: <ul style="list-style-type: none"> <li>Time</li> <li>HitCounter.</li> </ul>	When the TimeFilter is less than 1 day, the data is collected at an

Column name	Column description	Column type	Data type and restrictions	Remarks
				interval of 5 minutes. Otherwise, the interval is 1 hour.  Up to one month's data can be collected.
Time	Time of the data	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	Multiple values.
HitCounter	Hit count	N/A	Unsigned integer Value range: 0 to $2^{32}-1$	Multiple values.

## NTOP/LogAggregations

This table is used to get the log aggregation information.

### XML structure

```

<NTOP>
  <LogAggregations>
    <LogAggregation>
      <LogType></LogType>
      <Enabled></Enabled>
      <Time></Time>
    </LogAggregation>
  </LogAggregations>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	LogAggregations
Table Type	Multi-instance table
Row name	LogAggregation
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LogType	Log type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—ThreatLog</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—TrafficLog</li> <li>3—URLLog</li> <li>4—FFilterLog</li> </ul>	
Enabled	Whether aggregation is enabled or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Time	Aggregation time in seconds	N/A	Unsigned integer Value range: 10 to 60	Default is 60 seconds.

## NTOP/LogPaging

This table is used to get the log paging information.

### XML structure

```

<NTOP>
  <LogPaging>
    <Log>
      <LogType></LogType>
      <UserID></UserID>
      <ID></ID>
      <PageNo></PageNo>
      <CountPerPage></CountPerPage>
      <TotalCounts></TotalCounts>
      <InputJSON></InputJSON>
      <OutputJSON></OutputJSON>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
    </Log>
  </LogPaging>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	LogPaging
Table Type	Multi-instance table
Row name	Log
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LogType	Log type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—ThreatLog</li> <li>2—TrafficLog</li> <li>3—URLLog</li> <li>4—FFilterLog</li> </ul>	N/A
UserID	User ID	Index	Unsigned integer Value range: 1 to $2^{32}-1$	Used to distinguish different requests.
ID	Reserve column	Index	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
PageNo	Page number to display	N/A	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
CountPerPage	Number of logs per page	N/A	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
TotalCounts	Log total counts	N/A	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
InputJSON	Input parameter to get log	N/A	String Length: 1 to 2048 characters.	When LogType is 1, InputJSON uses ThreatLog Filter conditions. When LogType is 2, InputJSON uses TrafficLog Filter conditions. When LogType is 3, InputJSON uses URLLog Filter conditions. When LogType is 4, InputJSON uses FFilterLog Filter conditions.
OutputJSON	Log information	N/A	String Length: 1 to 2048 characters.	When LogType is 1, OutputJSON uses ThreatLog output structure. When LogType is 2, OutputJSON uses TrafficLog output structure. When LogType is 3, OutputJSON uses URLLog output structure. When LogType is 4, OutputJSON uses FFilterLog output structure.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>EndTime</li> </ul>	
StartTime	Start time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A

## NTOP/PersistCfg

This table is used to get the persistence configuration

### XML structure

```

<NTOP>
  <PersistCfg>
    <DBCfg>
      <ServiceType></ServiceType>
      <AutoDeleteEnable></AutoDeleteEnable>
      <LimitTime></LimitTime>
      <DiskEnable></DiskEnable>
      <LogLimit></LogLimit>
      <TrendLimit></TrendLimit>
      <DBSoftware></DBSoftware>
    </DBCfg>
  </PersistCfg>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	PersistCfg
Table Type	Multi-instance table
Row name	DBCfg
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceType	Service type	Index	Enumeration:	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Global service</li> <li>2—Audit service</li> <li>3—Traffic service</li> <li>4—Threat service</li> <li>5—URLFilter service</li> <li>6—Filefilter service</li> </ul>	
AutoDeleteEnable	Whether delete files on disk automatically or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
LimitTime	Maximum number of days that the data can be stored	N/A	Unsigned integer Value range: 1 to $2^{32}-1$	Multiple values.
DiskEnable	Whether the device mounts the hard disk	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
LogLimit	Log records limit	N/A	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
TrendLimit	Trend Records limit	N/A	Unsigned integer Value range: 1 to $2^{32}-1$	N/A
DBSoftware	Database software of this service	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Sqlite</li> <li>2—Fastbit</li> </ul>	N/A

## NTOP/TrafficHistogram

This table is used to get the traffic flow histogram information.

### XML structure

```

<NTOP>
  <TrafficHistogram>
    <Histogram>
      <FilterType></FilterType>
      <FilterCondition></FilterCondition>
      <ContextID></ContextID>
      <AnalyType></AnalyType>
      <TrafficType></TrafficType>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
      <AnalyVlaues>
        <Percent></Percent>
        <AnalyValue></AnalyValue>
      </AnalyVlaues>
      <UserID></UserID>
    </Histogram>
  </TrafficHistogram>
</NTOP>

```

```

    </Histogram>
  </TrafficHistogram>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	TrafficHistogram
Table Type	Multi-instance table
Row name	Histogram
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AnalyType	Analysis type	Index	Unsigned integer <ul style="list-style-type: none"> <li>0—Traffic flow</li> <li>1—Traffic flow rate</li> </ul>	N/A
TrafficType	Type of the traffic	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Total bytes</li> <li>1—bytes</li> <li>2—Reply bytes</li> </ul>	N/A
UserID	User ID	Index	Unsigned integer Value range: 1 to $2^{32}-1$	Used to distinguish different requests.
FilterType	Filter type	N/A	Unsigned integer <ul style="list-style-type: none"> <li>1—SrcIP</li> <li>4—Application</li> <li>8—User</li> <li>64—ContextName</li> </ul>	For example, to filter the statistics by application, set the GroupType value to 4.
FilterCondition	Filter condition	N/A	String Length: 1 to 255 characters.	N/A
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
AnalyValues	Analysis value list	Data structure	Members include: <ul style="list-style-type: none"> <li>Percent</li> <li>AnalyValue</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Percent	Percent of an analysis value	N/A	Unsigned integer Value range: 0 to 100	N/A
AnalyValue	Analysis value	Traffic or BandWidth	Unsigned integer Value range: 1 to $2^{64}-1$	N/A
ContextID	Context ID	N/A	Unsigned integer	N/A

## NTOP/TrafficDistribution

This table is used to get the traffic time distribution information.

### XML structure

```

<NTOP>
  <TrafficDistribution>
    <Distribution>
      <ContextID></ContextID>
      <FilterType></FilterType>
      <FilterCondition></FilterCondition>
      <TrafficType></TrafficType>
      <TimeRange></TimeRange>
      <TimeFilter>
        <StartTime></StartTime>
        <EndTime></EndTime>
      </TimeFilter>
      <DistributeVlaues>
        <Time></Time>
        <Bytes></Bytes>
      </DistributeVlaues>
      <UserID></UserID>
    </Distribution>
  </TrafficDistribution>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	TrafficDistribution
Table Type	Multi-instance table
Row name	Distribution
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FilterType	Filter type	N/A	Unsigned integer <ul style="list-style-type: none"> <li>1—SrcIP</li> <li>4—Application</li> <li>8—User</li> <li>64—ContextName</li> </ul>	For example, to filter the statistics by application, set the GroupType value to 4.
FilterCondition	Filter condition	N/A	String Length: 1 to 255 characters.	N/A
TrafficType	Type of the traffic	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Total bytes</li> <li>1—Bytes</li> <li>2—Reply bytes</li> </ul>	N/A
TimeRange	Time range	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Hour</li> <li>1—Day</li> <li>2—Week</li> </ul>	N/A
UserID	User ID	Index	Unsigned integer Value range: 1 to $2^{32}-1$	Used to distinguish different requests.
TimeFilter	Query time range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime</li> <li>EndTime</li> </ul>	N/A
StartTime	Start time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
EndTime	End time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS	N/A
DistributeValues	Distribute value list	Data structure	Members include: <ul style="list-style-type: none"> <li>Time</li> <li>Bytes</li> </ul>	N/A
Time	Time values in this time range.	N/A	Unsigned integer Value range: 0 to 31	When TimeRange is 0, the time value range 0 to 23 represents 24 hours; When TimeRange is 1, the time value range 1 to 31 represents 31 days; When TimeRange is 2, the time value range 1 to 7 represents 7 days in a week.
Bytes	Traffic bytes in this time range.	Traffic	Unsigned integer Value range: 1 to $2^{64}-1$	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context ID	N/A	Unsigned integer	N/A

## NTOP/TrafficConstant

This table is used to get the traffic information constantly.

### XML structure

```

<NTOP>
  <TrafficConstant>
    <Constant>
      <ContextID></ContextID>
      <ConstantType></ConstantType>
      <SortType></SortType>
      <TopNumber></TopNumber>
      <ContextName></ContextName>
      <ConstantValues>
        <TotalBytes></TotalBytes>
        <Bytes></Bytes>
        <ReplyBytes></ReplyBytes>
        <ConstantName></ConstantName>
        <ConstantPercent></ConstantPercent>
      </ConstantValues>
      <UserID></UserID>
    </Constant>
  </TrafficConstant>
</NTOP>

```

### Table description

Item	Description
Feature name	NTOP
Table name	TrafficConstant
Table Type	Multi-instance table
Row name	Constant
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserID	User ID	Index	Unsigned integer.	Used to distinguish

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 1 to $2^{32}-1$ .	different requests.
ConstantType	Type of the constant data	Index	Enumeration: <ul style="list-style-type: none"> <li>0—SrcIP</li> <li>1—Application</li> </ul>	N/A
SortType	The type of data sort	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—TotalBytes</li> <li>1—Bytes</li> <li>2—ReplyBytes</li> </ul>	
TopNumber	Display first N data	N/A	Unsigned integer Value range: 0 to 100	
ConstantValues	Constant value list	Data structure	Members include: <ul style="list-style-type: none"> <li>TotalBytes</li> <li>Bytes</li> <li>ReplyBytes</li> <li>ConstantName</li> <li>ConstantPercent</li> </ul>	N/A
TotalBytes	Total bytes	N/A	Unsigned integer. Value range: 1 to $2^{64}-1$	N/A
Bytes	Bytes	N/A	Unsigned integer Value range: 0 to $2^{64}-1$	N/A
ReplyBytes	Reply bytes	N/A	Unsigned integer Value range: 0 to $2^{64}-1$	N/A
ConstantName	The name of constant data	N/A	String. Length: 1 to 63 characters.	N/A
ConstantPercent	The percent of constant data in total data.	N/A	Unsigned integer Value range: 0 to 100	N/A
ContextID	Context ID	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$	N/A
ContextName	Context name	N/A	String Length: 1 to 15 characters.	N/A

## NTOP/ReportRss

This table is used to get the report subscription configuration.

### XML structure

```

<NTOP>
  <ReportRss>
    <Rss>
      <ReportType></ReportType>
      <MailId></ MailId >
      <MailAddr></MailAddr>
    </Rss>
  </ReportRss>
</NTOP>

```

```

    </ReportRss>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	ReportRss
Table type	Multi-instance table
Row name	Rss
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReportType	Report type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Period report</li> <li>2—Comparison report</li> <li>3—Intelligent report</li> <li>4—Integrated report</li> </ul>	N/A
MailId	Mail Id	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1	N/A
MailAddr	Mail address	N/A	String, case insensitive Length: 1 to 127 characters	N/A.

## NTOP/PersistDiskCfg

This table is used to set the persistence disk configuration.

## XML structure

```

<NTOP>
  <PersistDiskCfg>
    <DBCfg>
      <ServiceType></ServiceType>
      <ServiceUsed></ServiceUsed>
      <ServiceFree></ServiceFree>
      <ServiceDiskLimit></ServiceDiskLimit>
      <ServiceAlarmLimit></ServiceAlarmLimit>
    </DBCfg>
  </PersistDiskCfg>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	PersistDiskCfg
Table type	Multi-instance table
Row name	DBCfg
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceAlarmLimit	Alarm limit percent	N/A	Unsigned integer. Value range: 1 to 100	When disk usage reaches the alarm limit, the system deletes the oldest file.
ServiceType	Service type	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Global service</li><li>• 2—Audit service</li><li>• 3—Traffic service</li><li>• 4—Threat service</li><li>• 5—URLFilter service</li><li>• 6—Filefilter service</li></ul>	N/A
ServiceUsed	Service disk used	N/A	Unsigned integer. Value range: 1 to $2^{64}-1$ .	N/A
ServiceFree	Service disk free	N/A	Unsigned integer. Value range: 1 to $2^{64}-1$ .	N/A
ServiceDiskLimit	Service disk limit percent	N/A	Unsigned integer. Value range: 1 to 100	Global service disk limit is the maximum percentage of disk occupancy. Other service disk limit is the percentage occupancy in the Global service proportion.

## NTOP/ReportChapter

This table contains informations about report chapter name.

## XML structure

```
<NTOP>
  <ReportChapter>
    <Chapter>
```



```

    <ReportType></ReportType>
    <ChapterNo></ChapterNo>
    <ChapterNameEN></ChapterNameEN>
    <ChapterNameCN></ChapterNameCN>
  </Chapter>
</ReportChapter>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	ReportChapter
Table type	Multi-instance table
Row name	Chapter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ReportType	Report type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Period report</li> <li>2—Comparison report</li> <li>3—Intelligent report</li> <li>4—Integrated report</li> </ul>	N/A
ChapterNo	The number of chapter	N/A	Unsigned integer. Value range: 1 to 32	N/A
ChapterName EN	Chapter Chinese name	N/A	String, case-insensitive. Length: 1 to 63 characters.:	N/A
ChapterName CN	Chapter English name	N/A	String, case-insensitive. Length: 1 to 63 characters.:	N/A

## NTOP/SecurityScore

This table contains informations about security score.

## XML structure

```

<NTOP>
  <SecurityScore>
    <Score>
      <ScoreType></ScoreType>
      <TotalScore></TotalScore>
      <DetailJSON></DetailJSON>
    </Score>
  </SecurityScore>
</NTOP>

```

```

    </Score>
  </SecurityScore>
</NTOP>

```

## Table description

Item	Description
Feature name	NTOP
Table name	SecurityScore
Table type	Multi-instance table
Row name	Score
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ScoreType	Score type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Using threat data</li> </ul>	N/A
TotalScore	Total score	N/A	Unsigned integer. Value range: 10 to 100	Total security score.
DetailJSON	Detail JSON	N/A	String, case-insensitive. Length: 1 to 2048 characters.	JSON packeted by numbers of different levels.

# Contents

Comware 7 NTOP NETCONF XML API Error Message Reference .....2

    Ntop/PersistDiskCfg .....2

    Ntop /PlatformLogAction.....2

# Comware 7 NTOP NETCONF XML API

## Error Message Reference

### Ntop/PersistDiskCfg

Message	Explanation
Failed to set the usage limit because the system could not bring the storage usage below the limit. 操作失败，上限值低于当前已用值。	The specified usage limit value is less than the storage usage. 当配置的存储空间小于当前已用空间提示

### Ntop /PlatformLogAction

Message	Explanation
Failed to export logs due to insufficient storage space. 设备空间不足，导出失败。	The size of the log file exported is larger than the storage space. 导出的日志文件大小大于设备空间大小。
Failed to export logs. Please check whether the service is enabled. 文件导出失败，请检查业务功能是否已启用。	The service may not start (cannot get the register information). 相关业务没有启动（无法获取注册信息）。
Failed to decompress file. 解压缩失败。	Decompressing file failed. 文件解压失败。
Failed to verify the file. 文件校验失败。	The log file exported is modified. 导出的日志文件被修改。
Failed to import logs. Please check whether the service is enabled. 文件导入失败，请检查业务功能是否已启用。	The service may not start (cannot get the register information). 相关业务没有启动（无法获取注册信息）。

# Contents

NTP .....	1
NTP/Clients .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
NTP/AuthenticationKey .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
NTP/Service .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
NTP/RefClocks .....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# NTP

## NTP/Clients

This table contains NTP client information.

### XML structure

```
<NTP>
  <Clients>
    <Client>
      <Service></Service>
      <VRF></VRF>
      <AddressType></AddressType>
      <IpAddress></IpAddress>
      <HostName></HostName>
      <HostMode></HostMode>
      <IfIndex></IfIndex>
      <KeyID></KeyID>
      <Version></Version>
      <Priority></Priority>
      <MaxPollInterval></MaxPollInterval>
      <MinPollInterval></MinPollInterval>
    </Client>
  </Clients>
</NTP>
```

### Table description

Item	Description
Feature name	NTP
Table name	Clients
Table type	Multi-instance table
Row name	Client
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Service	Service type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—NTP.</li> <li>2—SNTP.</li> </ul>	N/A
VRF	VRF	Index	String. Length: 0 to 31 characters.	It can be empty when it represents a public VRF instance.
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4</li> <li>2—IPv6</li> </ul>	IPv6 is not supported.
IpAddress	Remote IPv4 or IPv6 address.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1::1. HostName and IP address cannot be specified at the same time.
HostName	Host name	Index	String. Length: 1 to 253 characters.	HostName and IP address cannot be specified at the same time .
HostMode	Client mode	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Symmetric active.</li> <li>3—Client.</li> </ul>	The symmetric active mode is available only for NTP.
IfIndex	Source interface index.	N/A	Unsigned integer.	This column supports only Layer 3 interfaces. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
KeyID	Key ID	N/A	Unsigned integer. Value range: 1 to 4294967295.	This column specifies the key used for calculating the packet digest when the local end sends NTP messages to the peer.
Version	NTP version	N/A	Unsigned integer. Value range: 1 to 4 Default value: 4	This column is available only for IPv4 address entries, and not available for IPv6 address entries.
Priority	Whether the specified peer is the first choice under the same condition.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	Priority true is available only for NTP.
MaxPollInterval	Maximum polling interval	N/A	Unsigned integer. Value range: 4 to 17, in seconds.	Available only for NTP (not available for SNTP).

Column name	Column description	Column type	Data type and restrictions	Remarks
			Default value: 10.	
MinPollInterval	Minimum polling interval	N/A	Unsigned integer. Value range: 4 to 17, in seconds. Default value: 6	Available only for NTP (not available for Sntp).

## NTP/AuthenticationKey

This table contains information about NTP authentication.

### XML structure

```

<NTP>
  <AuthenticationKey>
    <Authentication>
      <Service></Service>
      <KeyID></KeyID>
      <AuthMode></AuthMode>
      <AuthKey></AuthKey>
      <Reliable></Reliable>
    </Authentication>
  </AuthenticationKey>
</NTP>

```

### Table description

Item	Description
Feature name	NTP
Table name	AuthenticationKey
Table type	Multi-instance table
Row name	Authentication
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Service	Service type	Index	Enumeration: • 1—NTP. • 2—Sntp.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
KeyID	Key ID	Index	Unsigned integer. Value range: 1 to 4294967295.	This column is used to identify an authentication key.
AuthMode	Authentication mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—MD5.</li> <li>2—HMAC-SHA-1.</li> <li>3—HMAC-SHA-256.</li> <li>4—HMAC-SHA-384.</li> <li>5—HMAC-SHA-512.</li> </ul>	For the create, merge and replace operations, if the AuthMode is not configured and the AuthKey is configured, the AuthMode value is equivalently set to 1.
AuthKey	Key content	N/A	String. Length: 1 to 32 characters.	Plain text key calculated by using the MD5 algorithm for authentication.
Reliable	Whether the key is a trusted key.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	For the delete and remove operations, if both the AuthMode and AuthKey are configured, the Reliable value will be deleted.

## NTP/Service

This table contains NTP service information.

## XML structure

```

<NTP>
  <Service>
    <NTPEnable></NTPEnable>
    <SNTPEnable></SNTPEnable>
    <NTPAuthEnable></NTPAuthEnable>
    <SNTPAuthEnable></SNTPAuthEnable>
    <NTPSource></NTPSource>
  </Service>
</NTP>

```

## Table description

Item	Description
Feature name	NTP
Table name	Service
Table type	Single-instance table
Row name	N/A
Restrictions	None

Item	Description
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NTPEnable	Whether to enable the NTP service.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	N/A
SNTPEnable	Whether to enable the SNTP service.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	N/A
NTPAuthEnable	Whether to enable the NTP authentication function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	N/A
SNTPAuthEnable	Whether to enable the SNTP authentication function.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false (default).</li> </ul>	N/A
NTPSource	NTP source interface index	N/A	Unsigned integer	Available only for Layer 3 interfaces.

## NTP/RefClocks

This table contains NTP reference clock information.

## XML structure

```

<NTP>
  <RefClocks>
    <RefClock>
      <RefID></RefID>
      <Stratum></Stratum>
    </RefClock>
  </RefClocks>
</NTP>

```

## Table description

Item	Description
Feature name	NTP
Table name	RefClocks

Item	Description
Table type	Multi-instance table
Row name	RefClock
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RefID	Reference Clock ID.	Index	String, dotted decimal notation 127.127.1.u, where u is in the range of 0 to 3.	N/A
Stratum	Stratum level of the local clock.	N/A	Unsigned integer. Value range: 1 to 15.	A lower stratum level represents a higher clock accuracy.

# Contents

NTP .....	1
NTP/Clients .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
NTP/AuthenticationKey .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
NTP/Service .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
NTP/RefClocks .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
NTP/Status .....	6
XML structure .....	6
Table description .....	6
Columns .....	6

# NTP

## NTP/Clients

This table contains NTP client information.

### XML structure

```
<NTP>
  <Clients>
    <Client>
      <Service></Service>
      <VRF></VRF>
      <AddressType></AddressType>
      <IpAddress></IpAddress>
      <HostName></HostName>
      <HostMode></HostMode>
      <IfIndex></IfIndex>
      <KeyID></KeyID>
      <Version></Version>
      <Priority></Priority>
      <MaxPollInterval></MaxPollInterval>
      <MinPollInterval></MinPollInterval>
    </Client>
  </Clients>
</NTP>
```

### Table description

Item	Description
Feature name	NTP
Table name	Clients
Table type	Multi-instance table
Row name	Client
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Service	Service type	Index	Enumeration: <ul style="list-style-type: none"><li>1—NTP.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—SNTP.</li> </ul>	
VRF	VRF	Index	String. Length: 0 to 31 characters.	It can be empty when it represents a public VRF instance.
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4</li> <li>2—IPv6</li> </ul>	IPv6 is not supported.
IpAddress	Remote IPv4 or IPv6 address.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1. IPv6 example: 1::1. HostName and IP address cannot be specified at the same time.
HostName	Host name	Index	String. Length: 1 to 253 characters.	HostName and IP address cannot be specified at the same time .
HostMode	Client mode	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Symmetric active.</li> <li>3—Client.</li> </ul>	The symmetric active mode is supported only for NTP.
IfIndex	Source interface index.	N/A	Unsigned integer.	This column supports only Layer 3 interfaces. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
KeyID	Key ID	N/A	Unsigned integer. Value range: 1 to 4294967295.	This column specifies the key used for calculating the packet digest when the local end sends NTP messages to the peer.
Version	NTP version	N/A	Unsigned integer. Value range: 1 to 4.	This column is available only for IPv4 address entries, and not available for IPv6 address entries.
Priority	Whether the specified peer is the first choice under the same condition.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Priority true is available only for NTP.
MaxPollInterval	Maximum polling interval	N/A	Unsigned integer. Value range: 4 to 17, in seconds. Default value: 10.	Available only for NTP (not available for SNTP).
MinPollInterval	Minimum polling interval	N/A	Unsigned integer. Value range: 4 to 17, in seconds.	Available only for NTP (not available for SNTP).

Column name	Column description	Column type	Data type and restrictions	Remarks
			Default value: 6.	

# NTP/AuthenticationKey

This table contains information about NTP authentication.

## XML structure

```

<NTP>
  <AuthenticationKey>
    <Authentication>
      <Service></Service>
      <KeyID></KeyID>
      <AuthMode></AuthMode>
      <AuthKey></AuthKey>
      <Reliable></Reliable>
    </Authentication>
  </AuthenticationKey>
</NTP>

```

## Table description

Item	Description
Feature name	NTP
Table name	AuthenticationKey
Table type	Multi-instance table
Row name	Authentication
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Service	Service type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—NTP.</li> <li>2—SNTP.</li> </ul>	N/A
KeyID	Key ID	Index	Unsigned integer. Value range: 1 to 4294967295.	This column is used to identify an authentication key.
AuthMode	Authentication mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—MD5.</li> </ul>	For the create,merge and replace operations, if the

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—HMAC-SHA-1.</li> <li>3—HMAC-SHA-256.</li> <li>4—HMAC-SHA-384.</li> <li>5—HMAC-SHA-512.</li> </ul>	AuthMode is not configured and the AuthKey is configured, the AuthMode value is equivalently set to 1.
AuthKey	Key content	N/A	String. Length: 1 to 32 characters.	Plain text key calculated by using the MD5 algorithm for authentication.
Reliable	Whether the key is a trusted key.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	For the delete and remove operations, if both the AuthMode and AuthKey are configured, the Reliable value will be deleted.

## NTP/Service

This table contains NTP service information.

## XML structure

```

<NTP>
  <Service>
    <NTPEnable></NTPEnable>
    <SNTPEnable></SNTPEnable>
    <NTPAuthEnable></NTPAuthEnable>
    <SNTPAuthEnable></SNTPAuthEnable>
    <NTPSource></NTPSource>
  </Service>
</NTP>

```

## Table description

Item	Description
Feature name	NTP
Table name	Service
Table type	Single-instance table
Row name	N/A
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NTPEnable	Whether to enable the NTP service.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
SNTPEnable	Whether to enable the SNTP service.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
NTPAuthEnable	Whether to enable the NTP authentication function.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
SNTPAuthEnable	Whether to enable the SNTP authentication function.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
NTPSource	NTP source interface index.	N/A	Unsigned integer	Available only for Layer 3 interfaces.

## NTP/RefClocks

This table contains NTP reference clock information.

### XML structure

```
<NTP>
  <RefClocks>
    <RefClock>
      <RefID></RefID>
      <Stratum></Stratum>
    </RefClock>
  </RefClocks>
</NTP>
```

### Table description

Item	Description
Feature name	NTP
Table name	RefClocks
Table type	Multi-instance table
Row name	RefClock

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RefID	Reference Clock ID.	Index	String, dotted decimal notation 127.127.1.u, where u is in the range of 0 to 3.	N/A
Stratum	Stratum level of the local clock.	N/A	Unsigned integer. Value range: 1 to 15.	A lower stratum level represents a higher clock accuracy.

## NTP/Status

This table contains NTP status information.

## XML structure

```

<NTP>
  <Status>
    <NTPSynchronized></NTPSynchronized>
    <SNTPSynchronized></SNTPSynchronized>
  </Status>
</NTP>

```

## Table description

Item	Description
Feature name	NTP
Table name	Status
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NTPSynchronized	Whether the NTP clock has been synchronized.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SNTPSynchronized	Whether the SNTP clock has been synchronized	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false</li> </ul>	N/A

# Contents

- NTP .....1
  - NTP/Clients .....1
  - NTP/AuthenticationKey .....1
  - NTP/Service .....2
  - NTP/RefClocks.....2

# NTP

## NTP/Clients

Message	Explanation
NTP is not configured. NTP未配置。	NTP service has not been started.
SNTP is not configured. SNTP未配置。	SNTP service has not been started.
IPv6 addresses are not supported. 不支持IPv6地址。	NTP IPv6 addresses are not supported with NETCONF.
Failed to create an NTP association, because the maximum number is reached. 创建失败，NTP会话超过最大数量。	The maximum number of NTP sessions is 128.
Failed to create an SNTP association, because the maximum number is reached. 创建失败，SNTP会话超过最大数量。	The maximum number of SNTP sessions is 128.
Failed to create an NTP association, because the maximum polling interval is smaller than the minimum polling interval. 创建失败，最大轮询时间间隔小于最小轮询时间间隔	Maximum polling interval must be greater than minimum polling interval.

## NTP/AuthenticationKey

Message	Explanation
NTP is not configured. NTP未配置。	NTP service has not been started.
SNTP is not configured. SNTP未配置。	SNTP service has not been started.
Input a valid authentication key string. 请输入有效的认证字符串。	Please input a valid authentication key string when set new configuration.
Failed to create an NTP authentication key, because the maximum number is reached. 创建失败，NTP认证密钥超过最大数量。	The maximum number of NTP authentication key is 128.
You cannot delete only the authentication mode or key string. 不能只删除认证模式或者认证字符串。	You have to delete authentication mode and authentication key string at the same time.
Failed to create an SNTP authentication key, because the maximum number is reached. 创建失败，SNTP认证密钥超过最大数量。	The maximum number of SNTP authentication key is 128.

## NTP/Service

Message	Explanation
Do not enable SNTP and NTP at the same time. SNTP和NTP不能同时使能。	Do not enable SNTP and NTP at the same time.
NTP is not configured. NTP未配置。	NTP service has not been started.
SNTP is not configured. SNTP未配置。	SNTP service has not been started.

## NTP/RefClocks

Message	Explanation
NTP is not configured. NTP未配置。	NTP service has not been started.
IP address of the local clock must be 127.127.1.x, where x is in the range of 0 to 3. 本地时钟的IP地址127.127.1.x, x的取值范围为0~3。	The range of valid IP address of the local clock is 127.127.1.0 to 127.127.1.3

# Contents

NVGRE.....	1
NVGRE/NVGREs.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
NVGRE/Tunnels.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
NVGRE/RmtMACs.....	2
XML structure.....	3
Table description.....	3
Columns.....	3

# NVGRE

## NVGRE/NVGREs

This table contains information about NVGRE configurations.

### XML structure

```
<NVGRE>
  <NVGREs>
    <Nvgre>
      <NvgreID></NvgreID>
      <VsiName></VsiName>
    </Nvgre>
  </NVGREs>
</NVGRE>
```

### Table description

Item	Description
Feature name	NVGRE
Table name	NVGREs
Table type	Multi-instance table
Row name	Nvgre
Restrictions	You must enabled global L2VPN feature at first.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NvgreID	NVGRE ID	Index	Unsigned integer, Value range: 4096-16777214.	N/A
VsiName	VSI name	N/A	String, Length: 1 to 31 characters.	You must create a VSI first before you merge, replace or create NVGREs. You must specify this column when the operation is merge, create or replace. You can't specify this column when the operation is delete or remove.



				Can not be modified after creation
--	--	--	--	------------------------------------

## NVGRE/Tunnels

This table contains information about tunnels associated with NVGREs.

### XML structure

```
<NVGRE>
  <Tunnels>
    <Tunnel>
      <NvgreID></NvgreID>
      <TunnelID></TunnelID>
    </Tunnel>
  </Tunnels>
</NVGRE>
```

### Table description

Item	Description
Feature name	NVGRE
Table name	Tunnels
Table type	Multi-instance table
Row name	Tunnel
Restrictions	You must enabled global L2VPN feature at first.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NvgreID	NVGRE ID	Index	Unsigned integer, Value range:4096-16777214.	You must create an NVGRE first before you merge, replace or create tunnels.
TunnelID	Tunnel ID	Index	Unsigned integer.	You must create a tunnel first before you merge, replace or create tunnels

## NVGRE/RmtMACs

This table contains information about remote MAC addresses of each NVGRE.

## XML structure

```
<NVGRE>
  <RmtMACs>
    <MAC>
      <VsiName></VsiName>
      <MacAddr></MacAddr>
      <TunnelID></TunnelID>
    </MAC>
  </RmtMACs>
</NVGRE>
```

## Table description

Item	Description
Feature name	NVGRE
Table name	RmtMACs
Table type	Multi-instance table
Row name	MAC
Restrictions	You must enabled global L2VPN feature at first.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String, Length: 1 to 31 characters.	You must create a VSI first before you merge, replace or create MACs.
MacAddr	Remote MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated. The value must be unicast address.	Example: 00-0c-af-e3-5d-c0.
TunnelID	Tunnel ID	N/A	Unsigned integer	You must create a tunnel first before you merge, replace or create MACs. You must specify this column when the operation is merge, create or replace. You can't specify this column when the operation is delete

Column name	Column description	Column type	Data type and restrictions	Remarks
				or remove.

# Contents

NVGRE.....	1
NVGRE/Base.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
NVGRE/NVGREs.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
NVGRE/Tunnels.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
NVGRE/RmtMACs.....	3
XML structure.....	3
Table description.....	4
Columns.....	4

# NVGRE

## NVGRE/Base

This table contains information about global NVGRE functions.

### XML structure

```
<NVGRE>
  <Base>
    <NextNvgreID></NextNvgreID>
    <TotalNvgreNum></TotalNvgreNum>
  </Base>
</NVGRE>
```

### Table description

Item	Description
Feature name	NVGRE
Table name	Base
Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only global functions.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NextNvgreID	Next useful NVGRE ID	N/A	Unsigned integer, Value range: 4096-16777214.	You must enabled global L2VPN feature at first. The invalid value 4294967295 indicates that no ID can be set.
TotalNvgreNum	Total number of existing NVGRES	N/A	Unsigned integer	You must enabled global L2VPN feature at first.

## NVGRE/NVGREs

This table contains information about NVGRE configurations.

### XML structure

```
<NVGRE>
```

```

<NVGRES>
  <Nvgre>
    <NvgreID></NvgreID>
    <VsiName></VsiName>
    <RmtMacCnt></RmtMacCnt>
  </Nvgre>
</NVGRES>
</NVGRE>

```

## Table description

Item	Description
Feature name	NVGRE
Table name	NVGRES
Table type	Multi-instance table
Row name	Nvgre
Restrictions	You must enabled global L2VPN feature at first.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NvgreID	NVGRE ID	Index	Unsigned integer, Value range: 4096-16777214.	N/A
VsiName	VSI name	N/A	String, Length: 1 to 31 characters.	N/A
RmtMacCnt	The count of remote MAC addresses	N/A	Unsigned integer	N/A

## NVGRE/Tunnels

This table contains information about tunnels associated with NVGRES.

## XML structure

```

<NVGRE>
  <Tunnels>
    <Tunnel>
      <NvgreID></NvgreID>
      <TunnelID></TunnelID>
      <Type></Type>
    </Tunnel>
  </Tunnels>

```

</NVGRE>

## Table description

Item	Description
Feature name	NVGRE
Table name	Tunnels
Table type	Multi-instance table
Row name	Tunnel
Restrictions	You must enabled global L2VPN feature at first.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NvgreID	NVGRE ID	Index	Unsigned integer, Value range:4096-16777214.	N/A
TunnelID	Tunnel ID	Index	Unsigned integer.	N/A
Type	Tunnel type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—auto.</li><li>• 1—manual.</li></ul>	N/A

## NVGRE/RmtMACs

This table contains information about remote MAC addresses of each NVGRE.

## XML structure

```
<NVGRE>
  <RmtMACs>
    <MAC>
      <VsiName></VsiName>
      <MacAddr></MacAddr>
      <TunnelID></TunnelID>
      <Status></Status>
    </MAC>
  </RmtMACs>
</NVGRE>
```

## Table description

Item	Description
Feature name	NVGRE
Table name	RmtMACs
Table type	Multi-instance table
Row name	MAC
Restrictions	You must enable global L2VPN feature at first.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String, Length: 1 to 31 characters.	N/A
MacAddr	Remote MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
TunnelID	Tunnel ID	N/A	Unsigned integer	N/A
Status	Type of remote MAC address	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—other.</li><li>• <b>1</b>—static.</li><li>• <b>2</b>—selfLearned.</li><li>• <b>3</b>—protocolLearned.</li></ul>	1-static: Manually configured static unicast address 2- selfLearned: Dynamically learned unicast address 3- protocolLearned: Unicast address added by protocol.



# Contents

- OAP .....1
  - OAP/Clients .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# OAP

## OAP/Clients

This table is used to shut down or reboot an OAP client.

### XML structure

```
<OAP>
  <Clients>
    <Client>
      <ClientID></ClientID>
      <Operation></Operation>
    </Client>
  </Clients>
</OAP>
```

### Table description

Item	Description
Feature name	OAP
Table name	Clients
Table type	Multi-instance table
Row name	Client
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ClientID	OAP client ID	Index	Unsigned integer: Length: 32 bits.
Operation	Operation to be performed on the client	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Shut down.</li><li>• 2—Reboot.</li></ul>

# Contents

- OAP .....1
  - OAP/Base .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - OAP/Interfaces .....1
    - XML structure .....2
    - Table description .....2
    - Columns .....2

# OAP

## OAP/Base

This table contains global OAP information.

### XML structure

```
<OAP>
  <Base>
    <ClockSyncTime></ClockSyncTime>
    <MonitorTime></MonitorTime>
  </Base>
</OAP>
```

### Table description

Item	Description
Feature name	OAP
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global functions.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
ClockSyncTime	Clock synchronization timer in minutes	N/A	Unsigned integer. Value range: 0 to 1440. Default: 5. Setting it to 0 disables the feature.
MonitorTime	Client monitoring timer in seconds	N/A	Unsigned integer. Value range: 0 to 10. Default: 5. Setting it to 0 disables the timer.

## OAP/Interfaces

This table contains OAP interface information.

## XML structure

```
<OAP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
    </Interface>
  </Interfaces>
</OAP>
```

## Table description

Item	Description
Feature name	OAP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enable	Whether the interface is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

**Table 1 Methods for specifying interfaces**

Value	Operation status	Remarks
1	Single interface index	<IfIndex>1</IfIndex>
2	Single interface name	<IfIndex>GigabitEthernet0/0/2</IfIndex>

3	Multiple interface names	<IfIndex>GigabitEthernet0/0/2 to GigabitEthernet0/0/3, GigabitEthernet1/0/2 to GigabitEthernet1/0/3, Bridge-Aggregation1</IfIndex>
4	Interface range name	<IfIndex>RangeName</IfIndex>
5	Interface range name and interface names	<IfIndex>GigabitEthernet0/0/2 to GigabitEthernet0/0/3, GigabitEthernet1/0/2 to GigabitEthernet1/0/3, Bridge-Aggregation1</IfIndex>

# Contents

OAP .....	1
OAP/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
OAP/Interfaces .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
OAP/Clients .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# OAP

## OAP/Base

This table contains global OAP information.

### XML structure

```
<OAP>
  <Base>
    <ClockSyncTime></ClockSyncTime>
    <MonitorTime></MonitorTime>
  </Base>
</OAP>
```

### Table description

Item	Description
Feature name	OAP
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table contains only global settings.

### Columns

Column name	Column description	Column type	Data type and restrictions
ClockSyncTime	Clock synchronization timer in minutes	N/A	Unsigned integer. Value range: 0 to 1440. Default: 5. Setting it to 0 disables the feature.
MonitorTime	Client monitoring timer in seconds	N/A	Unsigned integer. Value range: 0 to 10. Default: 5. Setting it to 0 disables the timer.

## OAP/Interfaces

This table contains OAP interface information.



## XML structure

```
<OAP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <ClientIDList></ClientIDList>
    </Interface>
  </Interfaces>
</OAP>
```

## Table description

Item	Description
Feature name	OAP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enable	Whether the interface is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientIDList	Client ID list, which includes all registered clients.	N/A	<p>Bitmap. No length restrictions.</p> <p>Each bit represents a client. If the value of a bit is '1', the client ID is included in the list. If the value of a bit is '0', the client ID is not included in the list.</p> <p>The first octet specifies client IDs 1 through 8, the second octet specifies client IDs 9 through 16, and so on. Within each octet, the most significant bit represents the lowest numbered client, and the least significant bit represents the highest numbered client.</p>	N/A

## OAP/Clients

This table contains OAP client information.

## XML structure

```

<OAP>
  <Clients>
    <Client>
      <ClientID></ClientID>
      <IfIndex></IfIndex>
      <MacAddress></MacAddress>
      <LastRegisteredTime></LastRegisteredTime>
      <ClientDescription></ClientDescription>
      <Hardware></Hardware>
      <SystemSoftware></SystemSoftware>
      <ApplicationSoftware></ApplicationSoftware>
      <CPUInfo></CPUInfo>
      <PCBVersion></PCBVersion>
      <CPLDVersion></CPLDVersion>
      <BootromVersion></BootromVersion>
      <StorageCard></StorageCard>
      <Memory></Memory>
      <Harddisk></Harddisk>
    </Client>
  </Clients>
</OAP>

```

## Table description

Item	Description
Feature name	OAP
Table name	Clients
Table type	Multi-instance table
Row name	Client
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ClientID	OAP client ID	Index	Unsigned integer: Length: 32 bits.
IfIndex	Interface index	N/A	Unsigned integer. Length: 32 bits.
MacAddress	MAC address of the client	N/A	A 6-octet MAC address value. Format: H-H-H.
LastRegisteredTime	Time when the client registered	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.
ClientDescription	Description for the OAP client	N/A	String. Length: 1 to 253 characters.
Hardware	Hardware information	N/A	String. Length: 1 to 253 characters.
SystemSoftware	System software information	N/A	String. Length: 1 to 253 characters.
ApplicationSoftware	Application information	N/A	String. Length: 1 to 253 characters.
CPUInfo	CPU information	N/A	String. Length: 1 to 253 characters.
PCBVersion	PCB version	N/A	String. Length: 1 to 253 characters.
CPLDVersion	CPLD version	N/A	String. Length: 1 to 253 characters.
BootromVersion	BootROM version	N/A	String. Length: 1 to 253 characters.
StorageCard	Storage size	N/A	String. Length: 1 to 253 characters.
Memory	Memory size	N/A	String. Length: 1 to 253 characters.

Column name	Column description	Column type	Data type and restrictions
Harddisk	Hard disk size	N/A	String. Length: 1 to 253 characters.

# Contents

OBJP.....	1
OBJP/ClearZoneStatistic .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
OBJP/ClearAllStatistic .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
OBJP/ClearRuleStatistic .....	2
XML structure .....	2
Table description .....	3
Columns .....	3

# OBJP

## OBJP/ClearZoneStatistic

This table contains the operation information for an security zone pair object policy.

### XML structure

```
<OBJP>
  <ClearZoneStatistic>
    <Zonepair>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ClearType></ClearType>
      <Clear></Clear>
    </Zonepair>
  </ClearZoneStatistic>
</OBJP>
```

### Table description

Item	Description
Feature name	OBJP
Table name	ClearZoneStatistic
Table type	Multi-instance table
Row name	Zonepair
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZone	Name of the source zone.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
DestZone	Name of the destination zone.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ClearType	Type of statistics to be cleared.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—IPv4 statistics.</li><li>2—IPv6 statistics.</li></ul>	Optional. If you do not specify this column, both IPv4 and IPv6 statistics are cleared.
Clear	Clears security zone pair object policy statistics.	N/A	This column must be empty.	Required.

# OBJP/ClearAllStatistic

This table contains the operation information for all security zone pair object policies.

## XML structure

```
<OBJP>
  <ClearAllStatistic>
    <ClearType></ClearType>
    <Clear></Clear>
  </ClearAllStatistic>
</OBJP>
```

## Table description

Item	Description
Feature name	OBJP
Table name	ClearAllStatistic
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClearType	Type of statistics to be cleared.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—IPv4 statistics.</li><li>2—IPv6 statistics.</li></ul>	Optional. If you do not specify this column, both IPv4 and IPv6 statistics are cleared.
Clear	Clears security zone pair object policy statistics.	N/A	This column must be empty.	Required.

# OBJP/ClearRuleStatistic

This table contains the operation information for all security zone pair object policies.

## XML structure

```
<OBJP>
  <ClearRuleStatistic>
```

```

<Rule>
  <SrcZone></SrcZone>
  <DestZone></DestZone>
  <ClearType></ClearType>
  <RuleID></RuleID>
  <Clear></Clear>
</Rule>
</ClearRuleStatistic>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	ClearRuleStatistic
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZone	Name of the source zone.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
DestZone	Name of the destination zone.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ClearType	Type of statistics to be cleared.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4 statistics.</li> <li>2—IPv6 statistics.</li> </ul>	Optional. If you do not specify this column, both IPv4 and IPv6 statistics are cleared.
RuleID	Rule ID	Index	Unassigned integer. Value range: 0 to 65535.	If you set this column to 65535, the device automatically assigns the rule an ID.
Clear	Clears security zone pair object policy statistics.	N/A	This column must be empty.	Required.



# Contents

OBJP.....	1
OBJP/IPv4Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
OBJP/IPv4Rules .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
OBJP/IPv6Policies .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
OBJP/IPv6Rules .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
OBJP/IPv4RuleSrcAddr .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
OBJP/IPv4RuleDestAddr .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
OBJP/IPv4RuleServGrp .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
OBJP/IPv4RuleApp .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
OBJP/IPv6RuleSrcAddr .....	11
XML structure .....	11
Table description .....	11
Columns .....	12
OBJP/IPv6RuleDestAddr .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
OBJP/IPv6RuleServGrp .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
OBJP/IPv6RuleApp .....	14
XML structure .....	14
Table description .....	14
Columns .....	15

# OBJP

## OBJP/IPv4Policies

This table contains IPv4 security zone pair object policy information.

### XML structure

```
<OBJP>
  <IPv4Policies>
    <Policy>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
    </Policy>
  </IPv4Policies>
</OBJP>
```

### Table description

Item	Description
Feature name	OBJP
Table name	IPv4Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination zone	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv4Rules

This table contains IPv4 security zone pair object policy rule information.

# XML structure

```
<OBJP>
  <IPv4Rules>
    <Rule>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <InsID></InsID>
      <Action></Action>
      <SrcIPv4Group></SrcIPv4Group>
      <DestIPv4Group></DestIPv4Group>
      <ServGroup></ServGroup>
      <VRF></VRF>
      <TimeRange></TimeRange>
      <Enable></Enable>
      <Log></Log>
      <Counting></Counting>
      <Comment></Comment>
      <AppGrp></AppGrp>
      <App></App>
      <Profile></Profile>
    </Rule>
  </IPv4Rules>
</OBJP>
```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZone	Name of the source zone	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
DestZone	Name of the destination zone	Index	String, case insensitive. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65535.	If you set this column to 65535, the device automatically assigns the rule an ID.  When you create or modify a rule, this column determines the place for the rule.  If you do not specify this column or set this column to 65535, the rule is put behind all rules.
InsID	Inserts this rule before the rule identified by this ID	N/A	Unassigned integer. Value range: 0 to 65535.	If you set this column to the ID of an existing rule, the rule is inserted before the specified rule.  If you set this column to the ID of a nonexistent rule, the operation fails.
Action	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	Required when you create a rule or modify a rule through the <b>replace</b> operation.
SrcIPv4Group	Name of the source IPv4 address object group	N/A	String, case insensitive. Length: 1 to 31 characters.	Optional.
DestIPv4Group	Name of the destination IPv4 address object group	N/A	String, case insensitive. Length: 1 to 31 characters.	Optional.
ServGroup	Name of the service object group	N/A	String, case insensitive. Length: 1 to 31 characters.	Optional.
VRF	VRF name	N/A	String, case sensitive. Length: 1 to 31 characters.	Optional.
TimeRange	Name of the time range	N/A	String, case insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
Enable	Whether to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable (default).</li> <li><b>false</b>—Disable.</li> </ul>	Optional.
Log	Whether to enable logging	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable (default).</li> </ul>	Optional.
Counting	Whether to enable Counting	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable (default).</li> </ul>	Optional.

Column name	Column description	Column type	Data type and restrictions	Remarks
Comment	Description	N/A	String. Length: 1 to 127 characters.	Optional.
AppGrp	Name of the application group	N/A	String, case insensitive. Length: 1 to 63 characters.	Optional.
App	Name of the application	N/A	String, case insensitive. Length: 1 to 63 characters.	Optional.
Profile	Profile	N/A	String. Length: 1 to 100 characters.	N/A.

## OBJP/IPv6Policies

This table contains IPv6 security zone pair object policy information.

### XML structure

```

<OBJP>
  <IPv6Policies>
    <Policy>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
    </Policy>
  </IPv6Policies>
</OBJP>

```

### Table description

Item	Description
Feature name	OBJP
Table name	IPv6Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source zone	Index	String, case insensitive. Length: 1 to 31 characters.

Column name	Column description	Column type	Data type and restrictions
DestZone	Name of the destination zone	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv6Rules

This table contains IPv6 security zone pair object policy rule information.

### XML structure

```

<OBJP>
  <IPv6Rules>
    <Rule>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <InsID></InsID>
      <Action></Action>
      <SrcIPv6Group></SrcIPv6Group>
      <DestIPv6Group></DestIPv6Group>
      <ServGroup></ServGroup>
      <VRF></VRF>
      <TimeRange></TimeRange>
      <Enable></Enable>
      <Log></Log>
      <Counting></Counting>
      <Comment></Comment>
      <AppGrp></AppGrp>
      <App></App>
      <Profile></Profile>
    </Rule>
  </IPv6Rules>
</OBJP>

```

### Table description

Item	Description
Feature name	OBJP
Table name	IPv6Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZone	Name of the source zone	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
DestZone	Name of the destination zone	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65535.	If you set this column to 65535, the device automatically assigns the rule an ID.  When you create or modify a rule, this column determines the place for the rule.  If you do not specify this column or set this column to 65535, the rule is put behind all rules.
InsID	Inserts this rule before the rule identified by this ID	N/A	Unassigned integer. Value range: 0 to 65535.	If you set this column to the ID of an existing rule, the rule is inserted before the specified rule.  If you set this column to the ID of a nonexistent rule, the operation fails.
Action	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	Required when you create a rule or modify a rule through the <b>replace</b> operation.
SrcIPv6Group	Name of the source IPv6 address object group	N/A	String, case insensitive. Length: 1 to 31 characters.	Optional.
DestIPv6Group	Name of the destination IPv6 address object group	N/A	String, case insensitive. Length: 1 to 31 characters.	Optional.
ServGroup	Name of the service object group	N/A	String, case insensitive. Length: 1 to 31 characters.	Optional.
VRF	VRF name	N/A	String, case sensitive. Length: 1 to 31 characters.	Optional.
TimeRange	Name of the time range	N/A	String, case insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
Enable	Whether to enable the	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable (default).</li> </ul>	Optional.

Column name	Column description	Column type	Data type and restrictions	Remarks
	rule		<ul style="list-style-type: none"> <li><b>false</b>—Disable.</li> </ul>	
Log	Whether to enable logging	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable (default).</li> </ul>	Optional.
Counting	Whether to enable Counting	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable (default).</li> </ul>	Optional.
Comment	Description	N/A	String. Length: 1 to 127 characters.	Optional.
AppGrp	Name of the application group	N/A	String, case insensitive. Length: 1 to 63 characters.	Optional.
App	Name of the application	N/A	String, case insensitive. Length: 1 to 63 characters.	Optional.
Profile	Profile	N/A	String. Length: 1 to 100 characters.	N/A.

## OBJP/IPv4RuleSrcAddr

This table contains source address of IPv4 object policy rule information.

## XML structure

```

<OBJP>
  <IPv4RuleSrcAddr>
    <RuleSrcAddr>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleSrcAddr>
  </IPv4RuleSrcAddr>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4RuleSrcAddr
Table type	Multi-instance table
Row name	RuleSrcAddr
Restrictions	None



Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of source object group	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Object group.</li> </ul>
Name	Name of source object group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv4RuleDestAddr

This table contains destination address of IPv4 object policy rule information.

## XML structure

```

<OBJP>
  <IPv4RuleDestAddr>
    <RuleDestAddr>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleDestAddr>
  </IPv4RuleDestAddr>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4RuleDestAddr
Table type	Multi-instance table
Row name	RuleDestAddr

Item	Description
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of destination object group	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Object group.</li> </ul>
Name	Name of destination object group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv4RuleServGrp

This table contains service group of IPv4 object policy rule information.

## XML structure

```

<OBJP>
  <IPv4RuleServGrp>
    <RuleServGrp>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Name></Name>
    </RuleServGrp>
  </IPv4RuleServGrp>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4RuleServGrp
Table type	Multi-instance table
Row name	RuleServGrp

Item	Description
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Name	Name of service group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv4RuleApp

This table contains application of IPv4 object policy rule information.

## XML structure

```

<OBJP>
  <IPv4RuleApp>
    <RuleApp>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleApp>
  </IPv4RuleApp>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4RuleApp
Table type	Multi-instance table
Row name	RuleApp
Restrictions	None

Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of application	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Application group.</li> <li>2—Application.</li> </ul>
Name	Name of application	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv6RuleSrcAddr

This table contains source address of IPv6 object policy rule information.

## XML structure

```

<OBJP>
  <IPv6RuleSrcAddr>
    <RuleSrcAddr>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleSrcAddr>
  </IPv6RuleSrcAddr>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6RuleSrcAddr
Table type	Multi-instance table

Item	Description
Row name	RuleSrcAddr
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of source object group	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Object group.</li> </ul>
Name	Name of source object group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv6RuleDestAddr

This table contains destination address of IPv6 object policy rule information.

## XML structure

```

<OBJP>
  <IPv6RuleDestAddr>
    <RuleDestAddr>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleDestAddr>
  </IPv6RuleDestAddr>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6RuleDestAddr

Item	Description
Table type	Multi-instance table
Row name	RuleDestAddr
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of destination object group	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Object group.</li> </ul>
Name	Name of destination object group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv6RuleServGrp

This table contains service group of IPv6 object policy rule information.

## XML structure

```

<OBJP>
  <IPv6RuleServGrp>
    <RuleServGrp>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Name></Name>
    </RuleServGrp>
  </IPv6RuleServGrp>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6RuleServGrp

Item	Description
Table type	Multi-instance table
Row name	RuleServGrp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Name	Name of service group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv6RuleApp

This table contains application of IPv6 object policy rule information.

## XML structure

```

<OBJP>
  <IPv6RuleApp>
    <RuleApp>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleApp>
  </IPv6RuleApp>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6RuleApp
Table type	Multi-instance table

Item	Description
Row name	RuleApp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of application	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Application group.</li> <li>2—Application.</li> </ul>
Name	Name of application	Index	String, case insensitive. Length: 1 to 31 characters.



# Contents

OBJP.....	1
OBJP/IPv4Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
OBJP/IPv4Rules .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
OBJP/IPv6Policies .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
OBJP/IPv6Rules .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
OBJP/IPv4RuleSrcAddr .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
OBJP/IPv4RuleDestAddr .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
OBJP/IPv4RuleServGrp .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
OBJP/IPv4RuleApp .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
OBJP/IPv6RuleSrcAddr .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
OBJP/IPv6RuleDestAddr .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
OBJP/IPv6RuleServGrp .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
OBJP/IPv6RuleApp .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
OBJP/AllocRuleID .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
OBJP/Capability .....	15
XML structure .....	15
Table description .....	15
Columns .....	16

# OBJP

## OBJP/IPv4Policies

This table contains IPv4 security zone pair object policy information.

### XML structure

```
<OBJP>
  <IPv4Policies>
    <Policy>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <RuleNum></RuleNum>
    </Policy>
  </IPv4Policies>
</OBJP>
```

### Table description

Item	Description
Feature name	OBJP
Table name	IPv4Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination zone	Index	String, case insensitive. Length: 1 to 31 characters.
RuleNum	Number of rules	N/A	Unassigned integer.

## OBJP/IPv4Rules

This table contains IPv4 security zone pair object policy rule information.

# XML structure

```
<OBJP>
  <IPv4Rules>
    <Rule>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Action></Action>
      <SrcIPv4Group></SrcIPv4Group>
      <DestIPv4Group></DestIPv4Group>
      <ServGroup></ServGroup>
      <VRF></VRF>
      <TimeRange></TimeRange>
      <TimeRangeState></TimeRangeState>
      <Enable></Enable>
      <Log></Log>
      <Comment></Comment>
      <Counting></Counting>
      <Count></Count>
      <AppGrp></AppGrp>
      <App></App>
      <Byte></Byte>
      <Profile></Profile>
    </Rule>
  </IPv4Rules>
</OBJP>
```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination zone	Index	String, case insensitive. Length: 1 to 31 characters.

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
Action	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Deny.</li> <li>• <b>2</b>—Permit.</li> </ul>
SrcIPv4Group	Name of the source IPv4 address object group	N/A	String. Length: 1 to 31 characters.
DestIPv4Group	Name of the destination IPv4 address object group	N/A	String. Length: 1 to 31 characters.
ServGroup	Name of the service object group	N/A	String. Length: 1 to 31 characters.
VRF	VRF name	N/A	String. Length: 1 to 31 characters.
TimeRange	Name of the time range	N/A	String. Length: 1 to 32 characters.
TimeRangeState	Status of the time range	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Effective.</li> <li>• <b>false</b>—Not effective.</li> </ul>
Enable	Whether the rule is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Not enabled.</li> </ul>
Log	Whether logging is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Not enabled.</li> </ul>
Counting	Whether counting is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Not enabled.</li> </ul>
Comment	Description	N/A	String. Length: 1 to 127 characters.
Count	Count of matches	N/A	Unassigned integer. Value range: 0 to $2^{64}-1$ .
AppGrp	Name of the application group	N/A	String. Length: 1 to 63 characters.
App	Name of the application	N/A	String. Length: 1 to 63 characters.
Byte	Byte	N/A	Unsigned integer.
Profile	Profile	N/A	String. Length: 1 to 100 characters.

# OBJP/IPv6Policies

This table contains IPv6 security zone pair object policy information.

## XML structure

```
<OBJP>
  <IPv6Policies>
    <Policy>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <RuleNum></RuleNum>
    </Policy>
  </IPv6Policies>
</OBJP>
```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source zone	Index	String. Length: 1 to 31 characters.
DestZone	Name of the destination zone	Index	String. Length: 1 to 31 characters.
RuleNum	Number of rules	N/A	Unassigned integer.

# OBJP/IPv6Rules

This table contains IPv6 security zone pair object policy rule information.

## XML structure

```
<OBJP>
  <IPv6Rules>
```

```

<Rule>
  <SrcZone></SrcZone>
  <DestZone></DestZone>
  <ID></ID>
  <Action></Action>
  <SrcIPv6Group></SrcIPv6Group>
  <DestIPv6Group></DestIPv6Group>
  <ServGroup></ServGroup>
  <VRF></VRF>
  <TimeRange></TimeRange>
  <TimeRangeState></TimeRangeState>
  <Enable></Enable>
  <Log></Log>
  <Counting></Counting>
  <Comment></Comment>
  <Count></Count>
  <AppGrp></AppGrp>
  <App></App>
  <Byte></Byte>
  <Profile></Profile>
</Rule>
</IPv6Rules>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source zone	Index	String. Length: 1 to 31 characters.
DestZone	Name of the destination zone	Index	String. Length: 1 to 31 characters.
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
Action	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>• <b>2</b>—Permit.</li> </ul>
SrcIPv6Group	Name of the source IPv6 address object group	N/A	String. Length: 1 to 31 characters.
DestIPv6Group	Name of the destination IPv6 address object group	N/A	String. Length: 1 to 31 characters.
ServGroup	Name of the service object group	N/A	String. Length: 1 to 31 characters.
VRF	VRF name	N/A	String. Length: 1 to 31 characters.
TimeRange	Name of the time range	N/A	String. Length: 1 to 32 characters.
TimeRangeState	Status of the time range	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Effective.</li> <li>• <b>false</b>—Not effective.</li> </ul>
Enable	Whether the rule is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Not enabled.</li> </ul>
Log	Whether logging is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Not enabled.</li> </ul>
Counting	Whether counting is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Not enabled.</li> </ul>
Comment	Description	N/A	String. Length: 1 to 127 characters.
Count	Count of matches	N/A	Unassigned integer. Value range: 0 to $2^{64} - 1$ .
AppGrp	Name of the application group	N/A	String. Length: 1 to 63 characters.
App	Name of the application	N/A	String. Length: 1 to 63 characters.
Byte	Byte	N/A	Unsigned integer.
Profile	Profile	N/A	String. Length: 1 to 100 characters.

## OBJP/IPv4RuleSrcAddr

This table contains source address of IPv4 object policy rule information.

## XML structure

<OBJP>

```

<IPv4RuleSrcAddr>
  <RuleSrcAddr>
    <SrcZone></SrcZone>
    <DestZone></DestZone>
    <ID></ID>
    <Type></Type>
    <Name></Name>
  </RuleSrcAddr>
</IPv4RuleSrcAddr>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4RuleSrcAddr
Table type	Multi-instance table
Row name	RuleSrcAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of source object group	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Object group.</li> </ul>
Name	Name of source object group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv4RuleDestAddr

This table contains destination address of IPv4 object policy rule information.

## XML structure

```

<OBJP>
  <IPv4RuleDestAddr>
    <RuleDestAddr>

```



```

        <SrcZone></SrcZone>
        <DestZone></DestZone>
        <ID></ID>
        <Type></Type>
        <Name></Name>
    </RuleDestAddr>
</IPv4RuleDestAddr>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4RuleDestAddr
Table type	Multi-instance table
Row name	RuleDestAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of destination object group	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Object group.</li> </ul>
Name	Name of destination object group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv4RuleServGrp

This table contains service group of IPv4 object policy rule information.

## XML structure

```

<OBJP>
  <IPv4RuleServGrp>
    <RuleServGrp>
      <SrcZone></SrcZone>
    </RuleServGrp>
  </IPv4RuleServGrp>
</OBJP>

```

```

    <DestZone></DestZone>
    <ID></ID>
    <Name></Name>
  </RuleServGrp>
</IPv4RuleServGrp>
</OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4RuleServGrp
Table type	Multi-instance table
Row name	RuleServGrp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Name	Name of service group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv4RuleApp

This table contains application of IPv4 object policy rule information.

## XML structure

```

<OBJP>
  <IPv4RuleApp>
    <RuleApp>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleApp>
  </IPv4RuleApp>
</OBJP>

```

```

    </IPv4RuleApp>
  </OBJP>

```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv4RuleApp
Table type	Multi-instance table
Row name	RuleApp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of application	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Application group.</li> <li>2—Application</li> </ul>
Name	Name of application	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv6RuleSrcAddr

This table contains source address of IPv6 object policy rule information.

## XML structure

```

<OBJP>
  <IPv6RuleSrcAddr>
    <RuleSrcAddr>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleSrcAddr>
  </IPv6RuleSrcAddr>

```

</OBJP>

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6RuleSrcAddr
Table type	Multi-instance table
Row name	RuleSrcAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of source object group	Index	Enumeration: <ul style="list-style-type: none"><li>1—Object group.</li></ul>
Name	Name of source object group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv6RuleDestAddr

This table contains destination address of IPv6 object policy rule information.

## XML structure

```
<OBJP>
  <IPv6RuleDestAddr>
    <RuleDestAddr>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleDestAddr>
  </IPv6RuleDestAddr>
</OBJP>
```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6RuleDestAddr
Table type	Multi-instance table
Row name	RuleDestAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of destination object group	Index	Enumeration: <ul style="list-style-type: none"><li>1—Object group.</li></ul>
Name	Name of destination object group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv6RuleServGrp

This table contains service group of IPv6 object policy rule information.

## XML structure

```
<OBJP>
  <IPv6RuleServGrp>
    <RuleServGrp>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Name></Name>
    </RuleServGrp>
  </IPv6RuleServGrp>
</OBJP>
```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6RuleServGrp
Table type	Multi-instance table
Row name	RuleServGrp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Name	Name of service group	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/IPv6RuleApp

This table contains application of IPv6 object policy rule information.

## XML structure

```
<OBJP>
  <IPv6RuleApp>
    <RuleApp>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <ID></ID>
      <Type></Type>
      <Name></Name>
    </RuleApp>
  </IPv6RuleApp>
</OBJP>
```

## Table description

Item	Description
Feature name	OBJP
Table name	IPv6RuleApp
Table type	Multi-instance table
Row name	RuleApp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
ID	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Type	Type of application	Index	Enumeration: <ul style="list-style-type: none"><li>1—Application group.</li><li>2—Application.</li></ul>
Name	Name of application	Index	String, case insensitive. Length: 1 to 31 characters.

## OBJP/AllocRuleID

This table contains valid rule id.

## XML structure

```
<OBJP>
  <AllocRuleID>
    <Rule>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
      <Type></Type>
      <ID></ID>
    </Rule>
  </AllocRuleID>
</OBJP>
```

## Table description

Item	Description
Feature name	OBJP
Table name	AllocRuleID
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SrcZone	Name of the source security zone	Index	String, case insensitive. Length: 1 to 31 characters.
DestZone	Name of the destination security zone	Index	String, case insensitive. Length: 1 to 31 characters.
Type	Type of policy	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4.</li><li>• 2—IPv6.</li></ul>
ID	Rule ID	N/A	Unsigned integer. Value range: 0 to 65534.

## OBJP/Capability

This table contains capability of APR.

## XML structure

```
<OBJP>
  <Capability>
    <Support>
      <APR></APR>
    </Support>
  </Capability>
</OBJP>
```

## Table description

Item	Description
Feature name	OBJP
Table name	Capability
Table type	Multi-instance table



Item	Description
Row name	Support
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
APR	Whether support APR.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support</li> </ul>

# Contents

OBJP.....1

    OBJP .....1

# OBJP

## OBJP

Message	Explanation
Failed to create the rule because the rule number exceeds the upper limit. 由于已经达到规则数上限，创建规则失败。	The number of rules configured by the object policy reaches the upper limit. 对象策略配置的规则数达到上限。
Source IP address object group does not exist. 指定的源IP地址对象组不存在。	The object-group referenced by the IPv4 source address of the rule does not exist. 规则中IPv4源地址引用的对象组不存在。
Illegal source IP address object group type. 指定的源IP地址对象组类型不正确。	The object-group type referenced by the IPv4 source address is not the IPv4 type. 规则中IPv4源地址引用的对象组类型不是IPv4。
Destination IP address object group does not exist. 指定的目的IP地址对象组不存在。	The object-group referenced by the IPv4 destination address of the rule does not exist. 规则中IPv4目的地址引用的对象组不存在。
Illegal destination IP address object group type. 指定的目的IP地址对象组类型不正确。	The object-group type referenced by the IPv4 destination address is not the IPv4 type. 规则中IPv4目的地址引用的对象组类型不是IPv4。
Source IPv6 address object group does not exist. 指定的源IPv6地址对象组不存在。	The object-group referenced by the IPv6 source address of the rule does not exist. 规则中IPv6源地址引用的对象组不存在。
Illegal source IPv6 address object group type. 指定的源IPv6地址对象组类型不正确。	The object-group type referenced by the IPv6 destination address is not the IPv6 type. 规则中IPv6源地址引用的对象组类型不是IPv6。
Destination IPv6 address object group does not exist. 指定的目的IPv6地址对象组不存在。	The object-group referenced by the IPv6 destination address of the rule does not exist. 规则中IPv6目的地址引用的对象组不存在。
Illegal destination IPv6 address object group type. 指定的目的IPv6地址对象组类型不正确。	The object-group type referenced by the IPv6 destination address is not the IPv6 type. 规则中IPv6目的地址引用的对象组类型不是IPv6。
Service object group does not exist. 指定的服务对象组不存在。	The object-group referenced by the service of the rule does not exist. 规则中服务引用的对象组不存在。
Illegal service object group type. 指定的服务对象组类型不正确。	The object-group type referenced by the service is not the service type. 规则中服务引用的对象组类型不是服务类型。
The time range does not exist and the rule will be set to inactive. 由于指定的时间段不存在，该规则不会生效。	The time range name referenced by the rule does not exist. 规则中引用的时间段名称不存在。
Failed to move the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则和目标规则的编号相同，移动规则失	The source rule number specified when moving the rule is the same as the destination number. 移动规则时指定的源规则编号与目的编号一样。

败。	
Failed to move the rule because the specified rule does not exist. 由于指定规则或目标规则不存在，移动规则失败。	The source rule number specified when the rule was moved does not exist. 移动规则时指定的源规则编号不存在。
The rule does not exist. Please create the rule before adding a comment. 由于指定的规则不存在，添加规则描述信息失败。	The rule number specified when adding rule comment information does not exist. 添加规则评审信息时指定的规则编号不存在。
Failed to insert the rule because the specified rule does not exist. 由于指定的规则不存在，规则插入失败。	Specifies that the rule number to be inserted is not created. 指定要插入的规则编号没有被创建。
Failed to create the rule because the action of the rule is not specified. 由于未指定规则动作，创建规则失败。	Failure to specify a rule action cause the create operation to fail to create a rule. 没有指定规则动作导致create操作创建规则失败。
Failed to merge the rule because the action of the rule is not specified. 由于未指定规则动作，创建规则失败。	Failure to specify a rule action cause the merge operation to fail to create a rule. 没有指定规则动作导致merge操作创建规则失败。
Failed to replace the rule because the action of the rule is not specified. 由于未指定规则动作，创建规则失败。	Failure to specify a rule action cause the replace operation to fail to create a rule. 没有指定规则动作导致replace操作创建规则失败。
Failed to create the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则编号和目标规则编号相同，移动规则失败	The source rule number specified when the rule is moved is the same as the destination number, causing the create operation to fail. 移动规则时指定的源规则编号与目的编号一样导致create操作失败。
Failed to merge the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则编号和目标规则编号相同，移动规则失败	The source rule number specified when the rule is moved is the same as the destination number, causing the merge operation to fail. 移动规则时指定的源规则编号与目的编号一样导致merge操作失败。
Failed to replace the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则编号和目标规则编号相同，移动规则失败	The source rule number specified when the rule is moved is the same as the destination number, causing the replace operation to fail. 移动规则时指定的源规则编号与目的编号一样导致replace操作失败。
Failed to create the rule because the rule to insert before does not exist. 由于目标规则不存在，移动规则失败。	The source rule number specified when the rule was moved does not exist, causing the create operation to fail. 移动规则时指定的源规则编号不存在导致create操作失败。
Failed to merge the rule because the rule to insert before does not exist. 由于目标规则不存在，移动规则失败。	The source rule number specified when the rule was moved does not exist, causing the merge operation to fail. 移动规则时指定的源规则编号不存在导致merge操作失败。
Failed to replace the rule because the rule to insert before does not exist. 由于目标规则不存在，移动规则失败。	The source rule number specified when the rule was moved does not exist, causing the replace operation to fail. 移动规则时指定的源规则编号不存在导致replace操作失败。
Can not use 'all' as time range name. 时间段名称不能为“all”。	The time range name referenced by the rule cannot be “all”. 规则引用的时间段名称不能为“all”。
The maximum number of rules has been reached. 由于已经达到规则数上限，创建规则失败。	Object policy configuration rules reach the upper limit. 对象策略配置的规则达到上限。

<p>If the action is set to "inspect", you must specify an inspect profile.</p> <p>指定动作为Inspect时，必须指定Profile。</p>	<p>The profile name is not specified when the specified rule action is inspect.</p> <p>指定规则动作为Inspect时没有指定Profile名称。</p>
<p>If the profile is specified, the action should be set to "inspect".</p> <p>指定Profile时，必须指定动作为Inspect。</p>	<p>Rule action is not inspect when specifying profile name.</p> <p>指定Profile名称时规则动作不是Inspect。</p>
<p>The app group does not exist.</p> <p>指定的应用组不存在。</p>	<p>The application group referenced by the rule has not been created.</p> <p>规则引用的应用组没有被创建。</p>
<p>The application does not exist.</p> <p>指定的应用不存在。</p>	<p>The application referenced by the rule has not been created.</p> <p>规则引用的应用没有被创建。</p>
<p>The app group and the application does not exist, the rule does not match packets.</p> <p>指定的应用组和应用都不存在，该规则不会匹配报文。</p>	<p>The application group and application referenced by the rule have not been created.</p> <p>规则引用的应用组和引用都没有被创建。</p>
<p>The application does not exist, the rule does not match packets.</p> <p>指定的应用不存在，该规则不会匹配报文。</p>	<p>The application referenced by the rule has not been created.</p> <p>规则引用的应用没有被创建。</p>
<p>The app group does not exist, the rule does not match packets.</p> <p>指定的应用组不存在，该规则不会匹配报文。</p>	<p>The application group referenced by the rule has not been created.</p> <p>规则引用的应用组没有被创建。</p>
<p>Can not use 'invalid' or 'other' as app-group or application name.</p> <p>应用组或应用名称不能为'invalid'或'other'。</p>	<p>The application group or application name referenced by the rule is "invalid" or "other".</p> <p>规则引用的应用组或引用名称为“invalid”或“other”。</p>
<p>Failed to create the interzone policy because the policy number exceeds the upper limit.</p> <p>由于已经达到域间策略个数上限，创建策略失败。</p>	<p>The number of interzone policy applications has reached the upper limit.</p> <p>域间策略应用个数达到上限。</p>
<p>The object policy does not exist.</p> <p>指定的对象策略不存在。</p>	<p>The specified object policy name was not created.</p> <p>指定的对象策略名称没有创建。</p>
<p>The specified source zone doesn't exist.</p> <p>指定的源安全域不存在。</p>	<p>The specified source zone name was not created.</p> <p>指定的源安全域名称没有创建。</p>
<p>The specified destination zone doesn't exist.</p> <p>指定的目的安全域不存在。</p>	<p>The specified destination zone name was not created.</p> <p>指定的目的安全域名称没有创建。</p>

# Contents

- OMS.....1
  - OMS/RenameGroups .....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# OMS

## OMS/RenameGroups

This table contains information about the rename object groups.

### XML structure

```
<OMS>
  <RenameGroups>
    <Group>
      <Name></Name>
      <NewName></NewName>
      <Rename></Rename>
    </Group>
  </RenameGroups>
</OMS>
```

### Table description

Item	Description
Feature name	OMS
Table name	RenameGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Object group name.	Index	String. Length: 1 to 31characters.	N/A
NewName	New object group name.	N/A	String. Length: 1 to 31characters.	Required.
Rename	Rename an object group.	N/A	This column must be empty.	Required.

# Contents

OMS.....	1
OMS/IPv4Groups.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
OMS/IPv4Objs .....	1
XML structure.....	2
Table description.....	2
Columns.....	2
OMS/IPv6Groups.....	4
XML structure.....	4
Table description.....	4
Columns.....	5
OMS/IPv6Objs .....	5
XML structure.....	5
Table description.....	5
Columns.....	6
OMS/ServGroups.....	7
XML structure.....	7
Table description.....	7
Columns.....	8
OMS/ServObjs .....	8
XML structure.....	8
Table description.....	8
Columns.....	9
OMS/PortGroups .....	10
XML structure.....	10
Table description.....	10
Columns.....	11
OMS/PortObjs.....	11
XML structure.....	11
Table description.....	11
Columns.....	12
OMS/MACGroups .....	12
XML structure.....	12
Table description.....	12
Columns.....	13
OMS/MACObjs.....	13
XML structure.....	13
Table description.....	13
Columns.....	14



# OVS

## OVS/IPv4Groups

This table contains IPv4 address object group information.

### XML structure

```
<OVS>
  <IPv4Groups>
    <Group>
      <Name></Name>
      <Description></Description>
      <SecurityZone></SecurityZone>
    </Group>
  </IPv4Groups>
</OVS>
```

### Table description

Item	Description
Feature name	OVS
Table name	IPv4Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the IPv4 address object group	Index	String, case-insensitive. Length: 1 to 31 characters.
Description	Description for the IPv4 address object group	N/A	String. Length: 1 to 127 characters.
SecurityZone	Security zone name	N/A	String, Case-insensitive and contains no midline( - ). Length: 1 to 31 characters.

## OVS/IPv4Objs

This table contains IPv4 address object information.

## XML structure

```
<OMS>
  <IPv4Objs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <SubnetIPv4Address></SubnetIPv4Address>
      <IPv4Mask></IPv4Mask>
      <IPv4WildcardAddress></IPv4WildcardAddress>
      <IPv4WildcardMask></IPv4WildcardMask>
      <StartIPv4Address></StartIPv4Address>
      <EndIPv4Address></EndIPv4Address>
      <HostIPv4Address></HostIPv4Address>
      <HostName></HostName>
      <NestedGroup></NestedGroup>
      <VRFName></VRFName>
      <User></User>
      <UserDomain></UserDomain>
      <UserGroup></UserGroup>
      <UserGroupDomain></UserGroupDomain>
    </Obj>
  </IPv4Objs>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	IPv4Objs
Table type	Multi-instance table
Row name	Obj
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the IPv4 address object group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the IPv4 address object	Index	Unsigned integer. Value range: 0 to 4294967295.	When you create an object with the ID 4294967295, the system automatically assigns the object an ID.
Type	Type of the IPv4 address object	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Nested group.</li> <li>1—Subnet.</li> <li>2—Range.</li> <li>3—Host address.</li> <li>4—Host name.</li> </ul>	Required.
SubnetIPv4Address	IPv4 subnet address	N/A	String, dotted decimal notation.	Required when the <b>Type</b> column is <b>1</b> . It must be configured together with the <b>IPv4Mask</b> column.
IPv4Mask	IPv4 subnet mask	N/A	String, dotted decimal notation.	Required when the <b>Type</b> column is <b>1</b> . It must be configured together with the <b>SubnetIPv4Address</b> column.
IPv4WildcardAddress	IPv4 wildcard address	N/A	String, dotted decimal notation.	N/A
IPv4WildcardMask	IPv4 wildcard mask	N/A	String, dotted decimal notation.	N/A
StartIPv4Address	Start IPv4 address	N/A	String, dotted decimal notation.	Required when the <b>Type</b> column is <b>2</b> . It must be configured together with the <b>EndIPv4Address</b> column.
EndIPv4Address	End IPv4 address	N/A	String, dotted decimal notation.	Required when the <b>Type</b> column is <b>2</b> . It must be configured together with the <b>StartIPv4Address</b> column.
HostIPv4Address	IPv4 address of the host	N/A	String, dotted decimal notation.	Required when the <b>Type</b> column is <b>3</b> .
HostName	Host name	N/A	String, case-insensitive. Length: 1 to 60 characters.	Required when the <b>Type</b> column is <b>4</b> .
NestedGroup	Name of the nested IPv4 address object group	N/A	String, case-insensitive. Length: 1 to 31 characters.	Required when the <b>Type</b> column is <b>0</b> .
VRFName	VPN instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	Valid only when the <b>Type</b> column is <b>4</b> and the <b>HostName</b> column is specified.
User	User	N/A	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 55 characters.	
UserDomain	User domain	N/A	String. Length: 1 to 255 characters.	N/A
UserGroup	User group	N/A	String. Length: 1 to 32 characters.	N/A
UserGroupDomain	User group domain	N/A	String. Length: 1 to 255 characters.	N/A

## OMS/IPv6Groups

This table contains IPv6 address object group information.

### XML structure

```

<OMS>
  <IPv6Groups>
    <Group>
      <Name></Name>
      <Description></Description>
      <SecurityZone></SecurityZone>
    </Group>
  </IPv6Groups>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	IPv6Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the IPv4 address object group	Index	String, case-insensitive. Length: 1 to 31 characters.
Description	Description for the IPv4 address object group	N/A	String. Length: 1 to 127 characters.
SecurityZone	Security zone name	N/A	String, Case-insensitive and contains no midline( - ). Length: 1 to 31 characters.

## OMS/IPv6Objs

This table contains IPv6 address object information.

## XML structure

```
<OMS>
  <IPv6Objs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <SubnetIPv6Address></SubnetIPv6Address>
      <IPv6PrefixLen></IPv6PrefixLen>
      <StartIPv6Address></StartIPv6Address>
      <EndIPv6Address></EndIPv6Address>
      <HostIPv6Address></HostIPv6Address>
      <HostName></HostName>
      <NestedGroup></NestedGroup>
      <User></User>
      <UserDomain></UserDomain>
      <UserGroup></UserGroup>
      <UserGroupDomain></UserGroupDomain>
    </Obj>
  </IPv6Objs>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	IPv6Objs
Table type	Multi-instance table

Item	Description
Row name	Obj
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the IPv6 address object group	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
ID	ID of the IPv6 address object	Index	Unsigned integer. Value range: 1 to 4294967295.	When you create an object with the ID 4294967295, the system automatically assigns the object an ID.
Type	Type of the IPv6 address object	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Nested group.</li> <li>• <b>1</b>—Subnet.</li> <li>• <b>2</b>—Range.</li> <li>• <b>3</b>—Host address.</li> <li>• <b>4</b>—Host name.</li> </ul>	Required.
SubnetIPv6Address	IPv6 subnet address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. Required when the <b>Type</b> column is <b>1</b> . It must be configured together with the <b>IPv6PrefixLen</b> column.
IPv6PrefixLen	Length of the IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128.	Required when <b>Subnet</b> the <b>Type</b> column is <b>1</b> . It must be configured together with the <b>SubnetIPv6Address</b> column.
StartIPv6Address	Start IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. Required when the <b>Type</b> column is <b>2</b> . It must be configured together with the <b>EndIPv6Address</b> column.
EndIPv6Address	End IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. Required when the <b>Type</b> column is <b>2</b> . It must be configured together with the <b>StartIPv6Address</b> column.

Column name	Column description	Column type	Data type and restrictions	Remarks
HostIPv6Address	IPv6 address of the host	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. Required when the <b>Type</b> column is <b>3</b> .
HostName	Host name	N/A	String. Length: 1 to 60 characters.	Required when the <b>Type</b> column is <b>4</b> .
NestedGroup	Name of the nested IPv6 address object group	N/A	String, case insensitive. Length: 1 to 31 characters.	Required when the <b>Type</b> column is <b>0</b> .
User	User	N/A	String. Length: 1 to 55 characters.	N/A
UserDomain	User domain	N/A	String. Length: 1 to 255 characters.	N/A
UserGroup	User group	N/A	String. Length: 1 to 32 characters.	N/A
UserGroupDomain	User group domain	N/A	String. Length: 1 to 255 characters.	N/A

## OMS/ServGroups

This table contains service object group information.

### XML structure

```

<OMS>
  <ServGroups>
    <Group>
      <Name></Name>
      <Description></Description>
    </Group>
  </ServGroups>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	ServGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the service object group	Index	String, case insensitive. Length: 1 to 31 characters.
Description	Description for the service object group	N/A	String. Length: 1 to 127 characters.

## OMS/ServObjs

This table contains service object information.

## XML structure

```

<OMS>
  <ServObjs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <Protocol></Protocol>
      <StartSrcPort></StartSrcPort>
      <EndSrcPort></EndSrcPort>
      <StartDestPort></StartDestPort>
      <EndDestPort></EndDestPort>
      <ICMPType></ICMPType>
      <ICMPCode></ICMPCode>
      <NestedGroup></NestedGroup>
    </Obj>
  </ServObjs>
</OMS>

```

## Table description

Item	Description
Feature name	OMS
Table name	ServObjs
Table type	Multi-instance table
Row name	Obj



Item	Description
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the service object group	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
ID	ID of the service object	Index	Unsigned integer. Value range: 0 to 4294967295.	When you create an object with the ID 4294967295, the system automatically assigns the object an ID.
Type	Type of the service object	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Nested group.</li> <li>1—Protocol. This type specifies protocols other than the listed ones.</li> <li>2—ICMP (protocol number 1).</li> <li>3—TCP (protocol number 6).</li> <li>4—UDP (protocol number 17).</li> <li>5—ICMPv6 (protocol number 58).</li> </ul>	Required.
Protocol	Protocol number	N/A	Unsigned integer. Value range: 0 to 255.	Required when the <b>Type</b> column is <b>1</b> .
StartSrcPort	Start source port number	N/A	Unsigned integer. Value range: 0 to 65535.	Required when the <b>Type</b> column is <b>3</b> or <b>4</b> . It must be configured together with the <b>EndSrcPort</b> column.
EndSrcPort	End source port number	N/A	Unsigned integer. Value range: 0 to 65535.	Required when the <b>Type</b> column is <b>3</b> or <b>4</b> . It must be configured together with the <b>StartSrcPort</b> column.
StartDestPort	Start destination port number	N/A	Unsigned integer. Value range: 0 to 65535.	Required when the <b>Type</b> column is <b>3</b> or <b>4</b> . It must be configured together with the <b>EndDestPort</b> column.
EndDestPort	End destination port number	N/A	Unsigned integer. Value range: 0 to 65535.	Required when the <b>Type</b> column is <b>3</b> or <b>4</b> . It must be configured together with the <b>StartDestPort</b> column.

Column name	Column description	Column type	Data type and restrictions	Remarks
ICMPType	Type of the ICMP message	N/A	Unsigned integer. Value range: 0 to 255.	Required when the <b>Type</b> column is <b>2</b> or <b>5</b> . It must be configured together with the <b>ICMPCode</b> column.
ICMPCode	Code of the ICMP message	N/A	Unsigned integer. Value range: 0 to 255.	Required when the <b>Type</b> column is <b>2</b> or <b>5</b> . It must be configured together with the <b>ICMPType</b> column.
NestedGroup	Name of the nested service object group	N/A	String, case insensitive. Length: 1 to 31 characters.	Required when the <b>Type</b> column is <b>0</b> .

## OMS/PortGroups

This table contains port object group information.

### XML structure

```

<OMS>
  <PortGroups>
    <Group>
      <Name></Name>
      <Description></Description>
    </Group>
  </PortGroups>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	PortGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the port object group	Index	String, case insensitive. Length: 1 to 31 characters.
Description	Description for the port object group	N/A	String. Length: 1 to 127 characters.

## OMS/PortObjs

This table contains port object information.

## XML structure

```
<OMS>
  <PortObjs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <StartPort></StartPort>
      <EndPort></EndPort>
      <NestedGroup></NestedGroup>
    </Obj>
  </PortObjs>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	PortObjs
Table type	Multi-instance table
Row name	Obj
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the port object group	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
ID	ID of the port object	Index	Unsigned integer. Value range: 0 to 4294967295.	When you create an object with the ID 4294967295, the system automatically assigns the object an ID.
Type	Type of the port object	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Nested group.</li> <li>1—Range.</li> </ul>	Required.
StartPort	Start port number	N/A	Unsigned integer. Value range: 0 to 65535.	Required when the <b>Type</b> column is <b>1</b> . It must be configured together with the <b>EndPort</b> column.
EndPort	End port number	N/A	Unsigned integer. Value range: 0 to 65535.	Required when the <b>Type</b> column is <b>1</b> . It must be configured together with the <b>StartPort</b> column.
NestedGroup	Name of the nested port object group	N/A	String, case insensitive. Length: 1 to 31 characters.	Required when the <b>Type</b> column is <b>0</b> .

## OMS/MACGroups

This table contains MAC object group information.

### XML structure

```

<OMS>
  <MACGroups>
    <Group>
      <Name></Name>
      <Description></Description>
    </Group>
  </MACGroups>
</OMS>

```

### Table description

Item	Description
Feature name	OMS

Item	Description
Table name	MACGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the MAC object group.	Index	String, case-insensitive. Length: 1 to 31 characters.
Description	Description for the MAC object group.	N/A	String. Length: 1 to 127 characters.

## OMS/MACObjs

This table contains MAC object information.

## XML structure

```

<OMS>
  <MACObjs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <MACAddress></MACAddress>
      <NestedGroup></NestedGroup>
    </Obj>
  </MACObjs>
</OMS>

```

## Table description

Item	Description
Feature name	OMS
Table name	MACObjs
Table type	Multi-instance table
Row name	Obj
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the MAC object group.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ID	ID of the MAC object.	Index	Unsigned integer. Value range: 0 to 4294967295.	When you create an object with the ID 4294967295, the system automatically assigns the object ID.
Type	Type of the MAC object.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Nested group.</li> <li>• <b>1</b>—MAC address.</li> </ul>	Required.
MACAddress	MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0. Required when the <b>Type</b> column is <b>1</b> .
NestedGroup	Name of the nested MAC object group.	N/A	String, case-insensitive. Length: 1 to 31 characters.	Required when the <b>Type</b> column is <b>0</b> .

# Contents

OMS.....	1
OMS/IPv4Groups.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
OMS/SysIPv4Groups.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
OMS/IPv4Objs .....	3
XML structure.....	3
Table description.....	3
Columns.....	4
OMS/IPv6Groups.....	5
XML structure.....	5
Table description.....	5
Columns.....	6
OMS/SysIPv6Groups.....	6
XML structure.....	6
Table description.....	6
Columns.....	7
OMS/IPv6Objs .....	7
XML structure.....	7
Table description.....	8
Columns.....	8
OMS/ServGroups.....	9
XML structure.....	9
Table description.....	9
Columns.....	10
OMS/SysServGroups.....	10
XML structure.....	10
Table description.....	10
Columns.....	11
OMS/ServObjs .....	11
XML structure.....	11
Table description.....	11
Columns.....	12
OMS/PortGroups .....	13
XML structure.....	13
Table description.....	13
Columns.....	13
OMS/SysPortGroups .....	14
XML structure.....	14
Table description.....	14
Columns.....	14
OMS/PortObjs .....	15
XML structure.....	15
Table description.....	15
Columns.....	15
OMS/MACGroups .....	16
XML structure.....	16
Table description.....	16
Columns.....	16
OMS/MACObjs .....	17
XML structure.....	17
Table description.....	17
Columns.....	17

OMS/MACPaging.....	18
XML structure.....	18
Table description.....	18
Columns.....	19
OMS/IPv4Paging .....	19
XML structure.....	20
Table description.....	20
Columns.....	21
OMS/IPv6Paging .....	23
XML structure.....	23
Table description.....	24
Columns.....	24
OMS/ServicePaging .....	26
XML structure.....	26
Table description.....	27
Columns.....	27
OMS/GetIPv4ObjData.....	29
XML structure.....	29
Table description.....	30
Columns.....	30
OMS/GetIPv6ObjData.....	32
XML structure.....	32
Table description.....	32
Columns.....	32



# OVS

## OVS/IPv4Groups

This table contains information about IPv4 address object groups.

### XML structure

```
<OVS>
  <IPv4Groups>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
      <SecurityZone></SecurityZone>
    </Group>
  </IPv4Groups>
</OVS>
```

### Table description

Item	Description
Feature name	OVS
Table name	IPv4Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the IPv4 address object group	Index	String. Length: 1 to 31 characters.
Description	Description for the IPv4 address object group	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of IPv4 address objects	N/A	Unsigned integer.
InUse	Whether the IPv4 address object group is in use.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—The IPv4 address object group is in use.</li><li><b>false</b>—The IPv4 address object group is not in use.</li></ul>

Column name	Column description	Column type	Data type and restrictions
SecurityZone	Security zone name	N/A	String, Case-insensitive and contains no midline( - ). Length: 1 to 31 characters.

## OMS/SysIPv4Groups

This table contains information about pre-defined IPv4 address object groups.

### XML structure

```

<OMS>
  <SysIPv4Groups>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
    </Group>
  </SysIPv4Groups>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	SysIPv4Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the pre-defined IPv4 address object group	Index	String. Length: 1 to 31 characters.
Description	Description for the pre-defined IPv4 address object group	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of pre-defined IPv4 address objects	N/A	Unsigned integer.
InUse	Whether the pre-defined IPv4 address object group is in use.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The pre-defined IPv4 address object group is in use.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li><b>false</b>—The pre-defined IPv4 address object group is not in use.</li> </ul>

## OMS/IPv4Objs

This table contains information about IPv4 address objects.

## XML structure

```

<OMS>
  <IPv4Objs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <SubnetIPv4Address></SubnetIPv4Address>
      <IPv4Mask></IPv4Mask>
      <IPv4WildcardAddress></IPv4WildcardAddress>
      <IPv4WildcardMask></IPv4WildcardMask>
      <StartIPv4Address></StartIPv4Address>
      <EndIPv4Address></EndIPv4Address>
      <HostIPv4Address></HostIPv4Address>
      <HostName></HostName>
      <NestedGroup></NestedGroup>
      <VRFName></VRFName>
      <User></User>
      <UserDomain></UserDomain>
      <UserGroup></UserGroup>
      <UserGroupDomain></UserGroupDomain>
    </Obj>
  </IPv4Objs>
</OMS>

```

## Table description

Item	Description
Feature name	OMS
Table name	IPv4Objs
Table type	Multi-instance table
Row name	Obj
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the IPv4 address object group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ID	ID of the IPv4 address object	Index	Unsigned integer. Value range: 0 to 4294967294.	N/A
Type	Type of the IPv4 address object	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Nested group.</li> <li>• 1—Subnet.</li> <li>• 2—Range.</li> <li>• 3—Host address.</li> <li>• 4—Host name.</li> </ul>	N/A
SubnetIPv4Address	IPv4 subnet address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 1.
IPv4Mask	IPv4 subnet mask	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 1.
IPv4WildcardAddress	IPv4 wildcard address	N/A	String, dotted decimal notation.	N/A
IPv4WildcardMask	IPv4 wildcard mask	N/A	String, dotted decimal notation.	N/A
StartIPv4Address	Start IPv4 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 2.
EndIPv4Address	End IPv4 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 2.
HostIPv4Address	IPv4 address of the host	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 3.
HostName	Host name	N/A	String, case-insensitive. Length: 1 to 60 characters.	The value of this column is valid if Type is 4.
NestedGroup	Name of the nested IPv4 address object group	N/A	String. Length: 1 to 31 characters.	The value of this column is valid if Type is 0.
VRFName	VPN instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	Valid only when the Type column is 4 and the HostName column is specified.
User	User	N/A	String. Length: 1 to 55	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
UserDomain	User domain	N/A	String. Length: 1 to 255 characters.	N/A
UserGroup	User group	N/A	String. Length: 1 to 32 characters.	N/A
UserGroupDomain	User group domain	N/A	String. Length: 1 to 255 characters.	N/A

## OMS/IPv6Groups

This table contains information about IPv6 address object groups.

### XML structure

```

<OMS>
  <IPv6Groups>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
      <SecurityZone></SecurityZone>
    </Group>
  </IPv6Groups>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	IPv6Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the IPv6 address object group.	Index	String. Length: 1 to 31 characters.
Description	Description for the IPv6 address object group.	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of IPv6 address objects.	N/A	Unsigned integer.
InUse	Whether the IPv6 address object group is in use.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—The IPv6 address object group is in use.</li><li>• <b>false</b>—The IPv6 address object group is not in use.</li></ul>
SecurityZone	Security zone name	N/A	String, Case-insensitive and contains no midline( - ). Length: 1 to 31 characters.

## OMS/SysIPv6Groups

This table contains information about pre-defined IPv6 address object groups.

## XML structure

```
<OMS>
  <SysIPv6Groups>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
    </Group>
  </SysIPv6Groups>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	SysIPv6Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the pre-defined IPv6 address object group.	Index	String. Length: 1 to 31 characters.
Description	Description for the pre-defined IPv6 address object group.	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of pre-defined IPv6 address objects.	N/A	Unsigned integer.
InUse	Whether the pre-defined IPv6 address object group is in use.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—The pre-defined IPv6 address object group is in use.</li><li><b>false</b>—The pre-defined IPv6 address object group is not in use.</li></ul>

## OMS/IPv6Objs

This table contains IPv6 address object information.

## XML structure

```
<OMS>
  <IPv6Objs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <SubnetIPv6Address></SubnetIPv6Address>
      <IPv6PrefixLen></IPv6PrefixLen>
      <StartIPv6Address></StartIPv6Address>
      <EndIPv6Address></EndIPv6Address>
      <HostIPv6Address></HostIPv6Address>
      <HostName></HostName>
      <NestedGroup></NestedGroup>
      <User></User>
      <UserDomain></UserDomain>
      <UserGroup></UserGroup>
      <UserGroupDomain></UserGroupDomain>
    </Obj>
  </IPv6Objs>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	IPv6Objs
Table type	Multi-instance table
Row name	Obj
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the IPv6 address object group	Index	String. Length: 1 to 31 characters.	N/A
ID	ID of the IPv6 address object	Index	Unsigned integer. Value range: 1 to 4294967294.	N/A
Type	Type of the IPv6 address object	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Nested group.</li> <li>• <b>1</b>—Subnet.</li> <li>• <b>2</b>—Range.</li> <li>• <b>3</b>—Host address.</li> <li>• <b>4</b>—Host name.</li> </ul>	Required.
SubnetIPv6Addresses	IPv6 subnet address	N/A	Hexadecimal string, colon-separated .	Example: 1:1::1:1 . The value of this column is valid if Type is <b>1</b> .
IPv6PrefixLen	Length of the IPv6 prefix	N/A	Unsigned integer. Value range: 1 to 128	The value of this column is valid if Type is <b>1</b> .
StartIPv6Address	Start IPv6 address	N/A	Hexadecimal string, colon-separated .	Example: 1:1::1:1 . The value of this column is valid if Type is <b>2</b> .
EndIPv6Address	End IPv6 address	N/A	Hexadecimal string, colon-separated .	Example: 1:1::1:1 . The value of this column is valid if Type is <b>2</b> .
HostIPv6Address	IPv6 address of the host	N/A	Hexadecimal string, colon-separated .	Example: 1:1::1:1 . The value of this column is valid if



Column name	Column description	Column type	Data type and restrictions	Remarks
				Type is <b>3</b> .
HostName	Host name	N/A	String. Length: 1 to 60 characters.	The value of this column is valid if Type is <b>4</b> .
NestedGroup	Name of the nested IPv6 address object group	N/A	String. Length: 1 to 31 characters.	The value of this column is valid if Type is <b>0</b> .
User	User	N/A	String. Length: 1 to 55 characters.	N/A
UserDomain	User domain	N/A	String. Length: 1 to 255 characters.	N/A
UserGroup	User group	N/A	String. Length: 1 to 32 characters.	N/A
UserGroupDomain	User group domain	N/A	String. Length: 1 to 255 characters.	N/A

## OMS/ServGroups

This table contains information about service object groups.

### XML structure

```

<OMS>
  <ServGroups>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
    </Group>
  </ServGroups>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	ServGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the service object group.	Index	String. Length: 1 to 31 characters.
Description	Description for the service object group.	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of service objects.	N/A	Unsigned integer.
InUse	Whether the service object group is in use.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—The service object group is in use.</li><li>• <b>false</b>—The service object group is not in use.</li></ul>

## OMS/SysServGroups

This table contains information about pre-defined service object groups.

## XML structure

```
<OMS>
  <SysServGroups>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
    </Group>
  </SysServGroups>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	SysServGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the pre-defined service object group.	Index	String. Length: 1 to 31 characters.
Description	Description for the pre-defined service object group.	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of pre-defined service objects.	N/A	Unsigned integer.
InUse	Whether the pre-defined system service object group is in use.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—The pre-defined system service object group is in use.</li><li><b>false</b>—The pre-defined system service object group is not in use.</li></ul>

## OMS/ServObjs

This table contains information about service objects.

## XML structure

```
<OMS>
  <ServObjs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <Protocol></Protocol>
      <StartSrcPort></StartSrcPort>
      <EndSrcPort></EndSrcPort>
      <StartDestPort></StartDestPort>
      <EndDestPort></EndDestPort>
      <ICMPType></ICMPType>
      <ICMPCode></ICMPCode>
      <NestedGroup></NestedGroup>
    </Obj>
  </ServObjs>
</OMS>
```

## Table description

Item	Description
Feature name	OMS

Item	Description
Table name	ServObjs
Table type	Multi-instance table
Row name	Obj
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the service object group	Index	String. Length: 1 to 31 characters.	N/A
ID	ID of the service object	Index	Unsigned integer. Value range: 0 to 4294967294.	N/A
Type	Type of the service object	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Nested group.</li> <li>• <b>1</b>—Protocol. This type specifies protocols other than the listed ones.</li> <li>• <b>2</b>—ICMP (protocol number 1).</li> <li>• <b>3</b>—TCP (protocol number 6).</li> <li>• <b>4</b>—UDP (protocol number 17).</li> <li>• <b>5</b>—ICMPv6 (protocol number 58).</li> </ul>	Required.
Protocol	Protocol number	N/A	Unsigned integer. Value range: 0 to 255.	The value of this column is valid if Type is <b>1</b> .
StartSrcPort	Start source port number	N/A	Unsigned integer. Value range: 0 to 65535.	The value of this column is valid if Type is <b>3</b> or <b>4</b> .
EndSrcPort	End source port number	N/A	Unsigned integer. Value range: 0 to 65535.	The value of this column is valid if Type is <b>3</b> or <b>4</b> .
StartDestPort	Start destination port number	N/A	Unsigned integer. Value range: 0 to 65535.	The value of this column is valid if Type is <b>3</b> or <b>4</b> .
EndDestPort	End destination port number	N/A	Unsigned integer. Value range: 0 to 65535.	The value of this column is valid if Type is <b>3</b> or <b>4</b> .
ICMPType	Type of the ICMP message	N/A	Unsigned integer. Value range: 0 to 255.	The value of this column is valid if Type is <b>2</b> or <b>5</b> .
ICMPCode	Code of the ICMP message	N/A	Unsigned integer. Value range: 0 to 255.	The value of this column is valid if Type is <b>2</b> or <b>5</b> .
NestedGroup	Name of the nested service object	N/A	String. Length: 1 to 31 characters.	The value of this column is valid if Type is <b>0</b> .

Column name	Column description	Column type	Data type and restrictions	Remarks
	group			

## OMS/PortGroups

This table contains information about port object groups.

### XML structure

```

<OMS>
  <PortGroups>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
    </Group>
  </PortGroups>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	PortGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the port object group.	Index	String. Length: 1 to 31 characters.
Description	Description for the port object group.	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of port objects.	N/A	Unsigned integer.
InUse	Whether the port object group is in use.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The port object group is in use.</li> <li><b>false</b>—The port object group is not in use.</li> </ul>

# OMS/SysPortGroups

This table contains pre-defined port object group information.

## XML structure

```
<OMS>
  <SysPortGroups>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
    </Group>
  </SysPortGroups>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	SysPortGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the pre-defined port object group.	Index	String. Length: 1 to 31 characters.
Description	Description for the pre-defined port object group.	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of pre-defined port objects.	N/A	Unsigned integer.
InUse	Whether the pre-defined port object group is in use.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—The pre-defined port object group is in use.</li><li><b>false</b>—The pre-defined port object group is not in use.</li></ul>

# OMS/PortObjs

This table contains information about port objects.

## XML structure

```
<OMS>
  <PortObjs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <StartPort></StartPort>
      <EndPort></EndPort>
      <NestedGroup></NestedGroup>
    </Obj>
  </PortObjs>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	PortObjs
Table type	Multi-instance table
Row name	Obj
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the port object group	Index	String. Length: 1 to 31 characters.	N/A
ID	ID of the port group object	Index	Unsigned integer. Value range: 0 to 4294967294.	N/A
Type	Type of the port object	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Nested group.</li><li>• <b>1</b>—Range.</li></ul>	Required.
StartPort	Start port number	N/A	Unsigned integer. Value range: 0 to 65535.	The value of this column is valid if Type is <b>1</b> .
EndPort	End port number	N/A	Unsigned integer.	The value of this

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 65535.	column is valid if Type is <b>1</b> .
NestedGroup	Name of the nested port object group	N/A	String. Length: 1 to 31 characters.	The value of this column is valid if Type is <b>0</b> .

## OMS/MACGroups

This table contains information about MAC object groups.

### XML structure

```

<OMS>
  <MACGroups>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
    </Group>
  </MACGroups>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	MACGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the MAC object group.	Index	String. Length: 1 to 31 characters.
Description	Description for the MAC object group.	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of MAC objects.	N/A	Unsigned integer.
InUse	Whether the MAC object group is in use.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The MAC object group</li> </ul>



Column name	Column description	Column type	Data type and restrictions
			is in use. <ul style="list-style-type: none"> <li><b>false</b>—The MAC object group is not in use.</li> </ul>

## OMS/MACObjs

This table contains information about MAC objects.

### XML structure

```

<OMS>
  <MACObjs>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <MACAddress></MACAddress>
      <NestedGroup></NestedGroup>
    </Obj>
  </MACObjs>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	MACObjs
Table type	Multi-instance table
Row name	Obj
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Group	Name of the MAC object group.	Index	String. Length: 1 to 31 characters.
ID	ID of the MAC object.	Index	Unsigned integer. Value range: 0 to 4294967294.
Type	Type of the MAC object.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Nested group.</li> <li><b>1</b>—MAC address.</li> </ul>
MACAddress	MAC address.	N/A	Six groups of two hexadecimal

Column name	Column description	Column type	Data type and restrictions
			digits, hyphen-separated.
NestedGroup	Name of the nested MAC object group.	N/A	String. Length: 1 to 31 characters.

## OMS/MAC Paging

This table contains information about MAC object groups and MAC objects. This table is made for paging.

### XML structure

```

<OMS>
  <MACPaging>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
      <ObjList>
        <ID></ID>
        <Type></Type>
        <MACAddress></MACAddress>
        <NestedGroup></NestedGroup>
      </ObjList>
      <AllGroupsCount></AllGroupsCount>
      <InSecpUse></InSecpUse>
      <InNATUse></InNATUse>
    </Group>
  </MACPaging>
</OMS>

```

### Table description

Item	Description
Feature name	OMS
Table name	MACPaging
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the MAC object group.	Index	String. Length: 1 to 31 characters.
Description	Description for the MAC object group.	N/A	String. Length: 1 to 127 characters.
ObjNum	Number of MAC objects.	N/A	Unsigned integer.
InUse	Whether the MAC object group is in use.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The MAC object group is in use.</li> <li><b>false</b>—The MAC object group is not in use.</li> </ul>
ObjList	List of MAC objects.	Data structure	Members include: <ul style="list-style-type: none"> <li>ID.</li> <li>Type</li> <li>MACAddress</li> <li>NestedGroup</li> </ul>
ID	ID of the MAC object.	N/A	Unsigned integer. Value range: 0 to 4294967294.
Type	Type of the MAC object.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Nested group.</li> <li><b>1</b>—MAC address.</li> </ul>
MACAddress	MAC address.	N/A	Six groups of two hexadecimal digits, hyphen-separated.
NestedGroup	Name of the nested MAC object group.	N/A	String. Length: 1 to 31 characters.
AllGroupsCount	Number of MAC object groups.	N/A	Unsigned integer.
InSecpUse	Whether the MAC object group is used by Security policy	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The MAC object group is used by Security policy.</li> <li><b>false</b>—The MAC object group is not used by Security policy.</li> </ul>
InNATUse	Whether the MAC object group is used by NAT	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The MAC object group is used by NAT.</li> <li><b>false</b>—The MAC object group is not used by NAT.</li> </ul>

## OMS/IPv4Paging

This table contains information about IPv4 address object groups, IPv4 address objects, and excluded IPv4 addresses.

# XML structure

```
<OMS>
  <IPv4Paging>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
      <SecurityZone></SecurityZone>
      <ObjList>
        <ID></ID>
        <Type></Type>
        <SubnetIPv4Address></SubnetIPv4Address>
        <IPv4Mask></IPv4Mask>
        <IPv4WildcardAddress></IPv4WildcardAddress>
        <IPv4WildcardMask></IPv4WildcardMask>
        <StartIPv4Address></StartIPv4Address>
        <EndIPv4Address></EndIPv4Address>
        <HostIPv4Address></HostIPv4Address>
        <HostName></HostName>
        <NestedGroup></NestedGroup>
        <User></User>
        <UserDomain></UserDomain>
        <UserGroup></UserGroup>
        <UserGroupDomain></UserGroupDomain>
        <ExcludeIPv4Address></ExcludeIPv4Address>
      </ObjList>
      <AllGroupsCount></AllGroupsCount>
      <InSecpUse></InSecpUse>
      <InNATUse></InNATUse>
    </Group>
  </IPv4Paging>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	IPv4Paging
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IPv4 address object group	Index	String. Length: 1 to 31 characters.	N/A
Description	Description for the IPv4 address object group	N/A	String. Length: 1 to 127 characters.	N/A
ObjNum	Number of IPv4 address objects	N/A	Unsigned integer.	N/A
InUse	Whether the IPv4 address object group is in use	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The IPv4 address object group is in use.</li> <li><b>false</b>—The IPv4 address object group is not in use.</li> </ul>	N/A
SecurityZone	Security zone of the IPv4 address object group	N/A	String. Length: 1 to 31 characters.	N/A
ObjList	List of IPv4 address objects	Data structure	Members include: <ul style="list-style-type: none"> <li>ID.</li> <li>Type.</li> <li>SubnetIPv4Address.</li> <li>IPv4Mask.</li> <li>IPv4WildcardAddress.</li> <li>IPv4WildcardMask.</li> <li>StartIPv4Address.</li> <li>EndIPv4Address.</li> <li>HostIPv4Address.</li> <li>HostName.</li> <li>NestedGroup.</li> <li>User.</li> <li>UserDomain.</li> <li>UserGroup.</li> <li>UserGroupDomain.</li> <li>ExcludeIPv4Address.</li> </ul>	N/A
ID	ID of the IPv4 address object	N/A	Unsigned integer. Value range: 0 to 4294967294.	N/A
Type	Type of the IPv4 address object	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Nested group.</li> <li>1—Subnet.</li> <li>2—Range.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>3—Host address.</li> <li>4—Host name.</li> <li>5—User.</li> <li>6—User group.</li> <li>7—Wildcard.</li> </ul>	
SubnetIPv4Address	IPv4 subnet address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>1</b> .
IPv4Mask	IPv4 subnet mask	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>1</b> .
IPv4WildcardAddress	IPv4 wildcard address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>7</b> .
IPv4WildcardMask	IPv4 wildcard mask	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>7</b> .
StartIPv4Address	Start IPv4 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>2</b> .
EndIPv4Address	End IPv4 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>2</b> .
HostIPv4Address	IPv4 address of the host	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>3</b> .
HostName	Host name	N/A	String. Length: 1 to 60 characters.	The value of this column is valid if Type is <b>4</b> .
NestedGroup	Name of the nested IPv4 address object group	N/A	String. Length: 1 to 31 characters.	The value of this column is valid if Type is <b>0</b> .
User	Name of the user	N/A	String. Length: 1 to 55 characters.	N/A
UserDomain	Name of the user domain	N/A	String. Length: 1 to 255 characters.	N/A
UserGroup	Name of the user group	N/A	String. Length: 1 to 32 characters.	N/A
UserGroupDomain	Name of the user	N/A	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	group domain		Length: 1 to 255 characters.	
ExcludeIPv4Address	Excluded IPv4 address.	N/A	String, dotted decimal notation.	N/A
AllGroupsCount	Number of IPv4 address groups	N/A	Unsigned integer.	N/A
InSecpUse	Whether the IPv4 address object group is used by Security policy	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The IPv4 address object group is used by Security policy.</li> <li><b>false</b>—The IPv4 address object group is not used by Security policy.</li> </ul>	N/A
InNATUse	Whether the IPv4 address object group is used by NAT	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The IPv4 address object group is used by NAT.</li> <li><b>false</b>—The IPv4 address object group is not used by NAT.</li> </ul>	N/A

## OMS/IPv6Paging

This table contains information about IPv6 address object groups, IPv6 address objects, and excluded IPv6 addresses.

### XML structure

```

<OMS>
  <IPv6Paging>
    <Group>
      <Name></Name>
      <Description></Description>
      <ObjNum></ObjNum>
      <InUse></InUse>
      <SecurityZone></SecurityZone>
      <ObjList>
        <ID></ID>
        <Type></Type>
        <SubnetIPv6Address></SubnetIPv6Address>
        <IPv6PrefixLen></IPv6PrefixLen>
        <StartIPv6Address></StartIPv6Address>
        <EndIPv6Address></EndIPv6Address>
        <HostIPv6Address></HostIPv6Address>
        <HostName></HostName>
        <NestedGroup></NestedGroup>
      </ObjList>
    </Group>
  </IPv6Paging>
</OMS>

```

```

    <User></User>
    <UserDomain></UserDomain>
    <UserGroup></UserGroup>
    <UserGroupDomain></UserGroupDomain>
    <ExcludeIPv6Address></ExcludeIPv6Address>
  </ObjList>
  <AllGroupsCount></AllGroupsCount>
  <InSecpUse></InSecpUse>
  <InNATUse></InNATUse>
</Group>
</IPv6Paging>
</OMS>

```

## Table description

Item	Description
Feature name	OMS
Table name	IPv6Paging
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the IPv6 address object group	Index	String. Length: 1 to 31 characters.	N/A
Description	Description for the IPv6 address object group	N/A	String. Length: 1 to 127 characters.	N/A
ObjNum	Number of IPv6 address objects	N/A	Unsigned integer.	N/A
InUse	Whether the IPv6 address object group is in use	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The IPv6 address object group is in use.</li> <li><b>false</b>—The IPv6 address object group is not in use.</li> </ul>	N/A
SecurityZone	Security zone of the IPv6 address object group	N/A	String. Length: 1 to 31 characters.	N/A
ObjList	List of IPv6 address objects	Data structure	Members include: <ul style="list-style-type: none"> <li>ID.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Type.</li> <li>SubnetIPv6Address.</li> <li>IPv6PrefixLen..</li> <li>StartIPv6Address.</li> <li>EndIPv6Address.</li> <li>HostIPv6Address.</li> <li>HostName.</li> <li>NestedGroup.</li> <li>User.</li> <li>UserDomain.</li> <li>UserGroup.</li> <li>UserGroupDomain.</li> <li>ExcludeIPv6Address.</li> </ul>	
ID	ID of the IPv6 address object	N/A	Unsigned integer. Value range: 0 to 4294967294.	N/A
Type	Type of the IPv6 address object	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Nested group.</li> <li>1—Subnet.</li> <li>2—Range.</li> <li>3—Host address.</li> <li>4—Host name.</li> <li>5—User.</li> <li>6—User Group.</li> </ul>	N/A
SubnetIPv6Address	IPv6 subnet address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>1</b> .
IPv6PrefixLen	IPv6 prefix length	N/A	Unsigned integer. Value range: 1 to 128.	The value of this column is valid if Type is <b>1</b> .
StartIPv6Address	Start IPv6 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>2</b> .
EndIPv6Address	End IPv6 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>2</b> .
HostIPv6Address	IPv6 address of the host	N/A	String, dotted decimal notation.	The value of this column is valid if Type is <b>3</b> .
HostName	Host name	N/A	String.	The value of this column is

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 60 characters.	valid if Type is <b>4</b> .
NestedGroup	Name of the nested IPv4 address object group	N/A	String. Length: 1 to 31 characters.	The value of this column is valid if Type is <b>0</b> .
User	Name of the user	N/A	String. Length: 1 to 55 characters.	N/A
UserDomain	Name of the user domain	N/A	String. Length: 1 to 255 characters.	N/A
UserGroup	Name of the user group	N/A	String. Length: 1 to 32 characters.	N/A
UserGroupDomain	Name of the user group domain	N/A	String. Length: 1 to 255 characters.	N/A
ExcludeIPv6Address	Excluded IPv6 address	N/A	String, dotted decimal notation.	N/A
AllGroupsCount	Number of IPv6 address groups	N/A	Unsigned integer.	N/A
InSecpUse	Whether the IPv6 address object group is used by Security policy	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The IPv6 address object group is used by Security policy.</li> <li><b>false</b>—The IPv6 address object group is not used by Security policy.</li> </ul>	N/A
InNATUse	Whether the IPv6 address object group is used by NAT	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The IPv6 address object group is used by NAT.</li> <li><b>false</b>—The IPv6 address object group is not used by NAT.</li> </ul>	N/A

## OMS/ServicePaging

This table contains information about service object groups and service objects.

### XML structure

```

<OMS>
  <ServicePaging>
    <Group>
      <Name></Name>
      <Description></Description>
    
```

```

<ObjNum></ObjNum>
<InUse></InUse>
<ServiceType></ServiceType>
<ObjList>
  <ID></ID>
  <Type></Type>
  <Protocol></Protocol>
  <StartSrcPort></StartSrcPort>
  <EndSrcPort></EndSrcPort>
  <StartDestPort></StartDestPort>
  <EndDestPort></EndDestPort>
  <ICMPTType></ICMPTType>
  <ICMPCode></ICMPCode>
  <NestedGroup></NestedGroup>
</ObjList>
<AllGroupsCount></AllGroupsCount>
<InSecpUse></InSecpUse>
<InNATUse></InNATUse>
</Group>
</ServicePaging>
</OMS>

```

## Table description

Item	Description
Feature name	OMS
Table name	ServicePaging
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the service object group	Index	String. Length: 1 to 31 characters.	N/A
Description	Description for the service object group	N/A	String. Length: 1 to 127 characters.	N/A
ObjNum	Number of service objects	N/A	Unsigned integer.	N/A
InUse	Whether the service object group is in use	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The service object group is in use.</li> <li><b>false</b>—The service</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			object group is not in use.	
ServiceType	Type of the service object group	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—System defined service object group.</li> <li>• <b>1</b>—User defined service object group.</li> </ul>	N/A
ObjList	List of service objects	Data structure	Members include: <ul style="list-style-type: none"> <li>• ID.</li> <li>• Type.</li> <li>• Protocol.</li> <li>• StartSrcPort..</li> <li>• EndSrcPort.</li> <li>• StartDestPort.</li> <li>• EndDestPort.</li> <li>• ICMPType.</li> <li>• ICMPCode.</li> <li>• NestedGroup.</li> </ul>	N/A
ID	ID of the service object	N/A	Unsigned integer. Value range: 0 to 4294967294.	N/A
Type	Type of the service object	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Nested group.</li> <li>• <b>1</b>—Protocol. This type specifies protocols other than the listed ones.</li> <li>• <b>2</b>—ICMP (protocol number 1).</li> <li>• <b>3</b>—TCP (protocol number 6).</li> <li>• <b>4</b>—UDP (protocol number 17).</li> <li>• <b>5</b>—ICMPv6 (protocol number 58).</li> </ul>	Required.
Protocol	Protocol number	N/A	Unsigned integer. Value range: 0 to 255.	The value of this column is valid if Type is <b>1</b> .
StartSrcPort	Start source port number	N/A	Unsigned integer. Value range: 0 to 65535.	The value of this column is valid if Type is <b>3</b> or <b>4</b> .
EndSrcPort	End source port number	N/A	Unsigned integer. Value range: 0 to 65535.	The value of this column is valid if Type is <b>3</b> or <b>4</b> .
StartDestPort	Start destination port number	N/A	Unsigned integer.	The value of this column is

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 65535.	valid if Type is <b>3</b> or <b>4</b> .
EndDestPort	End destination port number	N/A	Unsigned integer. Value range: 0 to 65535.	The value of this column is valid if Type is <b>3</b> or <b>4</b> .
ICMPType	Type of the ICMP message	N/A	Unsigned integer. Value range: 0 to 255.	The value of this column is valid if Type is <b>2</b> or <b>5</b> .
ICMPCode	Code of the ICMP message	N/A	Unsigned integer. Value range: 0 to 255.	The value of this column is valid if Type is <b>2</b> or <b>5</b> .
NestedGroup	Name of the nested service object group	N/A	String. Length: 1 to 31 characters.	The value of this column is valid if Type is <b>0</b> .
AllGroupsCount	Number of service groups	N/A	Unsigned integer.	N/A
InSecpUse	Whether the service object group is used by Security policy	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The service object group is used by Security policy.</li> <li><b>false</b>—The service object group is not used by Security policy.</li> </ul>	N/A
InNATUse	Whether the service object group is used by NAT	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The service object group is used by NAT.</li> <li><b>false</b>—The service object group is not used by NAT.</li> </ul>	N/A

## OMS/GetIPv4ObjData

This table contains information about IPv4 address object groups, IPv4 address objects, and excluded IPv4 addresses.

### XML structure

```

<OMS>
  <GetIPv4ObjData>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <SubnetIPv4Address></SubnetIPv4Address>
    </Obj>
  </GetIPv4ObjData>
</OMS>

```

```

    <IPv4Mask></IPv4Mask>
    <IPv4WildcardAddress></IPv4WildcardAddress>
    <IPv4WildcardMask></IPv4WildcardMask>
    <StartIPv4Address></StartIPv4Address>
    <EndIPv4Address></EndIPv4Address>
    <HostIPv4Address></HostIPv4Address>
    <HostName></HostName>
    <NestedGroup></NestedGroup>
    <User></User>
    <UserDomain></UserDomain>
    <UserGroup></UserGroup>
    <UserGroupDomain></UserGroupDomain>
    <ExcludeIPv4Address></ExcludeIPv4Address>
  </Obj>
</GetIPv4ObjData>
</OMS>

```

## Table description

Item	Description
Feature name	OMS
Table name	GetIPv4ObjData
Table type	Multi-instance table
Row name	Obj
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the IPv4 address object group	Index	String. Length: 1 to 31 characters.	N/A
ID	ID of the IPv4 address object	Index	Unsigned integer. Value range: 0 to 4294967294.	N/A
Type	Type of the IPv4 address object	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Nested group.</li> <li>1—Subnet.</li> <li>2—Range.</li> <li>3—Host address.</li> <li>4—Host name.</li> <li>5—User.</li> <li>6—User group.</li> <li>7—Wildcard.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SubnetIPv4Address	IPv4 subnet address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 1.
IPv4Mask	IPv4 subnet mask	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 1.
IPv4WildcardAddress	IPv4 wildcard address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 7.
IPv4WildcardMask	IPv4 wildcard mask	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 7.
StartIPv4Address	Start IPv4 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 2.
EndIPv4Address	End IPv4 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 2.
HostIPv4Address	IPv4 address of the host	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 3.
HostName	Host name	N/A	String. Length: 1 to 60 characters.	The value of this column is valid if Type is 4.
NestedGroup	Name of the nested IPv4 address object group	N/A	String. Length: 1 to 31 characters.	The value of this column is valid if Type is 0.
User	Name of the user	N/A	String. Length: 1 to 55 characters.	N/A
UserDomain	Name of the user domain	N/A	String. Length: 1 to 255 characters.	N/A
UserGroup	Name of the user group	N/A	String. Length: 1 to 32 characters.	N/A
UserGroupDomain	Name of the user group domain	N/A	String. Length: 1 to 255 characters.	N/A
ExcludeIPv4Address	Excluded IPv4 address	N/A	String, dotted decimal notation.	N/A

# OMS/GetIPv6ObjData

This table contains information about IPv6 address object groups, IPv6 address objects, and excluded IPv6 addresses.

## XML structure

```
<OMS>
  <GetIPv6ObjData>
    <Obj>
      <Group></Group>
      <ID></ID>
      <Type></Type>
      <SubnetIPv6Address></SubnetIPv6Address>
      <IPv6PrefixLen></IPv6PrefixLen>
      <StartIPv6Address></StartIPv6Address>
      <EndIPv6Address></EndIPv6Address>
      <HostIPv6Address></HostIPv6Address>
      <HostName></HostName>
      <NestedGroup></NestedGroup>
      <User></User>
      <UserDomain></UserDomain>
      <UserGroup></UserGroup>
      <UserGroupDomain></UserGroupDomain>
      <ExcludeIPv6Address></ExcludeIPv6Address>
    </Obj>
  </GetIPv6ObjData>
</OMS>
```

## Table description

Item	Description
Feature name	OMS
Table name	GetIPv6ObjData
Table type	Multi-instance table
Row name	Obj
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Name of the IPv6 address object group	Index	String. Length: 1 to 31 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
ID	ID of the IPv6 address object	Index	Unsigned integer. Value range: 0 to 4294967294.	N/A
Type	Type of the IPv6 address object	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Nested group.</li> <li>1—Subnet.</li> <li>2—Range.</li> <li>3—Host address.</li> <li>4—Host name.</li> <li>5—User.</li> <li>6—User Group.</li> </ul>	N/A
SubnetIPv6Address	IPv6 subnet address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 1.
IPv6PrefixLen	IPv6 prefix length	N/A	Unsigned integer. Value range: 1 to 128.	The value of this column is valid if Type is 1.
StartIPv6Address	Start IPv6 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 2.
EndIPv6Address	End IPv6 address	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 2.
HostIPv6Address	IPv6 address of the host	N/A	String, dotted decimal notation.	The value of this column is valid if Type is 3.
HostName	Host name	N/A	String. Length: 1 to 60 characters.	The value of this column is valid if Type is 4.
NestedGroup	Name of the nested IPv4 address object group	N/A	String. Length: 1 to 31 characters.	The value of this column is valid if Type is 0.
User	Name of the user.	N/A	String. Length: 1 to 55 characters.	N/A
UserDomain	Name of the user domain.	N/A	String. Length: 1 to 255 characters.	N/A
UserGroup	Name of the user group.	N/A	String. Length: 1 to 32 characters.	N/A
UserGroupDomain	Name of the user group domain	N/A	String. Length: 1 to 255	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
ExcludeIPv6Address	Excluded IPv6 address.	N/A	String, dotted decimal notation.	N/A

# Contents

OMS.....1

    OMS .....1

# OMS

## OMS

Message	Explanation
The object group name is used by an object group of different type. 存在同名不同类型的对象组。	Object group name is occupied by other types of object groups. 对象组名称被其他类型的对象组占用。
The default object group can't be modified. 系统定义对象组不能修改。	Modify system predefined object groups. 修改系统预定义的对象组。
The default object group can't be deleted. 系统定义对象组不能删除。	Delete system predefined object groups. 删除系统预定义的对象组。
Deleting the group failed: Wrong group type. 对象组类型不匹配。	The specified type is incorrect when deleting an object group. 删除对象组时指定类型错误。
This object group is already referenced. 对象组正在被使用。	Deleted object groups are referenced by other modules. 删除的对象组被其他模块引用。
The ID can't be automatically assigned. Please specify a valid ID. 自动分配的对象编号超出了范围，请指定一个有效的对象编号。	Create a rule without specifying a number, the number of internal assignments exceeds the maximum value. 不指定编号创建规则，内部分配的编号超过最大值。
An object group can't reference an object group of different type. 被嵌套对象组类型不一致。	Nested object group types are inconsistent with parent object group types. 嵌套的对象组类型与父对象组类型不一致。
Maximum number of reference hierarchy layers (5) already reached. 嵌套层数最大支持5层。	The object group to be nested is already the sixth layer. 将要嵌套的对象组已经是第六层。
Two object groups can't reference each other. 不能形成循环引用。	A nested sub-object group cannot nest its parent object group. 被嵌套的子对象组不能嵌套其父对象组。
Invalid mask. 无效的掩码。	The address mask entered is incorrect. 输入的地址掩码错误。
Maximum number of objects already reached. 对象组中对象的个数超过了限制。	Object group configuration rules reach the upper limit. 对象组配置的规则达到上限。
The object already exists. 此对象已经存在。	The newly created rule content is the same as the other rule content that already exists. 新创建的规则内容与已存在的其他规则内容相同。
This object group can't be referenced. 此对象组不可以被引用。	System predefined object group "any" cannot be nested. 系统预定义的对象组any不能被嵌套。

# Contents

openconfig-bgp	1
openconfig-bgp/bgp	1
XML structure	1
Table description	4
Columns	4
openconfig-bgp/bgp/global	4
XML structure	4
Table description	4
Columns	5
openconfig-bgp/bgp/global/config	5
XML structure	5
Table description	5
Columns	6
openconfig-bgp/bgp/global/default-route-distance	6
XML structure	6
Table description	6
Columns	6
openconfig-bgp/bgp/global/default-route-distance/config	6
XML structure	7
Table description	7
Columns	7
openconfig-bgp/bgp/global/route-selection-options	7
XML structure	7
Table description	7
Columns	8
openconfig-bgp/bgp/global/route-selection-options/config	8
XML structure	8
Table description	8
Columns	8
openconfig-bgp/bgp/global/afi-safis	9
XML structure	9
Table description	9
Columns	9
openconfig-bgp/bgp/global/afi-safis/afi-safi	9
XML structure	9
Table description	9
Columns	10
openconfig-bgp/bgp/global/afi-safis/afi-safi/config	10
XML structure	11
Table description	11
Columns	11
openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths	12
XML structure	12
Table description	12
Columns	12
openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/config	13
XML structure	13
Table description	13
Columns	13
openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/ebgp	13
XML structure	13
Table description	13
Columns	14
openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/ebgp/config	14
XML structure	14
Table description	14
Columns	14

openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/ibgp .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/ibgp/config .....	15
XML structure .....	16
Table description .....	16
Columns .....	16
openconfig-bgp/bgp/peer-groups .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
openconfig-bgp/bgp/peer-groups/peer-group .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
openconfig-bgp/bgp/peer-groups/peer-group/config .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
openconfig-bgp/bgp/peer-groups/peer-group/timers .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
openconfig-bgp/bgp/peer-groups/peer-group/timers/config .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
openconfig-bgp/bgp/peer-groups/peer-group/apply-policy .....	21
XML structure .....	21
Table description .....	21
Columns .....	21
openconfig-bgp/bgp/peer-groups/peer-group/apply-policy/config .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
openconfig-bgp/bgp/peer-groups/peer-group/afi-safis .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
openconfig-bgp/bgp/peer-groups/peer-group/afi-safis/afi-safi .....	23
XML structure .....	23
Table description .....	23
Columns .....	23
openconfig-bgp/bgp/peer-groups/peer-group/afi-safis/afi-safi/config .....	24
XML structure .....	24
Table description .....	24
Columns .....	25
openconfig-bgp/bgp/peer-groups/peer-group/afi-safis/afi-safi/apply-policy .....	25
XML structure .....	25
Table description .....	26
Columns .....	26
openconfig-bgp/bgp/peer-groups/peer-group/afi-safis/afi-safi/apply-policy/config .....	26
XML structure .....	26
Table description .....	26
Columns .....	27
openconfig-bgp/bgp/neighbors .....	27
XML structure .....	27
Table description .....	27
Columns .....	27
openconfig-bgp/bgp/neighbors/neighbor .....	27
XML structure .....	28

Table description .....	28
Columns .....	28
openconfig-bgp/bgp/neighbors/neighbor/config .....	29
XML structure .....	29
Table description .....	29
Columns .....	29
openconfig-bgp/bgp/neighbors/neighbor/state .....	30
XML structure .....	30
Table description .....	30
Columns .....	30
openconfig-bgp/bgp/neighbors/neighbor/timers .....	31
XML structure .....	31
Table description .....	31
Columns .....	31
openconfig-bgp/bgp/neighbors/neighbor/timers/config .....	32
XML structure .....	32
Table description .....	32
Columns .....	32
openconfig-bgp/bgp/neighbors/neighbor/apply-policy .....	33
XML structure .....	33
Table description .....	33
Columns .....	33
openconfig-bgp/bgp/neighbors/neighbor/apply-policy/config .....	33
XML structure .....	33
Table description .....	34
Columns .....	34
openconfig-bgp/bgp/neighbors/neighbor/afi-safis .....	34
XML structure .....	34
Table description .....	34
Columns .....	35
openconfig-bgp/bgp/neighbors/neighbor/afi-safis/afi-safi .....	35
XML structure .....	35
Table description .....	35
Columns .....	35
openconfig-bgp/bgp/neighbors/neighbor/afi-safis/afi-safi/config .....	36
XML structure .....	36
Table description .....	36
Columns .....	37
openconfig-bgp/bgp/neighbors/neighbor/afi-safis/afi-safi/apply-policy .....	37
XML structure .....	37
Table description .....	37
Columns .....	38
openconfig-bgp/bgp/neighbors/neighbor/afi-safis/afi-safi/apply-policy/config .....	38
XML structure .....	38
Table description .....	38
Columns .....	38

# openconfig-bgp

## openconfig-bgp/bgp

This table contains bgp information.

### XML structure

```
<openconfig-bgp>
  <bgp>
    <global>
      <config>
        <as></as>
        <router-id></router-id>
      </config>
    <default-route-distance>
      <config>
        <external-route-distance></external-route-distance>
        <internal-route-distance></internal-route-distance>
      </config>
    </default-route-distance>
    <route-selection-options>
      <config>
        <always-compare-med></always-compare-med>
      </config>
    </route-selection-options>
    <afi-safis>
      <afi-safi>
        <afi-safi-name></afi-safi-name>
        <config>
          <afi-safi-name></afi-safi-name>
          <enabled></enabled>
        </config>
        <use-multiple-paths>
          <config>
            <enabled></enabled>
          </config>
        <ebgp>
          <config>
            <maximum-paths></maximum-paths>
          </config>
        </ebgp>
        <ibgp>
          <config>
            <maximum-paths></maximum-paths>
          </config>
        </ibgp>
      </afi-safi>
    </afi-safis>
  </bgp>
</openconfig-bgp>
```



```

        </ibgp>
    </use-multiple-paths>
</afi-safi>
</afi-safis>
</global>
<peer-groups>
    <peer-group>
        <peer-group-name></peer-group-name>
        <config>
            <peer-group-name></peer-group-name>
            <peer-as></peer-as>
            <peer-type></peer-type>
            <auth-password></auth-password>
            <send-community></send-community>
            <description></description>
        </config>
        <timers>
            <config>
                <minimum-advertisement-interval></minimum-advertisement-interval>
            </config>
        </timers>
        <apply-policy>
            <config>
                <import-policy></import-policy>
                <export-policy></export-policy>
            </config>
        </apply-policy>
    </afi-safis>
    <afi-safi>
        <afi-safi-name></afi-safi-name>
        <config>
            <afi-safi-name></afi-safi-name>
            <enabled></enabled>
        </config>
        <apply-policy>
            <config>
                <import-policy></import-policy>
                <export-policy></export-policy>
            </config>
        </apply-policy>
    </afi-safi>
</afi-safis>
</peer-group>
</peer-groups>
<neighbors>
    <neighbor>
        <neighbor-address></neighbor-address>
    </neighbor>
</neighbors>

```

```

    <neighbor-address></neighbor-address>
    <enabled></enabled>
    <peer-as></peer-as>
    <peer-group></peer-group>
    <auth-password></auth-password>
    <send-community></send-community>
    <description></description>
</config>
<state>
    <neighbor-address></neighbor-address>
    <enabled></enabled>
    <peer-as></peer-as>
    <session-state></session-state>
    <peer-group></peer-group>
    <auth-password></auth-password>
    <send-community></send-community>
    <description></description>
</state>
<timers>
    <config>
        <minimum-advertisement-interval></minimum-advertisement-interval>
    </config>
</timers>
<apply-policy>
    <config>
        <import-policy></import-policy>
        <export-policy></export-policy>
    </config>
</apply-policy>
<afi-safis>
    <afi-safi>
        <afi-safi-name></afi-safi-name>
        <config>
            <afi-safi-name></afi-safi-name>
            <enabled></enabled>
        </config>
        <apply-policy>
            <config>
                <import-policy></import-policy>
                <export-policy></export-policy>
            </config>
        </apply-policy>
    </afi-safi>
</afi-safis>
</neighbor>
</neighbors>
</bgp>
</openconfig-bgp>

```

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	bgp
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
global	global information	Subtable	N/A	For more information, see the bgp/global table.
peer-groups	peer-groups information	Subtable	N/A	For more information, see the bgp/peer-groups table.
neighbors	neighbors information	Subtable	N/A	For more information, see the bgp/neighbors table.

## openconfig-bgp/bgp/global

This table contains bgp global information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	global
Table type	Single-instance table
Row name	N/A
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Config information	Subtable	N/A	For more information, see the bgp/global/config table.
default-route-distance	default-route-distance information	Subtable	N/A	For more information, see the bgp/global/default-route-distance.
route-selection-options	route-selection-options information	Subtable	N/A	For more information, see the bgp/global/route-selection-options.
afi-safis	afi-safis information	Subtable	N/A	For more information, see the bgp/global/afi-safis.

## openconfig-bgp/bgp/global/config

This table contains bgp global config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
as	Local autonomous system number	N/A	32-bit as-number type from the model in RFC 6991.	N/A
router-id	Router id	N/A	IPv4 address string	N/A

## openconfig-bgp/bgp/global/default-route-distance

This table contains bgp global default-route-distance information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	default-route-distance
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/global/default-route-distance/config table.

## openconfig-bgp/bgp/global/default-route-distance/config

This table contains bgp global default-route-distance config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
external-route-distance	Administrative distance for routes learned from external	N/A	Unsigned int. Value range: 1 to 255	N/A
internal-route-distance	Administrative distance for routes learned from internal	N/A	Unsigned int. Value range: 1 to 255	N/A

## openconfig-bgp/bgp/global/route-selection-options

This table contains bgp global route-selection-options information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	route-selection-options
Table type	Single-instance table

Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/global/route-selection-options/config table.

# openconfig-bgp/bgp/global/route-selection-options/config

This table contains bgp global route-selection-options config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
always-compare-med	Compare multi-exit discriminator (MED) value from different ASes	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# openconfig-bgp/bgp/global/afi-safis

This table contains bgp global afi-safis information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	afi-safis
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afi-safi	afi-saf information	Sublist	N/A	For more information, see the bgp/global/afi-safis/afi-safi table.

# openconfig-bgp/bgp/global/afi-safis/afi-safi

This table contains bgp global afi-safis afi-safi information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	afi-safi



Table type	Multi-instance table
Row name	afi-safi
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afi-safi-name	AFI,SAFI	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPV4_UNICAST.</li> <li>• 2—IPV6_UNICAST.</li> <li>• 3—L3VPN_IPV4_UNICAST</li> <li>• 4—L3VPN_IPV6_UNICAST</li> <li>• 5—L2VPN_VPLS</li> <li>• 6—L2VPN_EVPN.</li> <li>• 7—IPV4_LABELED_UNICAST</li> <li>• 8—IPV6_LABELED_UNICAST</li> <li>• 9—L3VPN_IPV4_MULTICAST</li> <li>• 10—L3VPN_IPV6_MULTICAST</li> </ul>	N/A
config	config information	Subtable	N/A	For more information, see the bgp/global/afi-safis/afi-safi/config table.
use-multiple-paths	use-multiple-paths information	Subtable	N/A	For more information, see the bgp/global/afi-safis/afi-safi/use-multiple-paths table.

## openconfig-bgp/bgp/global/afi-safis/afi-safi/config

This table contains bgp global afi-safis afi-safi config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afi-safi-name	AFI,SAFI	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—IPV4_UNICAST.</li><li>• 2—IPV6_UNICAST.</li><li>• 3—L3VPN_IPV4_UNICAST</li><li>• 4—L3VPN_IPV6_UNICAST</li><li>• 5—L2VPN_VPLS</li><li>• 6—L2VPN_EVPN.</li><li>• 7—IPV4_LABELED_UNICAST</li><li>• 8—IPV6_LABELED_UNICAST</li><li>• 9—L3VPN_IPV4_MULTICAST</li><li>• 10—L3VPN_IPV6_MULTICAST</li></ul>	N/A
enabled	indicates whether the AFI,SAFI is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>• true</li><li>• false</li></ul>	N/A

# openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths

This table contains bgp global afi-safis afi-safi use-multiple-paths information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	use-multiple-paths
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/global/afi-safis/afi-safi/use-multiple-paths/config table.
ebgp	ebgp information	Subtable	N/A	For more information, see the bgp/global/afi-safis/afi-safi/use-multiple-paths/ebgp table.
ibgp	ebgp information	Subtable	N/A	For more information, see the bgp/global/afi-safis/afi-safi/use-multiple-paths/ibgp table.

# openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/config

This table contains bgp global afi-safis afi-safi use-multiple-paths config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
enabled	indicates whether the AFI,SAFI is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A

# openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/ebgp

This table contains bgp global afi-safis afi-safi use-multiple-paths ebgp information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp

Table name	ebgp
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/global/afi-safis/afi-safi/use-multiple-paths/ebgp/config table.

## openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/ebgp/config

This table contains bgp global afi-safis afi-safi use-multiple-paths ebgp config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
maximum-paths	Maximum number of	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	parallel paths to consider		Value range: 1 to 255	

## openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/ibgp

This table contains bgp global afi-safis afi-safi use-multiple-paths ibgp information.

### XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

### Table description

Item	Description
Feature name	openconfig-bgp
Table name	ibgp
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/global/afi-safis/afi-safi/use-multiple-paths/ibgp/config table.

## openconfig-bgp/bgp/global/afi-safis/afi-safi/use-multiple-paths/ibgp/config

This table contains bgp global afi-safis afi-safi use-multiple-paths ibgp config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
maximum-paths	Maximum number of parallel paths to consider	N/A	Unsigned integer. Value range: 1 to 255	N/A

## openconfig-bgp/bgp/peer-groups

This table contains bgp peer-groups information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	Peer-groups
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Peer-group	Peer-group information	Sublist	N/A	For more information, see the bgp/peer-groups/peer-group table.

## openconfig-bgp/bgp/peer-groups/peer-group

This table contains bgp peer-groups peer-group information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	peer-group
Table type	Multi-instance table
Row name	peer-group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
peer-group-name	peer-group name	Index	String. Length: 1 to 47 characters.	N/A
config	Config information	Subtable	N/A	For more information, see the bgp/peer-groups/peer-group/config table.
timers	Timers information	Subtable	N/A	For more information, see the bgp/peer-groups/peer-group/timers table.



Column name	Column description	Column type	Data type and restrictions	Remarks
apply-policy	Apply-policy information	Subtable	N/A	For more information, see the bgp/peer-groups/peer-group/apply-policy table.
afi-safis	Afi-safis information	Subtable	N/A	For more information, see the bgp/peer-groups/peer-group/afi-safis table.

## openconfig-bgp/bgp/peer-groups/peer-group/config

This table contains bgp peer-groups peer-group config information.

### XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

### Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
peer-group-name	peer-group name	Index	String. Length: 1 to 47 characters.	N/A
peer-as	AS number of the peer	N/A	Unsigned integer. Value range: 1 to 4294967295	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
peer-type	Explicitly designate the peer or peer group as internal (iBGP) or external (eBGP)	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—EXTERNAL.</li> <li>2—INTERNAL.</li> </ul>	N/A
auth-password	MD5 authentication password	N/A	String. Length: 1 to 80 characters.	N/A
send-community	Specify which types of community should be sent to the neighbor or group. The default is to not send the community attribute	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—STANDARD.</li> <li>2—EXTENDED.</li> <li>3—BOTH.</li> <li>4—NONE.</li> </ul>	N/A
description	textual description	N/A	String. Length: 1 to 79 characters.	N/A

## openconfig-bgp/bgp/peer-groups/peer-group/timers

This table contains bgp peer-groups peer-group timers information.

### XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

### Table description

Item	Description
Feature name	openconfig-bgp
Table name	timers
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/peer-groups/peer-group/timers/config table.

## openconfig-bgp/bgp/peer-groups/peer-group/timers/config

This table contains bgp peer-groups peer-group timers config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
minimum-advertisement-interval	Minimum time which must elapse between subsequent UPDATE messages relating to a common set of NLRI being transmitted to a peer	N/A	Unsigned integer. Value range: 0 to 600	N/A

# openconfig-bgp/bgp/peer-groups/peer-group/apply-policy

This table contains bgp peer-groups peer-group apply-policy information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	apply-policy
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/peer-groups/peer-group/apply-policy/config table.

# openconfig-bgp/bgp/peer-groups/peer-group/apply-policy/config

This table contains bgp peer-groups peer-group apply-policy config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
import-policy	Import Route-Policy for Neighbor	N/A	String. Length: 1 to 63 characters.	N/A
export-policy	Export Route-Policy for Neighbor	N/A	String. Length: 1 to 63 characters.	N/A

## openconfig-bgp/bgp/peer-groups/peer-group/afi-safis

This table contains bgp peer-groups peer-group afi-safis information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	afi-safis
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afi-safi	afi-safi information	Sublist	N/A	For more information, see the bgp/peer-groups/peer-group/afi-safis/afi-safi table.

## openconfig-bgp/bgp/peer-groups/peer-group/afi-safis/afi-safi

This table contains bgp peer-groups peer-group afi-safis afi-safi information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	afi-safi
Table type	Multi-instance table
Row name	afi-safi
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afi-safi-name	AFI,SAFI	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPV4_UNICAST.</li><li>2—IPV6_UNICAST.</li><li>3—L3VPN_IPV4_UNICAST</li><li>4—L3VPN_IPV6_UNICAST</li><li>5—L2VPN_VPLS</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>6—L2VPN_EVPN.</li> <li>7—IPV4_LABELED_UNICAST</li> <li>8—IPV6_LABELED_UNICAST</li> <li>9—L3VPN_IPV4_MULTICAST</li> <li>10—L3VPN_IPV6_MULTICAST</li> </ul>	
config	config information	Subtable	N/A	For more information, see the <code>bgp/peer-groups/peer-group/afi-safis/afi-safi/config</code> table.
apply-policy	apply-policy information	Subtable	N/A	For more information, see the <code>bgp/peer-groups/peer-group/afi-safis/afi-safi/apply-policy</code> table.

## openconfig-bgp/bgp/peer-groups/peer-group/afi-safis/afi-safi/config

This table contains bgp peer-groups peer-group afi-safis afi-safi config information.

### XML structure

Please refer to the XML structure of `openconfig-bgp/bgp`.

### Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None

Support for row creation and deletion

Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afi-safi-name	AFI,SAFI	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPV4_UNICAST.</li> <li>• 2—IPV6_UNICAST.</li> <li>• 3—L3VPN_IPV4_UNICAST</li> <li>• 4—L3VPN_IPV6_UNICAST</li> <li>• 5—L2VPN_VPLS</li> <li>• 6—L2VPN_EVPN.</li> <li>• 7—IPV4_LABELED_UNICAST</li> <li>• 8—IPV6_LABELED_UNICAST</li> <li>• 9—L3VPN_IPV4_MULTICAST</li> <li>• 10—L3VPN_IPV6_MULTICAST</li> </ul>	N/A
enabled	indicates whether the AFI,SAFI is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	N/A

## openconfig-bgp/bgp/peer-groups/peer-group/afi-safis/afi-safi/apply-policy

This table contains bgp peer-groups peer-group afi-safis afi-safi apply-policy information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.



## Table description

Item	Description
Feature name	openconfig-bgp
Table name	apply-policy
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/peer-groups/peer-group/afi-safis/afi-safi/apply-policy/config table.

## openconfig-bgp/bgp/peer-groups/peer-group/afi-safis/afi-safi/apply-policy/config

This table contains bgp peer-groups peer-group afi-safis afi-safi apply-policy config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
import-policy	Import Route-Policy for Neighbor	N/A	String. Length: 1 to 63 characters.	N/A
export-policy	Export Route-Policy for Neighbor	N/A	String. Length: 1 to 63 characters.	N/A

## openconfig-bgp/bgp/neighbors

This table contains bgp neighbors information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	neighbors
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
neighbor	neighbor information	Sublist	N/A	For more information, see the bgp/neighbors/neighbor table.

## openconfig-bgp/bgp/neighbors/neighbor

This table contains bgp neighbors neighbor information.

# XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	neighbor
Table type	Multi-instance table
Row name	neighbor
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
neighbor-address	Neighbor address	Index	String, IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
config	Config information	Subtable	N/A	For more information, see the bgp/neighbors/neighbor/config table.
timers	Timers information	Subtable	N/A	For more information, see the bgp/neighbors/neighbor/timers table.
apply-policy	Apply-policy information	Subtable	N/A	For more information, see the bgp/neighbors/neighbor/apply-policy table.
afi-safis	Afi-safis information	Subtable	N/A	For more information, see the bgp/neighbors/neighbor/afi-afis table.

# openconfig-bgp/bgp/neighbors/neighbor/config

This table contains bgp neighbors neighbor config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
neighbor-address	Neighbor address	Index	String, IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
enabled	Whether the BGP peer is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A
peer-as	AS number of the peer	N/A	Unsigned integer. Value range: 1 to 4294967295	N/A
peer-group	The peer-group with which this neighbor is associated	N/A	String. Length: 1 to 16 characters.	N/A
auth-password	MD5 authentication password	N/A	String. Length: 1 to 80 characters.	N/A
send-community	Specify which types of community should be sent to the neighbor or group. The default is to not send the community attribute	N/A	Enumeration: <ul style="list-style-type: none"><li>1—STANDARD.</li><li>2—EXTENDED.</li><li>3—BOTH.</li><li>4—NONE.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
description	textual description	N/A	String. Length: 1 to 79 characters.	N/A

## openconfig-bgp/bgp/neighbors/neighbor/state

This table contains bgp neighbors neighbor state information.

### XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

### Table description

Item	Description
Feature name	openconfig-bgp
Table name	state
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
neighbor-address	Neighbor address	Index	String,IPv4 address string or IPv6 address string.	Example: 1.1.1.1 or 1::1.
enabled	Whether the BGP peer is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
peer-as	AS number of the peer	N/A	Unsigned integer. Value range: 1 to 4294967295	N/A
session-state	Operational state of the BGP peer	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IDLE</li> <li>2—CONNECT</li> <li>3—ACTIVE</li> <li>4—OPENSENT</li> <li>5—OPENCONFIRM</li> <li>6—ESTABLISHED</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
peer-group	The peer-group with which this neighbor is associated	N/A	String. Length: 1 to 16 characters.	N/A
auth-password	MD5 authentication password	N/A	String. Length: 1 to 80 characters.	N/A
send-community	Specify which types of community should be sent to the neighbor or group. The default is to not send the community attribute	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—STANDARD.</li> <li>• 2—EXTENDED.</li> <li>• 3—BOTH.</li> <li>• 4—NONE.</li> </ul>	N/A
description	textual description	N/A	String. Length: 1 to 79 characters.	N/A

## openconfig-bgp/bgp/neighbors/neighbor/timers

This table contains bgp neighbors neighbor timers information.

### XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

### Table description

Item	Description
Feature name	openconfig-bgp
Table name	timers
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the

Column name	Column description	Column type	Data type and restrictions	Remarks
				bgp/neighbors/neighbor/timers/config table.

## openconfig-bgp/bgp/neighbors/neighbor/timers/config

This table contains bgp neighbors neighbor timers config information.

### XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

### Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
minimum-advertisement-interval	Minimum time which must elapse between subsequent UPDATE messages relating to a common set of NLRI being transmitted to a peer	N/A	Unsigned integer. Value range: 0 to 600	N/A

# openconfig-bgp/bgp/neighbors/neighbor/apply-policy

This table contains bgp neighbors neighbor apply-policy information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	apply-policy
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/neighbors/neighbor/apply-policy/config table.

# openconfig-bgp/bgp/neighbors/neighbor/apply-policy/config

This table contains bgp neighbors neighbor apply-policy config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.



## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
import-policy	Import Route-Policy for Neighbor	N/A	String. Length: 1 to 63 characters.	N/A
export-policy	Export Route-Policy for Neighbor	N/A	String. Length: 1 to 63 characters.	N/A

## openconfig-bgp/bgp/neighbors/neighbor/afi-safis

This table contains bgp neighbors neighbor afi-safis information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	afi-safis
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afi-safi	afi-safi information	Sublist	N/A	For more information, see the bgp/neighbors/neighbor/afi-safis/afi-safi table.

## openconfig-bgp/bgp/neighbors/neighbor/afi-safis/afi-safi

This table contains bgp neighbors neighbor afi-safis afi-safi information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	afi-safi
Table type	Multi-instance table
Row name	afi-safi
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afi-safi-name	AFI,SAFI	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPV4_UNICAST.</li><li>2—IPV6_UNICAST.</li><li>3—L3VPN_IPV4_UNICAST</li><li>4—L3VPN_IPV6_UNICAST</li><li>5—L2VPN_VPLS</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>6—L2VPN_EVPN.</li> <li>7—IPV4_LABELED_UNICAST</li> <li>8—IPV6_LABELED_UNICAST</li> <li>9—L3VPN_IPV4_MULTICAST</li> <li>10—L3VPN_IPV6_MULTICAST</li> </ul>	
config	config information	Subtable	N/A	For more information, see the bgp/neighbors/neighbor/afi-safis/afi-safi/config table.
apply-policy	apply-policy information	Subtable	N/A	For more information, see the bgp/neighbors/neighbor/afi-safis/afi-safi/ apply-policy table.

## openconfig-bgp/bgp/neighbors/neighbor/afi-safis/afi-safi/config

This table contains bgp neighbors neighbor afi-safis afi-safi config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
afi-safi-name	AFI,SAFI	Index	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPV4_UNICAST.</li> <li>• 2—IPV6_UNICAST.</li> <li>• 3—L3VPN_IPV4_UNICAST</li> <li>• 4—L3VPN_IPV6_UNICAST</li> <li>• 5—L2VPN_VPLS</li> <li>• 6—L2VPN_EVPN.</li> <li>• 7—IPV4_LABELED_UNICAST</li> <li>• 8—IPV6_LABELED_UNICAST</li> <li>• 9—L3VPN_IPV4_MULTICAST</li> <li>• 10—L3VPN_IPV6_MULTICAST</li> </ul>	N/A
enabled	indicates whether the AFI,SAFI is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	N/A

## openconfig-bgp/bgp/neighbors/neighbor/afi-safis/afi-safi/apply-policy

This table contains bgp neighbors neighbor afi-safis afi-safi apply-policy information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	apply-policy

Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	config information	Subtable	N/A	For more information, see the bgp/neighbors/neighbor/afi-safis/afi-safi/apply-policy/config table.

## openconfig-bgp/bgp/neighbors/neighbor/afi-safis/afi-safi/apply-policy/config

This table contains bgp neighbors neighbor afi-safis afi-safi apply-policy config information.

## XML structure

Please refer to the XML structure of openconfig-bgp/bgp.

## Table description

Item	Description
Feature name	openconfig-bgp
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
import-policy	Import Route-Policy for Neighbor	N/A	String. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
export-policy	Export Route-Policy for Neighbor	N/A	String. Length: 1 to 63 characters.	N/A

# Contents

DHCP .....	2
openconfig-relay-agent/relay-agent/dhcp .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
openconfig-relay-agent/relay-agent/dhcp/config .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
openconfig-relay-agent/relay-agent/dhcp/interface .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
openconfig-relay-agent/relay-agent/dhcp/interface/config .....	5
XML structure .....	5
Table description .....	5
Columns .....	5

# DHCP

## openconfig-relay-agent/relay-agent/dhcp

This table contains DHCP information.

### XML structure

```
<openconfig-relay-agent xmlns="http://openconfig.net/yang/relay-agent">
  <relay-agent>
    <dhcp>
      <config>
        <enable-relay-agent></enable-relay-agent>
      </config>
      <interfaces>
        <interface>
          <id></id>
          <config>
            <id></id>
            <enable></enable>
            <helper-address></helper-address>
          </config>
        </interface>
      </interfaces>
    </dhcp>
  </relay-agent>
</openconfig-relay-agent>
```

### Table description

Item	Description
Feature name	DHCP
Table name	dhcp
Table type	Single-instance table



Item	Description
Row name	dhcp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Configuration information	Subtable	N/A	For more information, see the dhcp/config table.
interfaces	Interface information	Subtable	N/A	For more information, see the dhcp/interfaces table.

## openconfig-relay-agent/relay-agent/dhcp/config

This table contains DHCP configuration information.

## XML structure

Please refer to the XML structure of openconfig-relay-agent/relay-agent/dhcp.

## Table description

Item	Description
Feature name	DHCP
Table name	config
Table type	Single-instance table
Row name	config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
enable-relay-agent	Enabling status of DHCP relay-agent on all interfaces	N/A	Boolean: <ul style="list-style-type: none"><li>● <b>true</b>—Enabled.</li><li>● <b>false</b>—Disabled.</li></ul>	N/A

## openconfig-relay-agent/relay-agent/dhcp/interface

This table contains DHCP interface information.

## XML structure

Please refer to the XML structure of openconfig-relay-agent/relay-agent/dhcp.

## Table description

Item	Description
Feature name	DHCP
Table name	interface
Table type	Single-instance table
Row name	interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
id	Reference to the interface list key	Index	String: Length: 1 to 46 characters.	N/A
config	Configuration information	Subtable	N/A	For more information, see the

Column name	Column description	Column type	Data type and restrictions	Remarks
				dhcp/interfaces /config table.

## openconfig-relay-agent/relay-agent/dhcp/interface/config

This table contains DHCP interface config information

### XML structure

Please refer to the XML structure of openconfig-relay-agent/relay-agent/dhcp.

### Table description

Item	Description
Feature name	DHCP
Table name	config
Table type	Single-instance table
Row name	config
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
id	Name of the interface on which relay agent is active	Index	String: Length: 1 to 46 characters.	N/A
enable	Enabling status of the relay agent on the referenced	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	interface			
helper-addresses	List of the IPv4 addresses of DHCP servers to which the relay agent should forward DHCPv4 requests.	N/A	String: Length: 1 to 42 characters.	This command only supports the IPv4 address.

# Contents

openconfig-if-ip .....	1
openconfig-if-ip/ipv4 .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
openconfig-if-ip/ipv4/addresses .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
openconfig-if-ip/ipv4/addresses/address .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
openconfig-if-ip/ipv4/addresses/address/config .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
openconfig-if-ip/ipv6 .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
openconfig-if-ip/ipv6/addresses .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
openconfig-if-ip/ipv6/addresses/address .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
openconfig-if-ip/ipv6/addresses/address/config .....	6
XML structure .....	6
Table description .....	6
Columns .....	6

# openconfig-if-ip

## openconfig-if-ip/ipv4

This table contains IPv4 address family configuration for interfaces.

### XML structure

```
<openconfig-if-ip>
  <ipv4>
    <addresses>
      <address>
        <ip></ip>
        <config>
          <ip></ip>
          <prefix-length></prefix-length>
        </config>
      </address>
    </addresses>
  </ipv4>
</openconfig-if-ip>
```

### Table description

Item	Description
Feature name	openconfig-if-ip
Table name	Ipv4
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
addresses	Enclose container for address list	Subtable	N/A	For more information, see the ipv4/addresses table.

# openconfig-if-ip/ipv4/addresses

This table contains information about enclosing container for address list.

## XML structure

Please refer to the XML structure of openconfig-if-ip/ipv4.

## Table description

Item	Description
Feature name	openconfig-if-ip
Table name	addresses
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
address	List of configured IPv4 addresses on the interface	sublist	N/A.	For more information, see the ipv4/addresses/address table.

# openconfig-if-ip/ipv4/addresses/address

This table contains IPv4 addresses config information.

## XML structure

Please refer to the XML structure of openconfig-if-ip/ipv4/addresses.

## Table description

Item	Description
Feature name	openconfig-if-ip
Table name	address
Table type	Multi-instance table
Row name	N/A

Item	Description
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ip	IPv4 address	index	String, dotted decimal	N/A
config	IPv4 address configuration information	Subtable	N/A	For more information, see the <a href="#">ipv4/addresses/address/config</a> table.

## openconfig-if-ipv4/addresses/address/config

This table contains IPv4 address configuration information.

## XML structure

Please refer to the XML structure of [openconfig-if-ipv4/addresses/address](#).

## Table description

Item	Description
Feature name	openconfig-if-ipv4
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ip	IPv4 address of the interface	index	String, dotted decimal.	N/A
prefix-length	Length of the subnet prefix	No	Unsigned integer. Value range: 1 to 32	N/A



# openconfig-if-ip/ipv6

This table contains IPv6 address family configuration for interfaces.

## XML structure

```
<openconfig-if-ip>
  <ipv6>
    <addresses>
      <address>
        <ip></ip>
        <config>
          <ip></ip>
          <prefix-length></prefix-length>
        </config>
      </address>
    </addresses>
  </ipv6>
</openconfig-if-ip>
```

## Table description

Item	Description
Feature name	openconfig-if-ip
Table name	Ipv6
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
addresses	Enclose container for address list	Subtable	N/A	For more information, see the ipv6/addresses table.

# openconfig-if-ip/ipv6/addresses

This table contains information about enclosing container for address list.

## XML structure

Please refer to the XML structure of openconfig-if-ip/ipv6.

## Table description

Item	Description
Feature name	openconfig-if-ip
Table name	addresses
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
address	List of configured IPv6 addresses on the interface	sublist	N/A.	For more information, see the ipv6/addresses/address table.

## openconfig-if-ip/ipv6/addresses/address

This table contains IPv6 addresses config information.

## XML structure

Please refer to the XML structure of openconfig-if-ip/ipv6/addresses.

## Table description

Item	Description
Feature name	openconfig-if-ip
Table name	address
Table type	Multi-instance table
Row name	N/A
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ip	IPv6 address	index	String, dotted decimal	N/A
config	IPv6 address configuration information	Subtable	N/A	For more information, see the <a href="#">ipv6/addresses/address/config</a> table.

## openconfig-if-ip/ipv6/addresses/address/config

This table contains IPv6 address configuration information.

## XML structure

Please refer to the XML structure of [openconfig-if-ip/ipv6/addresses/address](#).

## Table description

Item	Description
Feature name	openconfig-if-ip
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ip	IPv6 address of the interface	index	String, dotted decimal.	N/A
prefix-length	Length of the subnet prefix	No	Unsigned integer. Value range: 1 to 128	N/A

# Contents

- openconfig-interfaces ..... 1
  - interfaces ..... 1
    - XML structure ..... 1
    - Table description ..... 2
    - Columns ..... 2
  - interfaces/interface ..... 2
    - XML structure ..... 2
    - Table description ..... 2
    - Columns ..... 3
  - interfaces/interface/config ..... 3
    - XML structure ..... 3
    - Table description ..... 3
    - Columns ..... 3
  - interfaces/interface/subinterfaces ..... 4
    - XML structure ..... 4
    - Table description ..... 4
    - Columns ..... 5
  - interfaces/interface/subinterfaces/subinterface ..... 5
    - XML structure ..... 5
    - Table description ..... 5
    - Columns ..... 5
  - interfaces/interface/subinterfaces/subinterface/config ..... 6
    - XML structure ..... 6
    - Table description ..... 6
    - Columns ..... 6
  - openconfig-interfaces/interfaces/interface/subinterfaces/ipv4 ..... 7
    - XML structure ..... 7
    - Table description ..... 7
    - Columns ..... 7
  - interfaces/interface/ethernet ..... 8
    - XML structure ..... 8
    - Table description ..... 8
    - Columns ..... 8
  - interfaces/interface/ethernet/switched-vlan ..... 8
    - XML structure ..... 8
    - Table description ..... 8
    - Columns ..... 9
  - interfaces/interface/ethernet/config ..... 9
    - XML structure ..... 9
    - Table description ..... 9
    - Columns ..... 9
  - interfaces/interface/routed-vlan ..... 10
    - XML structure ..... 10
    - Table description ..... 10
    - Columns ..... 10
  - interfaces/interface/aggregation ..... 10
    - XML structure ..... 11
    - Table description ..... 11
    - Columns ..... 11

# openconfig-interfaces

## interfaces

This table contains interfaces information.

### XML structure

```
<interfaces>
  <interface>
    <name></name>
    <config>
      <name></name>
      <type></type>
      <mtu></mtu>
      <description></description>
      <enabled></enabled>
    </config>
    <subinterfaces>
      <subinterface>
        <index></index>
        <config>
          <index></index>
          <name></name>
          <description></description>
          <enabled></enabled>
        </config>
        <ipv4></ipv4>
        <ipv6></ipv6>
      </subinterface>
    </subinterfaces>
    <ethernet>
      <switched-vlan>
        <config>
          <interface-mode></interface-mode>
          <native-vlan></native-vlan>
          <access-vlan></access-vlan>
          <trunk-vlans></trunk-vlans>
        </config>
      </switched-vlan>
      <config>
        <aggregate-id></aggregate-id>
      </config>
    </ethernet>
    <routed-vlan>
      <ipv4></ipv4>
```

```

        <ipv6></ipv6>
    </routed-vlan>
<aggregation>
    <config></config>
    <swtich-vlan></swtich-vlan>
</aggregation>
</interface>
</interfaces>

```

## Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	interfaces
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	NO

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
interface	Interface table	Sublist	N/A	For more information, see the interfaces/intreface table.

## interfaces/interface

This table contains interfaces/interface information.

## XML structure

Please refer to the XML structure of interfaces.

## Table description

Item	Description
Feature name	openconfig-interfaces
Table name	interface
Table type	Multi-instance table
Row name	interface

Item	Description
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Full name of an interface	Index	String. Length: 2 to 47 characters.	Read-write.
config	Configuration item of interface	Subtable	N/A	For more information, see the interfaces/intreface/config table.
subinterfaces	Subinterfaces information of an interface	Sublist	N/A	For more information, see the interfaces/intreface/subinterfaces table.
ethernet	Ethernet of interface, ref-table to openconfig-vlan	Subtable	N/A	For more information, see the interfaces/intreface/ethernet table.

## interfaces/interface/config

This table contains interfaces/interface/config information.

## XML structure

Please refer to the XML structure of interfaces.

## Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	NO

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Full name of an interface	Index	String. Length: 2 to 47 characters.	Reference to: interfaces/interface/name.  For logic interface, only Vlan-interface, Bridge-Aggregation, Route-Aggregation and Loopback interface are supported.
type	Interface type	N/A	Unsigned integer.	Read-write. Additional values for ifType are assigned by the Internet Assigned Numbers Authority (IANA), through updating the syntax of the IANA ifType textual convention.
mtu	Configured MTU of an interface	N/A	Unsigned integer.	Read-write. Applicable to only Layer 3 interfaces.
description	Interface description	N/A	String. Length: 1 to 255 characters. Default: <i>interface-name Interface</i> .	Read-write.
enabled	Enabling status of an interface	N/A	Boolean <ul style="list-style-type: none"> <li>0—Disabled</li> <li>1—Enabled</li> </ul>	Read-write.

批注 [Is1]: 目前只有 B70 支持

## interfaces/interface/subinterfaces

This table contains interfaces/interface/subinterfaces information.

### XML structure

Please refer to the XML structure of interfaces.

### Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	subinterfaces
Table type	Multi-instance table



Item	Description
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
subinterface	Subinterface information table	sublist	N/A	For more information, see the interfaces/intreface/subinterfaces/subinterface table.
ipv4	Portlayer information table	subtable	N/A	For more information, see the interfaces/intreface/subinterfaces/ipv4 table.

## interfaces/interface/subinterfaces/subinterface

This table contains interfaces/interface/subinterfaces/subinterface information.

## XML structure

Please refer to the XML structure of interfaces.

## Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	subinterface
Table type	Multi-instance table
Row name	subinterface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
index	Subinterface number	index	Unsigned integer Value range: 1 to 4094.	Read-write.
config	Configuration item of interface	subtable	N/A	For more information, see the interfaces/intreface/subintefaces/ipv4/config table.
ipv4	IPv4 address family information table	subtable	N/A	Reference the table openconfig-if-ip/ipv4.
ipv6	IPv6 address family information table	subtable	N/A	Reference the table openconfig-if-ip/ipv6.

## interfaces/interface/subinterfaces/subinterface/config

This table contains interfaces/interface/subinterfaces/subinterface/config information.

### XML structure

Please refer to the XML structure of interfaces.

### Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
index	Subinterface number	index	Unsigned integer Value range: 1 to 4094.	Refer to interface/subinterfaces/subinterface/index.
name	Full name of an subinterface	N/A	String. Length: 2 to 47 characters.	Read-write. For more information, see the ipv4 table.

Column name	Column description	Column type	Data type and restrictions	Remarks
description	Subinterface description	N/A	String. Length: 1 to 255 characters. Default: <i>interface-name</i> <b>Interface.</b>	Read-write.
enabled	Enabling status of subinterface	N/A	Boolean <ul style="list-style-type: none"> <li>0—Disabled</li> <li>1—Enabled</li> </ul>	Read-write.

## openconfig-interfaces/interfaces/interface/subinterfaces/ipv4

This table contains openconfig-interfaces/interfaces/interface/subinterfaces/ipv4 information.

### XML structure

Please refer to the XML structure of openconfig-interfaces/interfaces.

### Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	Ipv4
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	NO

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
enabled	Portlayer of an interface	N/A	Boolean <ul style="list-style-type: none"> <li>0—Layer 2</li> <li>1—Layer 3</li> </ul>	Read-write. Only applicable to Ethernet interfaces.

## interfaces/interface/ethernet

This table contains interfaces/interface/ethernet information.

### XML structure

Please refer to the XML structure of interfaces.

### Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	ethernet
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
switched-vlan	VLAN type of an interface	N/A	N/A	Reference the table openconfig-vlan/switched-vlan.
config	Configuration item of interface	N/A	N/A	N/A.

## interfaces/interface/ethernet/switched-vlan

This table contains interfaces/interface/ethernet/switched-vlan information.

### XML structure

Please refer to the XML structure of interfaces.

### Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	switched-vlan

Item	Description
Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	NO

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Configured the VLAN type of an interface	subtable	N/A	See the openconfig-vlan/s witched-vlan table.

## interfaces/interface/ethernet/config

This table contains interfaces/interface/ethernet/config information.

## XML structure

Please refer to the XML structure of interfaces.

## Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	N/A
Support for row creation and deletion	NO

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
aggregate-id	Aggregation group ID	N/A	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>Layer 2 aggregation group: 1 to 16384.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>Layer 3 aggregation group: 16385 to 32768.</li> <li>S-channel bundle group: 36865 to 40960.</li> </ul> Default: 0. Not assigned to any link aggregation group.

## interfaces/interface/routed-vlan

This table contains interfaces/interface/routed-vlan information.

### XML structure

Please refer to the XML structure of interfaces.

### Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	routed-vlan
Table type	Multi-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ipv4	IPv4 address family information table	subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	Reference the table openconfig-if-ip/ipv4.
ipv6	IPv6 address family information table	subtable	<ul style="list-style-type: none"> <li>N/A</li> </ul>	Reference the table openconfig-if-ip/ipv6.

## interfaces/interface/aggregation

This table contains interfaces/interface/aggregation information.

## XML structure

Please refer to the XML structure of interfaces.

## Table description

Item	Description
Feature name	Openconfig-interfaces
Table name	aggregation
Table type	Multi-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Aggregation config	subtable	<ul style="list-style-type: none"><li>N/A</li></ul>	Reference the table openconfig-if-aggregate/aggregation.
swtich-vlan	VLAN type of an interface	N/A	<ul style="list-style-type: none"><li>N/A</li></ul>	Reference the table openconfig-vlan/switched-vlan.

openconfig-if-aggregate ..... 1

    openconfig-if-aggregate/aggregation ..... 1

        XML structure ..... 1

        Table description ..... 1

        Columns ..... 1

    openconfig-if-aggregate/aggregation/config ..... 1

        XML structure ..... 2

        Table description ..... 2

        Columns ..... 2



# openconfig-if-aggregate

## openconfig-if-aggregate/aggregation

This table contains openconfig-if-aggregate/aggregation information.

### XML structure

```
<openconfig-if-aggregate>
  <aggregation>
    <config>
      <lag-type></lag-type>
    </config>
    <swtich-vlan>
      <config></config>
    </swtich-vlan>
  </aggregation>
</openconfig-if-aggregate>
```

### Table description

Item	Description
Feature name	openconfig-if-aggregate
Table name	aggregation
Table type	Single-instance table
Row name	N/A
Restrictions	No
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Configuration item of interface	N/A	N/A	N/A
swtich-vlan	VLAN type of an interface	N/A	N/A	Reference the table openconfig-vlan/switched-vlan.

## openconfig-if-aggregate/aggregation/config

This table contains openconfig-if-aggregate/aggregation information/config information.

## XML structure

See the XML structure of openconfig-if-aggregate/aggregation.

## Table description

Item	Description
Feature name	openconfig-if-aggregate
Table name	config
Table type	Single-instance table
Row name	None
Restrictions	No
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
lag-type	Interface table	String	String. Options include: <ul style="list-style-type: none"><li>• <b>STATIC.</b></li><li>• <b>LACP.</b></li></ul>	N/A

# Contents

openconfig-network-instance .....	1
openconfig-network-instance/network-instances .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
openconfig-network-instance/network-instances/network-instance .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
openconfig-network-instance/network-instances/network-instance/config .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
openconfig-network-instance/network-instances/network-instance/table-connections .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
openconfig-network-instance/network-instances/network-instance/table-connections/table-connection .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
openconfig-network-instance/network-instances/network-instance/table-connections/table-connection/config .....	6
XML structure .....	7
Table description .....	7
Columns .....	7
openconfig-network-instance/network-instances/network-instance/interfaces .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
openconfig-network-instance/network-instances/network-instance/interfaces/interface .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
openconfig-network-instance/network-instances/network-instance/interfaces/interface/config .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
openconfig-network-instance/network-instances/network-instance/protocols .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
openconfig-network-instance/network-instances/network-instance/protocols/protocol .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
openconfig-network-instance/network-instances/network-instance/protocols/protocol/config .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
openconfig-network-instance/network-instances/network-instance/protocols/protocol/local-aggregates .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
openconfig-network-instance/network-instances/network-instance/protocols/protocol/local-aggregates/aggreg	
ate .....	14
XML structure .....	14
Table description .....	14

Columns .....	14
openconfig-network-instance/network-instances/network-instance/protocols/protocol/local-aggregates/aggreg	
ate/config .....	15
XML structure .....	15
Table description .....	15
Columns .....	15

# openconfig-network-instance

## openconfig-network-instance/network-instances

This table contains network instances information.

### XML structure

```
<openconfig-network-instance>
  <network-instances>
    <network-instance>
      <name></name>
      <config>
        <name></name>
        <route-distinguisher></route-distinguisher>
      </config>
      <table-connections>
        <table-connection>
          <src-protocol></src-protocol>
          <dst-protocol></dst-protocol>
          <address-family></address-family>
          <config>
            <src-protocol></src-protocol>
            <dst-protocol></dst-protocol>
            <address-family></address-family>
            <import-policy></import-policy>
          </config>
        </table-connection>
      </table-connections>
      <interfaces>
        <interface>
          <id></id>
          <config>
            <id></id>
            <interface></interface>
            <subinterface></subinterface>
          </config>
        </interface>
      </interfaces>
      <protocols>
        <protocol>
          <identifier></identifier>
          <name></name>
          <config>
            <identifier></identifier>
            <name></name>
          </config>
        </protocol>
      </protocols>
    </network-instance>
  </network-instances>
</openconfig-network-instance>
```

```

        <enabled></enabled>
        <default-metric></default-metric>
    </config>
</local-aggregates>
<aggregate>
    <prefix></prefix>
    <config>
        <prefix></prefix>
    </config>
</aggregate>
</local-aggregates>
</protocol>
</protocols>
</network-instance>
</network-instances>
</openconfig-network-instance>

```

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	network-instances
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
network-instance	Network instance information	Subtable	N/A	For more information, see the network-instances/network-instance table.

## openconfig-network-instance/network-instances/network-instance

This table contains network instance information.

# XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	network-instance
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Network instance name	Index	String. Length: 1 to 31 characters.	N/A
config	Configuration information	Subtable	N/A	For more information, see the network-instances/network-instance/config table.
table-connections	Table-connections information	Subtable	N/A	For more information, see the network-instances/network-instance/table-connections table.
interfaces	Interfaces information	Subtable	N/A	For more information, see the network-instances/network-instance/interfaces table.
protocols	Protocols information	Subtable	N/A	For more information, see the network-instances/network-instance/protocols table.

# openconfig-network-instance/network-instances/ network-instance/config

This table contains network instance configuration information.

## XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Network instance name	Index	String. Length: 1 to 31 characters.	N/A
route-distinguisher	Route distinguisher information	N/A	String. Length: 3 to 21 characters.	Example: 1:1

# openconfig-network-instance/network-instances/ network-instance/table-connections

This table contains table-connections information.

## XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.



## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	table-connections
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
table-connection	Table-connection information	Sublist	N/A	For more information, see the network-instances/network-instance/table-connections/table-connection table.

## openconfig-network-instance/network-instances/network-instance/table-connections/table-connection

This table contains table-connection information.

## XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	table-connection
Table type	Single-instance table
Row name	table-connection
Restrictions	None

Support for row creation and deletion

No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
src-protocol	Source protocol name	Index	String. Length: 1 to 20 characters. Enumeration: <ul style="list-style-type: none"> <li>• BGP</li> <li>• ISIS</li> <li>• OSPF</li> <li>• OSPF3</li> <li>• STATIC</li> <li>• DIRECTLY_CONNECTED</li> <li>• LOCAL_AGGREGATE</li> </ul>	Example: BGP.
dst-protocol	Destination protocol name	Index	String. Length: 1 to 20 characters. Enumeration: <ul style="list-style-type: none"> <li>• BGP</li> <li>• ISIS</li> <li>• OSPF</li> <li>• OSPF3</li> <li>• STATIC</li> <li>• DIRECTLY_CONNECTED</li> <li>• LOCAL_AGGREGATE</li> </ul>	Example: BGP.
address-family	Address family name	Index	String. Length: 1 to 10 characters.	Example: IPV4
config	Configuration information	Subtable	N/A	For more information, see the network-instances/network-instance/table-connections/table-connection/config table.

openconfig-network-instance/network-instances/  
network-instance/table-connections/table-connection/  
config

This table contains table-connection configuration information.

## XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
src-protocol	Source protocol name	Index	String. Length: 1 to 20 characters. Enumeration: <ul style="list-style-type: none"><li>• BGP</li><li>• ISIS</li><li>• OSPF</li><li>• OSPF3</li><li>• STATIC</li><li>• DIRECTLY_CONNECTED</li><li>• LOCAL_AGGREGATE</li></ul>	Example: BGP.
dst-protocol	Destination protocol name	Index	String. Length: 1 to 20 characters. Enumeration: <ul style="list-style-type: none"><li>• BGP</li><li>• ISIS</li><li>• OSPF</li><li>• OSPF3</li><li>• STATIC</li><li>• DIRECTLY_CONNECTED</li><li>• LOCAL_AGGREGATE</li></ul>	Example: BGP.
address-family	Address family name	Index	String. Length: 1 to 10 characters.	Example: IPV4
import-policy	Import policy name	N/A	String. Length: 1 to 63 characters.	Example: aaa

# openconfig-network-instance/network-instances/ network-instance/interfaces

This table contains interfaces information.

## XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	interfaces
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
interface	Interface information	Sublist	N/A	For more information, see the network-instances/network-instance/interfaces/interface table.

# openconfig-network-instance/network-instances/ network-instance/interfaces/interface

This table contains interface information.

## XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	interface
Table type	Single-instance table
Row name	interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
id	ID name	Index	String. Length: 1 to 31 characters. Same as interface name	Example: LoopBack2, L2.
config	Configuration information	Subtable	N/A	For more information, see the network-instances/network-instance/interfaces/interface/config table.

## openconfig-network-instance/network-instances/network-instance/interfaces/interface/config

This table contains interface configuration information.

## XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
id	ID name	Index	String. Length: 1 to 31 characters. Same as interface name	Example: LoopBack2, L2.
interface	Interface name	N/A	String. Length: 1 to 31 characters.	N/A
subinterface	Subinterface number	N/A	Integer. Range: 1 to 4094.	N/A

## openconfig-network-instance/network-instances/ network-instance/protocols

This table contains protocols nformation.

## XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	protocols
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
protocol	Protocol information.	Sublist	N/A	For more information, see the network-instances/network-instance/protocols/proto

Column name	Column description	Column type	Data type and restrictions	Remarks
				col table.

## openconfig-network-instance/network-instances/network-instance/protocols/protocol

This table contains protocol information.

### XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

### Table description

Item	Description
Feature name	openconfig-network-instance
Table name	protocol
Table type	Single-instance table
Row name	protocol
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
identifier	Protocol identifier name	Index	String. Length: 1 to 20characters. Enumeration: <ul style="list-style-type: none"> <li>• BGP</li> <li>• ISIS</li> <li>• OSPF</li> <li>• OSPF3</li> <li>• STATIC</li> <li>• DIRECTLY_CONNECTED</li> <li>• LOCAL_AGGREGATE</li> </ul>	Example: BGP
name	Protocol instance name	Index	String. Length: 1 to 31 characters.	Example: 1, aaa, and default.
config	Configuration information	Subtable	N/A	For more information, see the

Column name	Column description	Column type	Data type and restrictions	Remarks
				network-instances/network-instance/protocols/protocol /config table.
local-aggregates	Local-aggregates information	Subtable	N/A	For more information, see the network-instances/network-instance/protocols/protocol/local-aggregates table.

## openconfig-network-instance/network-instances/network-instance/protocols/protocol/config

This table contains protocol configuration information.

### XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

### Table description

Item	Description
Feature name	openconfig-network-instance
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
identifier	Protocol identifier	Index	String. Length: 1 to 20characters. Enumeration: <ul style="list-style-type: none"> <li>• BGP</li> <li>• ISIS</li> <li>• OSPF</li> <li>• OSPF3</li> <li>• STATIC</li> </ul>	Example:BGP



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>DIRECTLY_CONNECTED</li> <li>LOCAL_AGGREGATE</li> </ul>	
name	Protocol instance name	Index	String. Length: 1 to 31 characters.	Example:1, aaa, default
enabled	Whether the local protocol instance is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
default-metric	Default metric value	N/A	Unsigned Integer32. 0-65535	N/A

## openconfig-network-instance/network-instances/network-instance/protocols/protocol/local-aggregates

This table contains local-aggregates information.

### XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

### Table description

Item	Description
Feature name	openconfig-network-instance
Table name	local-aggregates
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
aggregate	Aggregate information	Sublist	N/A	For more information, see the network-instances/network-instances

Column name	Column description	Column type	Data type and restrictions	Remarks
				e/protocols/protocol/local-aggregates/aggregate table.

## openconfig-network-instance/network-instances/network-instance/protocols/protocol/local-aggregates/aggregate

This table contains aggregate information.

### XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

### Table description

Item	Description
Feature name	openconfig-network-instance
Table name	aggregate
Table type	Single-instance table
Row name	aggregate
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
prefix	Prefix name	Index	IPv4 prefix: String, dotted decimal notation. Prefix length. Length: 1-18	IPv4 example: 1.1.1.1/24.
config	Configuration information	Subtable	N/A	For more information, see the network-instances/network-instance/protocols/protocol/local-aggregates/aggregate/config table.

# openconfig-network-instance/network-instances/network-instance/protocols/protocol/local-aggregates/aggregate/config

This table contains aggregate configuration information.

## XML structure

Please refer to the XML structure of openconfig-network-instance/network-instances.

## Table description

Item	Description
Feature name	openconfig-network-instance
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
prefix	Prefix name	Index	IPv4 prefix: String, dotted decimal notation. Prefix length. Length: 1-18.	IPv4 example: 1.1.1.1/24.

# Contents

NTP .....	2
openconfig-system/system/ntp .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
openconfig-system/system/ntp/config .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
openconfig-system/system/ntp/servers/server .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
openconfig-system/system/ntp/servers/server/config .....	5
XML structure .....	5
Table description .....	5
Columns .....	5

# NTP

## openconfig-system/system/ntp

This table contains NTP information.

### XML structure

```
<openconfig-system xmlns="http://openconfig.net/yang/system">
  <system>
    <ntp>
      <config>
        <enabled></enabled>
        <ntp-source-address></ntp-source-address>
      </config>
      <servers>
        <server>
          <address></address>
          <config>
            <address></address>
            <port></port>
            <version></version>
            <association-type></association-type>
            <prefer></prefer>
          </config>
        </server>
      </servers>
    </ntp>
  </system>
</openconfig-system>
```

### Table description

Item	Description
Feature name	NTP
Table name	ntp

Item	Description
Table type	Single-instance table
Row name	ntp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Configuration information	Subtable	N/A	For more information, see the ntp/config table.
servers	Server information	Subtable	N/A	For more information, see the ntp/servers table.

## openconfig-system/system/ntp/config

This table contains NTP configuration information.

## XML structure

Please refer to the XML structure of openconfig-system/system/ntp.

## Table description

Item	Description
Feature name	NTP
Table name	config
Table type	Single-instance table
Row name	config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
enabled	Whether NTP is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled.</li><li>false—Disabled.</li></ul>	N/A
timers	Source IPv4 address for NTP packets	N/A	String: Length: 1 to 46 characters.	Only IPv4 addresses are supported.

## openconfig-system/system/ntp/servers/server

This table contains NTP server information.

## XML structure

Please refer to the XML structure of openconfig-system/system/ntp.

## Table description

Item	Description
Feature name	NTP
Table name	server
Table type	Single-instance table
Row name	server
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
address	Address of the NTP server	Index	String: Length: 1 to 46 characters.	Only IPv4 addresses are supported.

config	Configuration information of the NTP server	Subtable	N/A	For more information, see the ntp/servers/server/config table.
--------	---	----------	-----	--

## openconfig-system/system/ntp/servers/server/config

This table contains NTP server configuration information.

## XML structure

Please refer to the XML structure of openconfig-system/system/ntp.

## Table description

Item	Description
Feature name	NTP
Table name	config
Table type	Single-instance table
Row name	config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
address	Address of the NTP server	Index	String: Length: 1 to 46 characters.	Only IPv4 addresses are supported.
port	Port number of the NTP server	N/A	Unsigned integer	N/A
version	Version number to put into outgoing NTP packets	N/A	Unsigned integer. Value range: 1 to 4	N/A



association-type	Association type for the NTP server	N/A	Unsigned integer. Value: 3.	N/A
prefer	Whether this server should be preferred	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>	N/A

# Contents

OSPFv2 .....	2
openconfig-ospfv2 .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
openconfig-ospfv2/ospfv2/global .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
openconfig-ospfv2/ospfv2/global/config .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
openconfig-ospfv2/ospfv2/global/timers .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
openconfig-ospfv2/ospfv2/global/timers/spf/config .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
openconfig-ospfv2/ospfv2/global/timers/lsa-generation/config .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
openconfig-ospfv2/ospfv2/areas/area .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
openconfig-ospfv2/ospfv2/areas/area/config .....	9
XML structure .....	10
Table description .....	10
Columns .....	10
openconfig-ospfv2/ospfv2/areas/area/interfaces/interface .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
openconfig-ospfv2/ospfv2/areas/area/interfaces/interface/config .....	11
XML structure .....	12
Table description .....	12
Columns .....	12
openconfig-ospfv2/ospfv2/areas/area/interfaces/interface/timers/config .....	13
XML structure .....	13
Table description .....	13
Columns .....	13

# OSPFv2

## openconfig-ospfv2

This table contains OSPFv2 information.

### XML structure

```
<ospfv2 xmlns="http://openconfig.net/yang/ospfv2">
  <global>
    <config>
      <router-id></router-id>
    </config>
    <timers>
      <spf>
        <config>
          <initial-delay></initial-delay>
          <maximum-delay></maximum-delay>
        </config>
      </spf>
      <lsa-generation>
        <config>
          <initial-delay></initial-delay>
          <maximum-delay></maximum-delay>
        </config>
      </lsa-generation>
    </timers>
  </global>
  <areas>
    <area>
      <identifier></identifier>
      <config>
        <identifier></identifier>
      </config>
    </area>
  </areas>
  <interfaces>
```

```
<interface>
  <id></id>
  <config>
    <id></id>
    <network-type></network-type>
    <priority></priority>
    <metric></metric>
    <passive></passive>
  </config>
  <timers>
    <config>
      <dead-interval></dead-interval>
      <hello-interval></hello-interval>
    </config>
  </timers>
</interface>
</interfaces>
</area>
</areas>
</ospfv2>
```

## Table description

Item	Description
Feature name	OSPFv2
Table name	ospfv2
Table type	Multi-instance table
Row name	ospfv2
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
global	Global information	Subtable	N/A	For more

				information, see the ospfv2/global table.
areas	Area information	Subtable	N/A	For more information, see the ospfv2/areas.

## openconfig-ospfv2/ospfv2/global

This table contains global OSPFv2 information.

## XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2.

## Table description

Item	Description
Feature name	OSPFv2
Table name	global
Table type	Multi-instance table
Row name	global
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Configuration information	Subtable	N/A	For more information, see the ospfv2/global/config.
timers	Timer information	Subtable	N/A	For more information, see the ospfv2/global/time

				rs.
--	--	--	--	-----

## openconfig-ospfv2/ospfv2/global/config

This table contains global OSPFv2 configuration information.

## XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2.

## Table description

Item	Description
Feature name	OSPFv2
Table name	config
Table type	Multi-instance table
Row name	config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
router-id	A 32-bit number represented in dotted decimal notation assigned to each router running the OSPFv2 protocol.	N/A	String: Length: 1 to 42 characters.	N/A

# openconfig-ospfv2/ospfv2/global/timers

This table contains global OSPFv2 timer information.

## XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2.

## Table description

Item	Description
Feature name	OSPFv2
Table name	timers
Table type	Multi-instance table
Row name	timers
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
spf	SPF information	Subtable	N/A	For more information, see the ospfv2/global/timers/spf.
lsa-generation	LSA generation information	Subtable	N/A	For more information, see the ospfv2/global/timers/lsa-generation.

# openconfig-ospfv2/ospfv2/global/timers/spf/config

This table contains OSPFv2 SPF timer configuration information.

## XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2.

## Table description

Item	Description
Feature name	OSPFv2
Table name	config
Table type	Multi-instance table
Row name	config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
initial-delay	The value specifies the time between a change in topology being detected and the first run of the SPF algorithm.	N/A	Unsigned integer: Value range: 1 to 60.	N/A
maximum-delay	The value of this leaf specifies the maximum delay between a topology change being detected and running of the SPF algorithm.	N/A	Unsigned integer: Value range: 10 to 60000.	N/A



# openconfig-ospfv2/ospfv2/global/timers/lsa-generation/config

This table contains OSPFv2 LSA-generation timer configuration information.

## XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2

## Table description

Item	Description
Feature name	OSPFv2
Table name	config
Table type	Multi-instance table
Row name	config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
initial-delay	The value specifies the time between the first time an LSA is generated and advertised and the subsequent generation of that LSA.	N/A	Unsigned integer: Value range: 1 to 60	N/A
maximum-delay	The value specifies the maximum time between the generation of an LSA and the subsequent re-generation of that LSA.	N/A	Unsigned integer: Value range: 10 to 60000	N/A

## openconfig-ospfv2/ospfv2/areas/area

This table contains OSPFv2 area information.

### XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2.

### Table description

Item	Description
Feature name	OSPFv2
Table name	area
Table type	Multi-instance table
Row name	area
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
identifier	An identifier for the OSPFv2 area, represented as either a 32-bit unsigned integer or a dotted-quad.	Index	String: Length: 1 to 42 characters	For example: 32 or 1.1.1.1
interfaces	Interface information	Subtable	N/A	For more information, see the openconfig-ospfv2/ospfv2/areas/area/interfaces.

## openconfig-ospfv2/ospfv2/areas/area/config

This table contains OSPFv2 area configuration information.

## XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2.

## Table description

Item	Description
Feature name	OSPFv2
Table name	config
Table type	Multi-instance table
Row name	config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
identifier	An identifier for the OSPFv2 area, represented as either a 32-bit unsigned integer or a dotted-quad.	Index	String: Length: 1 to 42 characters	N/A

## openconfig-ospfv2/ospfv2/areas/area/interfaces/interface

This table contains OSPFv2 area interface information.

## XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2.

## Table description

Item	Description
Feature name	OSPFv2
Table name	interface
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
id	A pointer to the identifier for the interface name	Index	String. Length: 1 to 42characters.	N/A
config	Configuration information	Subtable	N/A	For more information, see the ospfv2/areas/area/interfaces/interface/config.
timers	Timer information	Subtable	N/A	For more information, see the ospfv2/areas/area/interfaces/interface/timers.

## openconfig-ospfv2/ospfv2/areas/area/interfaces/interface/config

This table contains OSPFv2 area interface configuration information.

## XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2.

## Table description

Item	Description
Feature name	OSPFv2
Table name	config
Table type	Multi-instance table
Row name	config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
id	An operator-specified string used to uniquely identify this interface	Index	String: Length: 1 to 42 characters	N/A
network-type	The type of network that OSPFv2 must use for the specified interface.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—broadcast</li> <li>2—NBMA.</li> <li>3—P2P.</li> <li>4—P2MP.</li> <li>5—P2MP unicast</li> </ul>	N/A
priority	The local system's priority to become the designated router	N/A	Unsigned integer: Value range: 1 to 255	N/A
metric	The metric for the interface	N/A	Unsigned integer: Value range: 0 to 65535 for loopback interfaces; 1 to 65535 for other types of interfaces.	N/A
passive	When this leaf is set to true, the interface must be	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The interface must be advertised within the</li> </ul>	N/A

	advertised within the OSPFv2 area but OSPFv2 adjacencies must not be established over the interface.		OSPFv2 area. <ul style="list-style-type: none"> <li><b>false</b>—The interface must not be advertised within the OSPFv2 area.</li> </ul>	
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## openconfig-ospfv2/ospfv2/areas/area/interfaces/interface/timers/config

This table contains OSPFv2 area interface timer configuration information.

### XML structure

Please refer to the XML structure of openconfig-ospfv2/ospfv2.

### Table description

Item	Description
Feature name	OSPFv2
Table name	config
Table type	Multi-instance table
Row name	config
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
dead-interval	The number of seconds that the local system must let elapse before declaring a silent router down	N/A	Unsigned integer: Value range: 1 to 2147483647	N/A

hello-interval	The number of seconds that the local system waits between the transmissions of subsequent Hello packets.	N/A	Unsigned integer: Value range: 1 to 65535	N/A
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# Contents

openconfig-routing-policy .....	1
openconfig-routing-policy/routing-policy .....	1
XML structure .....	1
Table description .....	2
Columns .....	3
openconfig-routing-policy/routing-policy/defined-sets .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
openconfig-routing-policy/routing-policy/defined-sets/prefix-sets .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set/config .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set/prefixes .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set/prefixes/prefix .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set/prefixes/prefix/config .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
openconfig-routing-policy/routing-policy/defined-sets/bgp-defined-sets .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
openconfig-routing-policy/routing-policy/defined-sets/bgp-defined-sets/community-sets .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
openconfig-routing-policy/routing-policy/defined-sets/bgp-defined-sets/community-sets/community-set .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
openconfig-routing-policy/routing-policy/defined-sets/bgp-defined-sets/community-sets/community-set/config .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
openconfig-routing-policy/routing-policy/policy-definitions .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition .....	12
XML structure .....	13
Table description .....	13



Columns .....	13
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/config .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/config .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/match-prefix-set .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/match-prefix-set/config .....	18
XML structure .....	19
Table description .....	19
Columns .....	19
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/bgp-conditions .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/bgp-conditions/match-community-set .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/bgp-conditions/match-community-set/match-community-set/config .....	21
XML structure .....	21
Table description .....	21
Columns .....	21
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/actions .....	22
XML structure .....	22
Table description .....	22
Columns .....	22
openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/actions/config .....	23
XML structure .....	23
Table description .....	23
Columns .....	23

# openconfig-routing-policy

## openconfig-routing-policy/routing-policy

This table contains routing policy information.

### XML structure

```
<openconfig-routing-policy>
  <routing-policy>
    <defined-sets>
      <prefix-sets>
        <prefix-set>
          <name></name>
          <config>
            <name></name>
            <mode></mode>
          </config>
          <prefixes>
            <prefix>
              <ip-prefix></ip-prefix>
              <masklength-range></masklength-range>
              <config>
                <ip-prefix></ip-prefix>
                <masklength-range></masklength-range>
              </config>
            </prefix>
          </prefixes>
        </prefix-set>
      </prefix-sets>
      <bgp-defined-sets>
        <community-sets>
          <community-set>
            <community-set-name></community-set-name>
            <config>
              <community-set-name></community-set-name>
              <community-member></community-member>
            </config>
          </community-set>
        </community-sets>
      </bgp-defined-sets>
    </defined-sets>
    <policy-definitions>
      <policy-definition>
        <name></name>
        <config>
```

```

    <name></name>
  </config>
  <statements>
    <statement>
      <name></name>
      <config>
        <name></name>
      </config>
      <conditions>
        <match-prefix-set>
          <config>
            <prefix-set></prefix-set>
            <match-set-options></match-set-options>
          </config>
        </match-prefix-set>
        <bgp-conditions>
          <match-community-set>
            <config>
              <community-set></community-set>
            </config>
          </match-community-set>
        </bgp-conditions>
      </conditions>
      <actions>
        <config>
          <policy-result></policy-result>
        </config>
      </actions>
    </statement>
  </statements>
</policy-definition>
</policy-definitions>
</routing-policy>
</openconfig-routing-policy>

```

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	routing-policy
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
defined-sets	Defined-sets information	Subtable	N/A	For more information, see the routing-policy/defined-sets table.
policy-definitions	Policy-definitions information	Subtable	N/A	For more information, see the routing-policy/policy-definitions table.

## openconfig-routing-policy/routing-policy/defined-sets

This table contains defined-sets information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	defined-sets
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
prefix-sets	Prefix-sets information	Subtable	N/A	For more information, see the routing-policy/defined-sets/prefix-sets table.

# openconfig-routing-policy/routing-policy/defined-sets/prefix-sets

This table contains prefix-sets information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	prefix-sets
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
prefix-set	Prefix-set information	Sublist	N/A	For more information, see the routing-policy /defined-sets/ prefix-sets/ prefix-set table.

# openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set

This table contains prefix-set information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	prefix-set
Table type	Single-instance table
Row name	prefix-set
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Prefix-set name	Index	String. Length: 1 to 63 characters.	N/A
config	Configuration information	Subtable	N/A	For more information, see the routing-policy /defined-sets/ prefix-sets/prefix-set/ config table.
prefixes	Prefixes information	Subtable	N/A	For more information, see the routing-policy /defined-sets/ prefix-sets/ prefix-set/ prefixes table.

## openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set/config

This table contains prefix-set configuration information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	config

Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Prefix-set name	Index	String. Length: 1 to 63 characters.	N/A
mode	Prefix-set mode	N/A	String. Length: 1 to 16 characters.	Example: IPV4

# openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set/prefixes

This table contains prefixes information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	prefixes
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
prefix	Prefix information	Sublist	N/A	For more information, see the routing-policy /defined-sets/prefix-sets/ prefix-set/

Column name	Column description	Column type	Data type and restrictions	Remarks
				prefixes/prefix table.

## openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set/prefixes/prefix

This table contains prefix information.

### XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

### Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	prefix
Table type	Multi-instance table
Row name	prefix
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ip-prefix	IP prefix and prefix length	Index	IPv4 prefix: String, dotted decimal notation. Prefix length. Length: 1-18	IPv4 example: 1.1.1.1/24.
masklength-range	Mask length range information	index	Ge: Greater than or equal to. Le: Less than or equal to. Length: 4-6.	IPv4 example: 24..26, exact (masklength == ge == le).
config	Configuration information	Subtable	N/A	For more information, see the routing-policy/defined-sets/prefix-sets/prefix-set/prefixes/prefix/config table.



# openconfig-routing-policy/routing-policy/defined-sets/prefix-sets/prefix-set/prefixes/prefix/config

This table contains prefix configuration information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ip-prefix	IP prefix and prefix length	Index	IPv4 prefix: String, dotted decimal notation. Prefix length. Length: 1-18	IPv4 example: 1.1.1.1/24.
masklength-range	Mask length range information	index	Ge: Greater than or equal to. Le: Less than or equal to. Length: 4-6.	IPv4 example: 24..26, exact (masklength == ge == le).

# openconfig-routing-policy/routing-policy/defined-sets/bgp-defined-sets

This table contains BGP-defined-sets information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	bgp-defined-sets
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
community-sets	Community-sets information	Subtable	N/A	For more information, see the routing-policy/defined-sets/bgp-defined-sets/community-sets table.

## openconfig-routing-policy/routing-policy/defined-sets/bgp-defined-sets/community-sets

This table contains community-sets information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	community-sets
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
community-set	Community-set information	Sublist	N/A	For more information, see the routing-policy/defined-sets/bgp-defined-sets/community-sets/community-set table.

## openconfig-routing-policy/routing-policy/defined-sets/bgp-defined-sets/community-sets/community-set

This table contains community-set information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	community-set
Table type	Multi-instance table
Row name	community-set
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
community-set-name	Community name	Index	String: Length: 1-2 Basic community list number: 1-99.	Example: 12.
config	Configuration information	Subtable	N/A	For more information, see the routing-policy

Column name	Column description	Column type	Data type and restrictions	Remarks
				/defined-sets/bgp-defined-sets/community-sets/community-set/config table.

## openconfig-routing-policy/routing-policy/defined-sets/bgp-defined-sets/community-sets/community-set/config

This table contains community-set configuration information.

### XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

### Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
community-set-name	Community name	Index	String: Length: 1-2. Basic community list number: 1-99.	Example: 12
community-member	Community member	N/A	String: Length: 1-19 1-4294967295 aa:nn: aa<0-65535>:nn<0-65535> internet no-advertise	Example:12345, 11:22.

Column name	Column description	Column type	Data type and restrictions	Remarks
			no-export no-export-subconfed	

## openconfig-routing-policy/routing-policy/policy-definitions

This table contains policy-definitions information.

### XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

### Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	policy-definitions
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
policy-definition	Policy-definition information	Subtable	N/A	For more information, see the routing-policy /policy-definitions / policy-definition table.

## openconfig-routing-policy/routing-policy/policy-definitions/policy-definition

This table contains policy-definition information.

## XML structure

Please refer to the XML structure of `openconfig-routing-policy/routing-policy`.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	policy-definition
Table type	Single-instance table
Row name	policy-definition
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Policy-definition name	Index	String. Length: 1 to 63 characters.	N/A
config	Configuration information	Subtable	N/A	For more information, see the routing-policy /policy-definitions /policy-definition/ config table.
statements	Statements information	Subtable	N/A	For more information, see the routing-policy /policy-definitions /policy-definition/ statements table.

## openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/config

This table contains policy-definition config information.

## XML structure

Please refer to the XML structure of `openconfig-routing-policy/routing-policy`.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Policy-definition name	Index	String. Length: 1 to 63 characters.	N/A

## openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements

This table contains statements information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	statements
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
statement	Statement information	Sublist	N/A	For more information, see the routing-policy/policy-definitions/policy-definition/statements/statement table.

## openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement

This table contains statement information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	statement
Table type	Multi-instance table
Row name	statement
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Node index	Index	Integer. Range: 0 to 65535.	Example: 123.
config	Configuration information	Subtable	N/A	For more information, see the routing-policy / policy-definitions / policy-definition / statements / statement / config



Column name	Column description	Column type	Data type and restrictions	Remarks
				table.
conditions	Conditions information	Subtable	N/A	For more information, see the routing-policy / policy-definitions/ policy-definition/s tatements/ statement / conditions table.
actions	Actions information	Subtable	N/A	For more information, see the routing-policy / policy-definitions/ policy-definition/s tatements/ statement / actions table.

## openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/config

This table contains statement configuration information.

### XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

### Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Node index	Index	Integer. Range: 0 to 65535.	Example: 123.

## openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions

This table contains conditions information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	conditions
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
match-prefix-set	Match-prefix-set information	Sublist	N/A	For more information, see the routing-policy/policy-definitions/policy-definition/statements/statement/conditions/match-prefix-set table.

# openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/match-prefix-set

This table contains match-prefix-set information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	match-prefix-set
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Configuration information	Subtable	N/A	For more information, see the routing-policy/policy-definitions/policy-definition/statements/statement/conditions/match-prefix-set/config table.

# openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/match-prefix-set/config

This table contains match-prefix-set configuration information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
prefix-set	Prefix-set information	N/A	String. Length: 1 to 63 characters.	N/A
match-set-options	Match-set-options information	N/A	String. Length: 1 to 16 characters. Only support "ANY".	Example: ANY

## openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/bgp-conditions

This table contains BGP-conditions information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	bgp-conditions
Table type	Single-instance table

Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
match-community-set	Match-community-set information	Subtable	N/A	For more information, see the routing-policy/policy-definitions/policy-definition/statements/statement/conditions/bgp-conditions/match-community-set table.

# openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/bgp-conditions/match-community-set

This table contains match-community-set information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	match-community-set
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Configuration information	Subtable	N/A	For more information, see the routing-policy/policy-definitions/policy-definition/statements/statement/conditions/bgp-conditions/match-community-set/match-community-set/config table.

openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/conditions/bgp-conditions/match-community-set/match-community-set/config

This table contains match-community-set configuration information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
community-set	Community-set information	N/A	String: Length: 1-2.	Example: 12.

Column name	Column description	Column type	Data type and restrictions	Remarks
			Basic community list number: 1-99.	

## openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/actions

This table contains actions information.

### XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

### Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	actions
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Configuration information	Subtable	N/A	For more information, see the routing-policy/policy-definition/statements/statement/actions/config table.

# openconfig-routing-policy/routing-policy/policy-definitions/policy-definition/statements/statement/actions/config

This table contains actions configuration information.

## XML structure

Please refer to the XML structure of openconfig-routing-policy/routing-policy.

## Table description

Item	Description
Feature name	openconfig-routing-policy
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
policy-result	Policy-result information	N/A	String: ACCEPT_ROUTE or REJECT_ROUTE. Length: 1 to 16 characters.  Enumeration: <ul style="list-style-type: none"><li>ACCEPT_ROUTE</li><li>REJECT_ROUTE</li></ul>	Example: ACCEPT_ROUTE.



# Contents

openconfig-spanning-tree .....	1
openconfig-spanning-tree/stp .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
openconfig-spanning-tree/stp/global .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
openconfig-spanning-tree/stp/global/config .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
openconfig-spanning-tree/stp/mstp .....	3
XML structure .....	4
Table description .....	4
Columns .....	4
openconfig-spanning-tree/stp/mstp/config .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
openconfig-spanning-tree/stp/mstp/mst-instances .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
openconfig-spanning-tree/stp/mstp/mst-instances/mst-instance .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
openconfig-spanning-tree/stp/mstp/mst-instances/mst-instance/config .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
openconfig-spanning-tree/stp/interfaces .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
openconfig-spanning-tree/stp/interfaces/interface .....	8
XML structure .....	9
Table description .....	9
Columns .....	9
openconfig-spanning-tree/stp/interfaces/interface/config .....	9
XML structure .....	9
Table description .....	9
Columns .....	10

# openconfig-spanning-tree

## openconfig-spanning-tree/stp

This table contains openconfig-spanning-tree/stp information.

### XML structure

```
<openconfig-spanning-tree>
  <stp>
    <global>
      <config>
        <bpdu-guard></bpdu-guard>
      </config>
    </global>
    <mstp>
      <config>
        <name></name>
        <revision></revision>
      </config>
      <mst-instances>
        <mst-instance>
          <mst-id></mst-id>
          <config>
            <mst-id></mst-id>
            <vlan></vlan>
            <bridge-priority></bridge-priority>
          </config>
        </mst-instance>
      </mst-instances>
    </mstp>
    <interfaces>
      <interface>
        <name></name>
        <config>
          <name></name>
          <edge-port></edge-port>
        </config>
      </interface>
    </interfaces>
  </stp>
</openconfig-spanning-tree>
```

## Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	stp
Table type	Single-instance table
Row name	N/A
Restrictions	No
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
global	Global STP information	Subtable	N/A	For more information, see the openconfig-spanning-tree/stp/global table.
mstp	MST information	Sublist	N/A	For more information, see the openconfig-spanning-tree/stp/mstp table.
interfaces	Interface table	Sublist	N/A	For more information, see the openconfig-spanning-tree/stp/interfaces table.

## openconfig-spanning-tree/stp/global

This table contains openconfig-spanning-tree/stp/global information.

## XML structure

See the XML structure of openconfig-spanning-tree/stp.

## Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	global
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global functions.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Global STP configuration information	Subtable	N/A	For more information, see the openconfig-spanning-tree/stp/global/config table.

## openconfig-spanning-tree/stp/global/config

This table contains openconfig-spanning-tree/stp/global/config information.

## XML structure

See the XML structure of openconfig-spanning-tree/stp.

## Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
bpdu-guard	Global BPDU guard function	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enables BPDU guard.</li><li><b>false</b>—Disables BPDU guard (default).</li></ul>	Global BPDU guard function

## openconfig-spanning-tree/stp/mstp

This table contains openconfig-spanning-tree/stp/mstp information.

## XML structure

See the XML structure of openconfig-spanning-tree/stp.

## Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	mstp
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Configuration items of the mst table	Subtable	N/A	For more information, see the openconfig-spanning-tree/stp/mstp/config table.
Mst-instances	Portlayer information table	Sublist	N/A	For more information, see the openconfig-spanning-tree/stp/mstp/mst-instances table.

## openconfig-spanning-tree/stp/mstp/config

This table contains openconfig-spanning-tree/stp/mstp/config information.

## XML structure

See the XML structure of openconfig-spanning-tree/stp.

## Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	config

Item	Description
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	MST region name	N/A	String. Length: 1 to 32 characters. Default: Hex-string of the bridge MAC address.	Read-write. The value range is 1 to 4094.
revision	Revision level of the MST region	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 0 to 65535.</li> <li>Default: 0.</li> </ul>	When a new revision level is configured, the active region configuration will be changed.

# openconfig-spanning-tree/stp/mstp/mst-instances

This table contains openconfig-spanning-tree/stp/mstp/mst-instances information.

## XML structure

See the XML structure of openconfig-spanning-tree/stp.

## Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	mst-instances
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
mst-instance	mst-instance table	Sublist	N/A	For more information, see the openconfig-spanning-tree/stp/mstp/mst-instances/mst-instances table.

## openconfig-spanning-tree/stp/mstp/mst-instances/mst-instance

This table contains openconfig-spanning-tree/stp/mstp/mst-instances/mst-instance information.

### XML structure

See the XML structure of openconfig-spanning-tree/stp.

### Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	mst-instance
Table type	Multi-instance table
Row name	StiVlan
Restrictions	All rows should be wrapped within a whole configuration message, following the region table above.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
mst-id	Spanning tree index	Index	Unsigned integer. Value range: 1 to 4094.	N/A
config	Configuration items of the sti table	Subtable	N/A	For more information, see the openconfig-spanning-tree/stp/mstp/mst-instances/mst-instance/config table.

# openconfig-spanning-tree/stp/mstp/mst-instances/mst-instance/config

This table contains openconfig-spanning-tree/stp/mstp/mst-instances/mst-instance/config information.

## XML structure

See the XML structure of openconfig-spanning-tree/stp.

## Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
mst-id	Spanning tree index	Index	Unsigned integer. Value range: 1 to 4094.	N/A
vlan	List of VLANs allocated to the MST instance	N/A	Number string. It is a comma-separated list of VLAN items. <ul style="list-style-type: none"><li>The string must not end with a comma or hyphen, or include any whitespace characters.</li><li>Default: All VLANs are allocated to spanning tree instance 0(CIST).</li></ul>	<ul style="list-style-type: none"><li>Each VLAN can only be allocated to one MST instance.</li><li>Each item can be an individual VLAN ID or a VLAN ID range. A hyphen (-) indicates a VLAN range from the start VLAN ID to end VLAN ID. For example: 1, 2, 3, 5-8, and 10-20.</li><li>VLAN ID range: 1 to 4094.</li></ul>
bridge-priority	Bridge priority of the spanning tree	N/A	Unsigned integer. <ul style="list-style-type: none"><li>Value range: 0 to 61440, in increments of 4096</li></ul>	Configuration is not allowed when the root type is configured as primary root or secondary root, except



Column name	Column description	Column type	Data type and restrictions	Remarks
			(as in 0, 4096, 8192). <ul style="list-style-type: none"> <li>Default: 32768.</li> </ul>	for the following values combination: <ul style="list-style-type: none"> <li>Priority is 0 when the root type is primary.</li> <li>Priority is 4096 when the root type is secondary.</li> </ul>

## openconfig-spanning-tree/stp/interfaces

This table contains openconfig-spanning-tree/stp/interfaces information.

### XML structure

See the XML structure of openconfig-spanning-tree/stp.

### Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	interfaces
Table type	Single-instance table
Row name	N/A
Restrictions	N/A
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
interface	Interface table	Sublist	N/A	For more information, see the openconfig-spanning-tree/stp/interfaces/interface table.

## openconfig-spanning-tree/stp/interfaces/interface

This table contains openconfig-spanning-tree/stp/interfaces/interface information.

## XML structure

See the XML structure of openconfig-spanning-tree/stp.

## Table description

Item	Description
Feature name	openconfig-spanning-tree
Table name	interface
Table type	Multi-instance table
Row name	interface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Full name of an interface	Index	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	Read-write.
config	Configuration items of an interface	Sublist	N/A	For more information, see the openconfig-spanning-tree/stp/interfaces/interface/config table

## openconfig-spanning-tree/stp/interfaces/interface/config

This table contains openconfig-spanning-tree/stp/interfaces/interface/config information.

## XML structure

See the XML structure of openconfig-spanning-tree/stp.

## Table description

Item	Description
Feature name	openconfig-spanning-tree

Item	Description
Table name	config
Table type	Multi-instance table
Row name	interface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Full name of an interface	Index	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	Read-write.
edge-port	Edge aggregate interface configuration	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Configures the interface as an edge aggregate interface. It should not be configured when loop protection is enabled.</li> <li><b>false</b>—Configures the interface as a non-edge aggregate interface (default).</li> </ul>	N/A

# Contents

static-route.....	2
openconfig-local-routing/local-routes/static-routes/static .....	2
XML structure.....	2
Table description.....	2
Columns.....	3
openconfig-local-routing/local-routes/static-routes/static/next-hops/next-hop.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
openconfig-local-routing/local-routes/static-routes/static/next-hops/next-hop/c	
onfig.....	4
XML structure.....	4
Table description.....	4
Columns.....	5
openconfig-local-routing/local-routes/static-routes/static/next-hops/next-hop/in	
terface-ref/config .....	5
XML structure.....	5
Table description.....	5
Columns.....	6

# static-route

## openconfig-local-routing/local-routes/static-routes/static

This table contains static route information.

### XML structure

```
<static-routes xmlns="http://openconfig.net/yang/local-routing">
  <static>
    <prefix></prefix>
    <next-hops>
      <next-hop>
        <index></index>
        <config>
          <index></index>
          <next-hop></next-hop>
        </config>
        <interface-ref>
          <config>
            <interface></interface>
          </config>
        </interface-ref>
      </next-hop>
    </next-hops>
  </static>
</static-routes>
```

### Table description

Item	Description
Feature name	static-route

Item	Description
Table name	static
Table type	Multi-instance table
Row name	static
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
prefix	Destination prefix for the static route.	Index	String: Length: 1 to 46 characters	For example: 1.1.1.1/24
next-hops	Next hop information	Subtable	N/A	N/A

## openconfig-local-routing/local-routes/static-routes/static/next-hops/next-hop

This table contains next hop information.

## XML structure

Please refer to the XML structure of openconfig-local-routing/local-routes/static-routes/static.

## Table description

Item	Description
Feature name	static-route
Table name	next-hop
Table type	Multi-instance table
Row name	next-hop
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
index	An user-specified identifier used to uniquely identify the next-hop entry in the next-hop list. The value of this index has no semantic meaning other than for identifying the entry.	Index	String: Length: 1 to 93 characters.	N/A
config	Configuration information	Subtable	N/A	N/A
interface-ref	Interface information	Subtable	N/A	N/A

## openconfig-local-routing/local-routes/static-routes/static/next-hops/next-hop/config

This table contains next hop configuration information.

## XML structure

Please refer to the XML structure of openconfig-local-routing/local-routes/static-routes/static.

## Table description

Item	Description
Feature name	static-route
Table name	config
Table type	Multi-instance table

Item	Description
Row name	config
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
index	Destination prefix for the static route.	Index	String: Length: 1 to 93 characters.	N/A
next-hop	Next hop address	N/A	String: Length: 1 to 46 characters.	N/A

## openconfig-local-routing/local-routes/static-routes/static/next-hops/next-hop/interface-ref/config

This table contains next hop interface configuration information.

## XML structure

Please refer to the XML structure of openconfig-local-routing/local-routes/static-routes/static.

## Table description

Item	Description
Feature name	static-routes
Table name	config
Table type	Multi-instance table
Row name	config
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
interface	Interface name.	N/A	String: Length: 1 to 46 characters.	N/A

# Contents

openconfig-system/system .....	1
system.....	1
XML structure .....	1
Table description .....	1
Columns.....	2
system/config .....	2
XML structure .....	2
Table description .....	2
Columns.....	2
system/clock .....	3
XML structure .....	3
Table description .....	3
Columns.....	3
system/clock/config .....	3
XML structure .....	3
Table description .....	3
Columns.....	4
system/logging .....	4
XML structure .....	4
Table description .....	4
Columns.....	4
system/logging/remote-servers .....	5
XML structure .....	5
Table description .....	5
Columns.....	5
system/logging/remote-servers/remote-server .....	5
XML structure .....	5
Table description .....	5
Columns.....	6
system/logging/remote-servers/remote-server/config .....	6
XML structure .....	6
Table description .....	6
Columns.....	7
system/logging/remote-servers/remote-server/selectors .....	7
XML structure .....	7
Table description .....	7
Columns.....	7
system/logging/remote-servers/remote-server/selectors/selector .....	8
XML structure .....	8
Table description .....	8
Columns.....	8
system/logging/remote-servers/remote-server/selectors/selector/config .....	9
XML structure .....	9
Table description .....	9
Columns.....	9

# openconfig-system/system

## system

This table contains system information.

## XML structure

```
<system>
  <config>
    <hostname></hostname>
  </config>
  <clock>
    <config>
      <timezone-name></timezone-name>
    </config>
  </clock>
  <logging>
    <remote-servers>
      <remote-server>
        <host></host>
        <config>
          <host></host>
          <remote-port></remote-port>
        </config>
        <selectors>
          <selector>
            <facility></facility>
            <config>
              <facility></facility>
            </config>
          </selector>
        </selectors>
      </remote-server>
    </remote-servers>
  </logging>
</system>
```

## Table description

Item	Description
Feature name	openconfig-system
Table name	system
Table type	Single-instance table
Row name	N/A

Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Config information	Subtable	N/A	For more information, see the system/config table.
clock	Clock information	Subtable	N/A	For more information, see the system/clock table.
logging	Logging information	Subtable	N/A	For more information, see the system/logging table.

## system/config

This table contains system config information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
hostname	Device name	N/A	String. Length: 1 to 64 characters.	Read-write

# system/clock

This table contains system clock information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	clock
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Clock config information	Subtable	N/A	For more information, see the system/clock/config table.

# system/clock/config

This table contains system clock config information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	config

Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
timezone-name	Time zone name	N/A	String. Length: 1 to 32 characters.	Read-write

## system/logging

This table contains system logging information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	logging
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
remote-servers	remote-servers information	Subtable	N/A	For more information, see the system/logging/remote-servers table.

# system/logging/remote-servers

This table contains system logging remote-servers information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	remote-servers
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
remote-server	remote-server information	Sublist	N/A	For more information, see the system/logging/remote-servers/remote-server table.

# system/logging/remote-servers/remote-server

This table contains system logging remote-servers remote-server information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	remote-server
Table type	Multi-instance table

Row name	remote-server
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
host	IP address	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	Read-write. IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
config	config information	Subtable	N/A	For more information, see the system/logging/remote-servers/remote-server/config table.
selectors	selectors information	Subtable	N/A	For more information, see the system/logging/remote-servers/remote-server/selectors table.

## system/logging/remote-servers/remote-server/config

This table contains system logging remote-servers remote-server config information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None



Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
host	IP address	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	Refer to system/logging/remote-servers/host index
remote-port	Port number	N/A	N/A	Read-write

## system/logging/remote-servers/remote-server/selectors

This table contains system logging remote-servers remote-server selectors information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	selectors
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
selector	selector information	Subtable	N/A	For more information, see the system/logging/remote-servers/remote-server/selectors/selectors table.

# system/logging/remote-servers/remote-server/selectors/selector

This table contains system logging remote-servers remote-server selectors selector information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	selector
Table type	Single-instance table
Row name	selector
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
facility	Logging facility used by the log host	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>128</b>—local0.</li><li>• <b>136</b>—local1.</li><li>• <b>144</b>—local2.</li><li>• <b>152</b>—local3.</li><li>• <b>160</b>—local4.</li><li>• <b>168</b>—local5.</li><li>• <b>176</b>—local6.</li><li>• <b>184</b>—local7.</li></ul>	Read-write
config	config information	Subtable	N/A	For more information, see the <a href="#">system/logging/remote-servers/remote-server/selectors/selector/config</a> table.

# system/logging/remote-servers/remote-server/selectors/selector/config

This table contains system logging remote-servers remote-server selectors selector config information.

## XML structure

Please refer to the XML structure of system.

## Table description

Item	Description
Feature name	openconfig-system
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
facility	Logging facility used by the log host	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>128</b>—local0.</li><li>• <b>136</b>—local1.</li><li>• <b>144</b>—local2.</li><li>• <b>152</b>—local3.</li><li>• <b>160</b>—local4.</li><li>• <b>168</b>—local5.</li><li>• <b>176</b>—local6.</li><li>• <b>184</b>—local7.</li></ul>	Read-write

# Contents

- openconfig-vlan .....2
  - vlan.....2
    - XML structure.....2
    - Table description.....2
    - Columns.....2
  - vlan/vlan.....2
    - XML structure.....3
    - Table description.....3
    - Columns.....3
  - vlan/vlan/config.....3
    - XML structure.....3
    - Table description.....3
    - Columns.....4
  - switched-vlan.....4
    - XML structure.....4
    - Table description.....4
    - Columns.....5
  - switched-vlan/config .....5
    - XML structure.....5
    - Table description.....5
    - Columns.....5

# openconfig-vlan

## vlan

This table contains basic VLAN information.

## XML structure

```
<vlans>
  <vlan>
    <vlan-id></vlan-id>
    <config>
      <vlan-id></vlan-id>
      <name></name>
      <tpid></tpid>
    </config>
  </vlan>
</vlans>
```

## Table description

Item	Description
Feature name	openconfig-vlan
Table name	vlan
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vlan	Vlan information	Sublist	N/A	For more information, see the vlans/vlan table.

## vlans/vlan

This table contains basic VLAN configuration information.

## XML structure

Please refer to the XML structure of vlans.

## Table description

Item	Description
Feature name	openconfig-vlan
Table name	vlan
Table type	Multi-instance table
Row name	vlan
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vlan-id	Vlan id	Index	Unsigned integer. Value range: 1 to 4094.	Read-write
config	Vlan config information	Subtable	N/A	For more information, see the vlans/config table.

## vlans/vlan/config

This table contains basic VLAN configuration information.

## XML structure

Please refer to the XML structure of vlans.

## Table description

Item	Description
Feature name	openconfig-vlan
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vlan-id	Vlan id	Index	Unsigned integer. Value range: 1 to 4094.	Refer to vlans vlan-id.
name	Vlan name	N/A	String. Length: 1 to 32 characters. Default: <b>vlan</b> <i>vlan-id</i> . The <i>vlan id</i> argument uses the four-digit form. If the VLAN ID has less than four digits, leading zeros are added.	Read-write. Example: VLAN 0001.
tpid	Tag protocol identifier field	N/A	Unsigned integer. Value range: 1 to 65535.	Read-write. Default TPID_0x8100

批注 [Is1]: Need confirmed by product.

## switched-vlan

This table contains basic switched-vlan information.

## XML structure

```
<openconfig-vlan>
  <switched-vlan>
    <config>
      <interface-mode></interface-mode>
      <native-vlan></native-vlan>
      <access-vlan></access-vlan>
      <trunk-vlans></trunk-vlans>
    </config>
  </switched-vlan>
</openconfig-vlan>
```

## Table description

Item	Description
Feature name	openconfig-vlan
Table name	switched-vlan
Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
config	Switched-vlan configuration information	Subtable	N/A	For more information, see the switched-vlan/config table.

## switched-vlan/config

This table contains basic switched-vlan configuration information.

## XML structure

Please refer to the XML structure of switched-vlan.

## Table description

Item	Description
Feature name	openconfig-vlan
Table name	config
Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
interface-mode	Set the interface mode to access or trunk for VLANs.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>TRUNK.</b></li><li>• <b>ACCESS.</b></li></ul>	Read-write.
native-vlan	Set the port VLAN ID (PVID) for untagged frames arriving on a trunk interface.	N/A	Value range: 1 to 4094.	Read-write. You can configure this column when the interface-mode is set to TRUNK.



Column name	Column description	Column type	Data type and restrictions	Remarks
access-vlan	Port VLAN ID	N/A	Value range: 1 to 4094.	Read-write. You can config this columns when interface-mode is set to "ACCESS"
trunk-vlans	List of permitted VLANs on the port	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Read-write. You can config this columns when interface-mode is set to "TRUNK". Example: 1,2,3,5-8,10-20. The item is permitted to incremental edit. You can sign the flag like "<PermitVlanList base:incremental=true">". If the value is true, the vlan list will be added or removed. Otherwise, it is the final result.

# Contents

- OFC .....1
  - OFC/Channel .....1
  - XML structure .....1
  - Table description .....1
  - Columns .....1

# OFC

## OFC/Channel

This table contains information about OpenFlow controller Channel.

### XML structure

```
<OFC>
  <Channels>
    <Channel>
      <DatapathID></DatapathID>
      <ChannelID></ChannelID>
      <SwitchIPv4Address></SwitchIPv4Address>
      <SwitchIPv6Address></SwitchIPv6Address>
    </Channel>
  </Channels>
</OFC>
```

### Table description

Item	Description
Feature name	OFC
Table name	Channels
Table type	Multi-instance table
Row name	Channel
Restrictions	No

### Columns

Column name	Column description	Column type	Data type and restrictions
DatapathID	DatapathID of instance	Index	Unsigned integer64. <ul style="list-style-type: none"><li>Value range: 1 to <math>2^{64}-1</math>.</li></ul>
ChannelID	Channel's ID	Index	Unsigned integer. <ul style="list-style-type: none"><li>Value range: 0-255.</li></ul>
SwitchIPv4Address	Switch's IPv4 address	N/A	String, dotted decimal notation.
SwitchIPv6Address	Switch's IPv6 address	N/A	String, semicolon hex notation.

# Revision Record

Date	Revision Version	Change Description	Author
2015-04-27	V1.00	Initial	Liuzhongxin

# Contents

OFP .....	1
OFP/RefreshIpFlow .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
OFP/Packet .....	1
XML structure .....	1
Table description .....	2
Columns .....	2

# OFP

## OFP/RefreshIpFlow

This table is used to refresh ip flow table of an OFP instance.

### XML structure

```
<OFP>
  <RefreshIpFlow>
    <Application>
      <InstanceID></InstanceID>
      <Refresh></Refresh>
    </Application>
  </RefreshIpFlow>
</OFP>
```

### Table description

Item	Description
Feature name	OFP
Table name	RefreshIpFlow
Table type	Multi-instance table
Row name	Application
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
InstanceID	Instance ID	Index	Unsigned integer. Value range: 1 to 4094.	You must specify this column.
Refresh	Refresh IP flow table	N/A	This column must be empty	Required.

## OFP/Packet

This table is used to send packet-out messages.

### XML structure

```
<OFP>
  <Packet>
```

```

<Application>
  <InstanceID></InstanceID>
  <Value></Value>
  <OffsetType></OffsetType>
  <OffsetLen></OffsetLen>
  <OffsetValue></OffsetValue>
  <EnableLocalFlow></EnableLocalFlow>
  <Packetout></Packetout>
</Application>
</Packet>
</OFP>

```

## Table description

Item	Description
Feature name	OFP
Table name	Packet
Table type	Multi-instance table
Row name	Application
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
InstanceID	Instance ID	Index	Unsigned integer. Value range: 1 to 4094.	You must specify this column.
Value	Values that need to be matched	N/A	Unsigned integer. Value range: 1 to 8388606.	Required. Only supports OffsetType 1,OffsetLen 29,match value 3 bytes.
OffsetType	The type of offset match	N/A	Unsigned integer. Value range: 0 to 2. <ul style="list-style-type: none"> <li><b>0</b>—The offset match is calculated from the Ethernet header.</li> <li><b>1</b>—The offset match is calculated from the IP header.</li> <li><b>2</b>—The offset match is calculated from the TCP/UDP header.</li> </ul>	Required. Only support type 2.
OffsetLen	Offset length	N/A	Unsigned integer.	Required. Only support 25 and 75.
OffsetValue	Offset value	N/A	Base64 binary. Value range: 1 to 32.	Required. Only support 4 bytes.

Column name	Column description	Column type	Data type and restrictions	Remarks
EnableLocalFlow	Enable local table entry	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No (default).</li> </ul>	Required.
Packetout	Packet-out message	N/A	Base64 binary. Value range: 1 to 255.	Requires an existing instance and existing local table entries.



# Contents

OFP .....	1
OFP/LogicalSwitches .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
OFP/Controller .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
OFP/GlobalConfigurations .....	7
XML structure .....	7
Table description .....	7
Columns .....	7

# OFP

## OFP/LogicalSwitches

This table contains information about OpenFlow instance.

### XML structure

```
<OFP>
  <LogicalSwitches>
    <LogicalSwitch>
      <InstanceID></InstanceID>
      <Description></Description>
      <DatapathID></DatapathID>
      <Enable></Enable>
      <Capabilities>
        <MaxEntries></MaxEntries>
        <DynamicMacAware></DynamicMacAware>
        <MacLearning></MacLearning>
        <TableMissDefaultPermit></TableMissDefaultPermit>
        <ForbiddenPort></ForbiddenPort>
        <PermitPort></PermitPort>
        <DynamicArpPre></DynamicArpPre>
        <TcpNsr></TcpNsr>
        <DataPlane></DataPlane>
      </Capabilities>
      <Resources>
        <ClassificationType></ClassificationType>
        <ClassificationVLAN></ClassificationVLAN>
        <ClassificationVLANMask></ClassificationVLANMask>
        <ClassificationVLANLoosen></ClassificationVLANLoosen>
        <InbandManagementVLANList></InbandManagementVLANList>
        <MACIPTableIDList></MACIPTableIDList>
        <MPLSTableIDList></MPLSTableIDList>
        <ExtensibilityFlowTableIDList></ExtensibilityFlowTableIDList>
      </Resources>
      <ConnectionCfg>
        <ConnectionMode></ConnectionMode>
        <ConnectionInterval></ConnectionInterval>
        <EchoInterval></EchoInterval>
        <LostConnectionBehavior></LostConnectionBehavior>
        <TcpDscp></TcpDscp>
        <ForbiddenPktInArpCtrl></ForbiddenPktInArpCtrl>
      </ConnectionCfg>
    </LogicalSwitch>
  </LogicalSwitches>
```

</OFP>

## Table description

Item	Description
Feature name	OFP
Table name	LogicalSwitches
Table type	Multi-instance table
Row name	LogicalSwitch
Restrictions	No
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
InstanceID	Instance ID	Index	Unsigned integer. <ul style="list-style-type: none"><li>• <b>Value range: 1-4094.</b></li></ul>
Description	Description of instance	N/A	String. <ul style="list-style-type: none"><li>• Length: 1 to 255 characters.</li></ul> Default is empty.
DatapathID	DatapathID of instance	N/A	Unsigned integer64. <ul style="list-style-type: none"><li>• Value range: 1 to <math>2^{64}-1</math>.</li></ul> Default: Instance ID for high 16 bits, Bridge MAC for low 48 bits.
Enable	Enable status of instance	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No(Default).</li></ul>
Capabilities	Capabilities of instance	Data structure	Members include: <ul style="list-style-type: none"><li>• MaxEntries.</li><li>• DynamicMacAware.</li><li>• MacLearning.</li><li>• TableMissDefaultPermit.</li><li>• ForbiddenPort.</li><li>• PermitPort.</li><li>• DynamicArpPre.</li><li>• TcpNsr.</li></ul>
MaxEntries	Maximum number of flow entry in instance	N/A	Unsigned integer. <ul style="list-style-type: none"><li>• <b>Value range: Depends on device type.</b></li></ul> Default value depends on device type.
DynamicMacAware	Enable to query state of dynamic mac addresses	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No(Default).</li></ul>
MacLearning	Enable mac learning in	N/A	Boolean:

Column name	Column description	Column type	Data type and restrictions
	instance		<ul style="list-style-type: none"> <li><b>true</b>—Yes(Default).</li> <li><b>false</b>—No.</li> </ul>
TableMissDefaultPermit	Assign “Permit” as the default table miss action of instance	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No(Default).</li> </ul>
ForbiddenPort	Port type to be forbidden reporting port status to controller	N/A	Unsigned integer. 1st bit for VLAN interface. 2nd bit for VSI interface. 3rd bit for ROUTE interface. Default is 0.
PermitPort	Permit reporting ports of specific type	N/A	Unsigned integer. 1st bit for LAGG interface. Default is 0.
DynamicArpPre	Dynamic ARP will replace the conflicting openflow ARP	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No(Default).</li> </ul>
TcpNsr	Enable controller tcp nsr in instance	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes(Default).</li> <li><b>false</b>—No.</li> </ul>
Resources	Resources of instance	Data structure	Members include: <ul style="list-style-type: none"> <li>ClassificationType.</li> <li>ClassificationVLAN.</li> <li>ClassificationVLANMask.</li> <li>ClassificationVLANLoosen.</li> <li>InbandManagementVLANList.</li> <li>MACIPTableIDList.</li> <li>MPLSTableIDList.</li> <li>ExtensibilityFlowTableIDList.</li> </ul>
ClassificationType	Classification type of instance	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—VLANMask.</li> <li><b>2</b>—Global.</li> </ul> Default is not configured.
ClassificationVLAN	VLAN value when the type of classification is VLANMask	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value <b>range: 1-4094</b>.</li> </ul> Default is not configured. Classification VLAN can be configured only when the value of classification type is VLANMASK.
ClassificationVLANMask	VLAN mask value when the type of classification is VLANMask	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value <b>range: 0-4095</b>.</li> </ul> Default is not configured. Classification VLAN mask can be configured only when the value of classification type is VLANMASK.
ClassificationVLANLoosen	Loosen mode	N/A	Boolean:

Column name	Column description	Column type	Data type and restrictions
	when the type of classification is VLANMask		<ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No(Default).</li> </ul>
InbandManagementVLANList	In band management VLAN list of the instance	N/A	Number string. It is a comma-separated list of VLAN items. <ul style="list-style-type: none"> <li>The string must not end with a comma or hyphen, or include any whitespace characters.</li> </ul> Default is not configured.
MACIPTableIDList	MAC-IP table ID configuration of the instance	N/A	Number string. It is a comma-separated list of table ID items. <ul style="list-style-type: none"> <li>The string must not end with a comma or hyphen, or include any whitespace characters.</li> </ul> Default is not configured.
MPLSTableIDList	MPLS table ID configuration of the instance	N/A	Number string. It is a comma-separated list of table ID items. The string must not end with a comma or hyphen, or include any whitespace characters. Default is not configured.
ExtensibilityFlowTableIDList	Extensibility table ID configuration of the instance	N/A	Number string. It is a comma-separated list of table ID items. <ul style="list-style-type: none"> <li>The string must not end with a comma or hyphen, or include any whitespace characters.</li> </ul> Default is 0.
ConnectionCfg	Configuration of connection in instance	Data structure	Members include: <ul style="list-style-type: none"> <li>ConnectionMode.</li> <li>ConnectionInterval.</li> <li>EchoInterval.</li> <li>LostConnectionBehavior.</li> <li>TcpDscp.</li> <li>ForbiddenPktInArpCtrl.</li> </ul>
ConnectionMode	Connection mode for controller in instance	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Parallel(Default).</li> <li><b>1</b>—Serially.</li> </ul>
ConnectionInterval	Connection retry interval for connection with controller in instance	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value <b>range: 1-120</b>.</li> </ul> Default is 60.
EchoInterval	Interval time value of echo packet sending to controller in	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value <b>range: 1-10</b>.</li> </ul> Default is 5.

Column name	Column description	Column type	Data type and restrictions
	instance		
LostConnectionBehavior	Behavior for connection failure with all controllers in instance	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Standalone.</li> <li>2—Secure.</li> <li>4—<b>Smart</b></li> </ul> <b>Default is secure mode.</b>
TcpDscp	Set the DSCP value for OpenFlow messages in an OpenFlow instance	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 0-63.</li> </ul> Default is 10.
ForbiddenPktInArpCtrl	Specify controllers to which ARP packets are forbidden to be sent	N/A	Unsigned integer64. 1st bit for controller 0. 2nd bit for controller 1. 3rd bit for controller 2. ..... 63rd bit for controller 62. 64th bit for controller 63. Default is 0.
DataPlane	Enable the data forwarding plane feature in an instance	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

## OFP/Controller

This table contains information about OpenFlow controllers.

### XML structure

```

<OFP>
  <Controllers>
    <Controller>
      <InstanceID></InstanceID>
      <ControllerID></ControllerID>
      <IPv4Address></IPv4Address>
      <IPv6Address></IPv6Address>
      <Port></Port>
      <LocalIPv4Address></LocalIPv4Address>
      <LocalIPv6Address></LocalIPv6Address>
      <LocalPort></LocalPort>
      <Protocol></Protocol>
      <VRF></VRF>
      <SSLPolicy></SSLPolicy>
    </Controller>
  </Controllers>

```

</OFP>

## Table description

Item	Description
Feature name	OFP
Table name	Controllers
Table type	Multi-instance table
Row name	Controller
Restrictions	Row creation is allowed only when the instance exists.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
InstanceID	Instance ID	Index	Unsigned integer. • <b>Value range: 1-4094.</b>
ControllerID	Controller ID	Index	Unsigned integer. <b>Value range: 0-63.</b>
IPv4Address	Controller's IPv4 address	N/A	String, dotted decimal notation. Default is not configured.
IPv6Address	Controller's IPv6 address	N/A	String, semicolon hex notation. Default is not configured.
Port	Controller's port	N/A	Unsigned integer. • <b>Value range: 1-65535.</b> Default is 6633.
LocalIPv4Address	Local IPv4 address for connection with controller	N/A	String, dotted decimal notation. Default is not configured.
LocalIPv6Address	Local IPv6 address for connection with controller	N/A	String, semicolon hex notation. Default is not configured.
LocalPort	Local port for connection with controller	N/A	Unsigned integer. • <b>Value range: 1-65535.</b> Default is not configured.
Protocol	Protocol used for connection with controller	N/A	Enumeration: • <b>1</b> —TCP(Default). • <b>2</b> —SSL
VRF	VRF name for VPN connection with controller	N/A	String. Length: 1 to 31 characters. Default is not configured.
SSLPolicy	SSL policy name for SSL connection with controller	N/A	String, case insensitive. Length: 1 to 31 characters. Default is not configured.

Column name	Column description	Column type	Data type and restrictions
			SSL policy can be configured only when the value of protocol is SSL.

## OFP/GlobalConfigurations

This table contains information about OpenFlow global configurations.

### XML structure

```
<OFP>
  <GlobalConfigurations>
    <NormalForwardVLANList></NormalForwardVLANList>
  </GlobalConfigurations>
</OFP>
```

### Table description

Item	Description
Feature name	OFP
Table name	GlobalConfigurations
Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only global configurations.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
NormalForwardVLANList	Normal forwarding VLAN list	N/A	Number string. It is a comma-separated list of VLAN items. The string cannot end with a comma or hyphen, or include any whitespace characters. Default is not configured.



# Contents

OFP .....	1
OFP/LogicalSwitches .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
OFP/Controller .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
OFP/GlobalConfigurations .....	6
XML structure .....	7
Table description .....	7
Columns .....	7
OFP/Capability .....	7
XML structure .....	7
Table description .....	8
Columns .....	8

# OFP

## OFP/LogicalSwitches

This table contains information about OpenFlow instance.

### XML structure

```
<OFP>
  <LogicalSwitches>
    <LogicalSwitch>
      <InstanceID></InstanceID>
      <Description></Description>
      <DatapathID></DatapathID>
      <Enable></Enable>
      <Capabilities>
        <MaxEntries></MaxEntries>
        <DynamicMacAware></DynamicMacAware>
        <MacLearning></MacLearning>
        <TableMissDefaultPermit></TableMissDefaultPermit>
        <ForbiddenPort></ForbiddenPort>
        <PermitPort></PermitPort>
        <DynamicArpPre></DynamicArpPre>
        <TcpNsr></TcpNsr>
        <DataPlane></DataPlane>
      </Capabilities>
      <Resources>
        <ClassificationType></ClassificationType>
        <ClassificationVLAN></ClassificationVLAN>
        <ClassificationVLANMask></ClassificationVLANMask>
        <ClassificationVLANLoosen></ClassificationVLANLoosen>
        <InbandManagementVLANList></InbandManagementVLANList>
        <MACIPTableIDList></MACIPTableIDList>
        <MPLSTableIDList></MPLSTableIDList>
        <ExtensibilityFlowTableIDList></ExtensibilityFlowTableIDList>
      </Resources>
      <ConnectionCfg>
        <ConnectionMode></ConnectionMode>
        <ConnectionInterval></ConnectionInterval>
        <EchoInterval></EchoInterval>
        <LostConnectionBehavior></LostConnectionBehavior>
        <TcpDscp></TcpDscp>
        <ForbiddenPktInArpCtrl></ForbiddenPktInArpCtrl>
      </ConnectionCfg>
    </LogicalSwitch>
  </LogicalSwitches>
```

</OFP>

## Table description

Item	Description
Feature name	OFP
Table name	LogicalSwitches
Table type	Multi-instance table
Row name	LogicalSwitch
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions
InstanceID	Instance ID	Index	Unsigned integer. <ul style="list-style-type: none"><li>• <b>Value range: 1-4094.</b></li></ul>
Description	Description of instance	N/A	String. <ul style="list-style-type: none"><li>• Length: 1 to 255 characters.</li></ul>
DatapathID	DatapathID of instance	N/A	Unsigned integer64. <ul style="list-style-type: none"><li>• Value range: 1 to <math>2^{64}-1</math>.</li></ul>
Enable	Enable status of instance	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>
Capabilities	Capabilities of instance	Data structure	Members include: <ul style="list-style-type: none"><li>• MaxEntries.</li><li>• DynamicMacAware.</li><li>• MacLearning.</li><li>• TableMissDefaultPermit.</li><li>• ForbiddenPort.</li><li>• PermitPort.</li><li>• DynamicArpPre.</li><li>• TcpNsr.</li></ul>
MaxEntries	Maximum number of flow entry in instance	N/A	Unsigned integer. <ul style="list-style-type: none"><li>• <b>Value range: Depends on device type.</b></li></ul>
DynamicMacAware	Enable to query state of dynamic mac addresses	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>
MacLearning	Enable mac learning in instance	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>
TableMissDefaultPermit	Assign “Permit” as the default table miss action of	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No.</li></ul>

Column name	Column description	Column type	Data type and restrictions
	instance		
ForbiddenPort	Port type to be forbidden reporting port status to controller	N/A	Unsigned integer. 1st bit for VLAN interface. 2nd bit for VSI interface. 3rd bit for ROUTE interface.
PermitPort	Permit reporting ports of specific type	N/A	Unsigned integer. 1st bit for LAGG interface.
DynamicArpPre	Dynamic ARP will replace the conflicting openflow ARP	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>
TcpNsr	Enable controller tcp nsr in instance	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>
Resources	Resources of instance	Data structure	Members include: <ul style="list-style-type: none"> <li>ClassificationType.</li> <li>ClassificationVLAN.</li> <li>ClassificationVLANMask.</li> <li>ClassificationVLANLoosen.</li> <li>InbandManagementVLANList.</li> <li>MACIPTableIDList.</li> <li>MPLSTableIDList.</li> <li>ExtensibilityFlowTableIDList.</li> </ul>
ClassificationType	Classification type of instance	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—VLANMask.</li> <li><b>2</b>—Global.</li> </ul>
ClassificationVLAN	VLAN value when the type of classification is VLANMask	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value <b>range: 1-4094</b>.</li> </ul>
ClassificationVLANMask	VLAN mask value when the type of classification is VLANMask	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value <b>range: 0-4095</b>.</li> </ul>
ClassificationVLANLoosen	Loosen mode when the type of classification is VLANMask	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>
InbandManagementVLANList	In band management VLAN list of the instance	N/A	Number string. It is a comma-separated list of VLAN items. <ul style="list-style-type: none"> <li>The string must not end with a comma or hyphen, or include any whitespace characters.</li> </ul>
MACIPTableIDList	MAC-IP table ID configuration of the instance	N/A	Number string. It is a comma-separated list of table ID items. <ul style="list-style-type: none"> <li>The string must not end with a</li> </ul>

Column name	Column description	Column type	Data type and restrictions
			comma or hyphen, or include any whitespace characters.
MPLSTableIDList	MPLS table ID configuration of the instance	N/A	Number string. It is a comma-separated list of table ID items. The string must not end with a comma or hyphen, or include any whitespace characters.
ExtensibilityFlowTableIDList	Extensibility table ID configuration of the instance	N/A	Number string. It is a comma-separated list of table ID items. <ul style="list-style-type: none"> <li>The string must not end with a comma or hyphen, or include any whitespace characters.</li> </ul>
ConnectionCfg	Configuration of connection in instance	Data structure	Members include: <ul style="list-style-type: none"> <li>ConnectionMode.</li> <li>ConnectionInterval.</li> <li>EchoInterval.</li> <li>LostConnectionBehavior.</li> <li>TcpDscp.</li> <li>ForbiddenPktInArpCtrl.</li> </ul>
ConnectionMode	Connection mode for controller in instance	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Parallel.</li> <li><b>1</b>—Serially.</li> </ul>
ConnectionInterval	Connection retry interval for connection with controller in instance	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value <b>range: 1-120</b>.</li> </ul>
EchoInterval	Interval time value of echo packet sending to controller in instance	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value <b>range: 1-10</b>.</li> </ul>
LostConnectionBehavior	Behavior for connection failure with all controllers in instance	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Standalone.</li> <li><b>2</b>—Secure.</li> <li><b>4</b>—<b>Smart</b></li> </ul>
TcpDscp	Set the DSCP value for OpenFlow messages in an OpenFlow instance	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 0-63.</li> </ul>
ForbiddenPktInArpCtrl	Specify controllers to which ARP packets are forbidden to be sent	N/A	Unsigned integer64. 1st bit for controller 0. 2nd bit for controller 1. 3rd bit for controller 2. ..... 63rd bit for controller 62.

Column name	Column description	Column type	Data type and restrictions
			64th bit for controller 63.
DataPlane	Enable the data forwarding plane feature in an instance	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

## OFP/Controller

This table contains information about OpenFlow controllers.

### XML structure

```

<OFP>
  <Controllers>
    <Controller>
      <InstanceID></InstanceID>
      <ControllerID></ControllerID>
      <Role></Role>
      <IPv4Address></IPv4Address>
      <IPv6Address></IPv6Address>
      <Port></Port>
      <LocalIPv4Address></LocalIPv4Address>
      <LocalIPv6Address></LocalIPv6Address>
      <LocalPort></LocalPort>
      <Protocol></Protocol>
      <VRF></VRF>
      <SSLPolicy></SSLPolicy>
      <ConnectionState></ConnectionState>
      <CurrentVersion></CurrentVersion>
    </Controller>
  </Controllers>
</OFP>

```

### Table description

Item	Description
Feature name	OFP
Table name	Controllers
Table type	Multi-instance table
Row name	Controller
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions
InstanceID	Instance ID	Index	Unsigned integer. • <b>Value range: 1-4094.</b>
ControllerID	Controller ID	Index	Unsigned integer. <b>Value range: 0-63.</b>
Role	Controller role	N/A	Enumeration: • <b>0</b> —Unknown. • <b>1</b> —Equal. • <b>2</b> —Master. • <b>3</b> —Slave.
IPv4Address	Controller's IPv4 address	N/A	String, dotted decimal notation.
IPv6Address	Controller's IPv6 address	N/A	String, semicolon hex notation.
Port	Controller's port	N/A	Unsigned integer. • <b>Value range: 1-65535.</b>
LocalIPv4Address	Local IPv4 address for connection with controller	N/A	String, dotted decimal notation.
LocalIPv6Address	Local IPv6 address for connection with controller	N/A	String, semicolon hex notation.
LocalPort	Local port for connection with controller	N/A	Unsigned integer. • <b>Value range: 1-65535.</b>
Protocol	Protocol used for connection with controller	N/A	Enumeration: • <b>1</b> —TCP • <b>2</b> —SSL
VRF	VRF name for VPN connection with controller	N/A	String. Length: 1 to 31 characters.
SSLPolicy	SSL policy name for SSL connection with controller	N/A	String. Length: 1 to 31 characters.
ConnectionState	Connection state of controller	N/A	Enumeration: • <b>0</b> —Idle. • <b>1</b> —Established.
CurrentVersion	Wired version of OpenFlow protocol for the connection.	N/A	String. Length: 1 to 15 characters.

## OFP/GlobalConfigurations

This table contains information about OpenFlow global configurations.

## XML structure

```
<OFP>
  <GlobalConfigurations>
    <NormalForwardVLANList></NormalForwardVLANList>
  </GlobalConfigurations>
</OFP>
```

## Table description

Item	Description
Feature name	OFP
Table name	GlobalConfigurations
Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only global configurations.

## Columns

Column name	Column description	Column type	Data type and restrictions
NormalForwardVLANList	Global support for normal forward VLAN list	N/A	Number string. It is a comma-separated list of VLAN items. <ul style="list-style-type: none"><li>The string must not end with a comma or hyphen, or include any whitespace characters.</li></ul>

## OFP/Capability

This table contains OFP capability information, and it is used to obtain custom OFP parameters.

## XML structure

```
<OFP>
  <Capability>
    <LostConnectionSmartMode></LostConnectionSmartMode>
    <SupportExtensibilityTableNum></SupportExtensibilityTableNum>
  </Capability>
</OFP>
```



## Table description

Item	Description
Feature name	OFP
Table name	Capability
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
LostConnectionSmartMode	SmartMode behavior for connection failure with all controllers in an OpenFlow instance	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Support.</li><li>• <b>false</b>—Nonsupport.</li></ul>
SupportExtensibilityTableNum	Number of extensibility tables supported by the instance	N/A	Unsigned integer. Value range: 0-255.

# Contents

OFP .....	2
OFP/RefreshIpFlow .....	2
OFP/Packet .....	2
OFP/LogicalSwitches .....	2
OFP/Controller .....	3
OFP/GlobalConfigurations .....	4
OFP/Capability .....	5

# OFP

## OFP/RefreshIpFlow

Message	Explanation
Failed to configure OpenFlow. 配置Open Flow失败。	Invalid configuration, please modify configuration under the guidance. 无效的配置，请修改指导下的配置。
The Openflow process is busy. Please try again later. OpenFlow进程繁忙，请稍后尝试。	Receive message failure,connect server failure 接收消息失败或者与服务端建立连接失败。

## OFP/Packet

Message	Explanation
Failed to configure OpenFlow. 配置Open Flow失败。	Invalid configuration, please modify configuration under the guidance. 无效的配置，请修改指导下的配置。
The Openflow process is busy. Please try again later. OpenFlow进程繁忙，请稍后尝试。	Receive message failure,connect server failure 接收消息失败或者与服务端建立连接失败。

## OFP/LogicalSwitches

Message	Explanation
Failed to configure OpenFlow. 配置Open Flow失败。	Invalid configuration, please modify configuration under the guidance. 无效的配置，请修改指导下的配置。
The Openflow process is busy. Please try again later. OpenFlow进程繁忙，请稍后尝试。	Receive message failure,connect server failure 接收消息失败或者与服务端建立连接失败。
The value of VLAN ID should be specified when the type is VLAN Mask. 类型为VLAN掩码时必须指定VLAN ID。	The value of VLAN ID should be specified when the instance type is VLAN Mask. 实例类型为VLAN掩码时必须指定VLAN ID。
Configuration of VLAN should not be specified, when the type is global. 类型为全局时不能执行VLAN相关配置。	Configuration of VLAN should not be specified, when the instance type is global. 实例类型为全局时不能执行VLAN相关配置。
Configuration of VLAN failed, because the type is not specified 由于未指定类型，VLAN配置失败	The instance type should be specified,when existence the configuration of the VLAN. 当存在VLAN的相关的配置的时候，应该指定相应的实例类型。
The Extensibility TableID is not legal.	The value of extensibility Tabled ID is only number and the

扩展流表ID输入不合法。	extensibility table ID should be in the range of 0-254. 扩展流表ID的值只能是数字并且必须在0-254范围内。
Configuration of multiple MAC-IP flow table ID is not supported. 暂不支持配置多个MAC-IP流表ID	Only one MAC-IP flow table ID can be supported. 只能配置一个MAC-IP流表ID。
Configuration of multiple multiple Extensibility flow table ID is not supported. 暂不支持配置多个Extensibility流表ID。	Only one extensibility flow table ID can be supported. 只能配置一个Extensibility流表ID。
The MAC-IP TableID is not legal. MAC-IP流表ID的值不合法。	The value of MAC-IP Tabled ID is only number and the MAC-IP table ID should be in the range of 0-254. MAC-IP流表ID的值只能是数字且范围是0-254。 .
Extensibility table ID and MAC-IP table ID should be in the range of 0-254. 扩展流表和MAC-IP流表的ID必须在0-254范围内。	The MAC-IP table ID and Extensibility table ID should be in the range of 0-254. 扩展流表和MAC-IP流表的ID应该在0-254范围内。
Can not delete the configuration of Vlan ID when the type is VLAN Mask. 类型为VLAN掩码时不允许删除VLAN ID。	If instance type is VLAN Mask ,the VLAN ID is not allowed to be deleted when an instance table is deleted、removed、replaced. 在对实例表进行delete、remove、replace时，如果实例类型是VLAN掩码则不允许删除VLAN ID
MAC-IP table ID and extensibility table ID should be deleted together. MAC-IP流表和扩展流表必须一起删除。	If the table type is MAC-IP table,,the MAC-IP table should be deleted with the extensibility table when an instance table is deleted、removed、replaced. 在对实例表进行delete、remove、replace时，如果流表类型是MAC-IP表，则MAC-IP表应该和扩展表一起删除。
Extensibility Flow table ID should be larger than MAC-IP table ID. 扩展流表ID必须大于MAC-IP流表ID。	MAC-IP table ID should be less than extensibility flow table ID. MAC-IP流表的ID不能大于扩展流表的ID。
The instance is already active, please deactivate instance first. 实例已经激活，请首先去激活。	Modify the activated instance configuration is not allowed when the instance has been activated. 实例已经被激活，不允许去修改已经激活的配置。
Queue wait timeout. 队列等待超时。	Read queue failure 读取队列失败
The operation of instance activation/deactivation is running, please try later. 实例激活和去激活的操作正在运行中，请稍后尝试。	The operation of instance activation/deactivation is running. 实例激活或者去激活的操作正在进行。
Failed to activate instance, please configure classification first. 激活实例请先配置实例类型。	Please configure classification first before activate instance. 激活实例之前请先配置实例类型。
No openflow instance exists. 没有OpenFlow实例存在。	No openflow instance exists. 没有OpenFlow实例存在。

## OFP/Controller

Message	Explanation
Please configure IPV4 or IPV6 unicast address.	IPV4 or IPV6 unicast address should be configured when the

请配置IPv4或IPv6的单播地址。	controller is created. 当创建控制器配置的时候，IPV4或者IPV6的单播地址应该被设置。
The instance does not exist. 指定的实例不存在。	The instance ID does not exist. 指定的实例不存在。
The specified controller can not be modified. 不支持修改控制器配置。	The specified controller is already exist when the current controller is create;the current controller has the same configure with others when the current controller is merged;the current controller is not line deletion when controller is deleted、removed. 控制器进行merge操作时，存在重复配置；进行creat操作时，指定的控制器已经存在；delete和remove操作时不是行删除。
SSL policy should not be specified when the value of protocol is TCP. 当使用TCP连接控制器时，不能配置SSL策略。	When the value of protocol is TCP ,ssl policy should not be specified. 当使用TCP连接控制器时，不能配置SSL策略。
SSL policy should be specified when the value of protocol is SSL. 当使用SSI连接控制器时，必须配置SSL策略。	When the value of protocol is SSL ,ssl policy should be specified. 当使用SSI连接控制器时，必须配置SSL策略。
Local IPv4 and IPv6 address can not be configured at the same time. 本地IPv4和IPv6地址不能同时配置。	Local IPv4 and IPv6 address can not be configured at the same time. 本地IPv4和IPv6地址不能同时配置。
IPv4 or IPv6 address must be configured. 配置控制器时必须指定IPv4或IPv6地址。	IPv4 or IPv6 address must be configured. 配置控制器时必须指定IPv4或IPv6地址。
The value of local IPv4 or IPv6 address should be configured when Local port is specified. 配置本地端口时必须指定本地IPV4或IPV6地址。	When Local port is specified, the value of local IPv4 or IPv6 address should be configured. 配置本地端口时必须指定本地IPV4或IPV6地址。
The specified controller ID exists. 指定的控制器号已经存在。	Cannot conflict with existing controller ID when creating controller configuration. 创建控制器配置时不能与已有的控制器ID冲突。
OpenFlow controller configuration conflicts with other one. 指定控制器的配置和其他控制器冲突。	The current controller configuration cannot config with other controllers when the current controller is created. 当控制器进行creat操作时，当前控制器的配置不能与其他控制相冲突。

## OFP/GlobalConfigurations

Message	Explanation
The global instance and VLAN instance can't take effect simultaneously. 全局实例和VLAN实例不可同时生效。	The global instance and VLAN instance can't be activated simultaneously. 全局实例和VLAN实例不可同时被激活生效。
This global classification already exists. 全局配置已经存在。	The current global classification conflict with others. 当前的全局配置与其他实例配置冲突。

# OFP/Capability

Message	Explanation
NULL	NULL

# Contents

OSPF .....	1
OSPF/Instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
OSPF/Redistributes .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
OSPF/Areas .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
OSPF/Networks .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
OSPF/Interfaces .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
OSPF/IfMd5s .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
OSPF/Preferences .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
OSPF/AsbrSummaries .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
OSPF/StubRouters .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
OSPF/Nssas .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
OSPF/SilentAllInterfaces .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
OSPF/SilentInterfaces .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
OSPF/SegmentRoutings .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
OSPF/DistributeBgpIses .....	22
XML structure .....	22
Table description .....	23
Columns .....	23

# OSPF

## OSPF/Instances

This table contains OSPF instance information.

### XML structure

```
<OSPF>
  <Instances>
    <Instance>
      <Name></Name>
      <VRF></VRF>
      <RouterId></RouterId>
    </Instance>
  </Instances>
</OSPF>
```

### Table description

Item	Description
Feature name	OSPF
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.
VRF	VRF name.	N/A	String. Length: 1 to 31 characters.	After an instance is created, its VRF cannot be modified.
RouterId	Router identifier.	N/A	String, dotted decimal notation.	After this column is created or merged, it cannot be deleted or removed.



# OSPF/Redistributes

This table contains OSPF redistribute list information.

## XML structure

```
<OSPF>
  <Redistributes>
    <Redist>
      <Name></Name>
      <TopoId></TopoId>
      <Protocol></Protocol>
      <RedistName></RedistName>
    </Redist>
  </Redistributes>
</OSPF>
```

## Table description

Item	Description
Feature name	OSPF
Table name	Redistributes
Table type	Multi-instance table
Row name	Redist
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before you merge or create redistribute lists for it.  It must be an unsigned integer in the range of 1 to 65535.
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127. Default: 0.	Only 0 is supported now.
Protocol	Redistribute protocol.	Index	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Direct.</li> <li>2—Static.</li> <li>3—RIP.</li> <li>4—OSPF.</li> <li>5—ISIS.</li> <li>6—BGP.</li> </ul>	
RedistName	Redistribute instance name.	Index	String. Length: 1 to 31 characters.	It must be empty when the <b>Protocol</b> column is Direct, Static, or BGP.

## OSPF/Areas

This table contains OSPF area information.

### XML structure

```

<OSPF>
  <Areas>
    <Area>
      <Name></Name>
      <AreaId></AreaId>
      <AreaType></AreaType>
    </Area>
  </Areas>
</OSPF>

```

### Table description

Item	Description
Feature name	OSPF
Table name	Areas
Table type	Multi-instance table
Row name	Area
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before

Column name	Column description	Column type	Data type and restrictions	Remarks
				you merge or create areas for it. It must be an unsigned integer in the range of 1 to 65535.
AreaId	Area ID.	Index	String, dotted decimal notation.	N/A
AreaType	Area type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Stub.</li> <li>2—NSSA.</li> </ul>	You cannot specify AreaType when AreaId is 0.

## OSPF/Networks

This table contains OSPF network list information.

### XML structure

```

<OSPF>
  <Networks>
    <Network>
      <Name></Name>
      <AreaId></AreaId>
      <NetworkAddr></NetworkAddr>
      <WildcardMask></WildcardMask>
    </Network>
  </Networks>
</OSPF>

```

### Table description

Item	Description
Feature name	OSPF
Table name	Networks
Table type	Multi-instance table
Row name	Network
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance and an area before you merge or create networks for it.  It must be an unsigned integer in the range of 1 to 65535.
Areald	Area ID.	Index	String, dotted decimal notation.	N/A
NetworkAddr	Network address.	Index	String, dotted decimal notation.	N/A
WildcardMask	Wildcard mask.	N/A	String, dotted decimal notation.	N/A

## OSPF/Interfaces

This table contains OSPF interface information.

## XML structure

```

<OSPF>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <IfEnable>
        <Name></Name>
        <AreaId></AreaId>
        <ExcludedSubIp></ExcludedSubIp>
      </IfEnable>
      <Cost></Cost>
      <NetworkType></NetworkType>
      <HelloTimer></HelloTimer>
      <DeadTimer></DeadTimer>
      <DrPriority></DrPriority>
      <SimpleAuth>
        <SimplePwdType></SimplePwdType>
        <SimplePwd></SimplePwd>
      </SimpleAuth>
      <NullAuth></NullAuth>
      <BfdEnable></BfdEnable>
      <PrefixSid>
        <SidName></SidName>
        <SidType></SidType>
      </PrefixSid>
    </Interface>
  </Interfaces>
</OSPF>

```

```

<Sid></Sid>

<ExplicitNull></ExplicitNull>

<NFlagClear></NFlagClear>

</PrefixSid>

</Interface>
</Interfaces>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
IfEnable	Interface enable messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Areald.</li> <li>ExcludedSubIp.</li> </ul>	The members of Name and Areald must be specified.
Name	Instance name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.
Areald	Area ID.	N/A	String, dotted decimal notation.	N/A
ExcludedSubIp	Whether to exclude secondary IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Excludes secondary IP addresses.</li> <li><b>false—Does not</b> exclude secondary IP addresses (default).</li> </ul>	N/A
Cost	Interface cost.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: <ul style="list-style-type: none"> <li>• Loopback interfaces: 0 to 65535.</li> <li>• Other interfaces: 1 to 65535.</li> </ul> Default: <ul style="list-style-type: none"> <li>• Loopback interfaces: 0.</li> <li>• Other interfaces: The cost values are calculated by using the formula: <i>Cost = Reference bandwidth value / Expected interface bandwidth.</i></li> </ul>	
NetworkType	Interface network type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Broadcast.</li> <li>• 2—NBMA.</li> <li>• 3—P2P.</li> <li>• 4—P2MP.</li> <li>• 5—P2MP unicast.</li> </ul>	N/A
HelloTimer	Hello interval.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
DeadTimer	Dead interval.	N/A	Unsigned integer. Value range: 1 to 2147483647.	N/A
DrPriority	Router priority.	N/A	Unsigned integer. Value range: 0 to 255. Default: 1.	N/A
SimpleAuth	Simple authentication messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>• SimplePwdType.</li> <li>• SimplePwd.</li> </ul>	The members must both be specified when SimplePwdType is not None.
SimplePwdType	Simple password type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Cipher.</li> <li>• 2—Plain.</li> <li>• 3—None.</li> </ul>	OSPF will use empty string to authenticate packets when SimplePwdType is None.
SimplePwd	Simple password.	N/A	String. Length: <ul style="list-style-type: none"> <li>• 1 to 8 characters for plain password.</li> <li>• 33 to 41 characters for cipher password.</li> </ul>	It will not take effect when SimplePwdType is None.
NullAuth	Whether to use no authentication.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Use no authentication.</li> <li>• <b>false</b>—Do not use no authentication.</li> </ul>	SimpleAuth cannot be specified and the simple or cryptographic authentication configuration will be deleted when NullAuth is true.
BfdEnable	BFD is enabled for	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Enable control</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	OSPF.		packet mode. <ul style="list-style-type: none"> <li><b>2</b>—Enable echo packet mode.</li> </ul>	
PrefixSid	Prefix Segment ID messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>SidName.</li> <li>SidType.</li> <li>Sid.</li> <li>ExplicitNull.</li> <li>NFlagClear.</li> </ul>	The members of SidName, SidType and Sid must be specified.
SidName	Instance name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.
SidType	The type of Prefix-SID	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Absolute value of Prefix-SID.</li> <li><b>2</b>—Index value of Prefix-SID.</li> </ul>	N/A
Sid	Prefix Segment ID	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
ExplicitNull	Explicit null label	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The upstream neighbor replaces the prefix SID with an explicit null label.</li> <li><b>false</b>—The upstream neighbor does not replace the prefix SID with an explicit null label (default).</li> </ul>	N/A
NFlagClear	Clear the N-flag	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Clears the N-flag for the prefix SID.</li> <li><b>false</b>—Does not clear the N-flag for the prefix SID (default).</li> </ul>	N/A

## OSPF/IfMd5s

This table contains OSPF interface cryptographic authentication information.

### XML structure

```

<OSPF>
  <IfMd5s>
    <Md5>
      <IfIndex></IfIndex>
      <KeyId></KeyId>
      <Md5Type></Md5Type>
    </Md5>
  </IfMd5s>
</OSPF>

```

```

    <PasswordType></PasswordType>
    <Password></Password>
  </Md5>
</IfMd5s>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	IfMd5s
Table type	Multi-instance table
Row name	Md5
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
KeyId	Key ID.	Index	Unsigned integer. Value range: 1 to 255.	OSPF will use empty string to authenticate packets when KeyId is empty. Other Md5 configuration will be deleted when you create, merge or replace a Md5 that KeyId is empty. Empty string authentication configuration will be deleted when you create, merge or replace a Md5 that KeyId is not empty.



Column name	Column description	Column type	Data type and restrictions	Remarks
Md5Type	Cryptographic authentication type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—MD5.</li> <li>2—HMAC-MD5.</li> <li>3—HMAC-SHA-256.</li> </ul>	After a Md5 is created, its Md5Type cannot be modified when KeyId is not empty.
PasswordType	Password type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Cipher.</li> <li>2—Plain.</li> </ul>	After a Md5 is created, its PasswordType cannot be modified. It will not take effect when KeyId is empty.
Password	Password.	N/A	String. Length: <ul style="list-style-type: none"> <li>1 to 16 characters for MD5/HMAC-MD5 plain password, and 1 to 255 characters for HMAC-SHA-256 plain password.</li> <li>33 to 53 characters for MD5/HMAC-MD5 cipher password, and 33 to 373 characters for HMAC-SHA-256 cipher password.</li> </ul>	After a Md5 is created, its Password cannot be modified. It will not take effect when KeyId is empty.

## OSPF/Preferences

This table contains OSPF preference information.

### XML structure

```

<OSPF>
  <Preferences>
    <Preference>
      <Name></Name>
      <TopoId></TopoId>
      <Type></Type>
      <Value></Value>
      <PolicyName></PolicyName>
    </Preference>
  </Preferences>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	Preferences
Table type	Multi-instance table
Row name	Preference
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before you merge or create areas for it. It must be an unsigned integer in the range of 1 to 65535.
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127. Default: 0.	Only 0 is supported now.
Type	Route type.	Index	Enumeration: <ul style="list-style-type: none"><li>1—AS internal route.</li><li>2—AS external route.</li></ul>	N/A
Value	Preference value.	N/A	Unsigned integer. Value range: 1 to 255. Default: <ul style="list-style-type: none"><li>AS internal route is 10.</li><li>AS external route is 150.</li></ul>	N/A
PolicyName	Name of the routing policy.	N/A	String. Length: 1 to 63 characters.	N/A

## OSPF/AsbrSummarys

This table contains OSPF ASBR summary route information.

## XML structure

```
<OSPF>
  <AsbrSummarys>
    <AsbrSummary>
```

```

<Name></Name>
<TopoId></TopoId>
<Ipv4Address></Ipv4Address>
<Ipv4Mask></Ipv4Mask>
<Cost></Cost>
<NotAdvertise></NotAdvertise>
<NssaOnly></NssaOnly>
<Tag></Tag>
</AsbrSummary>
</AsbrSummarys>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	AsbrSummarys
Table type	Multi-instance table
Row name	AsbrSummary
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before you merge or create areas for it. It must be an unsigned integer in the range of 1 to 65535.
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127. Default: 0.	Only 0 is supported now.
Ipv4Address	IPv4 address.	Index	IPv4: String, dotted decimal notation.	N/A
Ipv4Mask	Mask of IP address.	Index	IPv4: String, dotted decimal notation.	N/A
Cost	Summary route cost.	N/A	Unsigned integer. Value range: 1 to 16777214.	N/A
NotAdvertise	Does not advertise summary route.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—<b>Does not</b> advertise summary route.</li> <li><b>false</b>—Advertises</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			summary route (default).	
NssaOnly	Limits summary routes to NSSA areas.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Limits summary routes to NSSA areas.</li> <li><b>false</b>—Does not limit summary routes to NSSA areas(default).</li> </ul>	N/A
Tag	Summary route tag.	N/A	Unsigned integer. Value range: 0 to 4294967295. Default: 1.	N/A

## OSPF/StubRouters

This table contains OSPF stub router information.

### XML structure

```

<OSPF>
  <StubRouters>
    <StubRouter>
      <Name></Name>
      <TopoId></TopoId>
      <ExternalLsa></ExternalLsa>
      <ExtMetric></ExtMetric>
      <IncludeStub></IncludeStub>
      <OnStartup>
        <WaitForBgp></WaitForBgp>
        <Seconds></Seconds>
      </OnStartup>
      <SummaryLsa></SummaryLsa>
      <SumMetric></SumMetric>
    </StubRouter>
  </StubRouters>
</OSPF>

```

### Table description

Item	Description
Feature name	OSPF
Table name	StubRouters
Table type	Multi-instance table
Row name	StubRouter
Restrictions	None

Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before you merge, create, replace, delete, or remove StubRouter lists for it.  It must be an unsigned integer in the range of 1 to 65535.
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127. Default: 0.	Only 0 is supported now.
ExternalLsa	Configures the cost of external LSAs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—Specifies a cost for the external LSAs.</b></li> <li><b>false—Does not specify a cost for the external LSAs (default).</b></li> </ul>	For the create and merge operations, if you both configure the ExternalLsa and ExtMetric, you must specify the ExternalLsa as true.  For the replace operation, if you configure the ExtMetric, you must configure the ExternalLsa too, and specify the ExternalLsa as true.  For the delete and remove operations, if you configure the ExternalLsa, the ExtMetric value will be deleted.
ExtMetric	Cost of the external LSAs.	N/A	Unsigned integer. Value range: 1 to 16777215. Default: 16711680.	N/A
IncludeStub	Sets the cost of the stub links.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—Sets the cost of the stub links (link type 3) in Router LSAs to the maximum value</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<b>65535.</b> <ul style="list-style-type: none"> <li><b>false—Does not set the cost of the stub links (link type 3) in Router LSAs (default).</b></li> </ul>	
OnStartup	Specifies the router as a stub router during reboot.	Data structure	Members include: <ul style="list-style-type: none"> <li>WaitForBgp.</li> <li>Seconds.</li> </ul>	At least one member must be specified.
WaitForBgp	Waits for BGP on-startup.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—Specifies the router as a stub router during BGP route convergence after reboot.</b></li> <li><b>false—Does not specify the router as a stub router during BGP route convergence after reboot (default).</b></li> </ul>	N/A
Seconds	On-startup timeout time.	N/A	Unsigned integer. Value range: 5 to 86400. Default: 600 (when WaitForBgp is specified as <b>true</b> ).	The unit is seconds. When WaitForBgp is specified as <b>true</b> , the default value for Seconds is 600.
SummaryLsa	Configures the cost of the summary LSAs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—Specifies a cost for the Type-3 LSAs.</b></li> <li><b>false—Does not specify a cost for the Type-3 LSAs (default).</b></li> </ul>	For the create and merge operations, if you both configure the SummaryLsa and SumMetric, you must specify the SummaryLsa as true. For the replace operation, if you configure the SumMetric, you must configure the SummaryLsa too, and specify the SummaryLsa as true. For the delete and remove operations, if you configure the SummaryLsa, the SumMetric value will be deleted.
SumMetric	Cost of the summary LSAs.	N/A	Unsigned integer. Value range: 1 to 16777215.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Default: 16711680.	

## OSPF/Nssas

This table contains OSPF NSSA area information.

### XML structure

```

<OSPF>
  <Nssas>
    <Nssa>
      <Name></Name>
      <TopoId></TopoId>
      <AreaId></AreaId>
      <DefaultRouteAdvertiseCfg>
        <DefaultRouteAdvertise></DefaultRouteAdvertise>
        <Cost></Cost>
        <NssaOnly></NssaOnly>
        <PolicyName></PolicyName>
        <Type></Type>
      </DefaultRouteAdvertiseCfg>
      <NoImportRoute></NoImportRoute>
      <NoSummary></NoSummary>
      <SuppressFa></SuppressFa>
      <Translate></Translate>
      <TranslatorStabilityInterval></TranslatorStabilityInterval>
    </Nssa>
  </Nssas>
</OSPF>

```

### Table description

Item	Description
Feature name	OSPF
Table name	Nssas
Table type	Multi-instance table
Row name	Nssa
Restrictions	The row can be operated only when the AreaType of the corresponding area in the Areas table is configured as Nssa.
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before you merge or create areas for it. It must be an unsigned integer in the range of 1 to 65535.
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127. Default: 0.	Only 0 is supported now.
Areald	Area ID.	Index	String, dotted decimal notation.	
DefaultRoute AdvertiseCfg	Default route advertisement messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>DefaultRouteAdvertise.</li> <li>Cost.</li> <li>NssaOnly.</li> <li>PolicyName.</li> <li>Type.</li> </ul>	N/A
DefaultRoute Advertise	Whether to generate a Type-7 default into the NSSA area.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Generates a Type-7 default into the NSSA area.</li> <li><b>false</b>—<b>Does not</b> generate a Type-7 default into the NSSA area. <b>(default)</b>.</li> </ul>	For the create and merge operations, if you both configure the DefaultRouteAdvertise and the other members, you must specify the DefaultRouteAdvertise as true.  For the replace operation, if you configure the other members, you must configure the DefaultRouteAdvertise too, and specify it as true.  For the delete and remove operations, if you configure the DefaultRouteAdvertise, the values of the rest members will be deleted.
Cost	Metric for default route.	N/A	Unsigned integer. Value range: 0 to 16777214.	N/A
NssaOnly	Whether to limit the default route advertisement to the NSSA area.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Limits the default route advertisement to the NSSA area.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>false—Does not</b> limit the default route advertisement to the NSSA area <b>(default)</b>.</li> </ul>	
PolicyName	Specifies the routing policy to filter default route.	N/A	String. Length: 1 to 63 characters.	N/A
Type	Specifies a cost type for the Type-7 LSA.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Type 1.</li> <li><b>2</b>—Type 2.</li> </ul>	N/A
NoImportRoute	Whether to redistribute routes into the NSSA area.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Does not redistribute routes into the NSSA area.</li> <li><b>false</b>—Redistributes routes into the NSSA area (default).</li> </ul>	N/A
NoSummary	Whether to send summary LSA into the NSSA area.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Does not send summary LSA into the NSSA area.</li> <li><b>false</b>—Sends summary LSA into the NSSA area <b>(default)</b>.</li> </ul>	N/A
SuppressFa	Whether to suppress the forwarding address in the Type-7 LSAs from being placed in the Type-5 LSAs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Suppresses the forwarding address in the Type-7 LSAs from being placed in the Type-5 LSAs.</li> <li><b>false—Does not</b> suppress the forwarding address in the Type-7 LSAs from being placed in the Type-5 LSAs <b>(default)</b>.</li> </ul>	N/A
Translate	Whether to translate Type-7 LSAs to Type-5 LSAs.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Always translates Type-7 LSAs to Type-5 LSAs.</li> <li><b>2</b>—Never translates Type-7 LSAs to Type-5 LSAs.</li> <li><b>3</b>—Ignores checking the backbone area.</li> <li><b>4</b>—Always translates Type-7 LSAs to Type-5 LSAs and ignores checking the backbone area.</li> </ul>	N/A
TranslatorStabilityInterval	Specifies the stability interval of the translator.	N/A	Unsigned integer. Value range: 0 to 900.	The unit is seconds and the default value is 0.

# OSPF/SilentAllInterfaces

This table contains all OSPF silent interface information.

## XML structure

```
<OSPF>
  <SilentAllInterfaces>
    <SilentAllInterface>
      <Name></Name>
      <SilentAll></SilentAll>
    </SilentAllInterface>
  </SilentAllInterfaces>
</OSPF>
```

## Table description

Item	Description
Feature name	OSPF
Table name	SilentAllInterfaces
Table type	Multi-instance table
Row name	SilentAllInterface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before you merge or create SilentAllInterfaces for it.  It must be an unsigned integer in the range of 1 to 65535.
SilentAll	Whether to specify all interfaces	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Specifies all interfaces.</li><li><b>false</b>—Does not specify all interfaces(default).</li></ul>	N/A

# OSPF/SilentInterfaces

This table contains OSPF silent interface information.

## XML structure

```
<OSPF>
  <SilentInterfaces>
    <SilentInterface>
      <Name></Name>
      <IfName></IfName>
      <Silent></Silent>
    </SilentInterface>
  </SilentInterfaces>
</OSPF>
```

## Table description

Item	Description
Feature name	OSPF
Table name	SilentAllInterfaces
Table type	Multi-instance table
Row name	SilentAllInterface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before you merge or create SilentInterfaces for it.  It must be an unsigned integer in the range of 1 to 65535.
IfName	Interface name	Index	String. Length: 1 to 47 characters.	N/A
Silent	Whether to specify the interface	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Specifies the interface.</li><li><b>false</b>—Does not specify the interface.</li></ul>	If SilentAll is true in the SilentAllInterfaces table, the default Silent value is true.

Column name	Column description	Column type	Data type and restrictions	Remarks
				If SilentAll is false in the SilentAllInterfaces table, the default Silent value is false.

## OSPF/SegmentRoutings

This table contains OSPF segment routing information.

### XML structure

```

<OSPF>
  <SegmentRoutings>
    <SegmentRouting>
      <Name></Name>
      <MplsEnable></MplsEnable>
      <AdjacencyEnable></AdjacencyEnable>
      <SRGB>
        <Lowerbound></Lowerbound>
        <Upperbound></Upperbound>
      </SRGB>
      <SrPreferEnable></SrPreferEnable>
      <PrefixListName></PrefixListName>
    </SegmentRouting>
  </SegmentRoutings>
</OSPF>

```

### Table description

Item	Description
Feature name	OSPF
Table name	SegmentRoutings
Table type	Multi-instance table
Row name	SegmentRouting
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before you merge or create segment routings for it. It must be an unsigned integer in the range of 1 to 65535.
MplsEnable	Whether to enable MPLS SR.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables MPLS SR.</li> <li><b>false</b>—Does not enable MPLS SR(default).</li> </ul>	N/A
AdjacencyEnable	Whether to enable adjacency label allocation.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables adjacency label allocation.</li> <li><b>false</b>—Does not enable adjacency label allocation(default).</li> </ul>	N/A
SRGB	Specifies range of SRGB.	Data structure	Members include: <ul style="list-style-type: none"> <li>Lowerbound.</li> <li>Upperbound.</li> </ul>	N/A
Lowerbound	Min value of SRGB.	N/A	Unsigned integer. Value range: 16000 to 23999. Default: 16000.	N/A
Upperbound	Max value of SRGB.	N/A	Unsigned integer. Value range: 16001 to 24000. Default: 24000.	N/A
SrPreferEnable	Whether to enable SR label preference.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables SR label preference.</li> <li><b>false</b>—Does not enable SR label preference (default).</li> </ul>	N/A
PrefixListName	Name of the prefix list	N/A	String. Length: 1 to 63 characters.	N/A

## OSPF/DistributeBgppls

This table contains information about OSPF link state advertisement to BGP.

### XML structure

```
<OSPF>
```

```

<DistributeBgpls>
  <DistributeBgpls>
    <Name></Name>
    <TopoId></TopoId>
    <InstanceId></InstanceId>
    <StrictLinkCheck></StrictLinkCheck>
  </DistributeBgpls>
</DistributeBgpls>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	DistributeBgpls
Table type	Multi-instance table
Row name	DistributeBgpls
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance before you merge or create distributebgpls for it.  It must be an unsigned integer in the range of 1 to 65535.
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127 Default: 0.	Only 0 is supported now.
InstanceId	Instance ID.	N/A	Unsigned integer. Value range: 0 to 65535 Default: 0.	N/A
StrictLinkCheck	Whether to enable strict link checking.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables strict link checking.</li> <li><b>false</b>—Does not enable strict link checking (default).</li> </ul>	N/A



# Contents

OSPF .....	1
OSPF/Instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
OSPF/Redistributes .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
OSPF/Areas .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
OSPF/Networks .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
OSPF/Interfaces .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
OSPF/IfMd5s .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
OSPF/Neighbours .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
OSPF/Preferences .....	10
XML structure .....	11
Table description .....	11
Columns .....	11
OSPF/AsbrSummaries .....	11
XML structure .....	12
Table description .....	12
Columns .....	12
OSPF/StubRouters .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
OSPF/Nssas .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
OSPF/SilentAllInterfaces .....	17
XML structure .....	18
Table description .....	18
Columns .....	18
OSPF/SilentInterfaces .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
OSPF/SegmentRoutings .....	19
XML structure .....	19
Table description .....	20
Columns .....	20



OSPF/DistributeBgpIses .....	21
XML structure .....	21
Table description .....	21
Columns .....	21

# OSPF

## OSPF/Instances

This table contains OSPF instance information.

### XML structure

```
<OSPF>
  <Instances>
    <Instance>
      <Name></Name>
      <VRF></VRF>
      <RouterId></RouterId>
    </Instance>
  </Instances>
</OSPF>
```

### Table description

Item	Description
Feature name	OSPF
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	Instance name.	Index	String. Length: 1 to 31 characters.
VRF	VRF name.	N/A	String. Length: 1 to 31 characters.
RouterId	Router identifier.	N/A	String, dotted decimal notation.

## OSPF/Redistributes

This table contains OSPF redistribute list information.

## XML structure

```
<OSPF>
  <Redistributes>
    <Redist>
      <Name></Name>
      <TopoId></TopoId>
      <Protocol></Protocol>
      <RedistName></RedistName>
    </Redist>
  </Redistributes>
</OSPF>
```

## Table description

Item	Description
Feature name	OSPF
Table name	Redistributes
Table type	Multi-instance table
Row name	Redist
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Instance name.	Index	String. Length: 1 to 31 characters.
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127. Default: 0.
Protocol	Redistribute protocol.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Direct.</li><li>• 2—Static.</li><li>• 3—RIP.</li><li>• 4—OSPF.</li><li>• 5—ISIS.</li><li>• 6—BGP.</li></ul>
RedistName	Redistribute instance name.	Index	String. Length: 1 to 31 characters.

## OSPF/Areas

This table contains OSPF area information.

## XML structure

```
<OSPF>
  <Areas>
    <Area>
      <Name></Name>
      <AreaId></AreaId>
      <AreaType></AreaType>
    </Area>
  </Areas>
</OSPF>
```

## Table description

Item	Description
Feature name	OSPF
Table name	Areas
Table type	Multi-instance table
Row name	Area
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Instance name.	Index	String. Length: 1 to 31 characters.
Areald	Area ID.	Index	String, dotted decimal notation.
AreaType	Area type.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Stub.</li><li>2—NSSA.</li></ul>

## OSPF/Networks

This table contains OSPF network list information.

## XML structure

```
<OSPF>
  <Networks>
    <Network>
      <Name></Name>
      <AreaId></AreaId>
      <NetworkAddr></NetworkAddr>
      <WildcardMask></WildcardMask>
```

```

    </Network>
  </Networks>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	Networks
Table type	Multi-instance table
Row name	Network
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Instance name.	Index	String. Length: 1 to 31 characters.
Areald	Area ID.	Index	String, dotted decimal notation.
NetworkAddr	Network address.	Index	String, dotted decimal notation.
WildcardMask	Wildcard mask.	N/A	String, dotted decimal notation.

## OSPF/Interfaces

This table contains OSPF interface information.

## XML structure

```

<OSPF>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <IfEnable>
        <Name></Name>
        <AreaId></AreaId>
        <ExcludedSubIp></ExcludedSubIp>
      </IfEnable>
      <Cost></Cost>
      <NetworkType></NetworkType>
      <HelloTimer></HelloTimer>
      <DeadTimer></DeadTimer>
    </Interface>
  </Interfaces>
</OSPF>

```

```

<DrPriority></DrPriority>

<SimpleAuth>
<SimplePwdType></SimplePwdType>
  <SimplePwd></SimplePwd>
</SimpleAuth>

<NullAuth></NullAuth>

<CurAuthType></CurAuthType>

<CurMd5KeyId></CurMd5KeyId>

<State></State>

<BfdEnable></BfdEnable>

<PrefixSid>
  <SidName></SidName>
  <SidType></SidType>
  <Sid></Sid>
  <ExplicitNull></ExplicitNull>
  <NFlagClear></NFlagClear>
</PrefixSid>
</Interface>
</Interfaces>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
IfEnable	Interface	Data	Members include:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	enable messages.	structure	<ul style="list-style-type: none"> <li>Name.</li> <li>Areald.</li> </ul>	
Name	Instance name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
Areald	Area ID.	N/A	String, dotted decimal notation.	N/A
ExcludedSubIp	Whether to exclude secondary IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Excludes secondary IP addresses.</li> <li><b>false</b>—<b>Does not exclude secondary IP addresses (default).</b></li> </ul>	N/A
Cost	Interface cost.	N/A	Unsigned integer. Value range: <ul style="list-style-type: none"> <li>0 to 65535 for loopback interfaces.</li> <li>1 to 65535 for other interfaces.</li> </ul>	N/A
NetworkType	Interface network type.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Broadcast.</li> <li><b>2</b>—NBMA.</li> <li><b>3</b>—P2P.</li> <li><b>4</b>—P2MP.</li> <li><b>5</b>—P2MP <b>unicast</b>.</li> </ul>	N/A
HelloTimer	Hello interval.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
DeadTimer	Dead interval.	N/A	Unsigned integer. Value range: 1 to 2147483647.	N/A
DrPriority	Router priority.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
SimpleAuth	Simple authentication messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>SimplePwdType.</li> <li>SimplePwd.</li> </ul>	N/A
SimplePwdType	Simple password type.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Ciphertext.</li> <li><b>2</b>—Plaintext.</li> <li><b>3</b>—None.</li> </ul>	N/A
SimplePwd	Simple password.	N/A	String. Length: <ul style="list-style-type: none"> <li>1 to 8 characters for plain password.</li> <li>33 to 41 characters for cipher password.</li> </ul>	N/A
NullAuth	Whether to use	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	no authentication.		<ul style="list-style-type: none"> <li><b>true</b>—Use no authentication.</li> <li><b>false</b>—Do not use no authentication.</li> </ul>	
CurAuthType	Enabled authentication mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Simple.</li> <li><b>2</b>—MD5.</li> <li><b>3</b>—HMAC-MD5.</li> <li><b>4</b>—HMAC-SHA-256.</li> </ul>	N/A
CurMd5Id	Last key ID.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
State	Interface state.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Down.</li> <li><b>1</b>—Waiting.</li> <li><b>2</b>—P-2-P.</li> <li><b>3</b>—<b>DR</b>.</li> <li><b>4</b>—<b>BDR</b>.</li> <li><b>5</b>—<b>DROther</b>.</li> <li><b>6</b>—Loopback.</li> </ul>	N/A
BfdEnable	BFD is enabled for OSPF.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Enable control packet mode.</li> <li><b>2</b>—Enable echo packet mode.</li> </ul>	N/A
PrefixSid	Prefix Segment ID messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>SidName.</li> <li>SidType.</li> <li>Sid.</li> <li>ExplicitNull.</li> <li>NFlagClear.</li> </ul>	N/A
SidName	Instance name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
SidType	The type of Prefix-SID	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Absolute value of Prefix-SID.</li> <li><b>2</b>—Index value of Prefix-SID.</li> </ul>	N/A
Sid	Prefix Segment ID	N/A	Unsigned integer. Value range: 0 to 1048575.	N/A
ExplicitNull	Explicit null label	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The upstream neighbor replaces the prefix SID with an explicit null label.</li> <li><b>false</b>—The upstream neighbor does not replace the prefix SID with an explicit null label.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
NFlagClear	Whether to clear the N-flag	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Clears the N-flag for the prefix SID.</li> <li><b>false</b>—Does not clear the N-flag for the prefix SID.</li> </ul>	N/A

## OSPF/IfMd5s

This table contains OSPF interface cryptographic authentication information.

### XML structure

```

<OSPF>
  <IfMd5s>
    <Md5>
      <IfIndex></IfIndex>
      <KeyId></KeyId>
      <Md5Type></Md5Type>
      <PasswordType></PasswordType>
      <Password></Password>
    </Md5>
  </IfMd5s>
</OSPF>

```

### Table description

Item	Description
Feature name	OSPF
Table name	IfMd5s
Table type	Multi-instance table
Row name	Md5
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr</i>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<i>NETCONF XML API Configuration Reference.</i>
KeyId	Key ID.	Index	Unsigned integer. Value range: 1 to 255.	OSPF will use empty string to authenticate packets when KeyId is empty.
Md5Type	Cryptographic authentication type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—MD5.</li> <li>2—HMAC-MD5.</li> <li>3—HMAC-SHA-256.</li> </ul>	N/A
PasswordType	Password type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ciphertext.</li> <li>2—Plaintext.</li> </ul>	N/A
Password	Password.	N/A	String. Length: <ul style="list-style-type: none"> <li>1 to 16 characters for MD5/HMAC-MD5 plain password, and 1 to 255 characters for HMAC-SHA-256 plain password.</li> <li>33 to 53 characters for MD5/HMAC-MD5 cipher password, and 33 to 373 characters for HMAC-SHA-256 cipher password.</li> </ul>	N/A

## OSPF/Neighbours

This table contains OSPF neighbour information.

### XML structure

```

<OSPF>
  <Neighbours>
    <Nbr>
      <IfIndex></IfIndex>
      <NbrAddress></NbrAddress>
      <NbrRouterId></NbrRouterId>
      <Name></Name>
      <AreaId></AreaId>
      <DrPriority></DrPriority>
      <State></State>
    </Nbr>
  </Neighbours>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	Neighbours
Table type	Multi-instance table
Row name	Nbr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
NbrAddress	Neighbour IPv4 address.	Index	String, dotted decimal notation.	N/A
NbrRouterId	Neighbour router identifier.	N/A	String, dotted decimal notation.	N/A
Name	Instance name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
AreaId	Area ID.	N/A	String, dotted decimal notation.	N/A
DrPriority	Router priority.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
State	Neighbour state.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Down.</li><li>• 1—Init.</li><li>• 2—Attempt.</li><li>• 3—2-way.</li><li>• 4—Exstart.</li><li>• 5—Exchange.</li><li>• 6—Loading.</li><li>• 7—Full.</li></ul>	N/A

## OSPF/Preferences

This table contains OSPF preference information.

## XML structure

```
<OSPF>
  <Preferences>
    <Preference>
      <Name></Name>
      <TopoId></TopoId>
      <Type></Type>
      <Value></Value>
      <PolicyName></PolicyName>
    </Preference>
  </Preferences>
</OSPF>
```

## Table description

Item	Description
Feature name	OSPF
Table name	Preferences
Table type	Multi-instance table
Row name	Preference
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Instance name.	Index	String. Length: 1 to 31 characters.
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127.
Type	Route type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—AS internal route.</li><li>• 2—AS external route.</li></ul>
Value	Preference value.	N/A	Unsigned integer. Value range: 1 to 255.
PolicyName	Name of the routing policy.	N/A	String. Length: 1 to 63 characters.

## OSPF/AsbrSummarys

This table contains OSPF ASBR summary route information.

# XML structure

```
<OSPF>
  <AsbrSummaries>
    <AsbrSummary>
      <Name></Name>
      <TopoId></TopoId>
      <Ipv4Address></Ipv4Address>
      <Ipv4Mask></Ipv4Mask>
      <Cost></Cost>
      <NotAdvertise></NotAdvertise>
      <NssaOnly></NssaOnly>
      <Tag></Tag>
    </AsbrSummary>
  </AsbrSummaries>
</OSPF>
```

## Table description

Item	Description
Feature name	OSPF
Table name	AsbrSummaries
Table type	Multi-instance table
Row name	AsbrSummary
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	N/A
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127	N/A
Ipv4Address	IPv4 address.	Index	IPv4: String, dotted decimal notation.	N/A
Ipv4Mask	Mask of IP address	Index	Unsigned integer. Value range: 0 to 32.	N/A
Cost	Summary route cost.	N/A	Unsigned integer. Value range: 0 to 16777214.	If it is not configured, the largest cost among the summarized routes applies. If the routes in Type-5 LSAs translated from Type-7 LSAs are Type-2 external

Column name	Column description	Column type	Data type and restrictions	Remarks
				routes, the largest cost among the summarized routes plus 1 applies.
NotAdvertise	Does not advertise summary route.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—Does not</b> advertise summary route.</li> <li><b>false—</b>Advertises summary route.</li> </ul>	N/A
NssaOnly	Limits summary routes to NSSA areas.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—</b>Limits summary routes to NSSA areas.</li> <li><b>false—Does not</b> limit summary routes to NSSA areas.</li> </ul>	N/A
Tag	Summary route tag.	N/A	Unsigned integer. Value range: 0 to 4294967295.	If it is not configured, the tag specified by the <b>default tag</b> command is used.

## OSPF/StubRouters

This table contains OSPF stub router information.

### XML structure

```

<OSPF>
  <StubRouters>
    <StubRouter>
      <Name></Name>
      <TopoId></TopoId>
      <ExternalLsa></ExternalLsa>
      <ExtMetric></ExtMetric>
      <IncludeStub></IncludeStub>
      <OnStartup>
        <WaitForBgp></WaitForBgp>
        <Seconds></Seconds>
      </OnStartup>
      <SummaryLsa></SummaryLsa>
      <SumMetric></SumMetric>
    </StubRouter>
  </StubRouters>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	StubRouters
Table type	Multi-instance table
Row name	StubRouter
Restrictions	For the get or get-bulk operations, the data of the StubRouters table can be get only when the router is in stub state.

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Instance name.	Index	String. Length: 1 to 31 characters.
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127.
ExternalLsa	Configures the cost of external LSAs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—Specifies a cost for the external LSAs.</b></li> <li><b>false—Does not specify a cost for the external LSAs.</b></li> </ul>
ExtMetric	Cost of the external LSAs.	N/A	Unsigned integer. Value range: 1 to 16777215.
IncludeStub	Sets the cost of the stub links.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—Sets the cost of the stub links (link type 3) in Router LSAs to the maximum value 65535.</b></li> <li><b>false—Does not set the cost of the stub links (link type 3) in Router LSAs.</b></li> </ul>
OnStartup	Specifies the router as a stub router during reboot.	Data structure	Members include: <ul style="list-style-type: none"> <li>WaitForBgp.</li> <li>Seconds.</li> </ul>
WaitForBgp	Waits for BGP on startup.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—Specifies the router as a stub router during BGP route convergence after reboot.</b></li> <li><b>false—Does not specify the router as a stub router during BGP route convergence after reboot.</b></li> </ul>
Seconds	On-startup timeout	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	time.		Value range: 5 to 86400. Default: 600 (when WaitForBgp is specified as <b>true</b> ).
SummaryLsa	Configures the cost of the summary LSAs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specifies a cost for the <b>Type-3 LSAs</b>.</li> <li><b>false</b>—Does not specify a cost for the <b>Type-3 LSAs</b>.</li> </ul>
SumMetric	Cost of the summary LSAs.	N/A	Unsigned integer. Value range: 1 to 16777215.

## OSPF/Nssas

This table contains OSPF NSSA area information.

### XML structure

```

<OSPF>
  <Nssas>
    <Nssa>
      <Name></Name>
      <TopoId></TopoId>
      <AreaId></AreaId>
      <DefaultRouteAdvertiseCfg>
        <DefaultRouteAdvertise></DefaultRouteAdvertise>
        <Cost></Cost>
        <NssaOnly></NssaOnly>
        <PolicyName></PolicyName>
        <Type></Type>
      </DefaultRouteAdvertiseCfg>
      <NoImportRoute></NoImportRoute>
      <NoSummary></NoSummary>
      <SuppressFa></SuppressFa>
      <Translate></Translate>
      <TranslatorStabilityInterval></TranslatorStabilityInterval>
    </Nssa>
  </Nssas>
</OSPF>

```

### Table description

Item	Description
Feature name	OSPF
Table name	Nssas



Item	Description
Table type	Multi-instance table
Row name	Nssa
Restrictions	The row can be operated only when the AreaType of the corresponding area in the Areas table is configured as Nssa.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	N/A
Topold	Topology ID.	Index	Unsigned integer. Value range: 0, 32 to 127.	N/A
Areald	Area ID.	Index	String, dotted decimal notation.	N/A
DefaultRouteAdvertiseCfg	Default route advertisement messages.	Data structure	Members include: <ul style="list-style-type: none"> <li>DefaultRouteAdvertise.</li> <li>Cost.</li> <li>NssaOnly.</li> <li>PolicyName.</li> <li>Type.</li> </ul>	N/A
DefaultRouteAdvertise	Whether to generate a Type-7 default into the NSSA area.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Generates a Type-7 default into the NSSA area.</li> <li><b>false</b>—<b>Does not</b> generate a Type-7 default into the NSSA area.</li> </ul>	N/A
Cost	Metric for default route.	N/A	Unsigned integer. Value range: 0 to 16777214.	Depends on the value specified by using the <b>default-cost</b> command and the default value of the <b>default-cost</b> command is 1.
NssaOnly	Whether to limit the default route advertisement to the NSSA area.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Limits the default route advertisement to the NSSA area.</li> <li><b>false</b>—<b>Does not</b> limit the default route advertisement to the NSSA area.</li> </ul>	N/A
PolicyName	Specifies the routing policy to filter default route.	N/A	String. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Specifies a cost type for the Type-7 LSA.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Type 1.</li> <li>• <b>2</b>—Type 2.</li> </ul>	Depends on the value specified by using the <b>default type</b> command and the default value of the <b>default type</b> command is 2.
NoImportRoute	Whether to redistribute routes into the NSSA area.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Does not redistribute routes into the NSSA area.</li> <li>• <b>false</b>—Redistribute routes into the NSSA area.</li> </ul>	N/A
NoSummary	Whether to send summary LSA into the NSSA area.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Does not send summary LSA into the NSSA area.</li> <li>• <b>false</b>—Sends summary LSA into the NSSA area.</li> </ul>	N/A
SuppressFa	Whether to suppress the forwarding address in the Type-7 LSAs from being placed in the Type-5 LSAs.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Suppresses the forwarding address in the Type-7 LSAs from being placed in the Type-5 LSAs.</li> <li>• <b>false</b>—Does not suppress the forwarding address in the Type-7 LSAs from being placed in the Type-5 LSAs.</li> </ul>	N/A
Translate	Whether to translate Type-7 LSAs to Type-5 LSAs.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Always translates Type-7 LSAs to Type-5 LSAs.</li> <li>• <b>2</b>—Never translates Type-7 LSAs to Type-5 LSAs.</li> <li>• <b>3</b>—Ignores checking the backbone area.</li> <li>• <b>4</b>—Always translates Type-7 LSAs to Type-5 LSAs and ignores checking the backbone area.</li> </ul>	N/A
TranslatorStabilityInterval	Specifies the stability interval of the translator.	N/A	Unsigned integer. Value range: 0 to 900.	N/A

## OSPF/SilentAllInterfaces

This table contains all OSPF silent interface information.

## XML structure

```
<OSPF>
  <SilentAllInterfaces>
    <SilentAllInterface>
      <Name></Name>
      <SilentAll></SilentAll>
    </SilentAllInterface>
  </SilentAllInterfaces>
</OSPF>
```

## Table description

Item	Description
Feature name	OSPF
Table name	SilentAllInterfaces
Table type	Multi-instance table
Row name	SilentAllInterface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	N/A
SilentAll	Whether to specify all interfaces	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Specifies all interfaces.</li><li><b>false</b>—Does not specify all interfaces.</li></ul>	N/A

## OSPF/SilentInterfaces

This table contains OSPF silent interface information.

## XML structure

```
<OSPF>
  <SilentInterfaces>
    <SilentInterface>
      <Name></Name>
      <IfName></IfName>
      <Silent></Silent>
    </SilentInterface>
  </SilentInterfaces>
</OSPF>
```

```

    </SilentInterfaces>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	SilentInterfaces
Table type	Multi-instance table
Row name	SilentInterface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	N/A
IfName	Interface name	Index	String. Length: 1 to 47 characters.	N/A
Silent	Whether to specify the interface	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specifies the interface.</li> <li><b>false</b>—Does not specify the interface.</li> </ul>	If SilentAll is true in the SilentAllInterfaces table, the SilentInterfaces table gets data or configuration about interfaces that are not silent. If SilentAll is false in the SilentAllInterfaces table, the SilentInterfaces table gets data or configuration about silent interfaces.

## OSPF/SegmentRoutings

This table contains OSPF segment routing information.

## XML structure

```

<OSPF>
  <SegmentRoutings>
    <SegmentRouting>

```

```

<Name></Name>
<MplsEnable></MplsEnable>
<AdjacencyEnable></AdjacencyEnable>
<SRGB>
  <Lowerbound></Lowerbound>
  <Upperbound></Upperbound>
</SRGB>
<SrPreferEnable></SrPreferEnable>
<PrefixListName></PrefixListName>
</SegmentRouting>
</SegmentRoutings>
</OSPF>

```

## Table description

Item	Description
Feature name	OSPF
Table name	SegmentRoutings
Table type	Multi-instance table
Row name	SegmentRouting
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	N/A
MplsEnable	Whether to enable MPLS SR.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables MPLS SR.</li> <li><b>false</b>—Does not enable MPLS SR.</li> </ul>	N/A
AdjacencyEnable	Whether to enable adjacency label allocation.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables adjacency label allocation.</li> <li><b>false</b>—Does not enable adjacency label allocation.</li> </ul>	N/A
SRGB	Specifies range of SRGB.	Data structure	Members include: <ul style="list-style-type: none"> <li>Lowerbound.</li> <li>Upperbound.</li> </ul>	N/A
Lowerbound	Min value of SRGB.	N/A	Unsigned integer. Value range: 16000 to 23999. Default: 16000.	N/A
Upperbound	Max value of SRGB.	N/A	Unsigned integer. Value range: 16001 to 24000.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Default: 24000.	
SrPreferEnable	Whether to enable SR label preference.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables SR label preference.</li> <li><b>false</b>—Does not enable SR label preference.</li> </ul>	N/A
PrefixListName	Name of the prefix list.	N/A	String. Length: 1 to 63 characters.	N/A

## OSPF/DistributeBgppls

This table contains information about OSPF link state advertisement to BGP.

### XML structure

```

<OSPF>
  <DistributeBgppls>
    <DistributeBgpls>
      <Name></Name>
      <TopoId></TopoId>
      <InstanceId></InstanceId>
      <StrictLinkCheck></StrictLinkCheck>
    </DistributeBgpls>
  </DistributeBgppls>
</OSPF>

```

### Table description

Item	Description
Feature name	OSPF
Table name	DistributeBgppls
Table type	Multi-instance table
Row name	DistributeBgpls
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	N/A
Topold	Topology ID.	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0, 32 to 127 Default: 0.	
InstanceId	Instance ID.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
StrictLinkCheck	Whether to enable strict link checking.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables strict link checking.</li> <li><b>false</b>—Does not enable strict link checking.</li> </ul>	N/A

# Contents

OSPF .....	2
OSPF/Instances .....	2
OSPF/Redistributes .....	2
OSPF/Areas .....	3
OSPF/Interfaces .....	4
OSPF/Networks .....	5
OSPF/IfMd5s .....	6
OSPF/Neighbours .....	7
OSPF/Preferences .....	7
OSPF/AsbrSummaries .....	7
OSPF/StubRouters .....	8
OSPF/Nssas .....	9
OSPF/SilentAllInterfaces .....	10
OSPF/SilentInterfaces .....	10
OSPF/SegmentRoutings .....	11
OSPF/DistributeBgpls .....	12



# OSPF

## OSPF/Instances

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
The specified VRF doesn't exist. 指定的VRF不存在。	The specified VRF doesn't exist, when set configuration. 配置时，指定的VRF不存在
The instance is already associated with another VRF. OSPF实例ID已经存在于另一个VRF实例。	The OSPF process has been configured with another VRF. OSPF进程已经配置在另一个VRF实例中。
The specified VRF is deleting. 指定VRF正在被删除。	The specified VRF is deleting, when set configuration. 配置时，指定VRF正在被删除。
The instance is being deleted. OSPF实例正在删除中。	The OSPF process is deleting, when set configuration. 配置时，OSPF进程正在删除中。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
Invalid router ID. 无效的Router ID。	The router ID is invalid. Router ID配置不正确。

## OSPF/Redistributes

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
RedistName attribute column must be empty when the value of Protocol attribute column is 1,2,or 6 当Protocol属性值为1、2或6时，RedistName属性列必须为空。	RedistName attribute column must be empty when the value of Protocol attribute column is 1,2,or 6, when set configuration. Set操作时，direct/static/bgp协议不能带RedistName参数。
RedistName attribute column is required when the value of Protocol attribute column is 3,4,5 or 7. 当Protocol属性值为3、4、5或7时，RedistName属	RedistName attribute column must be empty when the value of Protocol attribute column is 1,2,or 6, when set configuration. Set操作时，rip/ospf/isis协议必须带RedistName参数。

性列不能为空。	
Import isn't allowed within the same instance. 不允许引入OSPF的当前实例	Can't import the same process. 不能引入自己的进程ID。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。

## OSPF/Areas

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
The specified area is being deleted. 指定区域正在被删除。	Specified area is being. 区域正在删除。
Can't remove the backbone area when virtual links exist in the backbone area. OSPF骨干区存在虚连接配置。	Virtual link exists in the backbone, backbone cannot be removed. 如果进程下区域存在vlink配置则不允许删除骨干区。
The area doesn't exist. 区域不存在。	No such area. 没有此区域。
The instance is being deleted. OSPF实例正在删除中。	The OSPF process is deleting, when set configuration. 配置时，OSPF进程正在删除中。

The area must be a stub area. 当前区域不是Stub区域。	The area must be a stub area. 区域不是stub，则不许配置。
The stub option is invalid for the backbone area. 骨干区不允许配置stub区域。	Stub option invalid for backbone. 骨干区不允许配置stub。
The area is already configured with a virtual link. Remove the virtual link first. 当前区域配置了虚连接，请先删除虚连接。	The area which is already configured with a virtual link cannot configured stub. 配置vlink区域不允许配置stub。
The area is already configured as an NSSA area. 当前为NSSA区域，不支持配置stub区域。	The area which is already configured with nssa cannot configured stub. Nssa区域不能配置stub。
The nssa option is invalid for the backbone area. 骨干区不允许配置nssa区域。	Nssa option invalid for backbone. 骨干区不允许配置nssa。
The area must be an nssa area. 当前区域不是nssa区域。	The area must be an nssa area. 区域不是nssa，则不许配置。
The area is already configured as a stub area. 当前为stub区域，不支持配置nssa区域。	The area which is already configured with stub cannot configured nssa. stub区域不能配置nssa。

## OSPF/Interfaces

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
Name attribute column is required. 需要补齐Name属性列。	Process name is required. 缺少进程名称参数。
Areald attribute column is required. 需要补齐Areald属性列。	Area ID is required. 缺少区域ID参数。
Name and Areald attribute columns are required. 需要补齐Name和Areald属性列。	The interface doesn't enable ospf. 接口没有使能ospf。
Not support Segment Routing configurations. 不支持SR相关配置。	Segment Routing doesn't support. 不支持SR相关配置。
SidName and SidType attribute columns are required. 需要补齐SidName和SidType属性列。	Wrong configuration. 配置错误。
SidType and Sid attribute columns are required. 需要补齐SidType和Sid属性列。	Wrong configuration. 配置错误。
SidName and Sid attribute columns are required. 需要补齐SidName和Sid属性列。	Wrong configuration. 配置错误。
SidType attribute column is required. 需要补齐SidType属性列。	Wrong configuration. 配置错误。
SidName attribute column is required.	Wrong configuration.

需要补齐SidName属性列。	配置错误。
Sid attribute column is required. 需要补齐Sid属性列。	Wrong configuration. 配置错误。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
Another process is enabled in the current interface. 该接口已经使能其他进程，不能进行配置。	Another process is enabled in the current interface. 该接口已经使能其他进程。
The Sid is out of the SRGB range. Sid配置不合法.它的值应该在SRGB范围内。	The Sid is out of the SRGB range. Sid配置的值在SRGB范围外。
The Sid already exists. Sid配置冲突, 该Sid已存在。	The Sid already exists. 该Sid已存在。
Can't set the OSPF cost of a non-loopback interface to 0. 非LoopBack接口不允许配置OSPF的开销值为0。	Can't set the OSPF cost of a non-loopback interface to 0. 非LoopBack接口不允许配置OSPF的开销值为0。
Not support BFD. 不支持BFD。	BFD is not supported. 不支持BFD。
SimpleAuth can't be specified when NullAuth is true. 不进行验证配置与认证配置不能共存。	SimpleAuth can't be specified when NullAuth is true. 不进行验证配置与认证配置不能共存。

## OSPF/Networks

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
WildcardMask attribute column is required. 需要补齐WildcardMask属性列。	WildcardMask attribute column is required. 获取子网掩码，必须制定掩码。
The network mask isn't contiguous. 网络掩码不连续。	The network mask is wrong. 网络掩码不对。
Network mask doesn't match network address. 网络掩码和当前网络地址不匹配。	The network mask is wrong. 网络掩码不对。

The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
The specified area is being deleted. 指定区域正在被删除。	Specified area is being. 区域正在删除。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
The area doesn't exist. 区域不存在。	No such area. 没有此区域。
The instance is being deleted. OSPF实例正在删除中。	The OSPF process is deleting, when set configuration. 配置时，OSPF进程正在删除中。
Network addresses of Class D and Class E in the format of 127.*.* are not allowed. 127.*.*形式的D类、E类地址不允许配置。	The network address is invalid. 网段不合法。
The network is already set in this instance. 指定网段已在当前实例使能。	The network is already set. 已在本进程使能。
The network is already set in another instance. 指定网段已在其他实例使能。	The network is already set in another process. 已在其他进程使能。
The network overlaps with the previously configured network. 网段配置重叠。	Network is duplicated or is the subset of the previous entry. 不允许配置的网段出现重叠。
Operation not supported. 不支持该操作。	WildcardMask doesn't support delete and remove. 子网掩码不支持delete、remove操作。

## OSPF/IfMd5s

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
Operation not supported. 不支持该操作。	Not support operate object without attribute. 不支持操作不带属性的对象。
The interface doesn't exist. 接口不存在。	The interface doesn't exist. 接口不存在。
Md5Type attribute column is required.	Wrong configuration.

需要补齐Md5Type属性列。	配置错误。
PasswordType attribute column is required. 需要补齐PasswordType属性列。	Wrong configuration. 配置错误。
Password attribute column is required. 需要补齐Password属性列	Wrong configuration. 配置错误。
Invalid OSPF authentication password. OSPF认证密码不合法。	Wrong configuration. 配置错误。

## OSPF/Neighbours

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。

## OSPF/Preferences

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。

## OSPF/AsbrSummarys

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
The router is in smooth state.	The router is smoothing, when set configuration.

路由器在平滑启动状态。	配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
Can't configure a summary route as a default route on an ASBR. 聚合路由不能配置为缺省路由。	Wrong configuration. 配置错误。
无效的聚合地址。 Invalid summary address.	Wrong configuration. 配置错误。
Invalid network mask. 无效的网络掩码。	Wrong configuration. 配置错误。
The network mask isn't contiguous. 网络掩码不连续。	Wrong configuration. 配置错误。

## OSPF/StubRouters

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
ExternalLsa attribute column is required and must be set to true. ExternalLsa属性列需要赋值为true。	Wrong configuration. 配置错误。
SummaryLsa attribute column is required and must be set to true. SummaryLsa属性列需要赋值为true。	Wrong configuration. 配置错误。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。

The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
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## OSPF/Nssas

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
DefaultRouteAdvertise attribute column is required and must be set to true. DefaultRouteAdvertise属性列需要赋值为true。	Wrong configuration. 配置错误。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
The specified area is being deleted. 指定区域正在被删除。	Specified area is being. 区域正在删除。
The area doesn't exist. 区域不存在。	No such area. 没有此区域。
The instance is being deleted. OSPF实例正在删除中。	The OSPF process is deleting, when set configuration. 配置时，OSPF进程正在删除中。
The area is already configured as an NSSA area. 当前为NSSA区域，不支持配置stub区域。	The area which is already configured with nssa cannot configured stub. Nssa区域不能配置stub。
The nssa option is invalid for the backbone area. 骨干区不允许配置nssa区域。	Nssa option invalid for backbone. 骨干区不允许配置nssa。
The area must be an nssa area. 当前区域不是nssa区域。	The area must be an nssa area. 区域不是nssa，则不许配置。
The area is already configured as a stub area. 当前为stub区域，不支持配置nssa区域。	The area which is already configured with stub cannot configured nssa. stub区域不能配置nssa。



# OSPF/SilentAllInterfaces

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
The instance is being deleted. OSPF实例正在删除中。	The OSPF process is deleting, when set configuration. 配置时，OSPF进程正在删除中。

# OSPF/SilentInterfaces

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
The instance is being deleted. OSPF实例正在删除中。	The OSPF process is deleting, when set configuration. 配置时，OSPF进程正在删除中。

# OSPF/SegmentRoutings

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
Not support Segment Routing configurations. 不支持SR相关配置。	Segment Routing doesn't support. 不支持SR相关配置。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。
Opaque-Capability is not enabled. Opaque-Capability 未使能。	Opaque-Capability is not enabled. Opaque-Capability 未使能。
The maximum value must be greater than the minimum value. 最大值一定要大于最小值。	Wrong configuration. 配置错误。
The SRGB is invalid. It must contain the configured prefix SIDs. SRGB配置不合法.它的配置范围应该包含已配置的前缀标签值。	Wrong configuration. 配置错误。
Lowerbound attribute column is required. 需要补齐Lowerbound属性列。	Wrong configuration. 配置错误。
Upperbound attribute column is required. 需要补齐Lowerbound属性列。	Wrong configuration. 配置错误。
The value of Lowerbound is invalid.The value must be in %u to %u. Lowerbound的值非法，该值有效范围是%u - %u。	Wrong configuration. 配置错误。
The value of Upperbound is invalid.The value must be in %u to %u. Upperbound的值非法，该值有效范围是%u - %u。	Wrong configuration. 配置错误。
SrPreferEnable属性列需要赋值为true。 SrPreferEnable attribute column is required and must be set to true.	Wrong configuration. 配置错误。

# OSPF/DistributeBgpIses

Message	Explanation
OSPF isn't configuration. 没有配置OSPF。	OSPF process has not been started. OSPF进程没有启动。
The instance doesn't exist. 配置实例不存在。	No such process exists. 配置的ospf进程不存在。
The router is in smooth state. 路由器在平滑启动状态。	The router is smoothing, when set configuration. 配置时，路由器正在平滑启动阶段。
The router is performing nonstop routing. 路由器正在NSR重启。	The router is performing nonstop routing, when set configuration. 配置时，路由器正在进行NSR重启。
The router is performing Graceful Restart or normal restart. 路由器正在平滑或正在重启。	The router is performing Graceful Restart or normal restart, when set configuration. 配置时，路由器正在平滑或正在重启。
Can't configure the router while it is performing an active/standby switchover. 路由器正在主备进程倒换不能进行配置。	Can't configure the router while it is upgrading. 路由器正处于升级平滑阶段，不允许配置。

# Contents

OSPFv3 .....	1
ietf_ospfv3.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
ietf_ospfv3/areas .....	2
XML structure.....	2
Table description.....	2
Columns.....	3
ietf_ospfv3/areas/interfaces.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
Example.....	4

# OSPFv3

The namespace of flexbng-device-info is "urn:ietf:params:xml:ns:yang:ietf-ospfv3".

The Example on the end of the module sets an instance that the module can't be under top node.

## ietf\_ospfv3

This table contains OSPFv3 configuration information.

### XML structure

```
<ospfv3>
  <instance>
    <af></af>
    <explicit-router-id></explicit-router-id>
    <areas>
      <area>
        <area-id></area-id>
        <area-type></area-type>
        <interfaces>
          <interface>
            <name></name>
            <instance-id></instance-id>
          </interface>
        </interfaces>
      </area>
    </areas>
  </instance>
</ospfv3>
```

### Table description

Item	Description
Feature name	ietf_ospfv3
Table name	ospfv3
Table type	Multi-instance table
Row name	instance
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
af	Address type	Index	String: case-sensitiv: <ul style="list-style-type: none"><li>• ipv4.</li><li>• ipv6.</li></ul>	N/A
explicit-router-id	Router identifier	N/A	String, dotted decimal notation.	You cannot modify this column after this column is created or merged. If you need to do this, you must delete the column and then create it again.
areas	Information of the areas	Sublist	The details of the sublist refer to areas table.	N/A

## ietf\_ospfv3/areas

This table contains area configuration information of ietf-ospfv3.

## XML structure

Please refer to the XML Structure of ietf-ospfv3/ospfv3.

## Table description

Item	Description
Feature name	ietf_ospfv3
Table name	areas
Table type	Multi-instance table
Row name	area
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
area-id	Area ID	Index	String, dotted decimal notation.	N/A
area-type	Area type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Stub.</li><li>2—NSSA.</li></ul>	You cannot specify AreaType when Areaid is 0.
interfaces	Information of the interfaces	Sublist	The details of the sublist refer to interfaces table.	N/A

## ietf\_ospfv3/areas/interfaces

This table contains interface information of ietf-ospfv3.

## XML structure

Please refer to the XML Structure of ietf-ospfv3/ospfv3.

## Table description

Item	Description
Feature name	ietf_ospfv3
Table name	interfaces
Table type	Multi-instance table
Row name	interface
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about

Column name	Column description	Column type	Data type and restrictions	Remarks
				IfIndex, see IfMgr in <i>IfMgr NETCONF XML API Configuration Reference</i> .
instance-id	Interface instance ID	N/A	Unsigned integer.	It must be an unsigned char in the range of 0 to 255.

## Example

配置一个 ospfv3 实例，并在接口上使能

```
<v:routing xc:operation="replace" xmlns:v="urn:ietf:params:xml:ns:yang:ietf-routing"
xmlns:xc="xc">
  <v:control-plane-protocols>
    <v:control-plane-protocol>
      <v:type>ospfv3</v:type>
      <v:name>21</v:name>
      <b:ospfv3 xmlns:b="urn:ietf:params:xml:ns:yang:ietf-ospfv3">
        <b:instance>
          <b:af>ipv6</b:af>
          <b:areas>
            <b:area>
              <b:area-id>0.0.0.1</b:area-id>
              <b:area-type>2</b:area-type>
              <b:interfaces>
                <b:interface>
                  <b:name>g0/0/1</b:name>
                  <b:instance-id>21</b:instance-id>
                </b:interface>
              </b:interfaces>
            </b:area>
          </b:areas>
        </b:instance>
      </b:ospfv3>
    </v:control-plane-protocol>
  </v:control-plane-protocols>
</v:routing>
```



# Contents

OSPFv3 .....	1
ietf_ospfv3.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
ietf_ospfv3/areas .....	2
XML structure.....	2
Table description.....	2
Columns.....	3
ietf_ospfv3/areas/interfaces.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
ietf-ospfv3/areas/interfaces/neighbors .....	4
XML structure.....	4
Table description.....	4
Columns.....	4
Example.....	5

# OSPFv3

The namespace of flexbng-device-info is "urn:ietf:params:xml:ns:yang:ietf-ospfv3".

The Example on the end of the module sets an instance that the module can't be under top node.

## ietf\_ospfv3

This table contains OSPFv3 configuration information.

### XML structure

```
<ospfv3>
  <instance>
    <af></af>
    <explicit-router-id></explicit-router-id>
    <areas>
      <area>
        <area-id></area-id>
        <area-type></area-type>
        <interfaces>
          <interface>
            <name></name>
            <instance-id></instance-id>
            <neighbors>
              <neighbor>
                <neighbor-router-id></neighbor-router-id >
                <address></address>
                <state></state>
              </neighbor>
            </neighbors>
          </interface>
        </interfaces>
      </area>
    </areas>
  </instance>
</ospfv3>
```

### Table description

Item	Description
Feature name	ietf_ospfv3
Table name	ospfv3
Table type	Multi-instance table
Row name	instance

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
af	Address type	Index	String: case-sensitiv: <ul style="list-style-type: none"> <li>ipv4.</li> <li>ipv6.</li> </ul>	N/A
explicit-router-id	Router identifier	N/A	String, dotted decimal notation.	N/A
areas	Information of the areas	Sublist	The details of the sublist refer to areas table.	N/A

## ietf\_ospfv3/areas

This table contains area configuration information of ietf-ospfv3.

## XML structure

Please refer to the XML Structure of ietf-ospfv3/ospfv3.

## Table description

Item	Description
Feature name	ietf_ospfv3
Table name	areas
Table type	Multi-instance table
Row name	area
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
area-id	Area ID	Index	String, dotted decimal notation.	N/A
area-type	Area type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Stub.</li><li>2—NSSA.</li></ul>	N/A
interfaces	Information of the interfaces	Sublist	The details of the sublist refer to interfaces table.	N/A

## ietf\_ospfv3/areas/interfaces

This table contains interface information of ietf-ospfv3.

## XML structure

Please refer to the XML Structure of ietf-ospfv3/ospfv3.

## Table description

Item	Description
Feature name	ietf_ospfv3
Table name	interfaces
Table type	Multi-instance table
Row name	interface
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
name	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in

Column name	Column description	Column type	Data type and restrictions	Remarks
				<i>Ifmgr NETCONF XML API Configuration Reference.</i>
instance-id	Interface instance ID	N/A	Unsigned integer.	It must be an unsigned char in the range of 0 to 255.
neighbors	Information of the neighbors	Sublist	The details of the sublist refer to neighbors table.	N/A

## ietf-ospfv3/areas/interfaces/neighbors

This table contains neighbors information of ietf-ospfv3.

### XML structure

Please refer to the XML Structure of ietf-ospfv3/ospfv3.

### Table description

Item	Description
Feature name	ietf_ospfv3
Table name	neighbors
Table type	Multi-instance table
Row name	neighbor
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
neighbor-router-id	Neighbor router ID	Index	String, dotted decimal notation.	N/A
address	Neighbor IPv6 address	N/A	Hexadecimal string, colon-separated..	N/A
state	Neighbor state type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Neighbor down state.</li> <li>2—Neighbor attempt state.</li> <li>3—Neighbor init state</li> <li>4—Neighbor 2-Way state</li> <li>5—Neighbor exchange</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			start state <ul style="list-style-type: none"> <li>6—Neighbor exchange state</li> <li>7—Neighbor loading state</li> <li>8—Neighbor full state</li> </ul>	

## Example

获取 ospfv3 实例信息

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <get-bulk>
    <filter type="subtree">
      <v:routing xmlns:v="urn:ietf:params:xml:ns:yang:ietf-routing">
        <v:control-plane-protocols>
          <v:control-plane-protocol>
            <v:type>ospfv3</v:type>
            <v:name>30</v:name>
            <b:ospfv3 xmlns:b="urn:ietf:params:xml:ns:yang:ietf-ospfv3">
              <b:instance>
                <b:af>ipv6</b:af>
                <b:explicit-router-id/>
                <b:areas>
                  <b:area>
                    <b:area-id>0.0.0.30</b:area-id>
                    <b:area-type/>
                    <b:interfaces>
                      <b:interface>
                        <b:name>5</b:name>
                        <b:instance-id/>
                      </b:interface>
                    </b:interfaces>
                  </b:area>
                </b:areas>
              </b:instance>
            </b:ospfv3>
          </v:control-plane-protocol>
        </v:control-plane-protocols>
      </v:routing>
    </filter>
  </get-bulk>
</rpc>
```

Package.....	1
Package/SetBootImage.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
Package/SetExtendImage .....	3
XML structure.....	3
Table description.....	3
Columns.....	4
Package/InstallImage.....	4
XML structure.....	4
Table description.....	5
Columns.....	5
Package/SetIssuMPUFile .....	6
XML structure.....	6
Table description.....	7
Columns.....	7
Package/SetIssuExtendFile .....	8
XML structure.....	8
Table description.....	8
Columns.....	9
Package/IssuUpgrade.....	9
XML structure.....	10
Table description.....	10
Columns.....	10
Package/AddIPE.....	11
XML structure.....	11
Table description.....	11
Columns.....	11
Package/ClearBootIPEResult.....	12
XML structure.....	12
Table description.....	12
Columns.....	13

# Package

## Package/SetBootImage

This table contains information to specify startup software image files for special node.

### XML structure

```
<Package>
  <SetBootImage>
    <DeviceNode>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
    </DeviceNode>
    <ImageFiles>
      <Boot></Boot>
      <System></System>
      <Feature></Feature>
    </ImageFiles>
    <IPEFileName></IPEFileName>
    <Type></Type>
    <OverwriteLocalFile></OverwriteLocalFile>
    <DeleteIPEFile></DeleteIPEFile>
    <Undecompressed/>
  </SetBootImage>
</Package>
```

### Table description

Item	Description
Feature name	Package
Table name	SetBootImage
Table type	Single-instance
Row name	None
Restrictions	Image files must already exist in the root directory of storage medium, must on the same device. Mostly an image file path is in the format of storage-medium:/base-filename.bin, you can also include the IRF member ID or slot number information in front of the storage medium segment to specify the node where this image file on.



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Specify a target node of the system.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis.</li> <li>Slot.</li> <li>CPUID.</li> </ul>	Optional column, specify a target node which to set all this image files as the startup software image files, if not specify, all suitable nodes will be set.
Chassis	Chassis of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	Cpu id of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ImageFiles	.bin image file list to set as the startup image files.	Data structure	Members include: <ul style="list-style-type: none"> <li>Boot.</li> <li>System.</li> <li>Feature.</li> </ul>	Column of Feature is optional, but both Boot and System must be included.
Boot	Specifies the file path of a .bin boot image file.	N/A	String. Length: 1 to 127 characters.	N/A
System	Specifies the file path of a .bin system image file.	N/A	String. Length: 1 to 127 characters.	N/A
Feature	Specifies the file path of a .bin feature image file.	N/A	String. Length: 1 to 127 characters.	This column can repeat to specifie several feature image files of up to 30.
IPEFileName	Specifies the file path of an .ipe image package file.	N/A	String. Length: 1 to 127 characters.	You could choose either IPEFileName or ImageFiles to specify the startup software image files.
Type	Startup type to set.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—main.</li> <li>2—backup.</li> </ul>	Backup images are used only when main images are not available.
OverwriteLocalFile	Whether overwrite image files when copying.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Optional column, if not specify default is false.
DeleteIPEFile	Whether delete the .ipe image package file after setting it as the next startup image.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Optional column, if not specify default is false.

Column name	Column description	Column type	Data type and restrictions	Remarks
Uncompressed	Decompress the IPE file when the device starts up instead of when the IPE file is specified as the startup file.	N/A	N/A	This column should be ignored when bin files are specified as startup files or the device does not support this function.

## Package/SetExtendImage

This table contains information to specify startup software image files stored on the device for security engines or PEXs.

### XML structure

```

<Package>
  <SetExtendImage>
    <ExtendImage>
      <Model></Model>
      <ImageFiles>
        <Boot></Boot>
        <System></System>
        <Feature></Feature>
      </ImageFiles>
      <IPEFileName></IPEFileName>
      <Type></Type>
      <OverwriteLocalFile></OverwriteLocalFile>
      <DeleteIPEFile></DeleteIPEFile>
    </ExtendImage>
  </SetExtendImage>
</Package>

```

### Table description

Item	Description
Feature name	Package
Table name	SetExtendImage
Table type	Multi-instance
Row name	ExtendImage
Restrictions	Image files must already exist in the root directory of storage medium, must on the same device. Mostly an image file path is in the format of storage-medium:/base-filename.bin, you can also include the IRF member ID or slot number information in front of the storage medium segment to specify the node where this image file on.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Model	Specifies the PEX model or the security engine model.	Index	String. Length: 1 to 63 characters.	N/A
ImageFiles	.bin image files list to set as the model startup image files.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Boot.</li> <li>• System.</li> <li>• Feature.</li> </ul>	Column of Feature is optional, but both Boot and System must be included.
Boot	Specifies the file path of a .bin boot image file.	N/A	String. Length: 1 to 127 characters.	N/A
System	Specifies the file path of a .bin system image file.	N/A	String. Length: 1 to 127 characters.	N/A
Feature	Specifies the file path of a .bin feature image file.	N/A	String. Length: 1 to 127 characters.	This column can repeat to specifies several feature image files of up to 30.
IPEFileName	Specifies the file path of an .ipe image package file.	N/A	String. Length: 1 to 127 characters.	You could choose either IPEFileName or ImageFiles to specify the startup software image files.
Type	Model startup type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—main.</li> <li>• 2—backup.</li> </ul>	Backup images are used only when main images are not available.
OverwriteLocalFile	Whether overwrite image file when copying.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Optional column, if not specify default is false.
DeleteIPEFile	Whether delete the .ipe image package file after setting it as the model startup image file.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Optional column, if not specify default is false.

## Package/InstallImage

This table contains information to activate or deactivate feature image files or patch file on special node.

## XML structure

<Package>

```

<InstallImage>
  <Action></Action>
  <ImageFiles>
    <Feature></Feature>
  </ImageFiles>
  <PatchFile></PatchFile>
  <OverwriteLocalFile></OverwriteLocalFile>
  <DeviceNode>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
  </DeviceNode>
</InstallImage>
</Package>

```

## Table description

Item	Description
Feature name	Package
Table name	InstallImage
Table type	Single-instance
Row name	None
Restrictions	This table only support patch image file and feature image file, only support fileupgrade and service upgrade for feature image file. Image files must already exist in the root directory of storage medium, must on the same device. Mostly an image file path is in the format of storage-medium:/base-filename.bin, you can also include the IRF member ID or slot number information in front of the storage medium segment to specify the node where this image file on.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Specify which action to handle all this image files.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—activate.</li> <li>2—deactivate.</li> </ul>	N/A
ImageFiles	Feature image files list to handle.	Data structure	Members include: <ul style="list-style-type: none"> <li>Feature.</li> </ul>	N/A
Feature	Specifies the file path of a .bin feature image file.	N/A	String. Length: 1 to 127 characters.	This column can repeat to specify several feature image files of up to 30.

Column name	Column description	Column type	Data type and restrictions	Remarks
PatchFile	Specifies the file path of a .bin patch image file.	N/A	String. Length: 1 to 127 characters.	You could choose either ImageFiles or PatchFile to do the specify action.
OverwriteLocalFile	Whether overwrite image file when copying.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Optional column, if not specify default is false.
DeviceNode	Specify a target node of the system.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis.</li> <li>Slot.</li> <li>CPUID.</li> </ul>	Optional column, specify a target node which to activate or deactivate all images files, if not specify, all suitable nodes will do the action.
Chassis	Chassis of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	Cpu id of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## Package/SetIssuMPUFile

This table contains information to set issu image files for MPUs to update the system.

### XML structure

```

<Package>
  <SetIssuMPUFile>
    <ImageFiles>
      <Boot></Boot>
      <System></System>
      <Feature></Feature>
      <Patch></Patch>
    </ImageFiles>
    <IPEFileName></IPEFileName>
    <OverwriteLocalFile></OverwriteLocalFile>
    <DeleteIPEFile></DeleteIPEFile>
  </SetIssuMPUFile>
</Package>

```

## Table description

Item	Description
Feature name	Package
Table name	SetIssuMPUFile
Table type	Single-instance
Row name	None
Restrictions	Image files must already exist in the root directory of storage medium, must on the same device. An image file path must in the format of storage-medium:/base-filename.bin or storage-medium:/base-filename.ipe, should not include the IRF member ID or slot number information in front of the storage medium segment.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ImageFiles	.bin image file list to set as the MPUs issu image files.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Boot.</li> <li>• System.</li> <li>• Feature.</li> </ul>	N/A
Boot	Specifies the file path of a .bin boot image file	N/A	String. Length: 1 to 63 characters.	N/A
System	Specifies the file path of a .bin system image file.	N/A	String. Length: 1 to 63 characters.	N/A
Feature	Specifies the file path of a .bin feature image file.	N/A	String. Length: 1 to 63 characters.	This column can repeat to specify several feature image files of up to 30.
Patch	Specifies the file path of a .bin patch image file.	N/A	String. Length: 1 to 63 characters.	This column can repeat to specify several patch image files of up to 30.
IPEFileName	Specifies the file path of an .ipe image package file.	N/A	String. Length: 1 to 63 characters.	You could choose either ImageFiles or IPEFileName to specify issu image files for MPUs .
OverwriteLocalFile	Whether overwrite images files when copying.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Optional column, if not specify default is false.
DeleteIPEFile	Whether delete the .ipe image package file after decompressing	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Optional column, if not specify default is false.

Column name	Column description	Column type	Data type and restrictions	Remarks
	it.			

## Package/SetIssuExtendFile

This table contains information to set issu image files for security engines or PEXs to update the system.

### XML structure

```

<Package>
  <SetIssuExtendFile>
    <IssuExtendFile>
      <Model></Model>
      <ImageFiles>
        <Boot></Boot>
        <System></System>
        <Feature></Feature>
      </ImageFiles>
      <IPEFileName></IPEFileName>
      <OverwriteLocalFile></OverwriteLocalFile>
      <AutoDeleteFile></AutoDeleteFile>
    </IssuExtendFile>
  </SetIssuExtendFile>
</Package>

```

### Table description

Item	Description
Feature name	Package
Table name	SetIssuExtendFile
Table type	Multi-instance
Row name	IssuExtendFile
Restrictions	Image files must already exist in the root directory of storage medium, must on the same device. Mostly an image file path is in the format of storage-medium:/base-filename.bin, you can also include the IRF member ID or slot number information in front of the storage medium segment to specify the node where this image file on.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Model	Specifies the PEX model or the security engine model	Index	String. Length: 1 to 63 characters.	N/A
ImageFiles	.bin image file list to set as the issu image files for security engines or PEXs.	Data structure	Members include: <ul style="list-style-type: none"> <li>• Boot.</li> <li>• System.</li> <li>• Feature.</li> </ul>	N/A
Boot	Specifies the file path of a .bin boot image file.	N/A	String. Length: 1 to 127 characters.	N/A
System	Specifies the file path of a .bin system image file.	N/A	String. Length: 1 to 127 characters.	N/A
Feature	Specifies the file path of a .bin feature image file.	N/A	String. Length: 1 to 127 characters.	This column can repeat to specify several feature image files of up to 30.
IPEFileName	Specifies the file path of an .ipe image package file.	N/A	String. Length: 1 to 127 characters.	You could choose either ImageFiles or IPEFileName to specify issu image files for security engines or PEXs.
OverwriteLocalFile	Whether overwrite images files when copying.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Optional column, if not specify default is false.
DeleteIPEFile	Whether delete the .ipe image package file after decompressing it.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	Optional column, if not specify default is false.

## Package/IssuUpgrade

This table contains information to update system step by step. To update the system you can following steps below: firstly make sure the "Status" and the "Action" is all "none" in the table IssuUpgrade(See Comware V7 Package NETCONF XML API Data Reference.docx); secondly specify the ISSU image files for MPUs(see table SetIssuMPUFile), additionally you can also specify ISSU image files for security engines and PEXs if you want to update these devices(see table SetIssuExtendFile); thirdly test all the image files you set, then install after test successfully, after that you can wait until the updating all done or you can roll back to cancel all the updating.



## XML structure

```
<Package>
  <IssuUpgrade>
    <Action></Action>
    <Timeout></Timeout>
    <Delay></Delay>
  </IssuUpgrade>
</Package>
```

## Table description

Item	Description
Feature name	Package
Table name	IssuUpgrade
Table type	Single-instance
Row name	None
Restrictions	Mostly Action should following step test->install->done, "done" can only set after the previous action have finished successfully or failure.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Specify step to update the system, action of test must be done before install begin.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—none</li><li>2—test</li><li>3—install</li><li>4—rollback</li><li>5—done</li></ul>	Action of "none" will be simply be ignored, "test" can collect all information about which way the system will be updated, "install" will start to update the system, "rollback" will cancel all the updating and roll back to the original software versions, "done" will clear all update information and set "Action" and "Status" to "none".
Timeout	Specify the timeout time for an ISSU operation.		Unsigned integer. Value range: 0 to 120. Unit: minute.	Setting this field to 0 disables automatic rollback.  The value for this field takes effect only on one ISSU operation.  If this field is not set for an ISSU operation, the automatic rollback timer set by using the

Column name	Column description	Column type	Data type and restrictions	Remarks
				<b>issu rollback-timer</b> command (45 minutes by default) is used.
Delay	Time that the system waits before starting the ISSU.		Unsigned integer. Value range: 0 to 1440. Unit: minute.	N/A

## Package/AddIPE

This table contains information to decompress a .ipe image file to several .bin image files.

### XML structure

```

<Package>
  <AddIPE>
    <IPEFileName></IPEFileName>
    <StorageCard></StorageCard>
    <OverwriteLocalFile></OverwriteLocalFile>
    <DeleteIPEFile></DeleteIPEFile>
  </AddIPE>
</Package>

```

### Table description

Item	Description
Feature name	Package
Table name	AddIPE
Table type	Single-instance
Row name	None
Restrictions	An .ipe image file must already exist in the root directory of storage medium. Mostly an image file path is in the format of storage-medium:/base-filename.ipe, you can also include the IRF member ID or slot number information in front of the storage medium segment to specify the node where the .ipe image file on.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPEFileName	Specifies the file path of an .ipe image package file.	N/A	String. Length: 1 to 127 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
StorageCard	Target storage medium to store the .bin image files.	N/A	String. Length: 1 to 63 characters.	You can include the IRF member ID or slot number information in front of the storage medium segment.
OverwriteLocalFile	Whether overwrite image file if Target storage medium already exist the .bin image file.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Optional column, if not specify default is false.
DeleteIPEFile	Whether delete the .ipe image package file after decompress it.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Optional column, if not specify default is false.

## Package/ClearBootIPEResult

This table contains information to clear the upgrade result for an IPE file upgrade.

### XML structure

```

<Package>
  <ClearBootIPEResult>
    <DeviceNode>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
    </DeviceNode>
  <ClearResult/>
</ClearBootIPEResult>
</Package>

```

### Table description

Item	Description
Feature name	Package
Table name	ClearBootIPEResult
Table type	Single-instance
Row name	None
Restrictions	If the device does not support IPE file decompression upon device startup, this table should be ignored.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Specify a target node of the system.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis.</li> <li>Slot.</li> <li>CPUID.</li> </ul>	Optional column, specify a target node which to set all this image files as the startup software image files, if not specify, all suitable nodes will be set.
Chassis	Chassis of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	Cpu id of a node.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ClearResult	Clear the upgrade result	N/A	N/A	This column must be empty.

Package.....	1
Package/BootLoaderList .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Package/ExtendStartupList .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
Package/IssuOpResult .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
Package/IssuMPUFileList .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
Package/IssuExtendFileList .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
Package/IssuUpgrade .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
Package/IPEInfo .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
Package/ImageLists .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
Package/BootIpeResult .....	11
XML structure .....	11
Table description .....	12
Columns .....	12

# Package

## Package/BootLoaderList

This table contains information of startup software image files for special node.

### XML structure

```
<Package>
  <BootLoaderList>
    <BootList>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <BootType></BootType>
      <ImageFiles>
        <FileName></FileName>
      </ImageFiles>
    </BootList>
  </BootLoaderList>
</Package>
```

### Table description

Item	Description
Feature name	Package
Table name	BootLoaderList
Table type	Muti-instance
Row name	BootList
Restrictions	N/A

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Specify a node of the system.	Data structure	Members include: <ul style="list-style-type: none"><li>• Chassis.</li><li>• Slot.</li><li>• CPUID.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	Chassis of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	Cpu id of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
BootType	Specify the startup type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—current running list</li> <li>1—main next startup list.</li> <li>2—backup next startup list.</li> </ul>	Backup images are used only when main images are not available.
ImageFiles	List of startup image files.	Data structure	Members include: <ul style="list-style-type: none"> <li>FileName.</li> </ul>	N/A
FileName	Name of a .bin image file.	N/A	String. Length: 1 to 63 characters.	This column may not occur which mean no image files have set yet, or can repeat of up to 32.

## Package/ExtendStartupList

This table contains information about startup software image files stored on the device for security engines or PEXs

### XML structure

```

<Package>
  <ExtendStartupList>
    <ExtendList>
      <Model></Model>
      <BootType></BootType>
      <ImageFiles>
        <FileName></FileName>
      </ImageFiles>
    </ExtendList>
  </ExtendStartupList>
</Package>

```

### Table description

Item	Description
Feature name	Package
Table name	ExtendStartupList

Item	Description
Table type	Muti-instance
Row name	ExtendList
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Model	PEX model or the security engine model.	Index	String. Length: 0 to 63 characters.	N/A
BootType	Specify the startup type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—main next startup list.</li> <li>2—backup next startup list.</li> </ul>	Backup images are used only when main images are not available.
ImageFiles	List of startup image files.	Data structure	Members include: <ul style="list-style-type: none"> <li>FileName.</li> </ul>	N/A
FileName	Name of a .bin image file.	N/A	String. Length: 1 to 63 characters.	This column may not occur which mean no image files have set yet, or can repeat of up to 32.

## Package/IssuOpResult

This table contains information of the upgrading status of special node.

### XML structure

```

<Package>
  <IssuOpResult>
    <OpResult>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <UpgradeType></UpgradeType>
      <DevStatus></DevStatus>
      <UpgradeStatus></UpgradeStatus>
      <FailedReason></FailedReason>
    </OpResult>
  </IssuOpResult>
</Package>

```



## Table description

Item	Description
Feature name	Package
Table name	IssuOpResult
Table type	Muti-instance
Row name	OpResult
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Indicate a node of the system.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis.</li> <li>Slot.</li> <li>CPUID.</li> </ul>	N/A
Chassis	Chassis of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	Cpu id of a node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
UpgradeType	Issu upgrde type of this node.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—none, indicate this node will not be updated.</li> <li>2—reboot, indicate the upgrade type of this node is reboot.</li> <li>3—sequenceReboot, indicate the upgrade type of this node is sequenceReboot.</li> <li>4—issuReboot, indicate the upgrade type of this node is issuReboot.</li> <li>5—serviceUpgrade, indicate the upgrade type of this node is serviceUpgrade.</li> <li>6—fileUpgrade, indicate the upgrade type of this node is fileUpgrade.</li> <li>7—incompatibleUpgrade, indicate the upgrade type of this node is incompatibleUpgrade.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DevStatus	Device status of this node.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—waiting, this node is waiting to upgrade.</li> <li>2—inProcess, this node is updating.</li> <li>3—success, this node has successfully updated.</li> <li>4—failed, failed to update this node.</li> </ul>	N/A
UpgradeStatus	Issue status of this node.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—init</li> <li>2—loading</li> <li>3—loaded</li> <li>4—switching</li> <li>5—switchover</li> <li>6—committing</li> <li>7—committed</li> <li>8—rollbacking</li> <li>9—rollbacked</li> </ul>	N/A
FailedReason	Failed reason of this node.	N/A	String. Length: 1 to 192 characters.	Usefully only in failure.

## Package/IssuMPUFileList

This table contains information of issue image files for MPUs.

### XML structure

```

<Package>
  <IssuMPUFileList>
    <ImageFiles>
      <FileName></FileName>
    </ImageFiles>
    <OverwriteLocalFile></OverwriteLocalFile>
    <DeleteIPEFile></DeleteIPEFile>
  </IssuMPUFileList>
</Package>

```

### Table description

Item	Description
Feature name	Package
Table name	IssuMPUFileList
Table type	Single-instance

Item	Description
Row name	None
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ImageFiles	List of issu image files for MPUs.	Data structure	Members include: <ul style="list-style-type: none"> <li>FileName.</li> </ul>	N/A
FileName	Name of a .bin or .ipe image file.	N/A	String. Length: 1 to 63 characters.	This column may not occur which mean no image files have set yet, or can repeat of up to 32.
OverwriteLocalFile	Whether overwrite image files when copying.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Optional column, if not specify default is false.
DeleteIPEFile	Whether delete the .ipe image package file after decompress it.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Optional column, if not specify default is false.

## Package/IssuExtendFileList

This table contains information of issu image files for security engines or PEXs.

## XML structure

```

<Package>
  <IssuExtendFileList>
    <IssuExtendFile>
      <Model></Model>
      <ImageFiles>
        <FileName></FileName>
      </ImageFiles>
    </IssuExtendFile>
  </IssuExtendFileList>
</Package>

```

## Table description

Item	Description
Feature name	Package

Item	Description
Table name	IssuExtendFileList
Table type	Muti-instance
Row name	IssuExtendFile
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Model	PEX model or the security engine model.	Index	String. Length: 1 to 63 characters.	N/A
ImageFiles	List of issu image files for security engines or PEXs.	Data structure	Members include: <ul style="list-style-type: none"> <li>FileName.</li> </ul>	N/A
FileName	Name of a .bin image file.	N/A	String. Length: 1 to 63 characters.	This column may not occur which mean no image files have set yet, or can repeat of up to 32.

## Package/IssuUpgrade

This table contains information of the ISSU operating status. After starting to update the system, you can obtain ISSU operating status from this table, you can also get detain information of the upgrading status of each node from the table IssuOpResult.

## XML structure

```

<Package>
  <IssuUpgrade>
    <Action></Action>
    <Timeout></Timeout>
    <Status></Status>
    <FailedReason></FailedReason>
    <Delay></Delay>
  </IssuUpgrade>
</Package>

```

## Table description

Item	Description
Feature name	Package

Item	Description
Table name	IssuUpgrade
Table type	Single-instance
Row name	None
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Specify step to update the system, action of test must be done before install begin.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—none</li> <li>2—test</li> <li>3—install</li> <li>4—rollback</li> </ul>	The Action “none” indicate the system has no did any ISSU operation, “test” means the system is testing all ISSU image files, “install” indicate the system is updating, “rollback” means the system is trying to roll back to the original software versions.
Timeout	Remaining time of the rollback timer for an ISSU operation.	N/A	Unsigned integer. Value range: 0 to 120.	If no ISSU operation is in progress, this field displays the value set by using the <b>issu rollback-timer</b> command.
Status	Upgrading status of the system.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—none, system have not started to update.</li> <li>2—failed, Action is failure.</li> <li>3—inProgress, Action is in progress.</li> <li>4—success, Action have successfully done.</li> <li>5—rollbacking, roll back is in process.</li> <li>6—rollbacked, successfully roll back to the original software versions.</li> </ul>	N/A
FailedReason	Failed reason of the ISSU operation.	N/A	String. Length: 1 to 6144 characters.	Usefully only in failure.For relevant information, see the XSD document of your product
Delay	Time that the system waits before starting the ISSU.	N/A	Unsigned integer. Value range: 0 to 1440. Unit: minute.	N/A

# Package/IPEInfo

This table contains information of all .ipe image package files in the system.

## XML structure

```
<Package>
  <IPEInfo>
    <InfoList>
      <IPEFileName></IPEFileName>
      <FileName></FileName>
      <Model></Model>
      <Type></Type>
      <Service></Service>
      <FilePlatVersion></FilePlatVersion>
      <FileProductVersion></FileProductVersion>
    </InfoList>
  </IPEInfo>
</Package>
```

## Table description

Item	Description
Feature name	Package
Table name	IPEInfo
Table type	Muti-instance
Row name	InfoList
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPEFileName	.ipe image pckage file in the system.	Index	String. Length: 1 to 127 characters.	File name may include the IRF member ID or slot number information in front of the storage medium segment.
FileName	.bin image file which the .ipe image package file contained.	Index	String. Length: 1 to 63 characters.	N/A
Model	The PEX model or the security	N/A	String. Length: 1 to 63 characters.	This column will not occur if the .bin image

Column name	Column description	Column type	Data type and restrictions	Remarks
	engine model, if the .bin image file belong to a PEX or security engine.			file belongs to MPUs.
Type	Specify the type of this .bin image file.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—bin</li> <li>1—patch</li> </ul>	“bin” means this is a normal .bin image file, “patch” means this is a patch image file.
Service	Specify the attribute of this .bin image file.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—boot</li> <li>2—system</li> <li>3—feature</li> </ul>	N/A
FilePlatformVersion	Platform version of this .bin image file.	N/A	String. Length: 1 to 63 characters.	N/A
FileProductVersion	Product version of this .bin image file.	N/A	String. Length: 1 to 63 characters.	N/A

## Package/ImageLists

This table contains information of all the .bin image files in the system.

### XML structure

```

<Package>
  <ImageLists>
    <ImageList>
      <FileName></FileName>
      <Model></Model>
      <Type></Type>
      <Service></Service>
      <FilePlatformVersion></FilePlatformVersion>
      <FileProductVersion></FileProductVersion>
    </ImageList>
  </ImageLists>
</Package>

```

### Table description

Item	Description
Feature name	Package
Table name	ImageLists
Table type	Muti-instance

Item	Description
Row name	ImageList
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	.bin image file in the system.	Index	String. Length: 1 to 127 characters.	File name may include the IRF member ID or slot number information in front of the storage medium segment.
Model	The PEX model or the security engine model, if the .bin image file belongs to a PEX or security engine.	N/A	String. Length: 1 to 63 characters.	This column will not occur if the .bin image file belongs to MPUs.
Type	Specify the type of this .bin image file.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—bin</li> <li>1—patch</li> </ul>	“bin” means this is a normal .bin image file, “patch” means this is a patch image file.
Service	Specify the attribute of this .bin image file.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—boot</li> <li>2—system</li> <li>3—feature</li> </ul>	N/A
FilePlatformVersion	Platform version of this .bin image file.	N/A	String. Length: 1 to 63 characters.	N/A
FileProductVersion	Product version of this .bin image file.	N/A	String. Length: 1 to 63 characters.	N/A

## Package/BootIpeResult

This table contains information of the upgrade result for an IPE file upgrade.

### XML structure

```

<Package>
  <BootIpeResult>
    <IpeResult>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>

```



```

    </DeviceNode>
    <IpeName></IpeName>
    <Result></Result>
  </IpeResult>
</BootIpeResult>
</Package>

```

## Table description

Item	Description
Feature name	Package
Table name	BootIpeResult
Table type	Muti-instance
Row name	IpeResult
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Indicate a device.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis.</li> <li>Slot.</li> <li>CPUID.</li> </ul>	N/A
Chassis	Chassis of the device.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot of the device.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
IpeName	.IPE file image.	N/A	String. Length: 1 to 63 characters.	IPE file decompressed when the device starts up.
Result	Upgrade result.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0-Did not use the delaying decompression function.</li> <li>1-Success.</li> <li>2-Verifying IPE file failed.</li> <li>3-Checking file system space failed.</li> <li>4-Unknown.</li> <li>5-Reading IPE file from file system failed.</li> <li>6-Deleting IPE file failed.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 7-Decompressing IPE file failed.</li> <li>• 8 Setting main image as backup image failed.</li> <li>• 9-Setting main image failed.</li> </ul>	

# Contents

Package .....2

    Device/boot-loader .....2

# Package

## Device/boot-loader

Message	Explanation
%s isn't the ipe file for the device. %s不适用于本设备。	
File corrupted. 文件损坏。	
The file doesn't exist. 文件不存在。	
Image file %s is incompatible with hardware. %s与硬件不兼容。	
Not enough storage space. 磁盘空间不足。	
One or more feature images are not compliant with the system image. 特性包与system包不兼容。	
This system image is not compliant with the boot image. system包与boot包不兼容。	
The patch image is not compliant with the image to be patched.	
Failed to decompress AP.ipe. 解压AP.ipe失败。	对于AC设备，在配置主控备板下次启动软件时，用包含AP版本的IPE，出现AP解压失败时，提示“解压AP失败”。

# Contents

PasswordControl	1
PasswordControl/ClearAllBlackLists	1
XML structure	1
Table description	1
Columns	1
PasswordControl/BlackLists	1
XML structure	1
Table description	2
Columns	2
PasswordControl/ClearAllHistoryRecords	2
XML structure	2
Table description	2
Columns	3
PasswordControl/LocalUserHistoryRecords	3
XML structure	3
Table description	3
Columns	4
PasswordControl/SuperRoleHistoryRecords	4
XML structure	4
Table description	4
Columns	4

# PasswordControl

## PasswordControl/ClearAllBlackLists

Clear all users in the password control blacklist.

### XML structure

```
<PasswordControl>
  <ClearAllBlackLists>
    <Clear></Clear>
  </ClearAllBlackLists>
</PasswordControl>
```

### Table description

Item	Description
Feature name	PasswordControl
Table name	ClearAllBlackLists
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clears all users in the blacklist.	N/A	This column must be empty.

## PasswordControl/BlackLists

Clear a specific user from the blacklist.

### XML structure

```
<PasswordControl>
  <BlackLists>
    <BlackList>
      <UserName></UserName>
      <Clear></Clear>
    </BlackList>
  </BlackLists>
</PasswordControl>
```

```

    </BlackList>
  </BlackLists>
</PasswordControl>

```

## Table description

Item	Description
Feature name	PasswordControl
Table name	BlackLists
Table type	Multi-instance table
Row name	BlackList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
UserName	User name.	Index	String, case-sensitive. Length: 1 to 80 characters.
Clear	Clears the specified user from the blacklist.	N/A	This column must be empty.

# PasswordControl/ClearAllHistoryRecords

Clear history password records for all local users or super roles.

## XML structure

```

<PasswordControl>
  <ClearAllHistoryRecord>
    <Type></Type>
    <Clear></Clear>
  </ClearAllHistoryRecord>
</PasswordControl>

```

## Table description

Item	Description
Feature name	PasswordControl
Table name	ClearAllHistoryRecord

Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	History password record type.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—History password records for all local users.</li> <li><b>1</b>—History password records for all super roles.</li> </ul>
Clear	Clears history password records.	N/A	This column must be empty.

# PasswordControl/LocalUserHistoryRecords

Clear history password records for a local user.

## XML structure

```

<PasswordControl>
  <LocalUserHistoryRecords>
    <LocalUserHistoryRecord>
      <UserName></UserName>
      <Clear></Clear>
    </LocalUserHistoryRecord>
  </LocalUserHistoryRecords>
</PasswordControl>

```

## Table description

Item	Description
Feature name	PasswordControl
Table name	LocalUserHistoryRecords
Table type	Multi-instance table
Row name	LocalUserHistoryRecord
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions
UserName	User name.	Index	String, case-sensitive. Length: 1 to 80 characters.
Clear	Clears history password records for the specified local user.	N/A	This column must be empty.

## PasswordControl/SuperRoleHistoryRecords

Clear password history records for a super role.

### XML structure

```
<PasswordControl>
  <SuperRoleHistoryRecords>
    <SuperRoleHistoryRecord>
      <RoleName></RoleName>
      <Clear></Clear>
    </SuperRoleHistoryRecord>
  </SuperRoleHistoryRecords>
</PasswordControl>
```

### Table description

Item	Description
Feature name	PasswordControl
Table name	SuperRoleHistoryRecords
Table type	Multi-instance table
Row name	SuperRoleHistoryRecord
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
RoleName	Role name.	Index	String, case-sensitive. Length: 1 to 63 characters.
Clear	Clears history	N/A	This column must be empty.

Column name	Column description	Column type	Data type and restrictions
	password records for the specified user role.		

# Contents

PasswordControl.....	1
PasswordControl/GlobalConfig .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
PasswordControl/UserGroups .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
PasswordControl/Users .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
PasswordControl/Super .....	9
XML structure .....	9
Table description .....	10
Columns .....	10

# PasswordControl

## PasswordControl/GlobalConfig

Global password control configuration information table.

### XML structure

```
<PasswordControl>
  <GlobalConfig>
    <GlobalEnableState></GlobalEnableState>
    <Length>
      <State></State>
      <MinLength></MinLength>
    </Length>
    <Composition>
      <State></State>
      <TypeNumber></TypeNumber>
      <PerTypeLen></PerTypeLen>
    </Composition>
    <Aging>
      <State></State>
      <AgingTime></AgingTime>
    </Aging>
    <History>
      <State></State>
      <MaxHistoryNumber></MaxHistoryNumber>
    </History>
    <CheckSameChar></CheckSameChar>
    <CheckUserName></CheckUserName>
    <AlertTime></AlertTime>
    <IdleTime></IdleTime>
    <UpdateInterval></UpdateInterval>
    <Expired>
      <DelayTime></DelayTime>
      <TryTimes></TryTimes>
    </Expired>
    <Attempt>
      <FailTimes></FailTimes>
      <Action></Action>
      <LockTime></LockTime>
    </Attempt>
  </GlobalConfig>
</PasswordControl>
```

## Table description

Item	Description
Feature name	PasswordControl
Table name	GlobalConfig
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalEnableState	Whether to enable password control globally.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	In non-FIPS mode, the default is false. In FIPS mode, the default is true.
Length	Minimum password length restriction policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>State.</li> <li>MinLength.</li> </ul>	N/A
State	Whether to enable the minimum password length restriction feature.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: true.
MinLength	Minimum password length.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, a password is a string of 4 to 32 characters.</li> <li>In FIPS mode, a password is a string of 15 to 32 characters.</li> </ul>	In non-FIPS mode, the default value is 10. In FIPS mode, the default value is 15.
Composition	Password composition restriction policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>State.</li> <li>TypeNumber.</li> <li>PerTypeLen.</li> </ul>	N/A
State	Whether to enable the password composition restriction feature.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: true.
TypeNumber	Minimum number of character types	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 4.</li> </ul>	In non-FIPS mode, the default value is 1. In FIPS mode, the

Column name	Column description	Column type	Data type and restrictions	Remarks
	that a password must contain.		<ul style="list-style-type: none"> <li>In FIPS mode, the value must be 4.</li> </ul>	default value is 4.
PerTypeLen	Minimum number of characters from each character type in a password.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 63.</li> <li>In FIPS mode, the value range is 1 to 15.</li> </ul>	Default: 1. This column must be set together with the TypeNumber column.
Aging	Password expiration policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>State.</li> <li>AgingTime.</li> </ul>	N/A
State	Whether a password expires.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: true.
AgingTime	Password expiration time.	N/A	Unsigned integer. Value range: 1 to 365, in days.	Default: 90 days.
History	Password history record policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>State.</li> <li>MaxHistoryNumber.</li> </ul>	N/A
State	Whether the device records previous passwords.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
MaxHistoryNumber	Maximum number of history password records for each user.	N/A	Unsigned integer. Value range: 2 to 15.	Default: 4.
CheckSameChar	Whether to refuse a password that contains any character appearing consecutively three or more times.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
CheckUsername	Whether to refuse the username or the reverse of the username to appear in the user's password.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AlertTime	Number of days before a user password expires during which the user is notified of the pending password	N/A	Unsigned integer. Value range: 1 to 30, in days.	Default: 7 days.

Column name	Column description	Column type	Data type and restrictions	Remarks
	expiration.			
IdleTime	Maximum account idle time.	N/A	Unsigned integer. Value range: 0 to 365, in days. The value 0 indicates that there is no restriction for the account idle time.	Default: 90 days.
UpdateInterval	Minimum password update interval.	N/A	Unsigned integer. Value range: 0 to 168, in hours.	Default: 24 hours.
Expired	Maximum number of days and maximum number of times that a user can log in after the password expires.	Data structure	Members include: <ul style="list-style-type: none"> <li>DelayTime.</li> <li>TryTimes.</li> </ul>	N/A
DelayTime	Maximum number of days that a user can log in after the password expires.	N/A	Unsigned integer. Value range: 1 to 90, in days. This column must be set together with the TryTimes column.	Default: 30 days.
TryTimes	Maximum number of times that a user can log in after the password expires.	N/A	Unsigned integer. Value range: 0 to 10. The value 0 indicates that a user can't log in after the password expires. This column must be set together with the DelayTime column.	Default: 3.
Attempt	Login attempt limit information.	Data structure	Members include: <ul style="list-style-type: none"> <li>FailTimes.</li> <li>Action.</li> <li>LockTime.</li> </ul>	N/A
FailTimes	Maximum number of consecutive login failures.	N/A	Unsigned integer. Value range: 2 to 10.	Default: 3.
Action	An action to be taken for the user who fails to log in after making the maximum number of attempts.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—lock.</li> <li>1—lock-time.</li> <li>2—unlock.</li> </ul> This column must be set together with the FailTimes column. If the value is 1, the LockTime column must also be set.	Default: 1.
LockTime	Time period for disabling a user account.	N/A	Unsigned integer. Value range: 1 to 360, in minutes.	Default: 1 minute.

Column name	Column description	Column type	Data type and restrictions	Remarks
			This column takes effect only when the value of the Action column is 1 and the FailTimes column is set.	

## PasswordControl/UserGroups

Password control configuration information table for user groups.

### XML structure

```

<PasswordControl>
  <UserGroups>
    <UserGroup>
      <UserGroupName></UserGroupName>
      <CheckSameChar></CheckSameChar>
      <CheckUserName></CheckUserName>
      <MinLength></MinLength>
      <AgingTime></AgingTime>
      <Composition>
        <TypeNumber></TypeNumber>
        <PerTypeLen></PerTypeLen>
      </Composition>
      <Attempt>
        <FailTimes></FailTimes>
        <Action></Action>
        <LockTime></LockTime>
      </Attempt>
    </UserGroup>
  </UserGroups>
</PasswordControl>

```

### Table description

Item	Description
Feature name	PasswordControl
Table name	UserGroups
Table type	Multi-instance table
Row name	UserGroup
Restrictions	The UserGroupName column must be from the table UserAccounts/UserGroups.
Support for row creation and	No



deletion	
----------	--

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserGroupName	User group name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
CheckSameChar	Whether to refuse a password that contains any character appearing consecutively three or more times.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	Default: false.
CheckUserName	Whether to refuse the username or the reverse of the username to appear in the user's password.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	Default: false.
MinLength	Minimum password length.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>In non-FIPS mode, the value range is 4 to 32 characters.</li><li>In FIPS mode, the value range is 15 to 32 characters.</li></ul>	N/A
AgingTime	Password expiration time.	N/A	Unsigned integer. Value range: 1 to 365, in days.	N/A
Composition	Password composition restriction policy.	Data structure	Members include: <ul style="list-style-type: none"><li>TypeNumber.</li><li>PerTypeLen.</li></ul>	N/A
TypeNumber	Minimum number of character types that a password must contain.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>In non-FIPS mode, the value range is 1 to 4.</li><li>In FIPS mode, the value must be 4.</li></ul>	N/A
PerTypeLen	Minimum number of characters from each character type in a password.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>In non-FIPS mode, the value range is 1 to 63.</li><li>In FIPS mode, the value range is 1 to 15.</li></ul>	Default: 1. This column takes effect only when the TypeNumber column is set.
Attempt	Login attempt limit information.	Data structure	Members include: <ul style="list-style-type: none"><li>FailTimes.</li><li>Action.</li><li>LockTime.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
FailTimes	Maximum number of consecutive login failures.	N/A	Unsigned integer. Value range: 2 to 10.	N/A
Action	An action to be taken for the user who fails to log in after making the maximum number of attempts.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—lock.</li> <li>• 1—lock-time.</li> <li>• 2—unlock.</li> </ul> This column must be set together with the FailTimes column. If the value is 1, the LockTime column must also be set.	Default: 1.
LockTime	Time period for disabling a user account.	N/A	Unsigned integer. Value range: 1 to 360, in minutes. This column takes effect only when the value of the Action column is 1 and the FailTimes column is set.	Default: 1 minute.

## PasswordControl/Users

Password control configuration information table for users.

### XML structure

```

<PasswordControl>
  <Users>
    <User>
      <UserName></UserName>
      <CheckSameChar></CheckSameChar>
      <CheckUserName></CheckUserName>
      <MinLength></MinLength>
      <AgingTime></AgingTime>
      <Composition>
        <TypeNumber></TypeNumber>
        <PerTypeLen></PerTypeLen>
      </Composition>
      <Attempt>
        <FailTimes></FailTimes>
        <Action></Action>
        <LockTime></LockTime>
      </Attempt>
    </User>
  
```

```

</Users>
</PasswordControl>

```

## Table description

Item	Description
Feature name	PasswordControl
Table name	Users
Table type	Multi-instance table
Row name	User
Restrictions	The UserName column must be from the table UserAccounts/Management/Accounts.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name.	Index	String, case-sensitive. Length: 1 to 80 characters.	Only support device management users.
CheckSameChar	Whether to refuse a password that contains any character appearing consecutively three or more times.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
CheckUserName	Whether to refuse the username or the reverse of the username to appear in the user's password.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
MinLength	Minimum password length.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 4 to 32 characters.</li> <li>In FIPS mode, the value range is 15 to 32 characters.</li> </ul>	N/A
AgingTime	Password expiration time.	N/A	Unsigned integer. Value range: 1 to 365, in days.	N/A
Composition	Password composition restriction policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>TypeNumber.</li> <li>PerTypeLen.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TypeNumber	Minimum number of character types that a password must contain.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 4.</li> <li>In FIPS mode, the value must be 4.</li> </ul>	N/A
PerTypeLen	Minimum number of characters from each character type in a password.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 63.</li> <li>In FIPS mode, the value range is 1 to 15.</li> </ul>	Default: 1. This column takes effect only when the TypeNumber column is set.
Attempt	Login attempt limit information.	Data structure	Members include: <ul style="list-style-type: none"> <li>FailTimes.</li> <li>Action.</li> <li>LockTime.</li> </ul>	N/A
FailTimes	Maximum number of consecutive login failures.	N/A	Unsigned integer. Value range: 2 to 10.	N/A
Action	An action to be taken for the user who fails to log in after making the maximum number of attempts.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—lock.</li> <li>1—lock-time.</li> <li>2—unlock.</li> </ul> This column must be set together with the FailTimes column. If the value is 1, the LockTime column must also be set.	Default: 1.
LockTime	Time period for disabling a user account.	N/A	Unsigned integer. Value range: 1 to 360, in minutes. This column takes effect only when the value of the Action column is 1 and the FailTimes column is set.	Default: 1 minute.

## PasswordControl/Super

Password control configuration information table for temporary user role authorization.

### XML structure

```

<PasswordControl>
  <Super>
    <MinLength></MinLength>
    <AgingTime></AgingTime>
  
```

```

    <Composition>
      <TypeNumber></TypeNumber>
      <PerTypeLen></PerTypeLen>
    </Composition>
  </Super>
</PasswordControl>

```

## Table description

Item	Description
Feature name	PasswordControl
Table name	Super
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinLength	Minimum password length.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 4 to 63 characters.</li> <li>In FIPS mode, the value range is 15 to 63 characters.</li> </ul>	<ul style="list-style-type: none"> <li>In non-FIPS mode, the default value is 10.</li> <li>In FIPS mode, the default value is 15.</li> </ul>
AgingTime	Password expiration time.	N/A	Unsigned integer. Value range: 1 to 365, in days.	Default: 90 days.
Composition	Password composition restriction policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>TypeNumber.</li> <li>PerTypeLen.</li> </ul>	N/A
TypeNumber	Minimum number of character types that a password must contain.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 4.</li> <li>In FIPS mode, the value must be 4.</li> </ul>	<ul style="list-style-type: none"> <li>In non-FIPS mode, the default value is 1.</li> <li>In FIPS mode, the default value is 4.</li> </ul>
PerTypeLen	Minimum number of characters from each character type in a password.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 63.</li> <li>In FIPS mode, the value range is 1 to 15.</li> </ul>	Default: 1. This column takes effect only when the TypeNumber column is set.

# Contents

PasswordControl.....	1
PasswordControl/GlobalConfig .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
PasswordControl/UserGroups .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
PasswordControl/Users .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
PasswordControl/Super .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
PasswordControl/BlackLists .....	10
XML structure .....	11
Table description .....	11
Columns .....	11
PasswordControl/Specification .....	12
XML structure .....	12
Table description .....	12
Columns .....	12

# PasswordControl

## PasswordControl/GlobalConfig

Global password control configuration information table.

### XML structure

```
<PasswordControl>
  <GlobalConfig>
    <GlobalEnableState></GlobalEnableState>
    <Length>
      <State></State>
      <MinLength></MinLength>
    </Length>
    <Composition>
      <State></State>
      <TypeNumber></TypeNumber>
      <PerTypeLen></PerTypeLen>
    </Composition>
    <Aging>
      <State></State>
      <AgingTime></AgingTime>
    </Aging>
    <History>
      <State></State>
      <MaxHistoryNumber></MaxHistoryNumber>
    </History>
    <CheckSameChar></CheckSameChar>
    <CheckUserName></CheckUserName>
    <AlertTime></AlertTime>
    <IdleTime></IdleTime>
    <UpdateInterval></UpdateInterval>
    <Expired>
      <DelayTime></DelayTime>
      <TryTimes></TryTimes>
    </Expired>
    <Attempt>
      <FailTimes></FailTimes>
      <Action></Action>
      <LockTime></LockTime>
    </Attempt>
  </GlobalConfig>
</PasswordControl>
```

## Table description

Item	Description
Feature name	PasswordControl
Table name	GlobalConfig
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalEnableState	Whether to enable password control globally.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
Length	Minimum password length restriction policy.	Data structure	Members include: <ul style="list-style-type: none"><li>State.</li><li>MinLength.</li></ul>	N/A
State	Whether to enable the minimum password length restriction feature.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
MinLength	Minimum password length.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>In non-FIPS mode, a password is a string of 4 to 32 characters.</li><li>In FIPS mode, a password is a string of 15 to 32 characters.</li></ul>	N/A
Composition	Password composition restriction policy.	Data structure	Members include: <ul style="list-style-type: none"><li>State.</li><li>TypeName.</li><li>PerTypeLen.</li></ul>	N/A
State	Whether to enable the password composition restriction feature.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
TypeName	Minimum number of character types that a password must contain.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>In non-FIPS mode, the value range is 1 to 4.</li><li>In FIPS mode, the value must be 4.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
PerTypeLen	Minimum number of characters from each character type in a password.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 63.</li> <li>In FIPS mode, the value range is 1 to 15.</li> </ul>	N/A
Aging	Password expiration policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>State.</li> <li>AgingTime.</li> </ul>	N/A
State	Whether a password expires.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
AgingTime	Password expiration time.	N/A	Unsigned integer. Value range: 1 to 365, in days.	N/A
History	Password history record policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>State.</li> <li>MaxHistoryNumber.</li> </ul>	N/A
State	Whether the device records previous passwords.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
MaxHistoryNumber	Maximum number of history password records for each user.	N/A	Unsigned integer. Value range: 2 to 15.	N/A
CheckSameChar	Whether to refuse a password that contains any character appearing consecutively three or more times.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
CheckUsername	Whether to refuse the username or the reverse of the username to appear in the user's password.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
AlertTime	Number of days before a user password expires during which the user is notified of the pending password expiration.	N/A	Unsigned integer. Value range: 1 to 30, in days.	N/A
IdleTime	Maximum	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	account idle time.		Value range: 0 to 365, in days. The value 0 indicates that there is no restriction for the account idle time.	
UpdateInterval	Minimum password update interval.	N/A	Unsigned integer. Value range: 0 to 168, in hours.	N/A
Expired	Maximum number of days and maximum number of times that a user can log in after the password expires.	Data structure	Members include: <ul style="list-style-type: none"> <li>DelayTime.</li> <li>TryTimes.</li> </ul>	N/A
DelayTime	Maximum number of days that a user can log in after the password expires.	N/A	Unsigned integer. Value range: 1 to 90, in days. This column must be set together with the TryTimes column.	N/A
TryTimes	Maximum number of times that a user can log in after the password expires.	N/A	Unsigned integer. Value range: 0 to 10. The value 0 indicates that a user can't log in after the password expires. This column must be set together with the DelayTime column.	N/A
Attempt	Login attempt limit information.	Data structure	Members include: <ul style="list-style-type: none"> <li>FailTimes.</li> <li>Action.</li> <li>LockTime.</li> </ul>	N/A
FailTimes	Maximum number of consecutive login failures.	N/A	Unsigned integer. Value range: 2 to 10.	N/A
Action	An action to be taken for the user who fails to log in after making the maximum number of attempts.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—lock.</li> <li>1—lock-time.</li> <li>2—unlock.</li> </ul> This column must be set together with the FailTimes column. If the value is 1, the LockTime column must also be set.	N/A
LockTime	Time period for disabling a user account.	N/A	Unsigned integer. Value range: 1 to 360, in minutes. This column takes effect only when the value of the Action column is 1 and the FailTimes	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			column is set.	

## PasswordControl/UserGroups

Password control configuration information table for user groups.

### XML structure

```

<PasswordControl>
  <UserGroups>
    <UserGroup>
      <UserGroupName></UserGroupName>
      <CheckSameChar></CheckSameChar>
      <CheckUserName></CheckUserName>
      <MinLength></MinLength>
      <AgingTime></AgingTime>
      <Composition>
        <TypeNumber></TypeNumber>
        <PerTypeLen></PerTypeLen>
      </Composition>
      <Attempt>
        <FailTimes></FailTimes>
        <Action></Action>
        <LockTime></LockTime>
      </Attempt>
    </UserGroup>
  </UserGroups>
</PasswordControl>

```

### Table description

Item	Description
Feature name	PasswordControl
Table name	UserGroups
Table type	Multi-instance table
Row name	UserGroup
Restrictions	The UserGroupName column must be from the table UserAccounts/UserGroups.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserGroupName	User group name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
CheckSameChar	Whether to refuse a password that contains any character appearing consecutively three or more times.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
CheckUsername	Whether to refuse the username or the reverse of the username to appear in the user's password.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
MinLength	Minimum password length.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 4 to 32 characters.</li> <li>In FIPS mode, the value range is 15 to 32 characters.</li> </ul>	N/A
AgingTime	Password expiration time.	N/A	Unsigned integer. Value range: 1 to 365, in days.	N/A
Composition	Password composition restriction policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>TypeNumber.</li> <li>PerTypeLen.</li> </ul>	N/A
TypeNumber	Minimum number of character types that a password must contain.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 4.</li> <li>In FIPS mode, the value must be 4.</li> </ul>	N/A
PerTypeLen	Minimum number of characters from each character type in a password.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 63.</li> <li>In FIPS mode, the value range is 1 to 15.</li> </ul>	Default: 1. This column takes effect only when the TypeNumber column is set.
Attempt	Login attempt limit information.	Data structure	Members include: <ul style="list-style-type: none"> <li>FailTimes.</li> <li>Action.</li> <li>LockTime.</li> </ul>	N/A
FailTimes	Maximum number of consecutive login	N/A	Unsigned integer. Value range: 2 to 10.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	failures.			
Action	An action to be taken for the user who fails to log in after making the maximum number of attempts.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—lock.</li> <li>• 1—lock-time.</li> <li>• 2—unlock.</li> </ul> This column must be set together with the FailTimes column. If the value is 1, the LockTime column must also be set.	Default: 1.
LockTime	Time period for disabling a user account.	N/A	Unsigned integer. Value range: 1 to 360, in minutes. This column takes effect only when the value of the Action column is 1 and the FailTimes column is set.	Default: 1 minute.

## PasswordControl/Users

Password control configuration information table for users.

### XML structure

```

<PasswordControl>
  <Users>
    <User>
      <UserName></UserName>
      <CheckSameChar></CheckSameChar>
      <CheckUserName></CheckUserName>
      <MinLength></MinLength>
      <AgingTime></AgingTime>
      <Composition>
        <TypeNumber></TypeNumber>
        <PerTypeLen></PerTypeLen>
      </Composition>
      <Attempt>
        <FailTimes></FailTimes>
        <Action></Action>
        <LockTime></LockTime>
      </Attempt>
    </User>
  </Users>
</PasswordControl>

```

## Table description

Item	Description
Feature name	PasswordControl
Table name	Users
Table type	Multi-instance table
Row name	User
Restrictions	The UserName column must be from the table UserAccounts/Management/Accounts.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name.	Index	String, case-sensitive. Length: 1 to 80 characters.	Only support device management users.
CheckSameChar	Whether to refuse a password that contains any character appearing consecutively three or more times.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
CheckUserName	Whether to refuse the username or the reverse of the username to appear in the user's password.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
MinLength	Minimum password length.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 4 to 32 characters.</li> <li>In FIPS mode, the value range is 15 to 32 characters.</li> </ul>	N/A
AgingTime	Password expiration time.	N/A	Unsigned integer. Value range: 1 to 365, in days.	N/A
Composition	Password composition restriction policy.	Data structure	Members include: <ul style="list-style-type: none"> <li>TypeNumber.</li> <li>PerTypeLen.</li> </ul>	N/A
TypeNumber	Minimum number of character types that a password must contain.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 4.</li> <li>In FIPS mode, the value must be 4.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PerTypeLen	Minimum number of characters from each character type in a password.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In non-FIPS mode, the value range is 1 to 63.</li> <li>In FIPS mode, the value range is 1 to 15.</li> </ul>	Default: 1. This column takes effect only when the TypeNumber column is set.
Attempt	Login attempt limit information.	Data structure	Members include: <ul style="list-style-type: none"> <li>FailTimes.</li> <li>Action.</li> <li>LockTime.</li> </ul>	N/A
FailTimes	Maximum number of consecutive login failures.	N/A	Unsigned integer. Value range: 2 to 10.	N/A
Action	An action to be taken for the user who fails to log in after making the maximum number of attempts.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—lock.</li> <li>1—lock-time.</li> <li>2—unlock.</li> </ul> This column must be set together with the FailTimes column. If the value is 1, the LockTime column must also be set.	Default: 1.
LockTime	Time period for disabling a user account.	N/A	Unsigned integer. Value range: 1 to 360, in minutes.  This column takes effect only when the value of the Action column is 1 and the FailTimes column is set.	Default: 1 minute.

## PasswordControl/Super

Password control configuration information table for temporary user role authorization.

### XML structure

```

<PasswordControl>
  <Super>
    <MinLength></MinLength>
    <AgingTime></AgingTime>
    <Composition>
      <TypeNumber></TypeNumber>
      <PerTypeLen></PerTypeLen>
    </Composition>
  </Super>

```

</PasswordControl>

## Table description

Item	Description
Feature name	PasswordControl
Table name	Super
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinLength	Minimum password length.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>In non-FIPS mode, the value range is 4 to 63 characters.</li><li>In FIPS mode, the value range is 15 to 63 characters.</li></ul>	N/A
AgingTime	Password expiration time.	N/A	Unsigned integer. Value range: 1 to 365, in days.	N/A
Composition	Password composition restriction policy.	Data structure	Members include: <ul style="list-style-type: none"><li>TypeNumber.</li><li>PerTypeLen.</li></ul>	N/A
TypeNumber	Minimum number of character types that a password must contain.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>In non-FIPS mode, the value range is 1 to 4.</li><li>In FIPS mode, the value must be 4.</li></ul>	N/A
PerTypeLen	Minimum number of characters from each character type in a password.	N/A	Unsigned integer. <ul style="list-style-type: none"><li>In non-FIPS mode, the value range is 1 to 63.</li><li>In FIPS mode, the value range is 1 to 15.</li></ul>	N/A

## PasswordControl/BlackLists

Password control blacklist information table.



## XML structure

```
<PasswordControl>
  <BlackLists>
    <BlackList>
      <UserName></UserName>
      <IpType></IpType>
      <IpAddress></IpAddress>
      <LoginFailures></LoginFailures>
      <LockState></LockState>
    </BlackList>
  </BlackLists>
</PasswordControl>
```

## Table description

Item	Description
Feature name	PasswordControl
Table name	BlackLists
Table type	Multi-instance table
Row name	BlackList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name.	Index	String, case-sensitive. Length: 1 to 80 characters.	Only support device management users.
IpType	IP address type.	Index	Enumeration: <ul style="list-style-type: none"><li>0—IPv4.</li><li>1—IPv6.</li></ul>	N/A
IpAddress	IP address of the user.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
LoginFailures	Login failure times.	N/A	Unsigned integer.	N/A
LockState	Whether the user account is disabled for the user.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—unlock. The user is allowed to continue using this account to perform login attempts.</li><li>1—lock. The user account is disabled temporarily or permanently, depending on the value of the</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Attempt column in the table PasswordControl/GlobalConfig, PasswordControl/UserGroups, or PasswordControl/Users.	

## PasswordControl/Specification

The value range change information table for password control configuration items. The value ranges for these items are different in FIPS and non-FIPS modes.

### XML structure

```

<PasswordControl>
  <Specification>
    <MinLength></MinLength>
    <MinTypeNumber></MinTypeNumber>
    <MaxPerTypeLen></MaxPerTypeLen>
  </Specification>
</PasswordControl>

```

### Table description

Item	Description
Feature name	PasswordControl
Table name	Specification
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinLength	Minimum value for the MinLength column in the tables PasswordControl/GlobalConfig, PasswordControl	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In FIPS mode, the value is 15.</li> <li>In non-FIPS mode, the value is 4.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	/UserGroups, PasswordControl /Users, and PasswordControl /Super.			
<b>MinTypeNumber</b>	Minimum value for the TypeNumber column in the tables PasswordControl /GlobalConfig, PasswordControl /UserGroups, PasswordControl /Users, and PasswordControl /Super.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In FIPS mode, the value is 4.</li> <li>In non-FIPS mode, the value is 1.</li> </ul>	N/A
<b>MaxPerTypeLen</b>	Maximum value for the PerTypeLen column in the tables PasswordControl /GlobalConfig, PasswordControl /UserGroups, PasswordControl /Users, and PasswordControl /Super.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>In FIPS mode, the value is 15.</li> <li>In non-FIPS mode, the value is 63.</li> </ul>	N/A

# Contents

PasswordControl.....1

    PasswordControl/GlobalConfig .....1

    PasswordControl/UserGroups .....1

    PasswordControl/Users.....1

# PasswordControl

## PasswordControl/GlobalConfig

Message	Explanation
The product of type-number and type-length cannot be greater than the maximum password length value. 密码元素的最少组合类型数以及每种元素的最小个数的乘积应该小于允许的最大密码长度。	The product of type-number and type-length cannot be greater than the maximum password length value. Please check your input.
Failed to enable password control. 开启密码管理失败。	Failed to enable password control.
This feature can't be disabled when system is in FIPS mode. FIPS模式下不能关闭密码管理功能。	This feature can't be disabled when system is in FIPS mode.

## PasswordControl/UserGroups

Message	Explanation
The product of type-number and type-length cannot be greater than the maximum password length value. 密码元素的最少组合类型数以及每种元素的最小个数的乘积应该小于允许的最大密码长度。	The product of type-number and type-length cannot be greater than the maximum password length value. Please check your input.

## PasswordControl/Users

Message	Explanation
The product of type-number and type-length cannot be greater than the maximum password length value. 密码元素的最少组合类型数以及每种元素的最小个数的乘积应该小于允许的最大密码长度。	The product of type-number and type-length cannot be greater than the maximum password length value. Please check your input.

# Contents

PBR .....	2
PBR/PBRPolicyNode .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
PBR/PBRIfPolicy .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
PBR/PBRApplyNexthop .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
PBR/PBRApplyOutInterface .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
PBR/PBRApplyAccessVPN .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
PBR/PBRLocalPolicy .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
PBR/PBRApplicationGroup .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
PBR/PBRObjectGroup .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
PBR/PBREgressIfPolicy .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
PBR/PBRMatchServiceChain .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
PBR/PBRApplyServiceChain .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
PBR/PBRApplyFailActionDrop .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
PBR/PBRVlanInterfacesPolicy .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
PBR/PBRGlobalPolicy .....	18
XML structure .....	18
Table description .....	19
Columns .....	19

# PBR

## PBR/PBRPolicyNode

This table contains policy node information.

### XML structure

```
<PBR>
  <PBRPolicyNode>
    <PolicyNode>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <Mode></Mode>
      <Description></Description>
      <ACLNumber></ACLNumber>
      <ACLName></ACLName>
      <MatchVxlanID></MatchVxlanID>
      <MatchPacketLenMin></MatchPacketLenMin>
      <MatchPacketLenMax></MatchPacketLenMax>
      <ApplyPrecedence></ApplyPrecedence>
      <ApplyIPDF></ApplyIPDF>
      <ApplyRemarkVPN></ApplyRemarkVPN>
      <ApplyContinue></ApplyContinue>
    </PolicyNode>
  </PBRPolicyNode>
</PBR>
```

### Table description

Item	Description
Feature name	PBR
Table name	PBRPolicyNode
Table type	Multi-instance table
Row name	PolicyNode
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—IPv4.</li> <li>• 1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19 characters.	N/A
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	A smaller number has a higher priority. The value range for the node-number argument depends on the device model.
Mode	Match mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Permit (default).</li> <li>• 2—Deny.</li> </ul>	N/A
Description	Description of the policy node	N/A	String, case sensitive. Length: 1 to 127 characters.	N/A
ACLNumber	ACL match criterion by number.	N/A	Unsigned integer. Value range: 2000 to 3999.	To delete an ACL match criterion, you must configure the ACLNumber together with the ACLName column.
ACLName	ACL match criterion by name.	N/A	String, case insensitive. Length: 1 to 63 characters.	The ACL name must start with letter a to z or A to Z. The ACL name cannot be <b>all</b> in any combination of upper- and lower-case letters. To delete an ACL match criterion, you must configure the ACLName together with the ACLNumber column.
MatchVxlanID	VXLAN ID	N/A	Unsigned integer, Value range: 0-16777215.	N/A
MatchPacketLen Min	Minimum IP packet length for a packet length match criterion.	N/A	Unsigned integer. Value range: 1 to 65535 bytes.	It must be configured together with the MatchPacketLenMax column. The packet length range includes boundary values. Support for this function depends on



Column name	Column description	Column type	Data type and restrictions	Remarks
				the device model.
MatchPacketLenMax	Maximum IP packet length for a packet length match criterion.	N/A	Unsigned integer. Value range: 1 to 65535 bytes.	It must be configured together with the MatchPacketLenMin column.  The value of MatchPacketLenMax must be no less than the value of MatchPacketLenMin.  Support for this function depends on the device model.
ApplyPrecedence	Sets an IP precedence for matching packets.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Routine.</li> <li>• <b>1</b>—Priority.</li> <li>• <b>2</b>—Immediate.</li> <li>• <b>3</b>—Flash.</li> <li>• <b>4</b>—Flash-override.</li> <li>• <b>5</b>—Critical.</li> <li>• <b>6</b>—Internet.</li> <li>• <b>7</b>—Network.</li> </ul>	Support for this function depends on the device model.
ApplyIPDF	Sets the Don't Fragment (DF) bit in the IP header of matching packets.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Allows packet fragmentation.</li> <li>• <b>1</b>—Prohibits packet fragmentation.</li> </ul>	Support for this function depends on the device model.
ApplyRemarkVPN	Remarks the VPN instance for packets	N/A	Boolean: <b>true</b> <b>false</b> (default).	This function takes effects only when apply access-vpn is configured.  Support for this function depends on the device model.
ApplyContinue	Compares packets with the next node upon failure on the current node.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default).</li> </ul>	This function takes effect only when the match mode of the node is permit.  Support for this function depends on the device model.

## PBR/PBRIfPolicy

This table contains interface PBR information.

## XML structure

```
<PBR>
  <PBRIfPolicy>
    <IfPolicy>
      <AddressType></AddressType>
      <IfIndex></IfIndex>
      <PolicyName></PolicyName>
    </IfPolicy>
  </PBRIfPolicy>
</PBR>
```

## Table description

Item	Description
Feature name	PBR
Table name	PBRIfPolicy
Table type	Multi-instance table
Row name	IfPolicy
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"><li>0—IPv4.</li><li>1—IPv6.</li></ul>	N/A
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
PolicyName	Policy name.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist. The delete and remove operations do not support this column.

# PBR/PBRApplyNexthop

This table contains PBR next hop information.

## XML structure

```
<PBR>
  <PBRApplyNexthop>
    <ApplyNexthop>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <Mode></Mode>
      <VrfIndex></VrfIndex>
      <IpAddress></IpAddress>
      <TrackID></TrackID>
      <NexthopDirect></NexthopDirect>
    </ApplyNexthop>
  </PBRApplyNexthop>
</PBR>
```

## Table description

Item	Description
Feature name	PBR
Table name	PBRApplyNexthop
Table type	Multi-instance table
Row name	ApplyNexthop
Restrictions	Support for this table depends on the device model.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4.</li><li>• 1—IPv6.</li></ul>	N/A
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	Next hop mode.	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Next hop.</li> <li>• <b>1</b>—Default next hop.</li> <li>• <b>2</b>—Mirroring next hop.</li> </ul>	Mirroring next hop not support NexthopDirect column.
VrfIndex	Index of the VPN instance.	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. The value of 0 specifies the public network. The value of 65535 specifies the VPN instance where the inbound interface belongs. Support for setting 65535 depends on the device model.
IpAddress	IP address of the next hop.	Index	String, case insensitive. Length: 1 to 45 characters.	Specify an IPv4 address or IPv6 address depending on AddressType.
TrackID	Track entry number	N/A	Unsigned integer. Value range: 1 to 1024.	No default track entry number exists.
NexthopDirect	Specifies whether the next hop must be directly connected.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default).</li> </ul>	N/A

## PBR/PBRApplyOutInterface

This table contains PBR output interface information.

### XML structure

```

<PBR>
  <PBRApplyOutInterface>
    <ApplyOutInterface>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <Mode></Mode>
      <IfIndex></IfIndex>
      <TrackID></TrackID>
    </ApplyOutInterface>
  </PBRApplyOutInterface>

```

</PBR>

## Table description

Item	Description
Feature name	PBR
Table name	PBRApplyOutInterface
Table type	Multi-instance table
Row name	ApplyOutInterface
Restrictions	Support for this table depends on the device model.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—IPv4.</li><li>• <b>1</b>—IPv6.</li></ul>	N/A
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
Mode	Output interface mode.	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Output interface.</li><li>• <b>1</b>—Default output interface.</li></ul>	N/A
IfIndex	Interface index.	Index	Unsigned integer.	The output interface must be P2P type. Using a non-P2P output interface can result in forwarding failures when the interface has multiple next hops. Non-P2P interfaces include broadcast and NBMA interfaces such as Ethernet and virtual-template interfaces.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in

Column name	Column description	Column type	Data type and restrictions	Remarks
				Ifmgr NETCONF XML API Configuration Reference.
TrackID	Track entry number.	N/A	Unsigned integer. Value range: 1 to 1024.	No track entry number as default.

## PBR/PBRApplyAccessVPN

This table contains PBR access VPN instance information.

### XML structure

```

<PBR>
  <PBRApplyAccessVPN>
    <ApplyAccessVPN>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <VrfIndex></VrfIndex>
    </ApplyAccessVPN>
  </PBRApplyAccessVPN>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBRApplyAccessVPN
Table type	Multi-instance table
Row name	ApplyAccessVPN
Restrictions	Support for this table depends on the device model.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19	The specified policy must already exist.

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
VrfIndex	Index of the VPN instance.	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product.

## PBR/PBRLocalPolicy

This table contains local PBR information.

### XML structure

```

<PBR>
  <PBRLocalPolicy>
    <Ipv4PolicyName></Ipv4PolicyName>
    <Ipv6PolicyName></Ipv6PolicyName>
  </PBRLocalPolicy>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBRLocalPolicy
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4PolicyName	Name of the policy used by IPv4 local PBR.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
Ipv6PolicyName	Name of the policy used by IPv6 local PBR.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.

# PBR/PBRApplicationGroup

This table contains PBR application group information.

## XML structure

```
<PBR>
  <PBRApplicationGroup>
    <ApplicationGroup>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <AppGroupName></AppGroupName>
    </ApplicationGroup>
  </PBRApplicationGroup>
</PBR>
```

## Table description

Item	Description
Feature name	PBR
Table name	PBRApplicationGroup
Table type	Multi-instance table
Row name	ApplicationGroup
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4.</li><li>• 1—IPv6.</li></ul>	IPv6 is not supported.
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
AppGroupName	Application group name.	Index	String, case insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_). The name cannot be <b>invalid</b> or <b>other</b> in any



Column name	Column description	Column type	Data type and restrictions	Remarks
				combination of upper- and lower-case letters.

## PBR/PBRObjectGroup

This table contains PBR object group information.

### XML structure

```

<PBR>
  <PBRObjectGroup>
    <ObjectGroup>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <ObjectGroupName></ObjectGroupName>
    </ObjectGroup>
  </PBRObjectGroup>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBRObjectGroup
Table type	Multi-instance table
Row name	ObjectGroup
Restrictions	Support for this table depends on the device model.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	IPv6 is not supported.
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.

Column name	Column description	Column type	Data type and restrictions	Remarks
ObjectGroupName	Object group name.	Index	String, case insensitive. Length: 1 to 31 characters.	The specified object group must be a service object group type.

## PBR/PBREgressIfPolicy

This table contains egress interface PBR information.

### XML structure

```

<PBR>
  <PBREgressIfPolicy>
    <EgressIfPolicy>
      <AddressType></AddressType>
      <IfIndex></IfIndex>
      <PolicyName></PolicyName>
    </EgressIfPolicy>
  </PBREgressIfPolicy>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBREgressIfPolicy
Table type	Multi-instance table
Row name	EgressIfPolicy
Restrictions	This table supports only VXLAN mode tunnel interfaces.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	IPv6 is not supported.

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
PolicyName	Policy name.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist. The delete and remove operations do not support this column.

## PBR/PBRMatchServiceChain

This table contains PBR object match service chain information.

### XML structure

```

<PBR>
  <PBRMatchServiceChain>
    <MatchServiceChain>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <PathID></PathID>
      <PathIndex></PathIndex>
    </MatchServiceChain>
  </PBRMatchServiceChain>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBRMatchServiceChain
Table type	Multi-instance table
Row name	MatchServiceChain
Restrictions	Support for this table depends on the device model.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4.</li><li>• 1—IPv6.</li></ul>	N/A
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
PathID	Service-Chain Path-ID	Index	Unsigned integer. Value range: 1 to 16777215.	N/A
PathIndex	Service-Chain Path-Index	N/A	Unsigned integer. Value range: 1 to 255.	N/A

## PBR/PBRApplyServiceChain

This table contains PBR object apply service chain information.

## XML structure

```
<PBR>
  <PBRApplyServiceChain>
    <ApplyServiceChain>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <PathID></PathID>
      <PathIndex></PathIndex>
    </ApplyServiceChain>
  </PBRApplyServiceChain>
</PBR>
```

## Table description

Item	Description
Feature name	PBR
Table name	PBRApplyServiceChain
Table type	Multi-instance table
Row name	ApplyServiceChain
Restrictions	Support for this table depends on the device model.

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
PathID	Service-Chain Path-ID	Index	Unsigned integer. Value range: 1 to 16777215.	N/A
PathIndex	Service-Chain Path-Index	N/A	Unsigned integer. Value range: 1 to 255.	N/A

## PBR/PBRApplyFailActionDrop

This table contains PBR failure action drop information.

## XML structure

```

<PBR>
  <PBRApplyFailActionDrop>
    <ApplyFailActionDrop>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <Mode></Mode>
      <Drop></Drop>
    </ApplyFailActionDrop>
  </PBRApplyFailActionDrop>
</PBR>

```

## Table description

Item	Description
Feature name	PBR
Table name	PBRApplyFailActionDrop
Table type	Multi-instance table

Row name	ApplyFailActionDrop
Restrictions	Support for this table depends on the device model
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
Mode	Next hop mode.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Next hop.</li> </ul>	N/A
Drop	Whether to drop matching packets when all next hops specified by column Mode become unreachable.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false(default).</li> </ul>	N/A

## PBR/PBRVlanInterfacesPolicy

This table contains VLAN interface PBR information.

## XML structure

```

<PBR>
  <PBRVlanInterfacesPolicy>
    <VlanInterfacesPolicy>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <VlanInterfaceNumberList></VlanInterfaceNumberList>
    </VlanInterfacesPolicy>
  </PBRVlanInterfacesPolicy>
</PBR>

```

## Table description

Item	Description
Feature name	PBR

Table name	PBRVlanInterfacesPolicy
Table type	Multi-instance table
Row name	VlanInterfacesPolicy
Restrictions	Support for this table depends on the device model.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
VlanInterfaceNumberList	List of VLAN interface numbers.	N/A	Number string. It is a comma-separated list of VLAN interface number items. An item can be an individual VLAN interface number or a VLAN interface number range. Use a hyphen (-) to separate the start and end VLAN interface numbers of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. The item is permitted to incremental edit. You can sign the flag like "<VlanInterfaceNumberList h3c:incremental=true">". If the value is true, the VLAN interface number list will be added or removed. Otherwise, it is the final result.

## PBR/PBRGlobalPolicy

This table contains global PBR information.

## XML structure

```

<PBR>
  <PBRGlobalPolicy>
    <Ipv4PolicyName></Ipv4PolicyName>
    <Ipv6PolicyName></Ipv6PolicyName>
  </PBRGlobalPolicy>
</PBR>

```

## Table description

Item	Description
Feature name	PBR
Table name	PBRGlobalPolicy
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4PolicyName	Name of the policy used by IPv4 global PBR.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
Ipv6PolicyName	Name of the policy used by IPv6 global PBR.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.



# Contents

PBR .....	1
PBR/PBRPolicyNode .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PBR/PBRIfPolicy .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
PBR/PBRApplyNexthop .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
PBR/PBRApplyOutInterface .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
PBR/PBRApplyAccessVPN .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
PBR/PBRLocalPolicy .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
PBR/PBRApplicationGroup .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
PBR/PBRObjectGroup .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
PBR/PBRSpecification .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
PBR/PBREgressIfPolicy .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
PBR/PBRMatchServiceChain .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
PBR/PBRApplyServiceChain .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
PBR/PBRApplyFailActionDrop .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
PBR/PBRVlanInterfacesPolicy .....	19
XML structure .....	19
Table description .....	20
Columns .....	20

PBR/PBRGlobalPolicy .....	20
XML structure .....	20
Table description .....	21
Columns .....	21

# PBR

## PBR/PBRPolicyNode

This table contains policy node information.

### XML structure

```
<PBR>
  <PBRPolicyNode>
    <PolicyNode>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <Mode></Mode>
      <Description></Description>
      <ACLNumber></ACLNumber>
      <ACLName></ACLName>
      <MatchVxlanID></MatchVxlanID>
      <MatchPacketLenMin></MatchPacketLenMin>
      <MatchPacketLenMax></MatchPacketLenMax>
      <ApplyPrecedence></ApplyPrecedence>
      <ApplyIPDF></ApplyIPDF>
      <ApplyRemarkVPN></ApplyRemarkVPN>
      <ApplyContinue></ApplyContinue>
    </PolicyNode>
  </PBRPolicyNode>
</PBR>
```

### Table description

Item	Description
Feature name	PBR
Table name	PBRPolicyNode
Table type	Multi-instance table
Row name	PolicyNode
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 0—IPv4.</li> <li>• 1—IPv6.</li> </ul>	
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19 characters.	N/A
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	A smaller number has a higher priority.  The value range for the node-number argument depends on the device model.
Mode	Match mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Permit.</li> <li>• 2—Deny.</li> </ul>	N/A
Description	Description of the policy node	N/A	String, case sensitive. Length: 1 to 127 characters.	N/A
ACLNumber	ACL match criterion by number.	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
ACLName	ACL match criterion by name.	N/A	String, case insensitive. Length: 1 to 63 characters.	The ACL name must start with letter a to z or A to Z. The ACL name cannot be <b>all</b> in any combination of upper- and lower-case letters.
MatchVxlanID	VXLAN ID	N/A	Unsigned integer, Value range: 0-16777215.	N/A
MatchPacketLen Min	Minimum IP packet length for a packet length match criterion.	N/A	Unsigned integer. Value range: 1 to 65535 bytes.	The packet length range includes boundary values.  Support for this function depends on the device model.
MatchPacketLen Max	Maximum IP packet length for a packet length match criterion.	N/A	Unsigned integer. Value range: 1 to 65535 bytes.	The value of MatchPacketLenMax must be no less than the value of MatchPacketLenMin.  Support for this function depends on the device model.
ApplyPrecedence	Sets an IP precedence for matching packets.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Routine.</li> <li>• 1—Priority.</li> <li>• 2—Immediate.</li> <li>• 3—Flash.</li> <li>• 4—Flash-override.</li> <li>• 5—Critical.</li> </ul>	Support for this function depends on the device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>6</b>—Internet.</li> <li><b>7</b>—Network.</li> </ul>	
ApplyIPDF	Sets the Don't Fragment (DF) bit in the IP header of matching packets.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Allows packet fragmentation.</li> <li><b>1</b>—Prohibits packet fragmentation.</li> <li><b>2</b>—DF bit is not set.</li> </ul>	Support for this function depends on the device model.
ApplyRemarkVPN	Remarks the VPN instance for packets	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Apply.</li> <li><b>false</b>—Not apply.</li> </ul>	This function takes effects only when apply access-vpn is configured. Support for this function depends on the device model.
ApplyContinue	Compares packets with the next node upon failure on the current node.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Apply.</li> <li><b>false</b>—Not apply.</li> </ul>	This function takes effect only when the match mode of the node is permit. Support for this function depends on the device model.

## PBR/PBRIfPolicy

This table contains interface PBR information.

### XML structure

```

<PBR>
  <PBRIfPolicy>
    <IfPolicy>
      <AddressType></AddressType>
      <IfIndex></IfIndex>
      <PolicyName></PolicyName>
    </IfPolicy>
  </PBRIfPolicy>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBRIfPolicy
Table type	Multi-instance table

Item	Description
Row name	IfPolicy
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
IfIndex	Interface index.	Index	Unsigned integer.	N/A
PolicyName	Policy name.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.

## PBR/PBRApplyNexthop

This table contains PBR next hop information.

## XML structure

```

<PBR>
  <PBRApplyNexthop>
    <ApplyNexthop>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <Mode></Mode>
      <VrfIndex></VrfIndex>
      <IpAddress></IpAddress>
      <Priority></Priority>
      <TrackID></TrackID>
      <NexthopDirect></NexthopDirect>
    </ApplyNexthop>
  </PBRApplyNexthop>
</PBR>

```

## Table description

Item	Description
Feature name	PBR
Table name	PBRApplyNexthop
Table type	Multi-instance table

Item	Description
Row name	ApplyNexthop
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—IPv4.</li> <li>• <b>1</b>—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
Mode	Next hop mode.	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Next hop.</li> <li>• <b>1</b>—Default next hop.</li> <li>• <b>2</b>—Mirroring next hop.</li> </ul>	Mirroring next hop not support NexthopDirect column.
VrfIndex	Index of the VPN instance.	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. The value of 0 specifies the public network. The value of 65535 specifies the VPN instance where the inbound interface belongs. Support for setting 65535 depends on the device model.
IpAddress	IP address of the next hop.	Index	String, case insensitive. Length: 1 to 45 characters.	Specify an IPv4 address or IPv6 address depending on AddressType.
Priority	Priority of the next hop.	N/A	Unsigned integer. Value range: 0 to 65535.	The smaller the value, the higher the priority.
TrackID	Track entry number.	N/A	Unsigned integer. Value range: 1 to 1024.	No default track entry number exists.
NexthopDirect	Specifies whether the next hop must be directly	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Apply.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	connected.		<ul style="list-style-type: none"> <li><b>false</b>—Not apply.</li> </ul>	

## PBR/PBRApplyOutInterface

This table contains PBR output interface information.

### XML structure

```

<PBR>
  <PBRApplyOutInterface>
    <ApplyOutInterface>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <Mode></Mode>
      <IfIndex></IfIndex>
      <Priority></Priority>
      <TrackID></TrackID>
    </ApplyOutInterface>
  </PBRApplyOutInterface>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBRApplyOutInterface
Table type	Multi-instance table
Row name	ApplyOutInterface
Restrictions	Support for this table depends on the device model.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—IPv4.</li> <li><b>1</b>—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer.	The specified node must already exist.



Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 65535.	
Mode	Output interface mode.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Output interface.</li> <li>1—Default output interface.</li> </ul>	N/A
IfIndex	Interface index.	Index	Unsigned integer.	The output interface must be P2P type. Using a non-P2P output interface can result in forwarding failures when the interface has multiple next hops. Non-P2P interfaces include broadcast and NBMA interfaces such as Ethernet and virtual-template interfaces.
Priority	Priority of the output interface.	N/A	Unsigned integer. Value range: 0 to 65535.	The smaller the value, the higher the priority.
TrackID	Track entry number.	N/A	Unsigned integer. Value range: 1 to 1024.	No default track entry number exists.

## PBR/PBRApplyAccessVPN

This table contains PBR access VPN instance information.

### XML structure

```

<PBR>
  <PBRApplyAccessVPN>
    <ApplyAccessVPN>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <VrfIndex></VrfIndex>
      <Priority></Priority>
    </ApplyAccessVPN>
  </PBRApplyAccessVPN>
</PBR>

```

### Table description

Item	Description
Feature name	PBR

Item	Description
Table name	PBRApplyAccessVPN
Table type	Multi-instance table
Row name	ApplyAccessVPN
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
VrfIndex	Index of the VPN instance.	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product.
Priority	Priority of the VPN instance.	N/A	Unsigned integer. Value range: 0 to 65535.	The smaller the value, the higher the priority.

## PBR/PBRLocalPolicy

This table contains local PBR information.

## XML structure

```

<PBR>
  <PBRLocalPolicy>
    <Ipv4PolicyName></Ipv4PolicyName>
    <Ipv6PolicyName></Ipv6PolicyName>
  </PBRLocalPolicy>
</PBR>

```

## Table description

Item	Description
Feature name	PBR

Item	Description
Table name	PBRLocalPolicy
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4PolicyName	Name of the policy used by IPv4 local PBR.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
Ipv6PolicyName	Name of the policy used by IPv6 local PBR.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.

## PBR/PBRApplicationGroup

This table contains PBR application group information.

## XML structure

```

<PBR>
  <PBRApplicationGroup>
    <ApplicationGroup>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <AppGroupName></AppGroupName>
      <Priority></Priority>
    </ApplicationGroup>
  </PBRApplicationGroup>
</PBR>

```

## Table description

Item	Description
Feature name	PBR
Table name	PBRApplicationGroup
Table type	Multi-instance table
Row name	ApplicationGroup
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4.</li><li>• 1—IPv6.</li></ul>	N/A
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
AppGroupName	Application group name.	Index	String, case insensitive. Length: 1 to 63 characters.	Valid characters include digits, letters, hyphens (-), and underlines (_). The name cannot be <b>invalid</b> or <b>other</b> in any combination of upper- and lower-case letters.
Priority	Priority of the application group.	N/A	Unsigned integer. Value range: 0 to 65535.	The smaller the value, the higher the priority.

## PBR/PBRObjectGroup

This table contains PBR object group information.

## XML structure

```
<PBR>
  <PBRObjectGroup>
    <ObjectGroup>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <ObjectGroupName></ObjectGroupName>
      <Priority></Priority>
    </ObjectGroup>
  </PBRObjectGroup>
</PBR>
```

## Table description

Item	Description
Feature name	PBR
Table name	PBRObjectGroup

Item	Description
Table type	Multi-instance table
Row name	ObjectGroup
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—IPv4.</li> <li>• 1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
ObjectGroupName	Object group name.	Index	String, case insensitive. Length: 1 to 31 characters.	The specified object group must be a service object group.
Priority	Priority of the object group.	N/A	Unsigned integer. Value range: 0 to 65535.	The smaller the value, the higher the priority.

## PBR/PBRSpecification

This table contains PBR specification information.

## XML structure

```

<PBR>
  <PBRSpecification>
    <SupportInboundVPNIPv4></SupportInboundVPNIPv4>
    <SupportOnlyNull0IPv4></SupportOnlyNull0IPv4>
    <SupportIPDFIPv4></SupportIPDFIPv4>
    <SupportPacketLenIPv4></SupportPacketLenIPv4>
    <SupportPrecedenceIPv4></SupportPrecedenceIPv4>
    <SupportContinueIPv4></SupportContinueIPv4>
    <SupportNextHopIPv4></SupportNextHopIPv4>
    <SupportDefNextHopIPv4></SupportDefNextHopIPv4>
    <SupportInterfaceIPv4></SupportInterfaceIPv4>
    <SupportDefInterfaceIPv4></SupportDefInterfaceIPv4>
    <SupportAccessVPNIPv4></SupportAccessVPNIPv4>
    <SupportInboundVPNIPv6></SupportInboundVPNIPv6>
    <SupportOnlyNull0IPv6></SupportOnlyNull0IPv6>
  
```

```

<SupportPacketLenIpv6></SupportPacketLenIpv6>
<SupportPrecedenceIpv6></SupportPrecedenceIpv6>
<SupportContinueIpv6></SupportContinueIpv6>
<SupportNextHopIpv6></SupportNextHopIpv6>
<SupportDefNextHopIpv6></SupportDefNextHopIpv6>
<SupportInterfaceIpv6></SupportInterfaceIpv6>
<SupportDefInterfaceIpv6></SupportDefInterfaceIpv6>
<SupportAccessVPNIpv6></SupportAccessVPNIpv6>
<MaxNodeIDIpv4></MaxNodeIDIpv4>
<MaxNodeIDIpv6></MaxNodeIDIpv6>
<MaxNextHopIpv4></MaxNextHopIpv4>
<MaxInterfaceIpv4></MaxInterfaceIpv4>
<MaxAccessVPNIpv4></MaxAccessVPNIpv4>
<MaxNextHopIpv6></MaxNextHopIpv6>
<MaxInterfaceIpv6></MaxInterfaceIpv6>
<MaxAccessVPNIpv6></MaxAccessVPNIpv6>
<SupportAppGroupIpv4></SupportAppGroupIpv4>
<SupportObjectGroupIpv4></SupportObjectGroupIpv4>
<MaxAppGroupIpv4></MaxAppGroupIpv4>
<MaxObjectGroupIpv4></MaxObjectGroupIpv4>
</PBRSpecification>
</PBR>

```

## Table description

Item	Description
Feature name	PBR
Table name	PBRSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportInboundVPNIpv4	Support for specifying the IPv4 VPN instance where the inbound interface belongs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportOnlyNull0Ipv4	Supports only the NULL 0 interface as the IPv4 output interface.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportIPDFIpv4	Sets the Don't Fragment (DF) bit	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	in the IP header of matching packets.		<ul style="list-style-type: none"> <li><b>false</b>—Not support.</li> </ul>	
SupportPacketLenIpv4	Support for IPv4 packet length match criteria.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportPrecedenceIpv4	Support for setting the precedence for IPv4 packets.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportContinueIpv4	Support for comparing IPv4 packets with the next node upon failure on the current node.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportNextHopIpv4	Support for IPv4 next hops.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportDefaultNextHopIpv4	Support for IPv4 default next hops.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportInterfaceIpv4	Support for IPv4 output interfaces.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportDefaultInterfaceIpv4	Support for IPv4 default output interfaces.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportAccessVPNIpv4	Support for IPv4 VPN instances.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportInboundVPNIpv6	Support for specifying the IPv6 VPN instance where the inbound interface belongs.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportOnlyNull0Ipv6	Supports only the NULL 0 interface as the IPv6 output interface.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportPacketLenIpv6	Support for IPv6 packet length match criteria.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportPrecedenceIpv6	Support for setting the precedence for IPv6 packets.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportContinueIpv6	Support for comparing IPv6 packets against the next node	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	upon failure on the current node.			
SupportNextHopIpv6	Support for IPv6 next hops.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportDefNextHopIpv6	Support for IPv6 default next hops.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportInterfaceIpv6	Support for IPv6 output interfaces.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportDefaultInterfaceIpv6	Support for IPv6 default output interfaces.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
SupportAccessVPNIpv6	Support for IPv6 VPN instances.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A
MaxNodeIDIpv4	Maximum number of IPv4 nodes.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
MaxNodeIDIpv6	Maximum number of IPv6 nodes.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
MaxNextHopIpv4	Maximum number of IPv4 next hops or default next hops.	N/A	Unsigned integer.	N/A
MaxInterfaceIpv4	Maximum number of IPv4 output interfaces or default output interfaces.	N/A	Unsigned integer.	N/A
MaxAccessVPNIpv4	Maximum number of IPv4 VPN instances.	N/A	Unsigned integer.	N/A
MaxNextHopIpv6	Maximum number of IPv6 next hops or default next hops.	N/A	Unsigned integer.	N/A
MaxInterfaceIpv6	Maximum number of IPv6 output interfaces or default output interfaces.	N/A	Unsigned integer.	N/A
MaxAccessVPNIpv6	Maximum number of IPv6 VPN instances.	N/A	Unsigned integer.	N/A
SupportAppGroupIpv4	Support for IPv4 application group.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—Not support.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
SupportObjectGroupIpv4	Support for IPv4 object group.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Support.</li> <li><b>false</b>—<b>Not support.</b></li> </ul>	N/A
MaxAppGroupIpv4	Maximum number of IPv4 application group.	N/A	Unsigned integer.	N/A
MaxObjectGroupIpv4	Maximum number of IPv4 object group.	N/A	Unsigned integer.	N/A

## PBR/PBREgressIfPolicy

This table contains egress interface PBR information.

### XML structure

```

<PBR>
  <PBREgressIfPolicy>
    <EgressIfPolicy>
      <AddressType></AddressType>
      <IfIndex></IfIndex>
      <PolicyName></PolicyName>
    </EgressIfPolicy>
  </PBREgressIfPolicy>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBREgressIfPolicy
Table type	Multi-instance table
Row name	EgressIfPolicy
Restrictions	This table supports only VXLAN mode tunnel interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—IPv4.</li> <li><b>1</b>—IPv6.</li> </ul>	IPv6 is not supported.

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
PolicyName	Policy name.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.

## PBR/PBRMatchServiceChain

This table contains PBR object match service chain information.

### XML structure

```

<PBR>
  <PBRMatchServiceChain>
    <MatchServiceChain>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <PathID></PathID>
      <PathIndex></PathIndex>
      <Priority></Priority>
    </MatchServiceChain>
  </PBRMatchServiceChain>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBRMatchServiceChain
Table type	Multi-instance table
Row name	MatchServiceChain
Restrictions	Support for this table depends on the device model.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
PathID	Service-Chain Path-ID	Index	Unsigned integer. Value range: 1 to 16777215.	N/A
PathIndex	Service-Chain Path-Index	N/A	Unsigned integer. Value range: 1 to 255.	N/A
Priority	Priority of the service chain.	N/A	Unsigned integer. Value range: 0 to 65535.	The smaller the value, the higher the priority.

## PBR/PBRApplyServiceChain

This table contains PBR object apply service chain information.

### XML structure

```

<PBR>
  <PBRApplyServiceChain>
    <ApplyServiceChain>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <PathID></PathID>
      <PathIndex></PathIndex>
    </ApplyServiceChain>
  </PBRApplyServiceChain>
</PBR>

```

### Table description

Item	Description
Feature name	PBR
Table name	PBRApplyServiceChain
Table type	Multi-instance table
Row name	ApplyServiceChain
Restrictions	Support for this table depends on the device model.

Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
PathID	Service-Chain Path-ID	Index	Unsigned integer. Value range: 1 to 16777215.	N/A
PathIndex	Service-Chain Path-Index	N/A	Unsigned integer. Value range: 1 to 255.	N/A

## PBR/PBRApplyFailActionDrop

This table contains PBR failure action drop information.

## XML structure

```

<PBR>
  <PBRApplyFailActionDrop>
    <ApplyFailActionDrop>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <NodeID></NodeID>
      <Mode></Mode>
      <Drop></Drop>
    </ApplyFailActionDrop>
  </PBRApplyFailActionDrop>
</PBR>

```

## Table description

Item	Description
Feature name	PBR
Table name	PBRApplyFailActionDrop

Item	Description
Table type	Multi-instance table
Row name	ApplyFailActionDrop
Restrictions	Support for this table depends on the device model

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
PolicyName	Policy name.	Index	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
NodeID	Policy node number.	Index	Unsigned integer. Value range: 0 to 65535.	The specified node must already exist.
Mode	Next hop mode.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Next hop.</li> </ul>	N/A
Drop	Whether to drop matching packets when all next hops specified by column Mode become unreachable.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A

## PBR/PBRVlanInterfacesPolicy

This table contains VLAN interface PBR information.

## XML structure

```

<PBR>
  <PBRVlanInterfacesPolicy>
    <VlanInterfacesPolicy>
      <AddressType></AddressType>
      <PolicyName></PolicyName>
      <VlanInterfaceNumberList></VlanInterfaceNumberList>
    </VlanInterfacesPolicy>
  </PBRVlanInterfacesPolicy>
</PBR>

```

## Table description

Item	Description
Feature name	PBR
Table name	PBRVlanInterfacesPolicy
Table type	Multi-instance table
Row name	VlanInterfacesPolicy
Restrictions	Support for this table depends on the device model.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4.</li><li>• 1—IPv6.</li></ul>	N/A
PolicyName	Policy name.	Index	String. Length: 1 to 19 characters.	The specified policy must already exist.
VlanInterfaceNumberList	List of VLAN interface numbers.	N/A	Number string. It is a comma-separated list of VLAN interface number items. An item can be an individual VLAN interface number or a VLAN interface number range. Use a hyphen (-) to separate the start and end VLAN interface numbers of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. The item is permitted to incremental edit. You can sign the flag like "<VlanInterfaceNumberList h3c:incremental='true'>". If the value is true, the VLAN interface number list will be added or removed. Otherwise, it is the final result.

## PBR/PBRGlobalPolicy

This table contains global PBR information.

## XML structure

```
<PBR>
  <PBRGlobalPolicy>
    <Ipv4PolicyName></Ipv4PolicyName>
    <Ipv6PolicyName></Ipv6PolicyName>
  </PBRGlobalPolicy>
```

< /PBR>

## Table description

Item	Description
Feature name	PBR
Table name	PBRGlobalPolicy
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4PolicyName	Name of the policy used by IPv4 global PBR.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.
Ipv6PolicyName	Name of the policy used by IPv6 global PBR.	N/A	String, case sensitive. Length: 1 to 19 characters.	The specified policy must already exist.

# Contents

PBR .....	1
PBR/PBRPolicyNode .....	1
PBR/PBRIfPolicy .....	1
PBR/PBREgressIfPolicy .....	3
PBR/PBRLocalPolicy .....	6
PBR/PBRApplyAccessVPN .....	6
PBR/PBRApplyNextHop .....	7
PBR/PBRApplyOutInterface .....	7
PBR/PBRApplicationGroup .....	7
PBR/PBRObjectGroup .....	8
PBR/PBRMatchServiceChain .....	8
PBR/PBRApplyServiceChain .....	8
PBR/PBRApplyFailActionDrop .....	8
PBR/PBRGlobalPolicy .....	9



# PBR

## PBR/PBRPolicyNode

Message	Explanation
Maximum number of policies already reached. 可配策略个数超过上限。	Maximum number of policies already reached. 可配策略个数超过上限。
Maximum number of nodes in a policy already reached. 一个策略中可配最大节点个数超过上限。	Maximum number of nodes in a policy already reached. 一个策略中可配最大节点个数超过上限。
The policy doesn't exist. 该策略不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。
The policy has been referenced, and can't be deleted. 此策略已经被引用，不能删除。	The policy has been referenced, and can't be deleted. 此策略已经被引用，不能删除。
Configuration items don't meet the requirements. 不符合配置要求。	Configuration items don't meet the requirements, please check the configuration of packet length or ACL is valid. 不符合配置要求，请检查配置的需要匹配的报文长度或者配置的AC是否合理。
The minimum packet length must be less than or equal to the maximum packet length. 配置的最短IP报文长度必须小于或等于最长IP报文长度。	The minimum packet length must be less than or equal to the maximum packet length. 配置的最短IP报文长度必须小于或等于最长IP报文长度。
IPv6 PBR doesn't support packet fragmentation. IPv6策略路由不支持报文分片。	IPv6 PBR doesn't support packet fragmentation. IPv6策略路由不支持报文分片。
The policy node doesn't exist. 该策略节点不存在。	The policy node doesn't exist. 该策略节点不存在。
Invalid ACL name. 非法的ACL名称。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。

## PBR/PBRIfPolicy

Message	Explanation
The operation is not supported in chassis %s slot %u. 在框号%s板号%u的设备上不支持此操作。	The operation is not supported. 此操作不支持。
Not enough resources to complete the operation in chassis %s slot %u. 在框号%s板号%u的设备上没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。

Message	Explanation
The operation is not supported in slot %u. 在板号%u的设备上不支持此操作。	The operation is not supported. 此操作不支持。
Not enough resources to complete the operation in slot %u. 在板号%u的设备上没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。
The operation is not supported. 不支持此操作。	The operation is not supported. 此操作不支持。
Not enough resources to complete the operation. 没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。
Not enough resources to complete the operation in chassis %s slot %u cpu %u. 在框号%s板号%uCPU%u的设备上没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。
The operation is not supported in chassis %u slot %u cpu %s. 在框号%s板号%uCPU%u的设备上不支持此操作。	The operation is not supported. 此操作不支持。
Not enough resources to complete the operation in slot %u cpu %u. 在板号%uCPU%u的设备上没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。
The operation is not supported in slot %u cpu %u. 在板号%uCPU%u的设备上不支持此操作。	The operation is not supported. 此操作不支持。
PBR is not ready in chassis %s slot %u. 在框号%s板号%u的设备上策略路由进程未启动完毕。	PBR service has not been started. PBR进程尚未启动完成。
PBR is not ready in chassis %s slot %u cpu %u. 在框号%s板号%uCPU%u的设备上策略路由进程未启动完毕。	PBR service has not been started. PBR进程尚未启动完成。
PBR is not ready in slot %u. 在板号%u的设备上策略路由进程未启动完毕。	PBR service has not been started. PBR进程尚未启动完成。
PBR is not ready in slot %u cpu %u. 在板号%uCPU%u的设备上策略路由进程未启动完毕。	PBR service has not been started. PBR进程尚未启动完成。
Failed to apply the PBR policy to chassis %s slot %u. 在框号%s板号%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy to slot %u. 在板号%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy to chassis %s	Failed to apply the PBR policy.

Message	Explanation
slot %u cpu %u. 在框号%s板号%uCPU%u的设备上应用策略路由失败。	应用策略路由失败。
Failed to apply the PBR policy to slot %u cpu %u. 在板号%uCPU%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy. 应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
The operation is not ready in chassis %s slot %u. 在框号%s板号%u的设备上驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
The operation is not ready in slot %u. 在板号%u的设备上驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
The operation is not ready in chassis %s slot %u cpu %u. 在框号%s板号%uCPU%u的设备上驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
The operation is not ready in slot %u cpu %u. 在板号%uCPU%u的设备上驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
The operation is not ready. 驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
Configuration items don't meet the requirements. 不符合配置要求。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, policy name must be configured. The specified configuration must be empty, when deleting or removing. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，策略名称必须配置；删除时指定配置必须为空。
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。
Another policy has been applied. Please remove the current policy first. 已经应用了另一个策略，请先取消已经应用的策略。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。

## PBR/PBREgressIfPolicy

Message	Explanation
The operation is not supported in chassis %s slot %u. 在框号%s板号%u的设备上不支持此操作。	The operation is not supported. 此操作不支持。

Message	Explanation
Not enough resources to complete the operation in chassis %s slot %u. 在框号%s板号%u的设备上没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。
The operation is not supported in slot %u. 在板号%u的设备上不支持此操作。	The operation is not supported. 此操作不支持。
Not enough resources to complete the operation in slot %u. 在板号%u的设备上没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。
The operation is not supported. 不支持此操作。	The operation is not supported. 此操作不支持。
Not enough resources to complete the operation. 没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。
Not enough resources to complete the operation in chassis %s slot %u cpu %u. 在框号%s板号%uCPU%u的设备上没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。
The operation is not supported in chassis %u slot %u cpu %s. 在框号%s板号%uCPU%u的设备上不支持此操作。	The operation is not supported. 此操作不支持。
Not enough resources to complete the operation in slot %u cpu %u. 在板号%uCPU%u的设备上没有足够的资源完成此操作。	No enough resource, please check your device. 资源不足，请检查设备。
The operation is not supported in slot %u cpu %u. 在板号%uCPU%u的设备上不支持此操作。	The operation is not supported. 此操作不支持。
PBR is not ready in chassis %s slot %u. 在框号%s板号%u的设备上策略路由进程未启动完毕。	PBR service has not been started. PBR进程尚未启动完成。
PBR is not ready in chassis %s slot %u cpu %u. 在框号%s板号%uCPU%u的设备上策略路由进程未启动完毕。	PBR service has not been started. PBR进程尚未启动完成。
PBR is not ready in slot %u. 在板号%u的设备上策略路由进程未启动完毕。	PBR service has not been started. PBR进程尚未启动完成。
PBR is not ready in slot %u cpu %u. 在板号%uCPU%u的设备上策略路由进程未启动完毕。	PBR service has not been started. PBR进程尚未启动完成。
Failed to apply the PBR policy to chassis %s slot %u. 在框号%s板号%u的设备上应用策略路由失	Failed to apply the PBR policy. 应用策略路由失败。

Message	Explanation
败。	
Failed to apply the PBR policy to slot %u. 在板号%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy to chassis %s slot %u cpu %u. 在框号%s板号%uCPU%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy to slot %u cpu %u. 在板号%uCPU%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy. 应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
The operation is not ready in chassis %s slot %u. 在框号%s板号%u的设备上驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
The operation is not ready in slot %u. 在板号%u的设备上驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
The operation is not ready in chassis %s slot %u cpu %u. 在框号%s板号%uCPU%u的设备上驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
The operation is not ready in slot %u cpu %u. 在板号%uCPU%u的设备上驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
The operation is not ready. 驱动资源未准备完毕。	The drive resources are not ready. 驱动资源未准备完毕。
Configuration items don't meet the requirements. 不符合配置要求。	During executing configuration operation(create、merge、replace、delete or remove) or get operation, policy name must be configured. The specified configuration must be empty, when deleting or removing. 当执行配置操作（包括create、merge、release、delete和remove）和获取操作时，策略名必须配置；删除时指定配置必须为空。
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。
Another policy has been applied. Please remove the current policy first. 已经应用了另一个策略，请先取消已经应用的策略。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。

## PBR/PBRLocalPolicy

Message	Explanation
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。
Failed to apply the PBR policy to chassis %s slot %u. 在框号%s板号%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy to slot %u. 在板号%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy to chassis %s slot %u cpu %u. 在框号%s板号%uCPU%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy to slot %u cpu %u. 在板号%uCPU%u的设备上应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Failed to apply the PBR policy. 应用策略路由失败。	Failed to apply the PBR policy. 应用策略路由失败。
Another policy has been applied. Please remove the current policy first. 已经应用了另一个策略，请先取消已经应用的策略。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。

## PBR/PBRApplyAccessVPN

Message	Explanation
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。
Configuration items don't meet the requirements. 不符合配置要求。	Configuration items don't meet the requirements, public network of vpn can't be configured, please modify configuration. 不符合配置要求，公网 VPN 不可配置，请修改配置
Maximum number of VRFs already reached. VRF个数超过上限。	Maximum number of VRFs already reached. VRF个数超过上限。
The VRF doesn't exist. 该VRF不存在。	The specified VRF is not existed. 该VRF不存在。

## PBR/PBRApplyNexthop

Message	Explanation
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。
The VRF doesn't exist. 该VRF不存在。	The VRF doesn't exist. 该VRF不存在。
Invalid IPv4 address. 非法的IPv4地址。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。
Invalid IPv6 address. 非法的IPv6地址。	Invalid configuration, please modify configuration under the guidance. 配置无效，请在指导下修改配置。
Maximum number of next hops already reached. 下一跳个数超过上限。	Maximum number of next hops already reached. 下一跳个数超过上限。
Maximum number of default next hops already reached. 缺省下一跳个数超过上限。	Maximum number of default next hops already reached. 缺省下一跳个数超过上限。

## PBR/PBRApplyOutInterface

Message	Explanation
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。
Maximum number of output interfaces already reached. 出接口个数超过上限。	Maximum number of output interfaces already reached. 出接口个数超过上限。
Maximum number of default output interfaces already reached. 缺省出接口个数超过上限。	Maximum number of default output interfaces already reached. 缺省出接口个数超过上限。

## PBR/PBRApplicationGroup

Message	Explanation
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。
Number of application groups exceeded the limit. 应用组个数超过上限。	Number of application groups exceeded the limit. 应用组个数超过上限。
Invalid application group name. 非法的应用组名称。	Invalid application group name. 非法的应用组名称。

## PBR/PBRObjectGroup

Message	Explanation
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。
Number of object groups exceeded the limit. 服务对象组个数超过上限。	Number of object groups exceeded the limit. 服务对象组个数超过上限。
The object group is not a service object group. 对象组不是服务对象组。	The object group is not a service object group. 对象组不是服务对象组。

## PBR/PBRMatchServiceChain

Message	Explanation
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。

## PBR/PBRApplyServiceChain

Message	Explanation
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。

## PBR/PBRApplyFailActionDrop

Message	Explanation
The policy node doesn't exist. 该策略节点不存在。	The policy doesn't exist, please create the policy first. 该策略不存在，请先创建。



# PBR/PBRGlobalPolicy

Message	Explanation
The policy doesn't exist. 该策略不存在。	The policy doesn't exist. Please create the policy first. 该策略不存在，请先创建。
Failed to apply the global PBR policy to slot %u. 在板号%u的设备上应用全局策略路由失败。	Failed to apply the global PBR policy. 应用全局策略路由失败。
Failed to apply the global PBR policy to chassis %s slot %u cpu %u. 在框号%s板号%uCPU%u的设备上应用全局策略路由失败。	Failed to apply the global PBR policy. 应用全局策略路由失败。
Failed to apply the global PBR policy to slot %u cpu %u. 在板号%uCPU%u的设备上应用全局策略路由失败。	Failed to apply the global PBR policy. 应用全局策略路由失败。
Failed to apply the global PBR policy. 应用全局策略路由失败。	Failed to apply the global PBR policy. 应用策略路由失败。
Another global policy has been applied. Please remove the current global policy first. 已经应用了另一个全局策略，请先取消已经应用的策略。	Invalid configuration. Please modify the configuration under the guidance. 配置无效，请在指导下修改配置。

# Contents

PCAPWARE .....	1
PCAPWARE/StartCapture .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PCAPWARE/StopCapture .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
PCAPWARE/DelCapFiles .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
PCAPWARE/DelAllCapFile .....	3
XML structure .....	3
Table description .....	3
Columns .....	3

# PCAPWARE

## PCAPWARE/StartCapture

This table contains information about starting the packet capture.

### XML structure

```
<PCAPWARE>
  <StartCapture>
    <ACL>
      <ACLType></ACLType>
      <ACLNumber></ACLNumber>
    </ACL>
    <Interface></Interface>
  </StartCapture>
</PCAPWARE>
```

### Table description

Item	Description
Feature name	PCAPWARE
Table name	StartCapture
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ACL	Capture packets that match the specified ACL.	Data structure	Members include: <ul style="list-style-type: none"><li>ACLType.</li><li>ACLNumber.</li></ul>
ACLType	ACL type.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>
ACLNumber	ACL number.	N/A	Unsigned integer.
Interface	Capture packets on the specified interface.	N/A	String. Length: 2 to 47 characters.

# PCAPWARE/StopCapture

This table contains information about stopping the packet capture.

## XML structure

```
<PCAPWARE>
  <StopCapture>
    <Stop><Stop/>
  </StopCapture>
</PCAPWARE>
```

## Table description

Item	Description
Feature name	PCAPWARE
Table name	StopCapture
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Stop	Stop the capture	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Stops the packet capture normally.</li><li>• <b>1</b>—Stops the packet capture immediately.</li></ul>	If this column is empty, packet capture is stopped normally.

# PCAPWARE/DelCapFiles

This table contains information about deleting specific .cap files.

## XML structure

```
<PCAPWARE>
  <DelCapFiles>
    <DelCapFile>
      <FileName></FileName>
    </DelCapFile>
  </DelCapFiles>
</PCAPWARE>
```

## Table description

Item	Description
Feature name	PCAPWARE
Table name	DelCapFiles
Table type	Multi-instance table
Row name	DelCapFile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
FileName	Name of the .cap file to be deleted.	Index	String. Length: 1 to 253 characters.

## PCAPWARE/DelAllCapFile

This table contains information about deleting all .cap files.

## XML structure

```
<PCAPWARE>
  <DelAllCapFile>
    <Delete/>
  </DelAllCapFile>
</PCAPWARE>
```

## Table description

Item	Description
Feature name	PCAPWARE
Table name	DelAllCapFile
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Delete	Delete all .cap	N/A	This column must be empty.

Column name	Column description	Column type	Data type and restrictions
	files.		

# Contents

- PCAPWARE .....1
  - PCAPWARE /GlobalConf .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# PCAPWARE

## PCAPWARE /GlobalConf

This table contains pcapware global configuration information.

### XML structure

```
<PCAPWARE>
  <GlobalConf>
    <MaxBytes></MaxBytes>
    <MaxPktsPerFile></MaxPktsPerFile>
    <Storage>
      <Type></Type>
      <LocalSpaceLimit></LocalSpaceLimit>
      <Path></Path>
      <Username></Username>
      <Password></Password>
      <PassType></PassType>
    </Storage>
  </GlobalConf>
</PCAPWARE>
```

### Table description

Item	Description
Feature name	PCAPWARE
Table name	GlobalConf
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxBytes	Maximum number of bytes per packet.	N/A	Unsigned integer. Value range: 512 to 4096. Default: 512.	N/A
MaxPktsPerFile	Maximum number of packets per file.	N/A	Unsigned integer. Value range: 100 to 1000.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			Default: 100.	
Storage	Storage information of the .cap file.	Data structure	Members include: <ul style="list-style-type: none"> <li>Type.</li> <li>Path.</li> <li>User.</li> <li>Password.</li> <li>LocalPacketLimit.</li> </ul>	N/A
Type	Storage type of the .cap file.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Local(Default).</li> <li>2—Remote.</li> </ul>	N/A
LocalSpaceLimit	Maximum space available for local packets, in KB.	N/A	Unsigned integer. Value range: 1024 to 10240. Default: 4096.	This column is empty if storage type is remote.
Path	Storage path of the .cap file.	N/A	String. Length: 1 to 253 characters.	This column is empty if storage type is local.
Username	Authentication username.	N/A	String. Length: 1 to 255 characters.	This column is empty if no authentication is required.
Password	Authentication password.	N/A	String. Length: 1 to 373 characters.	This column is empty if no authentication is required.
PassType	The type of authentication password.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Simple.</li> <li>2—Cipher.</li> </ul>	

# Contents

PCAPWARE .....	1
PCAPWARE/GlobalConf .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PCAPWARE/UploadFiles .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
PCAPWARE/LocalFiles .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
PCAPWARE/CaptureState .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
PCAPWARE/CaptureProgress .....	4
XML structure .....	5
Table description .....	5
Columns .....	5

# PCAPWARE

## PCAPWARE/GlobalConf

This table contains pcapware global information.

### XML structure

```
<PCAPWARE>
  <GlobalConf>
    <MaxBytes></MaxBytes>
    <MaxPktsPerFile></MaxPktsPerFile>
    <Storage>
      <Type></Type>
      <LocalSpaceLimit></LocalSpaceLimit>
      <Path></Path>
      <Username></Username>
      <Password></Password>
      <PassType></PassType>
    </Storage>
  </GlobalConf>
</PCAPWARE>
```

### Table description

Item	Description
Feature name	PCAPWARE
Table name	GlobalConf
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxBytes	Maximum number of bytes per packet.	N/A	Unsigned integer. Value range: 512 to 4096.	N/A
MaxPktsPerFile	Maximum number of packets per file.	N/A	Unsigned integer. Value range: 100 to 1000.	N/A
Storage	Storage information of the .cap file.	Data structure	Members include: <ul style="list-style-type: none"><li>Type.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Path.</li> <li>User.</li> <li>Password.</li> <li>LocalPacketLimit.</li> </ul>	
Type	Storage type of the .cap file.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Local.</li> <li>2—Remote.</li> </ul>	N/A
LocalSpaceLimit	Maximum space available for local packets, in KB.	N/A	Unsigned integer. Value range: 1024 to 10240.	This column is empty if storage type is remote.
Path	Storage path of the .cap file.	N/A	String. Length: 1 to 253 characters.	This column is empty if storage type is local.
Username	Authentication username.	N/A	String. Length: 1 to 255 characters.	This column is empty if no authentication is required.
Password	Authentication password.	N/A	String. Length: 1 to 373 characters.	This column is empty if no authentication is required.
PassType	The type of authentication password.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Simple.</li> <li>2—Cipher.</li> </ul>	

## PCAPWARE/UploadFiles

This table contains information about uploaded .cap files.

### XML structure

```

<PCAPWARE>
  <UploadFiles>
    <UploadFile>
      <Sequence></Sequence>
      <UploadState></UploadState>
      <FileName></FileName>
    </UploadFile>
  </UploadFiles>
</PCAPWARE>

```

### Table description

Item	Description
Feature name	PCAPWARE
Table name	UploadFiles
Table type	Multi-instance table
Row name	UploadFile

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions
Sequence	Sequence number of the .cap file.	Index	Unsigned integer.
UploadState	Whether the .cap file has been saved successfully.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Succeeded.</li> <li>2—Failed.</li> </ul>
FileName	Name of the .cap file.	N/A	String. Length: 1 to 253 characters.

## PCAPWARE/LocalFiles

This table contains information about local .cap files.

## XML structure

```

<PCAPWARE>
  <LocalFiles>
    <LocalFile>
      <FileName></FileName>
      <FileSize></FileSize>
    </LocalFile>
  </LocalFiles>
</PCAPWARE>

```

## Table description

Item	Description
Feature name	PCAPWARE
Table name	LocalFiles
Table type	Multi-instance table
Row name	LocalFile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
FileName	Name of the .cap	Index	String.

Column name	Column description	Column type	Data type and restrictions
	file.		Length: 1 to 253 characters.
FileSize	Size of the .cap file, in bytes.	N/A	Unsigned integer. Value range: 0 to $2^{32}-1$ .

## PCAPWARE/CaptureState

This table contains packet capture status information.

### XML structure

```
<PCAPWARE>
  <CaptureState>
    <State></State>
    <StateDetail></StateDetail>
  </CaptureState>
</PCAPWARE>
```

### Table description

Item	Description
Feature name	PCAPWARE
Table name	CaptureState
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
State	Packet capture status.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Started.</li> <li><b>false</b>—Stopped.</li> </ul>
StateDetail	Detailed packet capture status.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Stopped.</li> <li><b>1</b>—Started.</li> <li><b>2</b>—Saving captured packets.</li> </ul>

## PCAPWARE/CaptureProgress

This table contains information about the packet capture progress.

## XML structure

```
<PCAPWARE>
  <CaptureProgress>
    <Percent></Percent>
  </CaptureProgress>
</PCAPWARE>
```

## Table description

Item	Description
Feature name	PCAPWARE
Table name	CaptureProgress
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Percent	Percent of captured packets that have been saved.	N/A	Unsigned integer.

# Contents

- PCAPWARE .....1
  - PCAPWARE/StartCapture .....1
  - PCAPWARE/StopCapture .....1
  - PCAPWARE/GlobalConf .....1



# PCAPWARE

## PCAPWARE/StartCapture

Message	Explanation
Failed to start packet capture. Reason: Packet capture is not supported on a shared interface. 不支持共享口，开启报文捕获失败。	A user tried to start packet capture on a shared interface. Packet capture is not supported on a shared interface. 尝试在共享口进行报文捕获导致报文捕获失败，目前报文捕获不支持共享口抓包。
Saving captured packets to file... Please wait for a while or stop the ongoing packet capture process by force. 正在读取缓存报文，如果想继续操作请执行强制停止。	The system was writing the captured packets in memory to a file. You can wait for a while or stop the ongoing packet capture process by force to start packet capture again immediately. 缓存中还有报文没有读出，如果想继续操作请执行强制停止报文捕获。
Failed to start packet capture. Reason: Not enough memory. 内存达到一级告警门限，开启报文捕获失败。	Not enough memory. Please release enough memory space. 内存达到一级告警门限，请预留足够的内存。
Failed to start packet capture. Reason: The specified file server is unreachable. 外部存储服务器不可达，开启报文捕获失败。	The specified file server is unreachable. Verify that the file server IP address is correctly configured on the device and the file server is reachable. 外部存储服务器不可达，请检查外部服务器地址配置是否正确，路由是否可达。
A two-way packet capture process is already started. To start another packet capture process, stop the existing process first. 报文捕获已经开始，若要重新开始抓包，请先停止当前报文捕获。	A two-way packet capture process is already started. To start another packet capture process, stop the existing process first. 报文捕获已经开始，又尝试开始捕获报文，如果想重新开始抓包，请先停止当前报文捕获。

## PCAPWARE/StopCapture

Message	Explanation
Packet capture already stopped. 报文捕获已经停止。	The capture is already stopped. 报文捕获已经停止，又尝试停止报文捕获。
Saving captured packets to file... Please wait for a while or stop the ongoing packet capture process by force. 正在读取缓存报文，如果想继续操作请执行强制停止。	The system was writing the captured packets in memory to a file. You can wait for a while or stop the ongoing packet capture process by force. 缓存中还有报文没有读出，如果想继续操作请执行强制停止报文捕获。

## PCAPWARE/GlobalConf

Message	Explanation
A two-way packet capture process is already started. To change relevant settings, stop the	It is not permit to change relevant settings when a two-way packet capture process is already started. To change relevant settings,

**process first.**

报文捕获已经开始，若要修改相关配置，请先停止当前报文捕获。

**stop the process first.**

报文捕获开始时不允许修改配置，若要修改相关配置，请先停止当前报文捕获。

# Contents

- PEX .....1
  - PEX/PEXPorts .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# PEX

## PEX/PEXPorts

This table contains configuration of PEX ports.

Also available in stand-alone mode.

## XML structure

```
<PEX>
  <PEXPorts>
    <PEXPort>
      <Port></Port>
      <Description></Description>
      <Interface>
        <IfName></IfName>
      </Interface>
      <Associate></Associate>
    </PEXPort>
  </PEXPorts>
</PEX>
```

## Table description

Item	Description
Feature name	PEX
Table name	PEXPorts
Table type	Multi-instance table
Row name	PEXPort
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Port	PEX port number.	Index	Unsigned integer. Value range: MinPEXPortID to MaxPEXPortID	MinPEXPortID and MaxPEXPortID specification: Please reference to Comware V7 PEX NETCONF XML API Data Reference

Column name	Column description	Column type	Data type and restrictions	Remarks
Description	PEX port description.	N/A	String. Length: 1 to 79.	Optional
Interface	Physical port of an PEX port.	Data structure	Members: • IfName	Multi-instance
IfName	Interface name.	N/A	String. Length: 2 to 47 characters.	Physical port of an PEX port
Associate	Associated chassis ID or slot ID of the PEX port.	N/A	Unsigned integer. Value range: MinAssociateID to MaxAssociateID	<p>IRF (distributed): chassis ID Other: slot ID MinAssociateID and MaxAssociateID specification: Please reference to Comware V7 PEX NETCONF XML API Data Reference.</p> <p>Caution: PEX will reboot when the associated ID is modified.</p>

# Contents

PEX .....	1
PEX/Capability .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PEX/PEXPorts .....	2
XML structure .....	2
Table description .....	3
Columns .....	3

# PEX

## PEX/Capability

This table contains capabilities of PEX.

Also available in stand-alone mode.

## XML structure

```
<PEX>
  <Capability>
    <MinPEXPortID></MinPEXPortID>
    <MaxPEXPortID></MaxPEXPortID>
    <MinAssociateID></MinAssociateID>
    <MaxAssociateID></MaxAssociateID>
    <MaxIfNumPerPEXPort></MaxIfNumPerPEXPort>
    <SupportedIfTypes>
      <ifTypeExt></ifTypeExt>
    </SupportedIfTypes>
  </Capability>
</PEX>
```

## Table description

Item	Description
Feature name	PEX
Table name	Capability
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinPEXPortID	Minimum PEX port number	N/A	Unsigned integer.	N/A
MaxPEXPortID	Maximum PEX port number	N/A	Unsigned integer.	N/A
MinAssociateID	Minimum associate ID	N/A	Unsigned integer.	IRF (distributed): chassis ID Other: slot ID

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxAssociateID	Maximum associate ID	N/A	Unsigned integer.	IRF (distributed): chassis ID Other: slot ID
MaxIfNumPerPEXPort	Maximum interface count in a PEX port	N/A	Unsigned integer.	N/A
SupportedIfTypes	Indicates which physical interface type can be added to PEX port.	Data structure	Members: • ifTypeExt	Multi-instance.
ifTypeExt	The physical interface type.	N/A	Unsigned integer.	ifTypeExt is referenced from Interfaces table in Ifmgr NETCONF XML API, XPath is Ifmgr/Interfaces/Interface/ifTypeExt.  Please reference to <i>Comware V7 Ifmgr NETCONF XML API Data Reference</i> .

## PEX/PEXPorts

This table contains configuration of PEX ports.

Also available in stand-alone mode.

## XML structure

```

<PEX>
  <PEXPorts>
    <PEXPort>
      <Port></Port>
      <Description></Description>
      <State></State>
      <Interface>
        <IfName></IfName>
        <State></State>
        <PeerIfName></PeerIfName>
      </Interface>
      <Associate></Associate>
    </PEXPort>
  </PEXPorts>
</PEX>

```



## Table description

Item	Description
Feature name	IRF
Table name	PEXPorts
Table type	Multi-instance table
Row name	PEXPort
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Port	PEX port number.	index	Unsigned integer.	N/A
Description	PEX port description.	N/A	String. Length: 1 to 79	N/A
State	State of a PEX port.	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Offline</li> <li>2—Loading</li> <li>3—Online</li> </ul>	N/A
Interface	Physical port of a PEX port.	Data structure	Members: <ul style="list-style-type: none"> <li>IfName</li> <li>PeerIfName</li> <li>State</li> </ul>	Multi-instance
IfName	Interface name.	N/A	String. Length: 2 to 47 characters.	Physical port of an PEX port
State	State of the interface.	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—Forwarding</li> <li>2—Blocked</li> <li>3—Down</li> <li>4—ADM</li> </ul>	Forwarding: Link is up and is forwarding. Blocked: Link is up and flow is blocked. Down: Link is down. ADM: The port has been manually shut down with the shutdown command.
PeerIfName	Peer interface name.	N/A	String. Length: 2 to 47 characters.	Peer interface name of the Physical port of an PEX port
Associate	Associated chassis ID or slot ID of the PEX port.	N/A	Unsigned integer.	IRF (distributed): chassis ID Other: slot ID

# Contents

PEX .....1

    PEX/PEXPorts .....1

# PEX

## PEX/PEXPorts

Message	Explanation
Operation failed. The PEX port ID is out of range. 操作失败。PEX端口编号超出取值范围。	The PEX port ID is out of range. 指定的 PEX 端口编号超出取值范围。
The PEX port doesn't exist. 该PEX端口不存在。	The PEX port does not configuration. 指定的PEX端口还没有配置。
Operation failed. The number of PEX port's associated physical interfaces reached the upper limit. PEX端口的成员接口个数已达到最大值。	The number of PEX port's associated physical interfaces reached the upper limit. PEX端口的成员接口个数已经达到上限。
The virtual chassis ID or virtual slot number is already used. 该虚拟框号/虚拟槽位号已经被使用。	The virtual chassis ID or virtual slot number is already used. 指定的虚拟框号/虚拟槽位号已经被使用。
Interface <i>Ten-Gigabitethernet1/0/7</i> has been bound to another PEX port. 接口 <i>Ten-Gigabitethernet1/0/7</i> 已与另一PEX端口绑定。	The interface has been bound to another PEX port. 指定的接口已经与另外的PEX绑定。
The type of interface <i>Ten-Gigabitethernet1/0/7</i> is not supported. 不支持接口 <i>Ten-Gigabitethernet1/0/7</i> 的接口类型。	The interface type is not supported to bind to PEX port. 不支持指定的接口所属的接口类型绑定到PEX端口。
Interface <i>Ten-Gigabitethernet1/0/7</i> is already used exclusively by another feature and can't be bound to a PEX port. 接口 <i>Ten-Gigabitethernet1/0/7</i> 已被其他特性独占，不能配置为PEX端口的成员接口。	The interface is already used exclusively by another feature and can't be bound to a PEX port. 指定的接口已经被其它特性占用，不能配置为PEX端口的成员。
Configuration synchronization timed out. 同步配置超时。	Configuration synchronization timed out. 同步配置超时。
Configuration synchronization failed. 同步配置失败。	Configuration synchronization failed. 同步配置失败。
Interface <i>Ten-Gigabitethernet1/0/7</i> has been bound to the PEX port. 接口 <i>Ten-Gigabitethernet1/0/7</i> 已经与该PEX端口绑定。	The interface has been bound to the PEX port. 指定的接口已经绑定到指定的PEX端口。
Interface <i>Ten-Gigabitethernet1/0/7</i> switching failed. 接口 <i>Ten-Gigabitethernet1/0/7</i> 转换失败。	The interface binding to PEX port is failed. 指定的端口绑定到PEX端口失败。
Can't perform the operation when the PEX is loading. PEX加载时不能执行该操作。	Can't perform the operation when the PEX is loading. PEX加载时不能执行该操作。
The PEX port ID is already used in another MDC. PEX端口编号已经在其他MDC中使用。	The PEX port ID is already used in another MDC. 指定的PEX端口号已经在别的MDC内使用。

Physical interface <i>Ten-GigabitEthernet100/0/7</i> on PEXs can't be bound to a PEX port. PE板上的物理接口 <i>Ten-GigabitEthernet100/0/7</i> 不能绑定到PEX端口。	The physical interface on PEXs can't be bound to a PEX port. PE板上的物理口不能绑定到PEX端口
The virtual chassis ID or virtual slot number is not in range. 虚拟框号/虚拟槽位号超出了范围。	The virtual chassis ID or virtual slot number is not in range. 虚拟框号/虚拟槽位号超出了范围。
Interface <i>Ten-GigabitEthernet1/0/7</i> doesn't exist. 该接口不存在。	The interface does not exist. 指定的接口不存在。

# Contents

- PFC .....1
  - PFC/IfDeadLock .....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# PFC

## PFC/IfDeadLock

This table is used to recover from PFC deadlock.

### XML structure

```
<PFC>
  <IfDeadLock>
    <Interface>
      <IfIndex></IfIndex>
      <Recover></Recover>
    </Interface>
  </IfDeadLock>
</PFC>
```

### Table description

Item	Description
Feature name	PFC
Table name	IfRecover
Table type	Multi-instance table
Row name	DeadLock
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Recover	Recover from PFC deadlock.	N/A	This column must be empty.	N/A

# Contents

PFC .....	1
PFC/GlobalCfg .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PFC/DeadLockIntervals .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
PFC/DeadLockPrecisions .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
PFC/PortDeadLocks .....	3
XML structure .....	4
Table description .....	4
Columns .....	4
PFC/PortPktWarningThresholds .....	4
XML structure .....	5
Table description .....	5
Columns .....	5

# PFC

## PFC/GlobalCfg

This table contains the global PFC configuration.

### XML structure

```
<PFC>
  <GlobalCfg>
    <State></State>
  </GlobalCfg>
</PFC>
```

### Table description

Item	Description
Feature name	PFC
Table name	GlobalCfg
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
State	Global PFC state.	N/A	Enumeration: <ul style="list-style-type: none"><li>enable.(default)</li><li>disable.</li></ul>	N/A

## PFC/DeadLockIntervals

This table contains the detection interval information of the specified CoS.

### XML structure

```
<PFC>
  <DeadLockIntervals>
    <DeadLockInterval>
```



```

    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <Cos></Cos>
    <Interval></Interval>
  </DeadLockInterval>
</DeadLockIntervals>
</PFC>

```

## Table description

Item	Description
Feature name	PFC
Table name	DeadLockIntervals
Table type	Multi-instance table
Row name	DeadLockInterval
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current devie's type is centralized.
Slot	Slot ID of the device node.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current devie's type is centralized.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current devie's type is centralized.
Cos	Class of service	Index	Unsigned integer. Value range: 0 to 7.	N/A
Interval	Detection interval configuration	N/A	Unsigned integer. Value range: 1 to 15	N/A

## PFC/DeadLockPrecisions

This table contains the timer precision configuration.

## XML structure

```
<PFC>
  <DeadLockPrecisions>
    <DeadLockPrecision>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Precision></Precision>
    </DeadLockPrecision>
  </DeadLockPrecisions>
</PFC>
```

## Table description

Item	Description
Feature name	PFC
Table name	DeadLockPrecisions
Table type	Multi-instance table
Row name	DeadLockPrecision
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current device's type is centralized.
Slot	Slot ID of the device node.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current device's type is centralized.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current device's type is centralized.
Precision	Timer precision configuration	N/A	Enumeration: <ul style="list-style-type: none"><li>1—High.</li><li>2—Normal(default)</li><li>3—Low</li></ul>	N/A

## PFC/PortDeadLocks

This table contains the deadlock and manual recovery mode configuration.

## XML structure

```
<PFC>
  <PortDeadLocks>
    <PortDeadLock>
      <IfIndex></IfIndex>
      <State></State>
      <RecoverMode></RecoverMode>
    </PortDeadLock>
  </PortDeadLocks>
</PFC>
```

## Table description

Item	Description
Feature name	PFC
Table name	PortDeadLocks
Table type	Multi-instance table
Row name	PortDeadLock
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
State	Enable PFC deadlock	N/A	Enumeration: <ul style="list-style-type: none"><li>enable.</li><li>disable(default)</li></ul>	N/A
RecoverMode	RecoverMode Configuration	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Manual.</li><li>2—Auto(default)</li></ul>	N/A

## PFC/PortPktWarningThresholds

This table contains the input and output early warning information.

## XML structure

```
<PFC>
  <PortPktWarningThresholds>
    <PortPktWarningThreshold>
      <IfIndex></IfIndex>
      <Cos></Cos>
      <Inpps></Inpps>
      <Outpps></Outpps>
    </PortPktWarningThreshold>
  </PortPktWarningThresholds>
</PFC>
```

## Table description

Item	Description
Feature name	PFC
Table name	PortPktWarningThresholds
Table type	Multi-instance table
Row name	PortPktWarningThreshold
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Cos	Class of service	Index	Unsigned integer. Value range: 0 to 7.	N/A
Inpps	Input early warning information	N/A	Unsigned integer. The value range is from 1 to 159783010.	N/A
Outpps	Output early warning information	N/A	Unsigned integer. The value range is from 1 to 159783010.	N/A

# Contents

PFC .....	1
PFC/GlobalCfg .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PFC/DeadLockIntervals .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
PFC/DeadLockPrecisions .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
PFC/PortDeadLocks .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
PFC/PortPktWarningThresholds .....	4
XML structure .....	4
Table description .....	5
Columns .....	5

# PFC

## PFC/GlobalCfg

This table contains the global PFC configuration.

### XML structure

```
<PFC>
  <GlobalCfg>
    <State></State>
  </GlobalCfg>
</PFC>
```

### Table description

Item	Description
Feature name	PFC
Table name	GlobalCfg
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
State	Global PFC state.	N/A	Enumeration: <ul style="list-style-type: none"><li>enable.</li><li>disable.</li></ul>	N/A

## PFC/DeadLockIntervals

This table contains the detection interval information of the specified CoS.

### XML structure

```
<PFC>
  <DeadLockIntervals>
    <DeadLockInterval>
      <Chassis></Chassis>
      <Slot></Slot>
    </DeadLockInterval>
  </DeadLockIntervals>
</PFC>
```

```

    <CPUID></CPUID>
    <Cos></Cos>
    <Interval></Interval>
  </DeadLockInterval>
</DeadLockIntervals>
</PFC>

```

## Table description

Item	Description
Feature name	PFC
Table name	DeadLockIntervals
Table type	Multi-instance table
Row name	DeadLockInterval
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current devie's type is centralized.
Slot	Slot ID of the device node.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current devie's type is centralized.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current devie's type is centralized.
Cos	Class of service	Index	Unsigned integer. Value range: 0 to 7.	N/A
Interval	Detection interval configuration	N/A	Unsigned integer. Value range: 1 to 15	N/A

## PFC/DeadLockPrecisions

This table contains the timer precision configuration.

## XML structure

```

<PFC>
  <DeadLockPrecisions>
    <DeadLockPrecision>

```

```

    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <Precision></Precision>
  </DeadLockPrecision>
</DeadLockPrecisions>
</PFC>

```

## Table description

Item	Description
Feature name	PFC
Table name	DeadLockPrecisions
Table type	Multi-instance table
Row name	DeadLockPrecision
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current devie's type is centralized.
Slot	Slot ID of the device node.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current devie's type is centralized.
CPUID	CPU ID.	Index	Unsigned integer. Value range: 0 to 65535.	The value is 65535 when the current devie's type is centralized.
Precision	Timer precision configuration	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—High.</li> <li>2—Normal</li> <li>3—Low</li> </ul>	N/A

## PFC/PortDeadLocks

This table contains setting deadlock enable and recover-mode manual.

## XML structure

```

<PFC>
  <PortDeadLocks>
    <PortDeadLock>

```



```

    <IfIndex></IfIndex>
    <State></State>
    <RecoverMode></RecoverMode>
  </PortDeadLock>
</PortDeadLocks>
</PFC>

```

## Table description

Item	Description
Feature name	PFC
Table name	PortDeadLocks
Table type	Multi-instance table
Row name	PortDeadLock
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
State	Enable PFC deadlock function.	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable.</li> <li>disable</li> </ul>	N/A
RecoverMode	RecoverMode configuration	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Manual.</li> <li>2—Auto</li> </ul>	N/A

## PFC/PortPktWarningThresholds

This table contains the input and output early warning information.

## XML structure

```

<PFC>
  <PortPktWarningThresholds>
    <PortPktWarningThreshold>
      <IfIndex></IfIndex>
    
```

```

    <Cos></Cos>
    <Inpps></Inpps>
    <Outpps></Outpps>
  </PortPktWarningThreshold>
</PortPktWarningThresholds>
</PFC>

```

## Table description

Item	Description
Feature name	PFC
Table name	PortPktWarningThresholds
Table type	Multi-instance table
Row name	PortPktWarningThreshold
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Cos	Class of service	Index	Unsigned integer. Value range: 0 to 7.	N/A
Inpps	Input early warning infomaition.	N/A	Unsigned integer. The value range is from 1 to 159783010.	N/A
Outpps	Output early warning infomaition.	N/A	Unsigned integer. The value range is from 1 to 159783010.	N/A

# Contents

- PIM .....1
  - PIM/Instances .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - PIM/Interfaces .....2
    - XML structure .....2
    - Table description .....2
    - Columns .....2

# PIM

## PIM/Instances

This table contains IPv4 PIM instance information.

### XML structure

```
<PIM>
  <Ipv4Instances>
    <Instance>
      <VRF></VRF>
      <RegWholeChks></RegWholeChks>
      <SsmPolicy></SsmPolicy>
    </Instance>
  </Ipv4Instances>
</PIM>
```

### Table description

Item	Description
Feature name	PIM
Table name	Ipv4Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	This table supports only default VRF.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN name.	Index	String. Length: 0 to 31 characters.	Empty string indicates default VRF.
RegWholeChks	Checksum calculating rule for PIM register messages.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Calculates the checksum based on an entire register message.</li><li><b>false</b>—Calculates the checksum based on the header of a register message (default).</li></ul>	N/A
SsmPolicy	ACL number.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 2000 to 2999.	

## PIM/Interfaces

This table contains IPv4 PIM interface information.

## XML structure

```

<PIM>
  <Ipv4Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Mode></Mode>
    </Interface>
  </Ipv4Interfaces>
</PIM>

```

## Table description

Item	Description
Feature name	PIM
Table name	Ipv4Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Mode	PIM Mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—PIM-SM.</li> <li>2—PIM-DM.</li> </ul>	N/A

# Contents

PIM .....	1
PIM/Instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PIM/Interfaces .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
PIM/Ipv4Nbrs .....	2
XML structure .....	2
Table description .....	3
Columns .....	3

# PIM

## PIM/Instances

This table contains IPv4 PIM instance information.

## XML structure

```
<PIM>
  <Ipv4Instances>
    <Instance>
      <VRF></VRF>
      <RegWholeChks></RegWholeChks>
      <SsmPolicy></SsmPolicy>
    </Instance>
  </Ipv4Instances>
</PIM>
```

## Table description

Item	Description
Feature name	PIM
Table name	Ipv4Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	This table supports only default VRF.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN name.	Index	String. Length: 0 to 31 characters.	Empty string indicates default VRF.
RegWholeChks	Checksum calculating rule for PIM register message.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Calculates the checksum based on an entire register message.</li><li><b>false</b>—Calculates the checksum based on the header of a register message (default).</li></ul>	N/A
SsmPolicy	ACL number.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A

# PIM/Interfaces

This table contains IPv4 PIM interface information.

## XML structure

```
<PIM>
  <Ipv4Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Mode></Mode>
    </Interface>
  </Ipv4Interfaces>
</PIM>
```

## Table description

Item	Description
Feature name	PIM
Table name	Ipv4Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Mode	PIM Mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—PIM-SM.</li><li>2—PIM-DM.</li></ul>	N/A

# PIM/Ipv4Nbrs

This table contains IPv4 PIM neighbor information.

## XML structure

```
<PIM>
```



```

<Ipv4Nbrs>
  <Nbr>
    <IfIndex></IfIndex>
    <NbrAddr></NbrAddr>
    <Uptime></Uptime>
    <Expires></Expires>
  </Nbr>
</Ipv4Nbrs>
</PIM>

```

## Table description

Item	Description
Feature name	PIM
Table name	Ipv4Nbrs
Table type	Multi-instance table
Row name	Nbr
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
NbrAddr	IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Uptime	Length of time the PIM neighbor has been up.	N/A	Unsigned integer (in seconds).	N/A
Expires	Time remaining of the PIM neighbor lifetime.	N/A	Unsigned integer (in seconds).	The value of 0xFFFFFFFF means that the PIM neighbor is always up and reachable.

# Contents

PIM .....	2
PIM/Instances .....	2
PIM/Interfaces .....	2
PIM/Ipv4Nbrs .....	2

# PIM

## PIM/Instances

Message	Explanation
PIM is not configured. PIM尚未配置。	During executing set operation, PIM is not configured. 对该表进行配置时，PIM 还未配置。
PIM is not ready. PIM尚未就绪。	During executing set operation, PIM is not complete startup. 对该表进行配置时，PIM还未完全启动。
PIM is not enabled. PIM协议尚未开启。	During executing set operation, resource is not enough, that result in failing to create PIM view. 对该表进行配置时，资源不足，导致创建PIM视图失败。

## PIM/Interfaces

Message	Explanation
PIM is not configured. PIM尚未配置。	During executing set operation, PIM is not configured. 对该表进行配置时，PIM 还未配置。
PIM is not ready. PIM尚未就绪。	During executing set operation, PIM is not complete startup. 对该表进行配置时，PIM还未完全启动。
PIM-DM and PIM-SM can't coexist in the same VRF. 同一VRF内不能同时配置PIM-SM和PIM-DM。	During executing replace or merge operation for mode of this interface, PIM_SM or PIM_DM mode is already configured. Before setting new mode, deleting or removing previous mode is required. 通过replace或者merge操作更改接口下mode时，接口下已经配置了PIM-SM或者PIM-DM。更改时需要先去使能之前的mode，再配置新的mode。
PIM is not enabled on this interface. 接口上的PIM协议尚未开启。	Resource is not enough, that result in failing to enable PIM on this interface. 资源不足，导致接口上使能PIM协议失败。

## PIM/Ipv4Nbrs

Message	Explanation
PIM is not configured. PIM尚未配置。	During executing set operation, PIM is not configured. 对该表进行配置时，PIM 还未配置。
PIM is not ready. PIM尚未就绪。	During executing set operation, PIM is not complete startup. 对该表进行配置时，PIM还未完全启动。

# Contents

- Ping .....1
  - Ping/IPv4Ping.....1
    - XML structure .....1
    - Responded XML structure.....1
    - Table description.....1
    - Columns .....2
    - Responded columns .....2

# Ping

## Ping/IPv4Ping

This table is used to test the reachability of an IPv4 address.

### XML structure

```
<Ping>
  <IPv4Ping>
    <PingTest>
      <Host></Host>
      <VRF></VRF>
      <OutputInterface></OutputInterface>
    </PingTest>
  </IPv4Ping>
</Ping>
```

### Responded XML structure

```
<Ping>
  <IPv4Ping>
    <PingTest>
      <Host></Host>
      <PayloadLength></PayloadLength>
      <EchoReply>
        <IcmpSequence></IcmpSequence>
        <TTLValue></TTLValue>
        <ReplyTime></ReplyTime>
      </EchoReply>
      <TotalTransmitPacket></TotalTransmitPacket>
      <TotalReceivePacket></TotalReceivePacket>
      <LossRate></LossRate>
      <MinReplyTime></MinReplyTime>
      <MaxReplyTime></MaxReplyTime>
      <AvgReplyTime></AvgReplyTime>
      <StandardDeviation></StandardDeviation>
    </PingTest>
  </IPv4Ping>
</Ping>
```

### Table description

Item	Description
Feature name	Ping

Item	Description
Table name	IPv4Ping
Table type	Multi-instance table
Row name	PingTest
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Host	IPv4 address or hostname of a remote system	Index	String. Length: 1 to 253 characters.	Example: 1.1.1.1 or hostname.
VRF	VPN instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
OutputInterface	Name of the outgoing interface	N/A	String. Length: 0 to 46 characters.	An empty string indicates that no outgoing interface is specified.

## Responded columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Host	IPv4 address of the remote system	N/A	IPv4: String, dotted decimal notation.	Example: 1.1.1.1.
PayloadLength	Payload length	N/A	Unsigned integer. Value range: 20 to 8100 bytes.	N/A
EchoReply	Echo reply information	Data structure	Members include: <ul style="list-style-type: none"> <li>IcmpSequence.</li> <li>TTLValue.</li> <li>ReplyTime.</li> </ul>	N/A
IcmpSequence	Sequence of an echo reply	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
TTLValue	TTL value of an echo reply	N/A	Unsigned integer. Value range: 1 to 255.	N/A
ReplyTime	Response time of an echo reply	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If the value is 4294967295, the echo reply has timed out.
TotalTransmitPacket	Number of sent ICMP echo requests	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
TotalReceivePacket	Number of received ICMP	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	echo replies			
LossRate	Percentage of unacknowledged packets to the total sent packets	N/A	Unsigned integer. Value range: 0 to 100.	N/A
MinReplyTime	Minimum response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If LossRate is 100, the value in this column is insignificant.
MaxReplyTime	Maximum response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If LossRate is 100, the value in this column is insignificant.
AvgReplyTime	Average response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If LossRate is 100, the value in this column is insignificant.
StandardDeviation	Standard deviation response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If LossRate is 100, the value in this column is insignificant.

# Contents

Ping .....1

    Ping/IPv4Ping..... 1



# Ping

## Ping/IPv4Ping

Message	Explanation
Unknown host. 未知主机。	The specified host must exist.
The VPN instance doesn't exist. VPN不存在。	The specified VPN instance name must exist.
The outgoing interface is invalid. 出接口不合法。	The specified outgoing interface must be valid.

# Contents

- Ping6.....1
  - Ping6/IPv6Ping.....1
    - XML structure.....1
    - Responded XML structure.....1
    - Table description.....2
    - Columns.....2
    - Responded columns .....2

# Ping6

## Ping6/IPv6Ping

This table is used to test the reachability of an IPv6 address.

### XML structure

```
<Ping6>
  <IPv6Ping>
    <PingTest>
      <Host></Host>
      <VRF></VRF>
      <OutputInterface></OutputInterface>
    </PingTest>
  </IPv6Ping>
</Ping6>
```

### Responded XML structure

```
<Ping6>
  <IPv6Ping>
    <PingTest>
      <Host></Host>
      <SrcAddr></SrcAddr>
      <PayloadLength></PayloadLength>
      <EchoReply>
        <IcmpSequence></IcmpSequence>
        <HopLimitValue></HopLimitValue>
        <ReplyTime></ReplyTime>
      </EchoReply>
      <TotalTransmitPacket></TotalTransmitPacket>
      <TotalReceivePacket></TotalReceivePacket>
      <LossRate></LossRate>
      <MinReplyTime></MinReplyTime>
      <MaxReplyTime></MaxReplyTime>
      <AvgReplyTime></AvgReplyTime>
      <StandardDeviation></StandardDeviation>
    </PingTest>
  </IPv6Ping>
</Ping6>
```

## Table description

Item	Description
Feature name	Ping6
Table name	IPv6Ping
Table type	Multi-instance table
Row name	PingTest
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Host	IPv6 address or host name of a remote system	Index	String. Length: 1 to 253 characters.	Example: 1::1 or host name.
VRF	VPN instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
OutputInterface	Name of the outgoing interface	N/A	String. Length: 0 to 46 characters.	An empty string indicates that no outgoing interface is specified.

## Responded columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Host	IPv6 address of the remote system	N/A	IPv6: Hexadecimal string, colon-separated.	Example: 1::1.
SrcAddr	IPv6 source address	N/A	IPv6: Hexadecimal string, colon-separated.	Example: 1::1.
PayloadLength	Payload length	N/A	Unsigned integer. Value range: 20 to 8100 bytes.	N/A
EchoReply	Echo reply information	Data structure	Members include: <ul style="list-style-type: none"><li>IcmpSequence.</li><li>HopLimitValue.</li><li>ReplyTime.</li></ul>	N/A
IcmpSequence	Sequence of an echo reply	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
HopLimitValue	Hop limit value of an echo reply	N/A	Unsigned integer. Value range: 1 to 255.	N/A
ReplyTime	Response time of an echo reply	N/A	Unsigned integer. Value range: 0 to 4294967295	If the value is 4294967295, the echo

Column name	Column description	Column type	Data type and restrictions	Remarks
			microseconds.	reply has timed out.
TotalTransmit Packet	Number of sent ICMPv6 echo requests	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
TotalReceive Packet	Number of received ICMPv6 echo replies	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
LossRate	Percentage of unacknowledged packets to the total sent packets	N/A	Unsigned integer. Value range: 0 to 100.	N/A
MinReplyTime	Minimum response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If LossRate is 100, the value in this column is insignificant.
MaxReplyTime	Maximum response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If LossRate is 100, the value in this column is insignificant.
AvgReplyTime	Average response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If LossRate is 100, the value in this column is insignificant.
StandardDeviation	Standard deviation response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If LossRate is 100, the value in this column is insignificant.

# Contents

Ping6.....1

    Ping6/IPv6Ping.....1

# Ping6

## Ping6/IPv6Ping

Message	Explanation
Unknown host. 未知主机。	The specified host must exist.
The VPN instance doesn't exist. VPN不存在。	The specified VPN instance name must exist.
The outgoing interface is invalid. 出接口不合法。	The specified outgoing interface must be valid.

# Contents

PKEY .....	1
PKEY/ExportPublicKeys .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PKEY/ImportPeerKeys .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
PKEY/CreateLocalKeys .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
PKEY/DestroyLocalKeys .....	4
XML structure .....	4
Table description .....	4
Columns .....	5



# PKEY

## PKEY/ExportPublicKeys

This table is used to export local public key in SSH format.

### XML structure

```
<PKEY>
  <ExportPublicKeys>
    <Export>
      <AlgID></AlgID>
      <KeyName></KeyName>
      <FormatID></FormatID>
      <FileName></FileName>
      <ReplaceFile></ReplaceFile>
    </Export>
  </ExportPublicKeys>
</PKEY>
```

### Table description

Item	Description
Feature name	PKEY
Table name	ExportPublicKeys
Table type	Multi-instance table
Row name	Export
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgID	Identity of algorithm	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	See table PKEYCapabilities for supported algorithms.
KeyName	Name of local asymmetric key	Index	String. Length: 0 to 64 characters. Case insensitive.	A key name with 0 characters belongs to a default key.
FormatID	Identity of SSH format	N/A	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	See table SSHFormats for supported algorithm.

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	User path of the file ,which the public key will be exported to.	N/A	String. Length: 1 to 128 characters. Case insensitive.	The path can't be the followed value: <ul style="list-style-type: none"> <li>• "hostkey"</li> <li>• "serverkey"</li> <li>• "dsaakey"</li> <li>• "ecdsaakey"</li> <li>• path which only contain "."."</li> <li>• path which first character is '/'</li> <li>• path which contains "/" or "../"</li> </ul>
ReplaceFile	If replace existed file	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul> Default value is false	N/A

## PKEY/ImportPeerKeys

This table is used to import peer public key pairs.

### XML structure

```

<PKEY>
  <ImportPeerKeys>
    <Import>
      <PeerKeyName></PeerKeyName>
      <FileName></FileName>
      <ReplaceKey></ReplaceKey>
    </Import>
  </ImportPeerKeys>
</PKEY>

```

### Table description

Item	Description
Feature name	PKEY
Table name	ImportPeerKeys
Table type	Multi-instance table
Row name	Import
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PeerKeyName	Name of peer public key	Index	String. Length: 1 to 31 characters. Case sensitive	N/A
FileName	Path of peer key file	N/A	String. Length: 1 to 128 characters. Case insensitive.	The path can't be the followed value: <ul style="list-style-type: none"> <li>• "hostkey"</li> <li>• "serverkey"</li> <li>• "dsakey"</li> <li>• "ecdsaakey"</li> <li>• path which only contain ".", "\"</li> <li>• path which first character is '/'</li> <li>• path which contains "/" or "../"</li> </ul>
ReplaceKey	If replace existed peer key	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul> Default value is false	N/A

## PKEY/CreateLocalKeys

This table is used to create local asymmetric key pairs.

## XML structure

```

<PKEY>
  <CreateLocalKeys>
    <Create>
      <AlgID></AlgID>
      <KeyName></KeyName>
      <Length></Length>
      <ReplaceKey></ReplaceKey>
    </Create>
  </CreateLocalKeys>
</PKEY>

```

## Table description

Item	Description
Feature name	PKEY
Table name	CreateLocalKeys
Table type	Multi-instance table

Item	Description
Row name	Create
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgID	Identity of algorithm	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	See table PKEYCapabilities for supported algorithms.
KeyName	Name of local asymmetric key	Index	String. Length: 0 to 64 characters. Case insensitive.	A key name with 0 characters belongs to a default key.
Length	Length of public key	N/A	Unsigned integer.	See table PKEYCapabilities for supported length.
ReplaceKey	If replace existed local asymmetric key	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul> Default value is false.	N/A

## PKEY/DestroyLocalKeys

This table is used to destroy local asymmetric key pairs.

## XML structure

```

<PKEY>
  <DestroyLocalKeys>
    <Destroy>
      <AlgID></AlgID>
      <KeyName></KeyName>
    </Destroy>
  </DestroyLocalKeys>
</PKEY>

```

## Table description

Item	Description
Feature name	PKEY
Table name	DestroyLocalKeys
Table type	Multi-instance table

Item	Description
Row name	Destroy
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgID	Identity of algorithm	Index	Unsigned integer. Value range: 1 to $2^{32}-1$ .	See table PKEYCapabilities for supported algorithms.
KeyName	Name of local asymmetric key	Index	String. Length: 0 to 64 characters. Case insensitive.	A key name with 0 characters belongs to a default key.

# Contents

- PKEY .....1
  - PKEY/PeerKeys .....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# PKEY

## PKEY/PeerKeys

This table is used to configure peer public keys.

### XML structure

```
<PKEY>
  <PeerKeys>
    <Key>
      <PeerKeyName></PeerKeyName>
      <Value></Value>
    </Key>
  </PeerKeys>
</PKEY>
```

### Table description

Item	Description
Feature name	PKEY
Table name	PeerKeys
Table type	Multi-instance table
Row name	Key
Restrictions	None.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PeerKeyName	Name of peer public key	Index	String. Length: 1 to 31 characters. Case insensitive	N/A
Value	The data of Key	N/A	PKCS#1 formatted hex string. Length: 1 to 2047 characters.	See table LocalKeys for supported value.

# Contents

PKEY .....	1
PKEY/LocalKeys .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PKEY/DefaultLocalKeys .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
PKEY/PeerKeys .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
PKEY/GetSSHPublicKeys .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
PKEY/SSHFormats .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
PKEY/PKEYCapabilities .....	6
XML structure .....	6
Table description .....	6
Columns .....	7



# PKEY

## PKEY/LocalKeys

This table is used to get local public keys.

### XML structure

```
<PKEY>
  <LocalKeys>
    <Key>
      <AlgID></AlgID>
      <KeyName></KeyName>
      <Length></Length>
      <CreatedTime></CreatedTime>
      <Value></Value>
    </Key>
  </LocalKeys>
</PKEY>
```

### Table description

Item	Description
Feature name	PKEY
Table name	LocalKeys
Table type	Multi-instance table
Row name	Key
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgID	Identity of algorithm	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	See table PKEYCapabilities for supported algorithm.
KeyName	Name of local asymmetric key	Index	String. Length: 1 to 64 characters. Case insensitive	N/A
Length	Length of local asymmetric key	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CreatedTime	When is the key created	N/A	DateTime. Format:HH:MM:SS YYYY/MM/DDT	N/A
Value	The value of public key	N/A	PKCS#1 formatted hex string.	N/A

## PKEY/DefaultLocalKeys

This table is used to get default local public keys.

### XML structure

```

<PKEY>
  <DefaultLocalKeys>
    <Key>
      <AlgID></AlgID>
      <Usage></Usage>
      <Length></Length>
      <CreatedTime></CreatedTime>
      <Value></Value>
    </Key>
  </DefaultLocalKeys>
</PKEY>

```

### Table description

Item	Description
Feature name	PKEY
Table name	DefaultLocalKeys
Table type	Multi-instance table
Row name	Key
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgID	Identity of algorithm	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	See table PKEYCapabilities for supported algorithm.
Usage	Key Usage	Index	Enumeration:	ServerKey is only

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—HostKey.</li> <li>2—ServerKey</li> </ul>	meaningful for RSA, while HostKey is meaningful for all supported algorithms.
Length	Length of local asymmetric key	N/A	Unsigned integer.	N/A
CreatedTime	When is the key created	N/A	DateTime. Format:HH:MM:SS YYYY/MM/DDT	N/A
Value	The value of key	N/A	PKCS#1 formatted hex string.	N/A

## PKEY/PeerKeys

This table is used to get peer public keys.

### XML structure

```

<PKEY>
  <PeerKeys>
    <Key>
      <PeerKeyName></PeerKeyName>
      <AlgID></AlgID>
      <Length></Length>
      <Value></Value>
    </Key>
  </PeerKeys>
</PKEY>

```

### Table description

Item	Description
Feature name	PKEY
Table name	PeerKeys
Table type	Multi-instance table
Row name	Key
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PeerKeyName	Name of peer public key	Index	String. Length: 1 to 31 characters. Case sensitive	N/A
AlgID	Identity of algorithm	N/A	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	See table PKEYCapabilities for supported algorithm.
Length	Length of asymmetric key	N/A	Unsigned integer.	N/A
Value	The value of key	N/A	PKCS#1 formatted hex string.	N/A

## PKEY/GetSSHPublicKeys

This table is used to export local public key to SSH formatted data.

## XML structure

```
<PKEY>
  <GetSSHPublicKeys>
    <Key>
      <AlgID></AlgID>
      <KeyName></KeyName>
      <FormatID></FormatID>
      <Value></Value>
    </Key>
  </GetSSHPublicKeys>
</PKEY>
```

## Table description

Item	Description
Feature name	PKEY
Table name	GetSSHPublicKeys
Table type	Multi -instance table
Row name	Key
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgID	Identity of algorithm	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	See table PKEYCapabilities for supported algorithm.
KeyName	Name of local asymmetric key	Index	String. Length: 0 to 64 characters. Case insensitive.	A key name with 0 characters belongs to a default key.
FormatID	Identity of SSH format	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	See table SSHFormats for supported algorithm.
Value	Information of SSH format key	N/A	String. Length: 1 to 2048 characters.	N/A

## PKEY/SSHFormats

This table described supported SSH format

## XML structure

```
<PKEY>
  <SSHFormats>
    <SSHFormat>
      <FormatID></FormatID>
      <FormatName></FormatName>
    </SSHFormat>
  </SSHFormats>
</PKEY>
```

## Table description

Item	Description
Feature name	PKEY
Table name	SSHFormats
Table type	Multi -instance table
Row name	SSHFormat
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FormatID	Identity of SSH format	Index	Unsigned integer.	N/A
FormatName	Name of supported SSH format	N/A	String. Length: 1 to 255 characters Case insensitive	N/A

## PKEY/PKEYCapabilities

This table contains supported PKEY algorithm information

### XML structure

```
<PKEY>
  <PKEYCapabilities>
    <PKEYCapability>
      <AlgID></AlgID>
      <AlgName></AlgName>
      <MinLength></MinLength>
      <MaxLength></MaxLength>
      <DefaultLength></DefaultLength>
      <ExportFormatIDList>
        <IDItem></IDItem>
      </ExportFormatIDList>
    </PKEYCapability>
  </PKEYCapabilities>
</PKEY>
```

### Table description

Item	Description
Feature name	PKEY
Table name	PKEYCapabilities
Table type	Multi-instance table
Row name	PKEYCapability
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgID	Identity of algorithm	Index	Unsigned integer. Value range: 1 to $2^{32}-1$ .	N/A
AlgName	Name of algorithm	N/A	String. Length: 1 to 255 characters. Case insensitive.	The name of supported algorithm
MinLength	Minimal length of supported algorithm	N/A	Unsigned integer.	N/A
MaxLength	Maximal length of supported algorithm	N/A	Unsigned integer.	N/A
DefaultLength	Default length of supported algorithm	N/A	Unsigned integer.	N/A
ExportFormatList	Supported export SSH format list	Data structure	Members include: <ul style="list-style-type: none"> <li>IDItem.</li> </ul>	N/A
IDItem	Identity of SSH format	N/A	Unsigned integer. Value range: 1 to $2^{32}-1$	Contains up to 3 IDItem in ExportFormatList .

# Contents

PKI.....	1
PKI/ImportCertificates .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PKI/ExportCACertificates .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
PKI/ExportLocalCertificates .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
PKI/DeleteCertificates .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
PKI/RequestCerificates .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
PKI/AbortCertRequests .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
PKI/RetrieveCerificates .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
PKI/RetrieveCRLs .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
PKI/DelPeerCertBySerialNumber .....	9
XML structure .....	9
Table description .....	9
Columns .....	9



# PKI

# PKI/ImportCertificates

This table is used to import the certificate to device.

## XML structure

```
<PKI>
  <ImportCertificates>
    <Import>
      <Domain></Domain>
      <CertificateType></CertificateType>
      <FilePath></FilePath>
      <Password></Password>
      <NewPubKeyName></NewPubKeyName>
    </Import>
  </ImportCertificates>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	ImportCertificates
Table type	Multi-instance table
Row name	Import
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: ~, ", ' , \ ,   , . , * , < , > , / .
CertificateType	The type of certificate	Index	Enumeration: <ul style="list-style-type: none"> <li>1—CA</li> <li>2—Local.</li> </ul>	N/A
FilePath	The path of certificate file to be imported	N/A	String	The file must be existed in the device
Password	Password used to	N/A	String	<b>Case sensitive.</b> <b>The password is</b>

Column name	Column description	Column type	Data type and restrictions	Remarks
	decrypt the certificate, which can be PKCS#12 or PEM formatted.			<b>necessary as follow:</b> <ul style="list-style-type: none"> <li>The file format is PKCS#12 and the certificate type is local</li> <li>The file format is PEM, and there is local certificate and private key in the file</li> </ul>
NewPubKey Name	The name of new public key.	N/A	String. Length: 1 to 64 characters.	<ul style="list-style-type: none"> <li>Case insensitive.</li> <li>Only contain letters, number and "-".</li> <li>If the name is empty and there is no key name in the domain, it will use the domain name as the key name.</li> </ul>

## PKI/ExportCACertificates

This table is used to export the CA certificate.

### XML structure

```

<PKI>
  <ExportCACertificates>
    <Export>
      <Domain></Domain>
      <FileFormat></FileFormat>
      <IsWithCertsChain></IsWithCertsChain>
      <FilePath></FilePath>
      <ReplaceFile></ReplaceFile>
    </Export>
  </ExportCACertificates>
</PKI>

```

### Table description

Item	Description
Feature name	PKI

Table name	ExportCACertificates
Table type	Multi-instance table
Row name	Export
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: ~, *, \,  , ., " , ' , < , > , , , / , .
FileFormat	The file format	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—DER</li> <li>2—PEM</li> </ul>	N/A
IsWithCertsChain	If exported certificate contains CA certificate chain	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul> Default value is false	N/A
FilePath	The path of the file will export certificate to	N/A	String	The path must be existed in the device
ReplaceFile	If replace when the file is existed.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul> Default value is false	N/A

## PKI/ExportLocalCertificates

This table is used to export the local certificate.

## XML structure

```

<PKI>
  <ExportLocalCertificates>
    <Export>
      <Domain></Domain>
      <FileFormat></FileFormat>
      <IsWithCertsChain></IsWithCertsChain>
      <IsWithKey></IsWithKey>
      <EncAlgID></EncAlgID>
      <Password></Password>
      <FilePath></FilePath>
      <ReplaceFile></ReplaceFile>
    </Export>
  </ExportLocalCertificates>
</PKI>

```

```
</ExportLocalCertificates>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	ExportLocalCertificates
Table type	Multi-instance table
Row name	Export
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: ~, , \,  , , . , * , < , > , / , .
FileFormat	The file format	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—DER</li> <li>2—PKCS#12</li> <li>3—PEM</li> </ul>	N/A
IsWithCertsChain	If exported certificate contains CA certificate chain	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul> Default value is false	N/A
IsWithKey	If exported certificate contains private key	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul> Default value is false	N/A
EncAlgID	Identity of encryption algorithm	N/A	Unsigned integer. Value range: 1 to 2^32-1.	See table PKICapabilities for supported encryption algorithim.
Password	Password which will be used to encrypt the file when exported certificate contains private key	N/A	String <b>Case sensitive.</b>	<b>The password is required as follow:</b> <ul style="list-style-type: none"> <li>The file format is PKCS12 and the certificate type is local</li> <li>The file format is PEM, and it will export both local certificate and private key to the file</li> </ul>



# PKI/RequestCertificates

This table is used to request a certificate on line.

## XML structure

```
<PKI>
  <RequestCertificates>
    <Request>
      <Domain></Domain>
      <Password></Password>
    </Request>
  </RequestCertificates>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	RequestCertificates
Table type	Multi-instance table
Row name	Request
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: '~', '*', '\', ' ', ':', '<', '>', '"', '<!--', '<!-->', '<!-->'.
Password	The password value of certificate revocation.	N/A	String. Length: 1 to 31 characters. Case sensitive.	<b>N/A</b>

# PKI/AbortCertRequests

This table is used to abort the certificate request for a PKI domain.

## XML structure

```
<PKI>
  <AbortCertRequests>
    <Abort>
```

```

        <Domain></Domain>
    </Abort>
</AbortCertRequests>
</PKI>

```

## Table description

Item	Description
Feature name	PKI
Table name	AbortCertRequests
Table type	Multi-instance table
Row name	Abort
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: <code>"~!@#\$%^&amp;*(){}[]\ ;:, &lt;&gt;'`~!@#\$%^&amp;*(){}[]\ ;:</code>

# PKI/RetrieveCertificates

This table is used to obtain a certificate from the certificate distribution server.

## XML structure

```
<PKI>
  <RetrieveCertificates>
    <Retrieve>
      <Domain></Domain>
      <CertificateType></CertificateType>
      <PeerEntity></PeerEntity>
    </Retrieve>
  </RetrieveCertificates>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	RetrieveCertificates





## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: ~, *, \,  , ., " , ' , < , > , / , , .

## PKI/DelPeerCertBySerialNumber

This table is used to delete the certificates by SerialNumber.

## XML structure

```
<PKI>
  <DelPeerCertBySerialNumber>
    <Delete>
      <Domain></Domain>
      <SerialNumber></SerialNumber>
    </Delete>
  </DelPeerCertBySerialNumber>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	DelPeerCertBySerialNumber
Table type	Multi-instance table
Row name	Delete
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: ~, *, \,  , ., " , ' , < , > , / , , .
SerialNumber	The serial number of the peer certificate	Index	String. Length: 1 to 127 characters. Case insensitive.	N/A

# Contents

PKI.....	1
PKI/Domains.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
PKI/DomainPubkeys.....	5
XML structure.....	5
Table description.....	6
Columns.....	6
PKI/Entities.....	6
XML structure.....	6
Table description.....	7
Columns.....	7
PKI/CertAccessPolicies.....	8
XML structure.....	8
Table description.....	8
Columns.....	9
PKI/CertAccessRules.....	9
XML structure.....	9
Table description.....	9
Columns.....	10
PKI/CertAttributeGroups.....	10
XML structure.....	10
Table description.....	10
Columns.....	11
PKI/CertAttributes.....	11
XML structure.....	11
Table description.....	11
Columns.....	11
PKI/StoragePath.....	12
XML structure.....	12
Table description.....	12
Columns.....	13

# PKI

## PKI/Domains

This table is used to configure PKI domains.

### XML structure

```
<PKI>
  <Domains>
    <Domain>
      <Name></Name>
      <CAIdentifier></CAIdentifier>
      <Entity></Entity>
      <CertRequestFrom></CertRequestFrom>
      <CertRequestURL>
        <URL></URL>
        <VRF></VRF>
      </CertRequestURL>
      <CertRequestMode>
        <Mode></Mode>
        <PWDType></PWDType>
        <Password></Password>
      </CertRequestMode>
      <RootCertFingerprint>
        <Type></Type>
        <Value></Value>
      </RootCertFingerprint>
      <LDAPServer>
        <Host></Host>
        <PortNumber></PortNumber>
        <VRF></VRF>
      </LDAPServer>
      <CRLURL>
        <URL></URL>
        <VRF></VRF>
      </CRLURL>
      <CRLCheck></CRLCheck>
      <Usage>
        <IKE></IKE>
        <SSLServer></SSLServer>
        <SSLClient></SSLClient>
      </Usage>
      <CertRequestPoll>
        <Count></Count>
        <Interval></Interval>
```

```
</CertRequestPoll>
<SourceIP>
  <AddressType></AddressType>
  <Address></Address>
  <IfIndex></IfIndex>
</SourceIP>
<pkcs7EncryType></pkcs7EncryType>
</Domain>
</Domains>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	Domains
Table type	Multi-instance table
Row name	Domain
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: " ~ , * " \ ,   ; . " < " > _ : " / " .
CALidentifier	CA identifier name.	N/A	String. Length: 1 to 63 characters. Case sensitive.	N/A
Entity	Reference a PKI entity for the PKI domain	N/A	String. Case insensitive. Length: 1 to 31 characters.	N/A
CertRequest From	The type of certificate request reception authority.	N/A	Enumeration: 1—CA. 2—RA.	N/A
CertRequest URL	The URL of the certificate request reception authority (CA or RA)	Data structure	Members include: URL VRF	N/A
URL	The value of	N/A	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	URL		Length: 1 to 511 characters. Case sensitive.	
VRF	The vpn instance which the address is belongs to.	N/A	String: Length:1 to 31 characters Case sensitive.	It's a public network when VRF is not specified.
CertRequest Mode	The certificate request mode.	Data structure	Members include: Mode PWDType Password	N/A
Mode	The mode of certificate request	N/A	Enumeration: 1—Auto. 2—Manual. Default value is 2.	N/A
PWDType	The password type of certificate revocation.	N/A	Enumeration: 1—simple. 2—cipher.	The column can be valid only when Mode is Auto
Password	The password value of certificate revocation.	N/A	String. Length: 1 to 73 characters. Case sensitive.	The column can be valid only when Mode is Auto. Type simple string length is 1 to 31. Type cipher string length is 1 to 73.
RootCertFingerprint	The fingerprint for verifying the validity of the CA root certificate.	Data structure	Members include: Type Value	N/A
Type	The fingerprint type.	N/A	Enumeration: 1—MD5. 2—SHA1.	N/A
Value	The fingerprint value.	N/A	String: Length:32 or 40 hex characters Case sensitive.	Type MD5 is 32 hex string length. Type SHA1 is 40 hex string length.
LDAPServer	An LDAP server for a PKI domain	Data structure	Members include: Host PortNumber VRF	N/A
Host	The hostname of the LDAP server	N/A	String: Length:1 to 255 characters Case sensitive.	The string can be IPv4 address, IPv6 address, or domain name.
PortNumber	The port number of the LDAP server	N/A	Unsigned integer: Value range:1 to 65535 Default value is 389.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	The vpn instance which the address is belongs to.	N/A	String: Length:1 to 31 characters Case sensitive.	It's a public network when VRF is not specified.
CRLURL	the URL of the CRL repository.	Data structure	Members include: URL VRF	N/A
URL	The value of URL	N/A	String. Length: 1 to 511 characters. Case sensitive.	The URL format is ldap://server_location or http://server_location, Server_location can be an IP address or a domain name.
VRF	The vpn instance which the address is belongs to.	N/A	String: Length:1 to 31 characters Case sensitive.	It's a public network when VRF is not specified.
CRLCheck	If check whether the certificate has been revoked by CRL	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul> Default value is false.	N/A
Usage	Certificate usage for requesting certificate	Data structure	Members include: <ul style="list-style-type: none"> <li>IKE</li> <li>SSLServer</li> <li>SSLClient.</li> </ul>	Can include one or more certificate usage at the same time.
IKE	Use certificate as the IKE	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
SSLServer	Use certificate as the SSL server certificates	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
SSLClient	Use certificate as the SSL client certificates	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
CertRequest Poll	The polling interval and the maximum number of attempts to query certificate request status.	Data structure	Members include: Count Interval	N/A
Count	The value of the maximum number	N/A	Unsigned integer: Value range:1 to 100 Default value is 50.	N/A
Interval	The value of the polling	N/A	Unsigned integer:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	interval		Value range:5 to 168, in minutes Default value is 20.	
SourceIP	The source IP address for PKI protocol packets.	Data structure	Members include: AddressType Address IfIndex	N/A
AddressType	The type of IP Address	N/A	Enumeration: 1—IPv4 2—IPv6	AddressType, Address must be configured together. Can not be configured together with IfIndex.
Address	The value of IP Address	N/A	IPv4 or IPv6	N/A
IfIndex	The index of interface	N/A	Unsigned integer.	Can not be configured together with AddressType and Address. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
pkcs7EncryType	Encryption algorithm for the PKI domain	N/A	Unsigned integer.	See the PKICapabilities table in Comware V7 PKI NETCONF XML API Data Reference for supported encryption algorithms.

## PKI/DomainPubkeys

This table is used to reference the asymmetric keys for PKI domain.

### XML structure

```

<PKI>
  <DomainPubkeys>
    <Pubkey>
      <Domain></Domain>
      <Type></Type>
      <Purpose></Purpose>
      <Name></Name>
      <Length></Length>
    </Pubkey>
  
```

```
</DomainPubkeys>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	DomainPubkeys
Table type	Multi-instance table
Row name	Pubkey
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: ~, *, \,  , ", ., <, >, ' , /, .
Type	Type of algorithm	Index	Enumeration: <ul style="list-style-type: none"> <li>1—RSA.</li> <li>2—DSA.</li> <li>3—ECDSA.</li> <li>4—SM2</li> </ul>	See the PKI/AuthorityAlgs table in Comware V7 PKI NETCONF XML API Data Reference for supported algorithms.
Purpose	Key purpose	Index	Enumeration: <ul style="list-style-type: none"> <li>1—General</li> <li>2—Signature</li> <li>3—Encryption</li> </ul>	ECDSA key and DSA key can be used for signature purpose, while RSA key can be used for all purpose.
Name	Key name	N/A	String. Length: 1 to 64 characters Case insensitive.	Only contain letters, number and "-".
Length	Length of public key	N/A	Unsigned integer.	See table PKI/AuthorityAlgs for supported length.

## PKI/Entities

This table is used to configure the PKI entities.

## XML structure

```
<PKI>
  <Entities>
```



```

<Entity>
  <EntityName></EntityName>
  <CommonName></CommonName>
  <Country></Country>
  <State></State>
  <Locality></Locality>
  <Organization></Organization>
  <OrganizationUnit></OrganizationUnit>
  <FQDN></FQDN>
  <IP>
    <Ipv4Address></Ipv4Address>
    <IfIndex></IfIndex>
  </IP>
</Entity>
</Entities>
</PKI>

```

## Table description

Item	Description
Feature name	PKI
Table name	Entities
Table type	Multi-instance table
Row name	Entity
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EntityName	PKI entity name	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A
CommonName	The common name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
Country	The country code	N/A	Text. Length: 2 to 2 characters.	Country code is described in ISO 3166-1
State	The state name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
Locality	The locality name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.

Column name	Column description	Column type	Data type and restrictions	Remarks
Organization	The organization name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
OrganizationUnit	The unit name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
FQDN	The FQDN name	N/A	String. Length: 1 to 255 characters Case sensitive.	N/A
IP	The IP address	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv4Address.</li> <li>IfIndex..</li> </ul>	Either Ipv4Address or IfIndex can be specified.
Ipv4Address	Ipv4 address	N/A	Ipv4Address	N/A
IfIndex	The index of interface	N/A	Unsigned integer.	Get the primary Ipv4 address of the interface.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## PKI/CertAccessPolicies

This table is used to configure the certificate access control policies.

### XML structure

```

<PKI>
  <CertAccessPolicies>
    <Policy>
      <Name></Name>
    </Policy>
  </CertAccessPolicies>
</PKI>

```

### Table description

Item	Description
Feature name	PKI
Table name	CertAccessPolicies

Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The name of certificate access control policy	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A

## PKI/CertAccessRules

This table is used to configure the rules of the certificate access control policy.

## XML structure

```

<PKI>
  <CertAccessRules>
    <Rule>
      <Policy></Policy>
      <RuleID></RuleID>
      <Action></Action>
      <AttributeGroup></AttributeGroup>
    </Rule>
  </CertAccessRules>
</PKI>

```

## Table description

Item	Description
Feature name	PKI
Table name	CertAccessRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	The name of certificate access control policy	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A
RuleID	Index of the rule in the access control policy.	Index	Unsigned integer. Value range:1 to 16	The smaller the RuleID is, the higher the priority is.
Action	How to operate the certificate that match the rule	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Permit</li><li>• 2—Deny</li></ul>	N/A
AttributeGroup	The name of certificate attribute group	N/A	String. Length: 1 to 31 characters. Case insensitive.	N/A

## PKI/CertAttributeGroups

This table is used to configure the certificate attribute groups.

## XML structure

```
<PKI>
  <CertAttributeGroups>
    <Group>
      <Name></Name>
    </Group>
  </CertAttributeGroups>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	CertAttributeGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The name of certificate attribute group	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A

## PKI/CertAttributes

This table is used to configure the attributes of the certificate attribute groups.

## XML structure

```
<PKI>
  <CertAttributes>
    <Attribute>
      <Group></Group>
      <AttributeID></AttributeID>
      <Object></Object>
      <Item></Item>
      <Operator></Operator>
      <Value></Value>
    </Attribute>
  </CertAttributes>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	CertAttributes
Table type	Multi-instance table
Row name	Attribute
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	The name of certificate attribute group	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AttributeID	Index of the attribute in the certificate attribute group	Index	Unsigned integer. Value range:1 to 16	The smaller the AttributeID is, the higher the priority is.
Object	The object which to be matched	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—alt-subject-name</li> <li>2—issuer-name</li> <li>3—subject-name</li> </ul>	N/A
Item	The item in the object	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—DN</li> <li>2—FQDN</li> <li>3—IpAddress</li> </ul>	It's can be each value when the object is subject-name or issuer-name, but only can be FQDN or IpAddress when the object is alt-subject-name.
Operator	How to operate the item	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—contain</li> <li>2—equal</li> <li>3—not contain</li> <li>4—not equal</li> </ul>	N/A
Value	The value that be used to match with item.	N/A	String. Length: 1 to 255 characters. Case insensitive.	N/A

## PKI/StoragePath

This table is used to configure the PKI storage path.

### XML structure

```

<PKI>
  <StoragePath>
    <StorageCertPath></StorageCertPath>
    <StorageCRLPath></StorageCRLPath>
  </StoragePath>
</PKI>

```

### Table description

Item	Description
Feature name	PKI
Table name	StoragePath
Table type	Single-instance table

Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StorageCert Path	The PKI certificate storage path	N/A	String. Case sensitive.	The path can't begin with "/" or "../"
StorageCRL Path	The PKI CRL storage path	N/A	String. Case sensitive.	The path can't begin with "/" or "../"

# Contents

PKI.....	1
PKI/Domains.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
PKI/DomainPubkeys.....	5
XML structure.....	5
Table description.....	5
Columns.....	6
PKI/Entities.....	6
XML structure.....	6
Table description.....	7
Columns.....	7
PKI/CertAccessPolicies.....	8
XML structure.....	8
Table description.....	8
Columns.....	8
PKI/CertAccessRules.....	8
XML structure.....	9
Table description.....	9
Columns.....	9
PKI/CertAttributeGroups.....	9
XML structure.....	10
Table description.....	10
Columns.....	10
PKI/CertAttributes.....	10
XML structure.....	10
Table description.....	11
Columns.....	11
PKI/StoragePath.....	12
XML structure.....	12
Table description.....	12
Columns.....	12
PKI/DomainCACerts.....	12
XML structure.....	12
Table description.....	13
Columns.....	13
PKI/DomainLocalCerts.....	14
XML structure.....	14
Table description.....	14
Columns.....	14
PKI/CertificateRequests.....	15
XML structure.....	15
Table description.....	16
Columns.....	16
PKI/ImportCertStatus.....	16
XML structure.....	16
Table description.....	17
Columns.....	17
PKI/AuthorityAlgs.....	19
XML structure.....	19
Table description.....	19
Columns.....	19
PKI/PKICapabilities.....	20
XML structure.....	20
Table description.....	20
Columns.....	21



PKI/CertRequestStatus .....	21
XML structure .....	21
Table description .....	21
Columns .....	21
PKI/DomainPeerCerts .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
PKI/DomainsCRL .....	23
XML structure .....	23
Table description .....	24
Columns .....	24
PKI/PKIValidateResults .....	24
XML structure .....	24
Table description .....	25
Columns .....	25

# PKI

## PKI/Domains

This table is used to get information of PKI domain

### XML structure

```
<PKI>
  <Domains>
    <Domain>
      <Name></Name>
      <CAIdentifier></CAIdentifier>
      <Entity></Entity>
      <CertRequestFrom></CertRequestFrom>
      <CertRequestURL>
        <URL></URL>
        <VRF></VRF>
      </CertRequestURL>
      <CertRequestMode>
        <Mode></Mode>
      </CertRequestMode>
      <RootCertFingerprint>
        <Type></Type>
        <Value></Value>
      </RootCertFingerprint>
      <LDAPServer>
        <Host></Host>
        <PortNumber></PortNumber>
        <VRF></VRF>
      </LDAPServer>
      <CRLURL>
        <URL></URL>
        <VRF></VRF>
      </CRLURL>
      <CRLCheck></CRLCheck>
      <Usage>
        <IKE></IKE>
        <SSLServer></SSLServer>
        <SSLClient></SSLClient>
      </Usage>
      <CertRequestPoll>
        <Count></Count>
        <Interval></Interval>
      </CertRequestPoll>
      <SourceIP>
```

```

    <AddressType></AddressType>
    <Address></Address>
    <IfIndex></IfIndex>
    <pkcs7EncryType></pkcs7EncryType>
  </SourceIP>
</Domain>
</Domains>
</PKI>

```

## Table description

Item	Description
Feature name	PKI
Table name	Domains
Table type	Multi-instance table
Row name	Domain
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: ~, *, ", \,  , ., <, >, ;, /, .
CAIdentifier	CA identifier name.	N/A	String. Length: 1 to 63 characters. Case sensitive.	N/A
Entity	Reference a PKI entity for the PKI domain	N/A	String. Length: 1 to 31 characters. Case insensitive.	N/A
CertRequest From	The type of certificate request reception authority.	N/A	Enumeration: 1—CA. 2—RA.	N/A
CertRequest URL	The URL of the certificate request reception authority (CA or RA)	Data structure	Members include: URL VRF	N/A
URL	The value of URL	N/A	String. Length: 1 to 511 characters. Case sensitive.	N/A
VRF	The vpn	N/A	String:	It's a public network

Column name	Column description	Column type	Data type and restrictions	Remarks
	instance which the address is belongs to.		Length:1 to 31 characters Case sensitive.	when VRF is not specified.
CertRequest Mode	The certificate request mode.	Data structure	Members include: Mode	N/A
Mode	The type of Mode	N/A	Enumeration: 1—Auto. 2—Manual. Default value is 2.	N/A
RootCertFingerprint	The fingerprint for verifying the validity of the CA root certificate.	Data structure	Members include: Type Value	N/A
Type	The fingerprint type.	N/A	Enumeration: 1—MD5. 2—SHA1.	N/A
Value	The fingerprint value.	N/A	String: Length:32 or 40 hex characters Case sensitive.	Type MD5 is 32 hex string length. Type SHA1 is 40 hex string length.
LDAPServer	An LDAP server for a PKI domain	Data structure	Members include: Host PortNumber VRF	N/A
Host	The hostname of the LDAP server	N/A	String: Length:1 to 255 characters Case sensitive.	The string can be IPv4 address, IPv6 address, or domain name.
PortNumber	The port number of the LDAP server	N/A	Unsigned integer: Value range:1 to 65535 Default value is 389.	N/A
VRF	The vpn instance which the address is belongs to.	N/A	String: Length:1 to 31 characters Case sensitive.	It's a public network when VRF is not specified.
CRLURL	The URL of the CRL repository.	Data structure	Members include: URL VRF	N/A
URL	The value of URL	N/A	String. Length: 1 to 511 characters. Case sensitive.	The URL format is ldap://server_location or http://server_location, Server_location can be an IP address or a domain name.
VRF	The vpn instance which	N/A	String:	It's a public network when VRF is not

Column name	Column description	Column type	Data type and restrictions	Remarks
	the address is belongs to.		Length:1 to 31 characters Case sensitive.	specified.
CRLCheck	If check whether the certificate has been revoked by CRL	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul> Default value is false.	N/A
Usage	Certificate usage for requesting certificate	Data structure	Members include: <ul style="list-style-type: none"> <li>IKE</li> <li>SSLServer</li> <li>SSLClient.</li> </ul>	Can include one or more certificate usage at the same time.
IKE	Use certificate as the IKE	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
SSLServer	Use certificate as the SSL server certificates	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
SSLClient	Use certificate as the SSL client certificates	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A
CertRequest Poll	The polling interval and the maximum number of attempts to query certificate request status.	Data structure	Members include: Count Interval	N/A
Count	The value of the maximum number	N/A	Unsigned integer: Value range:1 to 100 Default value is 50.	N/A
Interval	The value of the polling interval	N/A	Unsigned integer: Value range:5 to 168, in minutes Default value is 20.	N/A
SourceIP	The source IP address for PKI protocol packets.	Data structure	Members include: AddressType Address IfIndex	N/A
AddressType	The type of IP Address	N/A	Enumeration: 1—IPv4 2—IPv6	N/A
Address	The value of IP Address	N/A	IPv4 or IPv6	N/A
IfIndex	The index of interface	N/A	Unsigned integer.	Get the primary IP address of the interface.

Column name	Column description	Column type	Data type and restrictions	Remarks
				Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
pkcs7Encry Type	Encryption algorithm for the PKI domain	N/A	Unsigned integer.	See table PKICapabilities for supported encryption algorithms.

## PKI/DomainPubkeys

This table is used to get the asymmetric keys of PKI domain.

### XML structure

```

<PKI>
  <DomainPubkeys>
    <Pubkey>
      <Domain></Domain>
      <Type></Type>
      <Purpose></Purpose>
      <Name></Name>
      <Length></Length>
    </Pubkey>
  </DomainPubkeys>
</PKI>

```

### Table description

Item	Description
Feature name	PKI
Table name	DomainPubkeys
Table type	Multi-instance table
Row name	Pubkey
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: ~ " ' * " '   , . : ; " < " > " "" "" "" "" "" / "
Type	Type of algorithm	Index	Enumeration: <ul style="list-style-type: none"> <li>1—RSA.</li> <li>2—DSA.</li> <li>3—ECDSA.</li> <li>4—SM2.</li> </ul>	See table PKI/AuthorityAlgs for supported encryption algorithim.
Purpose	Key purpose	Index	Enumeration: <ul style="list-style-type: none"> <li>1—General</li> <li>2—Signature</li> <li>3—Encryption</li> </ul>	ECDSA key and DSA key can be used for signature purpose, while RSA key can be used for all purpose.
Name	Key name	N/A	String. Length: 1 to 64 characters Case insensitive.	Only contain letters, number and "-".
Length	Length of public key	N/A	Unsigned integer.	See table PKI/AuthorityAlgs for supported length.

# PKI/Entities

This table is used to get the PKI entities.

## XML structure

```
<PKI>
  <Entities>
    <Entity>
      <EntityName></EntityName>
      <CommonName></CommonName>
      <Country></Country>
      <State></State>
      <Locality></Locality>
      <Organization></Organization>
      <OrganizationUnit></OrganizationUnit>
      <FQDN></FQDN>
      <IP>
        <Ipv4Address></Ipv4Address>
        <IfIndex></IfIndex>
      </IP>
    </Entity>
  </Entities>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	Entities
Table type	Multi-instance table
Row name	Entity
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EntityName	PKI entity name	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A
CommonName	The common name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
Country	The country code	N/A	Text. Length: 2 to 2 characters.	Country code is described in ISO 3166-1
State	The state name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
Locality	The locality name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
Organization	The organization name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
OrganizationUnit	The unit name	N/A	Text. Length: 1 to 63 characters. Case sensitive.	Comma can not be contained.
FQDN	The FQDN name	N/A	String. Length: 1 to 255 characters Case sensitive.	N/A
IP	The IP address	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv4Address.</li> <li>IfIndex..</li> </ul>	Either Ipv4Address or IfIndex can be specified.
Ipv4Address	Ipv4 address	N/A	Ipv4Address	N/A
IfIndex	The index of interface	N/A	Unsigned integer.	Get the primary Ipv4 address of the interface. Some versions support interface name. For



Column name	Column description	Column type	Data type and restrictions	Remarks
				relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.

## PKI/CertAccessPolicies

This table is used to get the certificate access control policies.

### XML structure

```

<PKI>
  <CertAccessPolicies>
    <Policy>
      <Name></Name>
    </Policy>
  </CertAccessPolicies>
</PKI>

```

### Table description

Item	Description
Feature name	PKI
Table name	CertAccessPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The name of certificate access control policy	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A

## PKI/CertAccessRules

This table is used to get the rules of the certificate access control policy.

## XML structure

```
<PKI>
  <CertAccessRules>
    <Rule>
      <Policy></Policy>
      <RuleID></RuleID>
      <Action></Action>
      <AttributeGroup></AttributeGroup>
    </Rule>
  </CertAccessRules>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	CertAccessRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Policy	The name of certificate access control policy	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A
RuleID	Index of the rule in the access control policy.	Index	Unsigned integer. Value range:1 to 16	The smaller the RuleID is, the higher the priority is.
Action	How to operate the certificate that match the rule	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Permit</li><li>2—Deny</li></ul>	N/A
AttributeGroup	The name of certificate attribute group	N/A	String. Length: 1 to 31 characters. Case insensitive.	N/A

## PKI/CertAttributeGroups

This table is used to get the certificate attribute groups.

## XML structure

```
<PKI>
  <CertAttributeGroups>
    <Group>
      <Name></Name>
    </Group>
  </CertAttributeGroups>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	CertAttributeGroups
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The name of certificate attribute group	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A

## PKI/CertAttributes

This table is used to get the attributes of the certificate attribute groups.

## XML structure

```
<PKI>
  <CertAttributes>
    <Attribute>
      <Group></Group>
      <AttributeID></AttributeID>
      <Object></Object>
      <Item></Item>
      <Operator></Operator>
      <Value></Value>
    </Attribute>
  </CertAttributes>
```

</PKI>

## Table description

Item	Description
Feature name	PKI
Table name	CertAttributes
Table type	Multi-instance table
Row name	Attribute
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	The name of certificate attribute group	Index	String. Length: 1 to 31 characters. Case insensitive.	N/A
AttributeID	Index of the attribute in the certificate attribute group	Index	Unsigned integer. Value range:1 to 16	The smaller the AttributeID is, the higher the priority is.
Object	The object which to be matched	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—alt-subject-name</li><li>• 2—issuer-name</li><li>• 3—subject-name</li></ul>	N/A
Item	The item in the object	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—DN</li><li>• 2—FQDN</li><li>• 3—IpAddress</li></ul>	It's can be each value when the object is subject-name or issuer-name, but only can be FQDN o IpAddress when the object is alt-subject-name.
Operator	How to operate the item	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—contain</li><li>• 2—equal</li><li>• 3—not contain</li><li>• 4—not equal</li></ul>	N/A
Value	The value that be used to match with item.	N/A	String. Length: 1 to 255 characters. Case insensitive.	N/A

# PKI/StoragePath

This table is used to get the PKI storage path.

## XML structure

```
<PKI>
  <StoragePath>
    <StorageCertPath></StorageCertPath>
    <StorageCRLPath></StorageCRLPath>
  </StoragePath>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	StoragePath
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StorageCert Path	The PKI certificate storage path	N/A	String. Case sensitive.	The path can't begin with "/" or "../"
StorageCRL Path	The PKI CRL storage path	N/A	String. Case sensitive.	The path can't begin with "/" or "../"

# PKI/DomainCACerts

This table is used to get the CA certificates of the PKI domain

## XML structure

```
<PKI>
  <DomainCACerts>
    <Cert>
      <Domain></Domain>
      <SerialNumber></SerialNumber>
      <Issuer></Issuer>
    </Cert>
  </DomainCACerts>
</PKI>
```

```

    <Subject></Subject>
    <Validity>
      <NotBefore></NotBefore>
      <NotAfter></NotAfter>
    </Validity>
    <IsLowestCA></IsLowestCA>
    <DetailInfoText></DetailInfoText>
  </Cert>
</DomainCACerts>
</PKI>

```

## Table description

Item	Description
Feature name	PKI
Table name	DomainCACerts
Table type	Multi-instance table
Row name	Cert
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: "~", "*", "\",  , ", ., <, >, ' , /, .
SerialNumber	The serial number of the certificate	Index	String.	N/A
Issuer	The issuer name	N/A	String	N/A
Subject	The Subject name	N/A	String	N/A
Validity	The validity date of the certificate	Data structure	Members include: <ul style="list-style-type: none"> <li>NotBefore.</li> <li>NotAfter.</li> </ul>	N/A
NotBefore	The begin time of the validity	N/A	DateTime	N/A
NotAfter	The end time of the validity	N/A	DateTime	N/A
IsLowestCA	If the CA certificate is the lowest in the PKI domain	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The CA certificate is lowest.</li> <li><b>false</b>—The CA certificate isn't lowest.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DetailInfoText	The text of the ca certificate or the certificate chain.	N/A	String	N/A

## PKI/DomainLocalCerts

This table is used to get the local certificates of the PKI domain

### XML structure

```

<PKI>
  <DomainLocalCerts>
    <Cert>
      <Domain></Domain>
      <KeyUsage></KeyUsage>
      <SerialNumber></SerialNumber>
      <Issuer></Issuer>
      <Subject></Subject>
      <Validity>
        <NotBefore></NotBefore>
        <NotAfter></NotAfter>
      </Validity>
      <DetailInfoText></DetailInfoText>
    </Cert>
  </DomainLocalCerts>
</PKI>

```

### Table description

Item	Description
Feature name	PKI
Table name	DomainLocalCerts
Table type	Multi-instance table
Row name	Cert
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI	Index	String.	Can't

Column name	Column description	Column type	Data type and restrictions	Remarks
	domain name		Length: 1 to 31 characters. Case insensitive.	include: ~ ! " \$ % & ' ( ) * + , - . : ; / .
KeyUsage	The key usage of the certificate	Index	Enumeration: <ul style="list-style-type: none"> <li>1—General.</li> <li>2—Signature.</li> <li>3—Encryption.</li> </ul>	There is only one special usage certificate in one domain, and general usage certificate can't appear with signature/encryption certificate at the same time.
SerialNumber	The serial number of the certificate	N/A	String.	N/A
Issuer	The issuer name	N/A	String	N/A
Subject	The Subject name	N/A	String	N/A
Validity	The validity date of the certificate	Data structure	Members include: <ul style="list-style-type: none"> <li>NotBefore.</li> <li>NotAfter.</li> </ul>	N/A
NotBefore	The begin time of the validity	N/A	DateTime	N/A
NotAfter	The end time of the validity	N/A	DateTime	N/A
DetailInfoText	The text of the local certificate or the certificate chain	N/A	String	N/A

## PKI/CertificateRequests

This table is used to get the certificate requests for the domain

### XML structure

```

<PKI>
  <CertificateRequests>
    <Request>
      <Domain></Domain>
      <Password></Password>
      <Value></Value>
    </Request>
  </CertificateRequests>
</PKI>

```



## Table description

Item	Description
Feature name	PKI
Table name	CertificateRequests
Table type	Multi-instance table
Row name	Request
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include:"~""`""'"\""; "" "" "" "" <""> "" "" "" "" - _ . , ; / "
Password	The challenge word which is needed when revoke the certificate	N/A	String. Length: 1 to 31 characters. Case sensitive.	N/A
Value	The certificate request value	N/A	String	N/A

# PKI/ImportCertStatus

This table is used to get the status when import certificate to a domain

## XML structure

```
<PKI>
  <ImportCertStatus>
    <Status>
      <Domain></Domain>
      <CertificateType></CertificateType>
      <FilePath></FilePath>
      <Password></Password>
      <NewPubKeyName></NewPubKeyName>
      <IsNewPubKeyExist></IsNewPubKeyExist>
      <IsPubKeyConfiged></IsPubKeyConfiged>
      <IsCorrectFormat></IsCorrectFormat>
      <IsNoCA></IsNoCA>
      <IsKeyPairExist></IsKeyPairExist>
      <IsKeyPairMatched></IsKeyPairMatched>
      <CertFingerprint></CertFingerprint>
```

```
<DomainFingerprint></DomainFingerprint>
<IsFingerprintMatched></IsFingerprintMatched>
<NeedReplaceCACert></NeedReplaceCACert>
<NeedReplaceLocalCert></NeedReplaceLocalCert>
<NeedReplaceKeyPair></NeedReplaceKeyPair>
<CertVerifyErrStr></CertVerifyErrStr>
</Status>
</ImportCertStatus>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	ImportCertStatus
Table type	Multi-instance table
Row name	Status
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: <code>" ~ " &amp;#x201C; \   , . ; * _ &lt; &gt; ~ /</code> .
CertificateType	The type of certificate	Index	Enumeration: • 1—CA • 2—Local.	N/A
FilePath	The path of the file contain certificate	Index	String	The file must be existed in the device
Password	Password which will be used to encrypt the file when the certificate contains private key.	N/A	String <b>Case sensitive.</b>	<b>The password is required as follow:</b> • The file format is <b>PKCS#12</b> and the certificate type is local • The file format is <b>PEM</b> , and there is local certificate and private key in the file
NewPubKey	The name of new public	N/A	String.	Only contain letters, number and “-”.

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	key.		Length: 1 to 64 characters. Case insensitive.	If the name is empty and there is no key name in the domain, it will use the domain name as the key name.
IsNewPubKeyExist	If the new public key is existed	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	N/A
IsPubKeyConfigured	If there is public key configure in the domain	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	N/A
IsCorrectFormat	If the file format is correct	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	Error information
IsNoCA	If there is no any CA certificate when import	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	Error information
IsKeyPairExists	If the key pair is existed	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	If there isn't key pair in both file and device, the value is false, otherwise it is true Error information
IsKeyPairMatched	If the key pair is matched with the certificate	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	Error information
CertFingerprint	The fingerprint of the root certificate	N/A	String. Length: 1 to 127 characters.	The column is appended only when there is new root certificate be imported to device Confirm information
DomainFingerprint	The fingerprint configured in the PKI domain	N/A	String. Length: 1 to 127 characters.	The column is appended only when the PKI domain configured the root fingerprint
IsFingerprintMatched	If the root fingerprint is matched	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	Error information
NeedReplaceCACert	If the ca certificate need to be replaced	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	Confirm information
NeedReplaceLocalCert	If the local certificate need to be replaced	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	Confirm information

Column name	Column description	Column type	Data type and restrictions	Remarks
NeedReplaceKeyPair	If the key pair need to be replaced	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	Confirm information
CertVerifyErrStr	The result of the validate when import	N/A	String. Length: 1 to 255 characters.	The column is appended only when it is failed to verify the certificate

## PKI/AuthorityAlgs

This table is used to get the authority algorithm

### XML structure

```

<PKI>
  <AuthorityAlgs>
    <Alg>
      <AlgID></AlgID>
      <AlgName></AlgName>
      <MinLength></MinLength>
      <MaxLength></MaxLength>
      <DefaultLength></DefaultLength>
    </Alg>
  </AuthorityAlgs>
</PKI>

```

### Table description

Item	Description
Feature name	PKI
Table name	AuthorityAlgs
Table type	Multi-instance table
Row name	Alg
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgID	Identity of algorithm	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	

Column name	Column description	Column type	Data type and restrictions	Remarks
AlgName	Name of algorithm	N/A	String. Length: 1 to 255 characters Case insensitive.	The name of supported algorithm
MinLength	Minimal length of supported algorithm	N/A	Unsigned integer.	N/A
MaxLength	Maximal length of supported algorithm	N/A	Unsigned integer.	N/A
DefaultLength	Default length of supported algorithm	N/A	Unsigned integer.	N/A

## PKI/PKICapabilities

This table is used to get the PKI capabilities

### XML structure

```

<PKI>
  <PKICapabilities>
    <PKICapability>
      <EncAlgID></EncAlgID>
      <Name></Name>
    </PKICapability>
  </PKICapabilities>
</PKI>

```

### Table description

Item	Description
Feature name	PKI
Table name	PKICapabilities
Table type	Multi-instance table
Row name	PKICapability
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EncAlgID	Identity of encryption algorithm	Index	Unsigned integer. Value range: 1 to 2 <sup>32</sup> -1.	N/A
Name	Name of encryption algorithm	N/A	String. Length: 1 to 255 characters. Case insensitive.	The name of supported encryption algorithm

## PKI/CertRequestStatus

This table is used to get the certificate request status.

## XML structure

```
<PKI>
  <CertRequestStatus>
    <Status>
      <Domain></Domain>
      <KeyUsage></KeyUsage>
      <PollingInterval></PollingInterval>
      <LastPollingTime></LastPollingTime>
      <RemainPollingCount></RemainPollingCount>
    </Status>
  </CertRequestStatus>
</PKI>
```

## Table description

Item	Description
Feature name	PKI
Table name	CertRequestStatus
Table type	Multi-instance table
Row name	Status
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	PKI domain	Index	String.	Can't



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include:" " * " \ "   " , . : ; < " > " " / .
SerialNumber	The serial number of the certificate	Index	String.	N/A
Issuer	The issuer name	N/A	String	N/A
Subject	The Subject name	N/A	String	N/A
Validity	The validity date of the certificate	Data structure	Members include: • NotBefore. • NotAfter.	N/A
NotBefore	The begin time of the validity	N/A	DateTime	N/A
NotAfter	The end time of the validity	N/A	DateTime	N/A
DetailInfoText	The text of the peer certificate .	N/A	String	N/A

# PKI/DomainsCRL

This table is used to get the CRL saved at the local for a PKI domain.

## XML structure

```
<PKI>
  <DomainsCRL>
    <DomainCRL>
      <Domain></Domain>
      <Issuer></Issuer>
      <LastUpdate></LastUpdate>
      <NextUpdate></NextUpdate>
    </DomainCRL>
  </DomainsCRL>
</PKI>
```



## Table description

Item	Description
Feature name	PKI
Table name	DomainsCRL
Table type	Multi-instance table
Row name	DomainCRL
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Domain	The PKI domain name	Index	String. Length: 1 to 31 characters. Case insensitive.	Can't include: ~ " " &#x201c; " "   " " " " " " < " " > " " " " " " " " " " " " " " " "
Issuer	The issuer name	N/A	String	N/A
LastUpdate	The last update time.	N/A	DateTime	N/A
NextUpdate	The next update time.	N/A	DateTime	N/A

# PKI/PKIValidateResults

This table is used to get the validity of certificates.

## XML structure

```
<PKI>
  <PKIValidateResults>
    <Result>
      <Domain></Domain>
      <CertType></CertType>
      <SerialNum></SerialNum>
      <Issuer></Issuer>
      <Subject></Subject>
      <ErrCode></ErrCode>
      <ErrDescription></ErrDescription>
    </Result>
  </PKIValidateResults>
</PKI>
```



# Contents

PoE.....	1
PoE/PSEUpdate.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
PoE/PSEs.....	1
XML structure.....	2
Table description.....	2
Columns.....	2
PoE/Ports.....	2
XML structure.....	2
Table description.....	3
Columns.....	3

# PoE

## PoE/PSEUpdate

This table contains PoE Update action information.

### XML structure

```
<PoE>
  <PSEUpdate>
    <PSE>
      <PSEID></PSEID>
      <FileName></FileName>
      <Mode></Mode>
    </PSE>
  </PSEUpdate>
</PoE>
```

### Table description

Item	Description
Feature name	PoE
Table name	PSEUpdate
Table type	Multi-instance table
Row name	PSE
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PSEID	Index of the PSE	Index	Unsigned integer.	N/A
FileName	The used file name.	N/A	String. Length: 1 to 255characters.	N/A
Mode	Updating mode.	<b>N/A</b>	<b>Enumeration:</b> <ul style="list-style-type: none"><li><b>0 – full.</b></li><li><b>1 – refresh.</b></li></ul>	N/A

## PoE/PSEs

This table contains PSE information.

## XML structure

```
<PoE>
  <PSEs>
    <PSE>
      <PSEID></PSEID>
      <PeakPower></PeakPower>
      <AveragePower></AveragePower>
    </PSE>
  </PSEs>
</PoE>
```

## Table description

Item	Description
Feature name	PoE
Table name	PSEs
Table type	Multi-instance table
Row name	PSE
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PSEID	Index of the PSE	Index	Unsigned integer.	N/A
PeakPower	The peak power (W)	N/A	Unsigned integer.	Only support 0 to clear the statistic information.
AveragePower	The average power (W)	N/A	Unsigned integer.	Only support 0 to clear the statistic information.

## PoE/Ports

This table contains PoE port information.

## XML structure

```
<PoE>
  <Ports>
    <Port>
      <PSEID></PSEID>
      <IfIndex></IfIndex>
      <PeakPower></PeakPower>
```

```

    <AveragePower></AveragePower>
  </Port>
</Ports>
</PoE>

```

## Table description

Item	Description
Feature name	PoE
Table name	Ports
Table type	Multi -instance table
Row name	Port
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PSEID	Index of the PSE which the port belongs to	Index	Unsigned integer.	N/A
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see <i>Ifmgr NETCONF XML API Configuration Reference</i> .
PeakPower	The peak power (mW)	N/A	Unsigned integer.	Only support 0 to clear the statistic information.
AveragePower	The average power (mW)	N/A	Unsigned integer.	Only support 0 to clear the statistic information.

# Contents

PoE.....	1
PoE/PriorityPolicy .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
PoE/Powers.....	2
XML structure.....	2
Table description.....	2
Columns.....	3
PoE/PSEs .....	3
XML structure.....	3
Table description.....	3
Columns.....	3
PoE/Ports.....	4
XML structure.....	4
Table description.....	4
Columns.....	5
PoE/Profiles.....	5
XML structure.....	6
Table description.....	6
Columns.....	6

# PoE

## PoE/PriorityPolicy

This table contains PoE global priority policy information.

### XML structure

```
<PoE>
  <PriorityPolicy>
    <PSEPolicyMode></PSEPolicyMode>
    <PDPolicyMode></PDPolicyMode>
  </PriorityPolicy>
</PoE>
```

### Table description

Item	Description
Feature name	PoE
Table name	PriorityPolicy
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PSEPolicyMode	Mode of PSE power policy.	N/A	Enumeration. <ul style="list-style-type: none"><li>1 – <b>disabled (default).</b></li><li>2 – <b>priority.</b></li></ul>	<p>The PSE policy only applies to the situation that when a new board (PSE) is inserted, and the power is overload.</p> <p>A value of priority(2) means that the power will stop supplying to the low priority PSE. A value of disabled(1) means that the power will stop supplying to the new inserted PSE.</p>



Column name	Column description	Column type	Data type and restrictions	Remarks
PDPolicyMode	Mode of PD power policy	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – disabled (default).</li> <li>2 – priority.</li> </ul>	The PD policy only applies to the situation that when a new PD is inserted, and the power of PSE is overload. A value of priority(2) means that the power will stop supplying to the low priority port PD. A value of disabled(1) means that the slot stop supplying to the new inserted PD.

## PoE/Powers

This table contains PoE Power information.

## XML structure

```

<PoE>
  <Powers>
    <Power>
      <PowerIndex></PowerIndex>
      <PowerLimit></PowerLimit>
    </Power>
  </Powers>
</PoE>

```

## Table description

Item	Description
Feature name	PoE
Table name	Powers
Table type	Multi-instance table
Row name	Power
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PowerIndex	Index of the Power supply	Index	Unsigned integer.	N/A
PowerLimit	The max power limit (mW)	N/A	Unsigned integer.	N/A

## PoE/PSEs

This table contains PSE information.

## XML structure

```
<PoE>
  <PSEs>
    <PSE>
      <PSEID></PSEID>
      <PowerLimit></PowerLimit>
      <UsageThreshold></UsageThreshold>
      <Priority></Priority>
      <Legacy></Legacy>
    </PSE>
  </PSEs>
</PoE>
```

## Table description

Item	Description
Feature name	PoE
Table name	PSEs
Table type	Multi-instance table
Row name	PSE
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PSEID	Index of the PSE	Index	Unsigned integer.	N/A
PowerLimit	The max power (mW)	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
UsageThresh old	The usage threshold (%)	N/A	Unsigned integer. Value range: 1 to 99.	N/A
Priority	The power priority	N/A	Enumeration. <ul style="list-style-type: none"> <li>• <b>1 – critical.</b></li> <li>• <b>2 – high.</b></li> <li>• <b>3 – low (default).</b></li> </ul>	N/A
Legacy	The legacy mode status(for nonstandard PD detection)	N/A	Enumeration. <ul style="list-style-type: none"> <li>• <b>0 – enabled.</b></li> <li>• <b>1 – disabled (default).</b></li> </ul>	N/A

## PoE/Ports

This table contains PoE Port information.

## XML structure

```

<PoE>
  <Ports>
    <Port>
      <PSEID></PSEID>
      <IfIndex></IfIndex>
      <AdminEnable></AdminEnable>
      <Pairs></Pairs>
      <Priority></Priority>
      <PDDescription></PDDescription>
      <FaultDescription></FaultDescription>
      <PowerLimit></PowerLimit>
      <ProfileIndex></ProfileIndex>
    </Port>
  </Ports>
</PoE>

```

## Table description

Item	Description
Feature name	PoE
Table name	Ports
Table type	Multi-instance table
Row name	Port
Restrictions	None

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PSEID	Index of the PSE which the port belongs to	Index	Unsigned integer.	N/A
IfIndex	Interface index Index of the PSE	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see <i>Ifmgr NETCONF XML API Configuration Reference</i> .
AdminEnable	The admin enable status of an interface which can provide PSE functions	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
Pairs	The power pairs in use.	N/A	Enumeration. <ul style="list-style-type: none"> <li><b>1 – signal.</b></li> <li><b>2 – spare.</b></li> </ul>	signal means that the signal pairs only are in use.  spare means that the spare pairs only are in use.
Priority	The power priority of the specified interface	N/A	Enumeration. <ul style="list-style-type: none"> <li><b>1 – critical.</b></li> <li><b>2 – high.</b></li> <li><b>3 – low (default).</b></li> </ul>	N/A
PDDescription	The description for the Pd that is connected to the port.	N/A	String. Length: 1 to 80 characters.	N/A
FaultDescription	The fault category	N/A	String. Length: 1 to 255 characters.	N/A
PowerLimit	The max power (mW)	N/A	Unsigned integer.	N/A
ProfileIndex	The profile index applied to the Poe port	N/A	Unsigned integer.	N/A

## PoE/Profiles

This table contains PoE profile information.

## XML structure

```
<PoE>
  <Profiles>
    <Profile>
      <ProfileIndex></ProfileIndex>
      <ProfileName></ProfileName>
      <PowerMode></PowerMode>
      <PowerLimit></PowerLimit>
      <Priority></Priority>
      <Pairs></Pairs>
    </Profile>
  </Profiles>
</PoE>
```

## Table description

Item	Description
Feature name	PoE
Table name	Profiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileIndex	Index of the profile	Index	Unsigned integer.	N/A
ProfileName	The name of profile	N/A	String. Length: 1 to 15 characters.	N/A
PowerMode	The power status of an interface which can provide PSE functions	N/A	Enumeration. <ul style="list-style-type: none"><li>1 – disabled (default).</li><li>2 – enabled.</li></ul>	N/A
PowerLimit	The max power (mW)	N/A	Unsigned integer.	N/A
Priority	The power priority	N/A	Enumeration. <ul style="list-style-type: none"><li>1 – critical.</li><li>2 – high.</li><li>3 – low (default).</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Pairs	The power pairs in use.	N/A	Enumeration. <ul style="list-style-type: none"> <li>• <b>1 – signal.</b></li> <li>• <b>2 – spare.</b></li> </ul>	signal means that the signal pairs only are in use. spare means that the spare pairs only are in use.

# Contents

PoE.....	1
PoE/Capabilities .....	1
XML structure .....	1
Table description.....	1
Columns.....	1
PoE/PriorityPolicy .....	2
XML structure .....	2
Table description.....	2
Columns.....	3
PoE/Powers.....	3
XML structure .....	3
Table description.....	4
Columns.....	4
PoE/PSEs .....	5
XML structure .....	5
Table description.....	6
Columns.....	6
PoE/Ports.....	7
XML structure .....	7
Table description.....	8
Columns.....	8
PoE/Profiles.....	11
XML structure .....	11
Table description.....	11
Columns.....	11

# PoE

## PoE/Capabilities

This table contains PoE global capability information.

### XML structure

```
<PoE>
  <Capabilities>
    <SupportPoE></SupportPoE>
    <PSEPolicy></PSEPolicy>
    <PDPolicy></PDPolicy>
    <PowerManage></PowerManage>
    <MaxPower></MaxPower>
    <PSEUpdate></PSEUpdate>
    <PowerMode></PowerMode>
    <PSEMaxPower></PSEMaxPower>
  </Capabilities>
</PoE>
```

### Table description

Item	Description
Feature name	PoE
Table name	Capabilities
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportPoE	Whether Support PoE feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A
PSEPolicy	Whether the system supports PSE power policy configuration	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A
PDPolicy	Whether the system supports	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	PD power policy configuration		<ul style="list-style-type: none"> <li><b>false</b></li> </ul>	
PowerManage	Whether the system supports PoE power management	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
MaxPower	Whether the system supports PoE power MaxPower configuration	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
PSEUpdate	Whether the system supports PSE firmware updating	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
PowerMode	Whether the system supports PoE port power mode configuration	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
PSEMaxPower	Whether the system supports PSE max power configuration	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## PoE/PriorityPolicy

This table contains PoE global priority policy information.

## XML structure

```

<PoE>
  <PriorityPolicy>
    <PSEPolicyMode></PSEPolicyMode>
    <PDPolicyMode></PDPolicyMode>
  </PriorityPolicy>
</PoE>

```

## Table description

Item	Description
Feature name	PoE
Table name	PriorityPolicy
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PSEPolicyMode	Mode of PSE power policy.	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – disabled.</li> <li>2 – priority.</li> </ul>	The PSE policy only applies to the situation that when a new board (PSE) is inserted, and the power is overload.  A value of priority(2) means that the power will stop supplying to the low priority PSE. A value of disabled(1) means that the power will stop supplying to the new inserted PSE.
PDPolicyMode	Mode of PD power policy	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – disabled.</li> <li>2 – priority.</li> </ul>	The PD policy only applies to the situation that when a new PD is inserted, and the power of PSE is overload.  A value of priority(2) means that the power will stop supplying to the low priority port PD. A value of disabled(1) means that the slot stop supplying to the new inserted PD.

## PoE/Powers

This table contains PoE Power information.

## XML structure

```

<PoE>
  <Powers>
    <Power>
      <PowerIndex></PowerIndex>
      <Chassis></Chassis>
      <Slot></Slot>
      <NominalPower></NominalPower>
      <CurrentPower></CurrentPower>
      <PeakPower></PeakPower>
      <AveragePower></AveragePower>
    </Power>
  </Powers>
</PoE>

```

```

    <RemainingGuaranteedPower></RemainingGuaranteedPower>
    <RemainingAllocablePower></RemainingAllocablePower>
    <PowerLimit></PowerLimit>
    <MaxPowerDefault></MaxPowerDefault>
    <MaxPowerUpper></MaxPowerUpper>
    <MaxPowerLower></MaxPowerLower>
  </Power>
</Powers>
</PoE>

```

## Table description

Item	Description
Feature name	PoE
Table name	Powers
Table type	Multi-instance table
Row name	Power
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PowerIndex	Index of the Power supply	Index	Unsigned integer.	N/A
Chassis	ID of the member where the power supply resides	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no chassis number, return 65535.
Slot	The number of slot where the power supply resides	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no slot number, return 65535.
NominalPower	The nominal power (mW)	N/A	Unsigned integer.	N/A
CurrentPower	The current power (mW)	N/A	Unsigned integer.	N/A
PeakPower	The peak power (mW)	N/A	Unsigned integer.	N/A
AveragePower	The average power m(W)	N/A	Unsigned integer.	N/A
RemainingGuaranteedPower	The remaining guaranteed power (mW)	N/A	Unsigned integer.	N/A
RemainingAllocablePower	The remaining allocable power (mW)	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PowerLimit	The max power limit (mW)	N/A	Unsigned integer.	N/A
MaxPowerDefault	The default value of PoE power max power(mW)	N/A	Unsigned integer.	N/A
MaxPowerUpper	The upper value of PoE power max power(mW)	N/A	Unsigned integer.	N/A
MaxPowerLower	The lower value of PoE power max power(mW)	N/A	Unsigned integer.	N/A

## PoE/PSEs

This table contains PSE information.

## XML structure

```

<PoE>
  <PSEs>
    <PSE>
      <PSEID></PSEID>
      <Chassis></Chassis>
      <Slot></Slot>
      <SubSlot></SubSlot>
      <Model></Model>
      <NominalPower></NominalPower>
      <CurrentPower></CurrentPower>
      <PeakPower></PeakPower>
      <AveragePower></AveragePower>
      <RemainingGuaranteedPower></RemainingGuaranteedPower>
      <PowerLimit></PowerLimit>
      <OperStatus></OperStatus>
      <UsageThreshold></UsageThreshold>
      <Priority></Priority>
      <Legacy></Legacy>
      <MaxPowerDefault></MaxPowerDefault>
      <MaxPowerUpper></MaxPowerUpper>
      <MaxPowerLower></MaxPowerLower>
      <PortMaxPowerDefault></PortMaxPowerDefault>
      <PortMaxPowerUpper></PortMaxPowerUpper>
      <PortMaxPowerLower></PortMaxPowerLower>
      <PowerIndex></PowerIndex>
    </PSE>
  </PSEs>
</PoE>

```

## Table description

Item	Description
Feature name	PoE
Table name	PSEs
Table type	Multi-instance table
Row name	PSE
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PSEID	Index of the PSE	Index	Unsigned integer.	N/A
Chassis	ID of the member where the PSE resides	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no chassis number, return 65535.
Slot	The number of slot where the PSE resides	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no slot number, return 65535.
SubSlot	The number of Subslot where the PSE resides	N/A	Unsigned integer. Value range: 1 to 65535.	If there is no slot number, return 65535.
Model	The type of the PSE	N/A	String. Length: 1 to 32 characters.	N/A
NominalPower	The nominal power (mW)	N/A	Unsigned integer.	N/A
CurrentPower	The current power (mW)	N/A	Unsigned integer.	N/A
PeakPower	The peak power (mW)	N/A	Unsigned integer.	N/A
AveragePower	The average power (mW)	N/A	Unsigned integer.	N/A
RemainingGuaranteedPower	The remaining guaranteed power (mW)	N/A	Unsigned integer.	N/A
PowerLimit	The max power limit (mW)	N/A	Unsigned integer.	N/A
OperStatus	The operational status of the PSE	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – on.</li> <li>2 – off.</li> <li>3 – faulty.</li> </ul>	N/A
UsageThreshold	The usage threshold (%)	N/A	Unsigned integer. Value range: 1 to 99.	N/A
Priority	The power priority	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – critical.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2 – high.</li> <li>3 – low.</li> </ul>	
Legacy	The legacy mode status(for nonstandard PD detection)	N/A	Enumeration. <ul style="list-style-type: none"> <li>0 – enabled.</li> <li>1 – disabled.</li> </ul>	N/A
MaxPowerDefault	The default max power value of this PSE(mW)	N/A	Unsigned integer.	N/A
MaxPowerUpper	The upper max power value of this PSE (mW)	N/A	Unsigned integer.	N/A
MaxPowerLower	The lower max power value of this PSE (mW)	N/A	Unsigned integer.	N/A
PortMaxPowerDefault	The default value of Port max power in this PSE(mW)	N/A	Unsigned integer.	N/A
PortMaxPowerUpper	The upper value of Port max power in this PSE (mW)	N/A	Unsigned integer.	N/A
PortMaxPowerLower	The lower value of Port max power in this PSE (mW)	N/A	Unsigned integer.	N/A
PowerIndex	Index of the Power supply	Index	Unsigned integer.	N/A

## PoE/Ports

This table contains PoE port information.

## XML structure

```

<PoE>
  <Ports>
    <Port>
      <PSEID></PSEID>
      <IfIndex></IfIndex>
      <AdminEnable></AdminEnable>
      <PairsControlAbility></PairsControlAbility>
      <Pairs></Pairs>
      <DetectionStatus></DetectionStatus>
      <Priority></Priority>
      <MPSAbsentCounter></MPSAbsentCounter>
      <PDDescription></PDDescription>
      <PowerClassifications></PowerClassifications>
    </Port>
  </Ports>
</PoE>

```

```

    <InvalidSignatureCounter></InvalidSignatureCounter>
    <PowerDeniedCounter></PowerDeniedCounter>
    <OverLoadCounter></OverLoadCounter>
    <ShortCounter></ShortCounter>
    <FaultDescription></FaultDescription>
    <PeakPower></PeakPower>
    <AveragePower></AveragePower>
    <CurrentPower></CurrentPower>
    <PowerLimit></PowerLimit>
    <PowerModeDefault></PowerModeDefault>
    <ProfileIndex></ProfileIndex>
  </Port>
</Ports>
</PoE>

```

## Table description

Item	Description
Feature name	PoE
Table name	Ports
Table type	Multi-instance table
Row name	Port
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PSEID	Index of the PSE which the port belongs to	Index	Unsigned integer.	N/A
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see <i>Ifmgr NETCONF XML API Configuration Reference</i> .
AdminEnable	The admin enable status of an interface which can provide PSE functions	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – <b>true</b>.</li> <li>2 – <b>false</b>.</li> </ul>	N/A
PairsControllability	The capability of controlling the power pairs	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – <b>true</b>.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	functionality to switch pins for sourcing power		<ul style="list-style-type: none"> <li>2 – <b>false</b>.</li> </ul>	
Pairs	The power pairs in use.	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – <b>signal</b>.</li> <li>2 – <b>spare</b>.</li> </ul>	signal means that the signal pairs only are in use.  spare means that the spare pairs only are in use.
DetectionStatus	The operational status of the port PD detection	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – <b>disabled</b>.</li> <li>2 – <b>searching</b>.</li> <li>3 – <b>deliveringPower</b>.</li> <li>4 – <b>fault</b>.</li> <li>5 – <b>test</b>.</li> <li>6 – <b>otherFault</b>.</li> <li>7 – <b>pdDisconnected</b>.</li> </ul>	disabled indicates that the PSE State diagram is in the state DISABLED.  deliveringPower indicates that the PSE State diagram is in the state POWER_ON for a duration greater than the limit max (see IEEE Std 802.3af Table 33-5 tlim).  fault indicates that the PSE State diagram is in the state TEST_ERROR.  test indicates that the PSE State diagram is in the state TEST_MODE.  otherFault indicates that the PSE State diagram is in the state IDLE due to the variable error_conditions.  searching indicates the PSE State diagram is in a state other than those listed above.  pdDisconnected indicates that the PSE State diagram is in the state DISCONNECTED.
Priority	The power priority	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – <b>critical</b>.</li> <li>2 – <b>high</b>.</li> <li>3 – <b>low</b>.</li> </ul>	N/A
MPSAbsentCounter	The counter for interface state diagram transitions directly from the state POWER_ON to the state	N/A	Unsigned integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	IDLE			
PDDescription	The description for the Pd that is connected to the port.	N/A	String. Length: 1 to 80 characters.	N/A
PowerClassifications	The Classification of the PD connected to the PoE interface	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – class0.</li> <li>2 – class1.</li> <li>3 – class2.</li> <li>4 – class3.</li> <li>5 – class4.</li> </ul>	N/A
InvalidSignatureCounter	This counter is incremented when the PSE state diagram enters the state SIGNATURE_INVALID	N/A	Unsigned integer.	N/A
PowerDeniedCounter	This counter is incremented when the PSE state diagram enters the state POWER_DENIED	N/A	Unsigned integer.	N/A
OverLoadCounter	This counter is incremented when the PSE state diagram enters the state ERROR_DELAY_OVER	N/A	Unsigned integer.	N/A
ShortCounter	This counter is incremented when the PSE state diagram enters the state ERROR_DELAY_SHORT	N/A	Unsigned integer.	N/A
FaultDescription	The fault category	N/A	String. Length: 1 to 255 characters.	N/A
PeakPower	The peak power (mW)	N/A	Unsigned integer.	N/A
AveragePower	The average power (mW)	N/A	Unsigned integer.	N/A
CurrentPower	The current power (mW)	N/A	Unsigned integer.	N/A
PowerLimit	The max power (mW)	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PowerModeDefault	The default mode of PoE port power mode	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – signal.</li> <li>2 – spare.</li> </ul>	N/A
ProfileIndex	The profile index applied to the PoE port	N/A	Unsigned integer.	N/A

## PoE/Profiles

This table contains PoE profile information.

### XML structure

```

<PoE>
  <Profiles>
    <Profile>
      <ProfileIndex></ProfileIndex>
      <ProfileName></ProfileName>
      <PowerMode></PowerMode>
      <PowerLimit></PowerLimit>
      <Priority></Priority>
      <Pairs></Pairs>
      <ApplyNumber></ApplyNumber>
    </Profile>
  </Profiles>
</PoE>

```

### Table description

Item	Description
Feature name	PoE
Table name	Profiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileIndex	Index of the profile	Index	Unsigned integer.	N/A
ProfileName	The name of	N/A	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	profile		Length: 1 to 15 characters.	
PowerMode	The power status of an interface which can provide PSE functions	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – <b>disabled.</b></li> <li>2 – <b>enabled.</b></li> </ul>	N/A
PowerLimit	The max power (mW)	N/A	Unsigned integer.	N/A
Priority	The power priority of the specified interface	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – <b>critical.</b></li> <li>2 – <b>high.</b></li> <li>3 – <b>low.</b></li> </ul>	N/A
Pairs	The power pairs in use.	N/A	Enumeration. <ul style="list-style-type: none"> <li>1 – <b>signal.</b></li> <li>2 – <b>spare.</b></li> </ul>	signal means that the signal pairs only are in use.  spare means that the spare pairs only are in use.
ApplyNumber	The number of this profile which has been applied.	N/A	Unsigned integer.	N/A

# Contents

- PoE event stream.....1
  - PSEPower event.....1
    - XML structure for event subscription .....1
    - XML structure for event report .....2
  - PoEPort event .....3
    - XML structure for event subscription .....3
    - XML structure for event report .....4

# PoE event stream

PoE stream description.

## PSEPower event

This event is used to report PSE usage power over threshold usage. Only supported on the default MDC.

## XML structure for event subscription

```
<PSEPowerEvent>
  <PSEPower>
    <PSEID></PSEID>
  </PSEPower>
</PSEPowerEvent>
```

Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>PoE</stream>
    <filter type="subtree">
      <PSEPowerEvent xmlns="http://www.h3c.com/netconf/event:1.0/PoE:1.0">
        <PSEPower>
          <PSEID>1</PSEID>
        </PSEPower>
      </PSEPowerEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	PoE
Event name	PSEPowerEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/PoE:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions
PSEID	Index of the PSE which the port belongs to	Unsigned integer.

# XML structure for event report

```
<PSEPowerEvent>
  <PSEPower>
    <PSEID></PSEID>
    <Chassis></Chassis>
    <Slot></Slot>
    <SubSlot></SubSlot>
    <Event></Event>
    <CurrentPower></CurrentPower>
  </PSEPower>
</PSEPowerEvent>
```

## Example:

```
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <PSEPowerEvent xmlns="http://www.h3c.com/netconf/event:1.0/PoE:1.0">
    <PSEPower>
      <PSEID>1</PSEID>
      <Chassis>1</Chassis>
      <Slot>1</Slot>
      <SubSlot>65535</SubSlot>
      <Event>2</Event>
      <CurrentPower>3000</CurrentPower>
    </PSEPower>
  </PSEPowerEvent>
</notification>
```

## Columns

Column name	Column description	Data type and restrictions	Remarks
PSEID	Index of the PSE which the port belongs to	Unsigned integer.	
Chassis	ID of the member where the power supply resides	Unsigned integer. Value range: 0 to 65535.	If there is no chassis number, return 65535.
Slot	The number of slot where the power supply resides	Unsigned integer. Value range: 0 to 65535.	If there is no slot number, return 65535.
SubSlot	The number of Subslot where the PSE resides	Unsigned integer. Value range: 1 to 65535.	If there is no subslot number, return 65535.
Event	Indicate what happens on PSE port.	Enumeration: <ul style="list-style-type: none"><li>1 - Power consumption exceed threshold</li><li>2 - Power consumption recede below threshold</li></ul>	
CurrentPower	The current power (mW)	Unsigned integer.	

# PoEPort event

This event is used to report PSE port detection status change.

## XML structure for event subscription

```
<PoEPortEvent>
  <PoEPort>
    <PSEID></PSEID>
    <InterfaceName></InterfaceName>
  </PoEPort>
</PoEPortEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>PoE</stream>
    <filter type="subtree">
      <PoEPortEvent xmlns="http://www.h3c.com/netconf/event:1.0/PoE:1.0">
        <PoEPort>
          <PSEID>1</PSEID>
          <InterfaceName>GigabitEthernet1/0/1</InterfaceName>
        </PoEPort>
      </PoEPortEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	PoE
Event name	PoEPortEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/PoE:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
PSEID	Index of the PSE which the port belongs to	Unsigned integer.	No
Interface Name	Interface name	String. Length: 2 to 47 characters. Example:	No

Column name	Column description	Data type and restrictions	Support for extended queries
		GigabitEthernet2/0/2	

## XML structure for event report

```

<PoEPortEvent>
  <PoEPort>
    <PSEID></PSEID>
    <InterfaceName></InterfaceName>
    <Event></Event>
    <CurrentPower></CurrentPower>
  </PoEPort>
</PoEPortEvent>

```

### Example:

```

<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2016-07-21T09:10:51</eventTime>
  <PoEPortEvent xmlns="http://www.h3c.com/netconf/event:1.0/PoE:1.0">
    <PoEPort>
      <PSEID>1</PSEID>
      <InterfaceName>GigabitEthernet1/0/1</InterfaceName>
      <Event>1</Event>
      <Status>3</Status>
    </PoEPort>
  </PoEPortEvent>
</notification>

```

## Columns

Column name	Column description	Data type and restrictions	Remarks
PSEID	Index of the PSE which the port belongs to	Unsigned integer.	
Interface Name	Interface name	String. Length: 2 to 47 characters. Example: GigabitEthernet2/0/2	
Event	Event Type	Enumeration: <ul style="list-style-type: none"> <li>1 - Power On</li> <li>2 - Power Off</li> </ul>	
Status	Indicate what happens on PSE port.	Enumeration: <ul style="list-style-type: none"> <li>1 - Power Disabled</li> <li>2 - Power Searching</li> <li>3 - Power Delivering</li> <li>4 - Power fault</li> <li>5 - Test</li> <li>6 - Other Fault</li> </ul>	



Column name	Column description	Data type and restrictions	Remarks
		<ul style="list-style-type: none"> <li>7 - PD disconnected</li> </ul>	

# Contents

PortSecurity .....	1
PortSecurity/Common .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PortSecurity/OUIList .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
PortSecurity/Interfaces .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
PortSecurity/InterfaceSecMAC .....	5
XML structure .....	6
Table description .....	6
Columns .....	6

# PortSecurity

## PortSecurity/Common

This table contains information about port security global parameters.

### XML structure

```
<PortSecurity>
  <Common>
    <Enable></Enable>
    <MACMove></MACMove>
    <AuthorStrict></AuthorStrict>
    <SecMACAgingInterval></SecMACAgingInterval>
    <IntrusionShutdownInterval></IntrusionShutdownInterval>
  </Common>
</PortSecurity>
```

### Table description

Item	Description
Feature name	PortSecurity
Table name	Common
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Whether port security is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled (default).</li></ul>
MACMove	Whether to allow 802.1X or MAC authenticated users to move between ports on a device	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Yes.</li><li><b>false</b>—No (default).</li></ul>
AuthorStrict	Whether to log off 802.1X or MAC authenticated users that have failed authorization	N/A	<ul style="list-style-type: none"><li><b>Boolean:</b></li><li><b>true</b>—Logs off the users.</li><li><b>false</b>—Keeps the users online (default).</li></ul>
SecMACAgingInterval	Value for the secure MAC	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	address aging timer		Value range: 0 to 129600 minutes. Default: 0 minutes.
IntrusionShutdownInterval	Value for intrusion protection's port shutdown timer	N/A	Unsigned integer Value range: 20 to 300 seconds. Default: 20 seconds.

## PortSecurity/OUIList

This table contains an OUI list for port security's OUI authentication.

### XML structure

```
<PortSecurity>
  <OUIList>
    <OUIMAC>
      <Index></Index>
      <Address></Address>
    </OUIMAC>
  </OUIList>
</PortSecurity>
```

### Table description

Item	Description
Feature name	PortSecurity
Table name	OUIList
Table type	Multi-instance table
Row name	OUIMAC
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	OUI index	Index	Unsigned integer. Value range: 1 to 16.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	An OUI string of a 48-bit MAC address	N/A	MAC address in the HH-HH-HH-HH-HH-HH format.	The system uses only the 24 high-order bits as the OUI value. The system does not limit the number of OUIs in the list.

## PortSecurity/Interfaces

This table contains port security configuration on an interface.

### XML structure

```

<PortSecurity>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <AuthenMode></AuthenMode>
      <AuthorIgnore></AuthorIgnore>
      <ProtectionMode></ProtectionMode>
      <SecMACAgeMode></SecMACAgeMode>
      <SecMACSticky></SecMACSticky>
      <SecMACMaxCnt></SecMACMaxCnt>
      <FreeVlanList></FreeVlanList>
      <NTKMode></NTKMode>      <SecMACDynamic></SecMACDynamic>
    </Interface>
  </Interfaces>
</PortSecurity>

```

### Table description

Item	Description
Feature name	PortSecurity
Table name	Interfaces
Table type	Multi-instance table
Row name	interface
Restrictions	None
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
AuthenMode	Authentication mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—noRestrictions (default).</li> <li>• <b>2</b>—autoLearn.</li> <li>• <b>3</b>—macAddressWithRadius.</li> <li>• <b>4</b>—macAddressElseUserLoginSecure.</li> <li>• <b>5</b>—macAddressElseUserLoginSecureExt.</li> <li>• <b>6</b>—secure.</li> <li>• <b>7</b>—userLogin.</li> <li>• <b>8</b>—userLoginSecure.</li> <li>• <b>9</b>—userLoginSecureExt.</li> <li>• <b>10</b>—macAddressOrUserLoginSecure.</li> <li>• <b>11</b>—macAddressOrUserLoginSecureExt.</li> <li>• <b>12</b>—userLoginWithOUI.</li> </ul>	N/A
AuthorIgnore	Whether to ignore authorization information from the server for users logging on from the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No (default).</li> </ul>	N/A
ProtectionMode	Protection action when an intrusion is detected	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Does not perform intrusion protection (default).</li> <li>• <b>2</b>—Adds the source MAC address of the illegal packet to the blocked MAC address list.</li> <li>• <b>3</b>—Shuts down the port that receives illegal packets permanently.</li> <li>• <b>4</b>—Shuts down the port that receives illegal packets for some time.</li> </ul>	N/A
SecMACAge	Secure MAC	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	aging mode		<ul style="list-style-type: none"> <li>• <b>0</b>—Time aging (default).</li> <li>• <b>1</b>—Inactivity aging.</li> </ul>	
SecMACSticky	Whether to save secure MAC addresses on the interface to the startup configuration file	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes (default).</li> <li>• <b>false</b>—No.</li> </ul>	This column does not take effect.
SecMACMaxCnt	Maximum number of secure MAC addresses on the interface	N/A	Unsigned integer. Value range: 1 to 2147483647. Default: Not configured.	N/A
NTKMode	Need to Know mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—NTK is disabled (default).</li> <li>• <b>2</b>—Allows only unicast packets and broadcasts with authenticated destination MAC addresses.</li> <li>• <b>3</b>—Allows unicast packets, multicasts, and broadcasts with authenticated destination MAC addresses.</li> <li>• <b>4</b>—Allows only unicast packets with authenticated destination MAC addresses.</li> </ul>	N/A
FreeVlanList	Authentication free VLAN list	N/A	Number string. The string is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	This column supports incremental editing. You can set the flag like "<FreeVlanList base:incremental='true'>". If the value is true, the VLAN list will be incrementally added or removed. If the value is false or no flag is set, the free VLANs issued on the current operation are all the effective free VLANs.
SecMACDynamic	Whether to enable the dynamic secure MAC feature	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Yes.</li> <li>• <b>false</b>—No (default).</li> </ul>	N/A

## PortSecurity/InterfaceSecMAC

This table contains port security's secure MAC addresses on interfaces.

## XML structure

```
<PortSecurity>
  <InterfaceSecMAC>
    <SecureMAC>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <MAC></MAC>
      <Sticky></Sticky>
    </SecureMAC>
  </InterfaceSecMAC>
</PortSecurity>
```

## Table description

Item	Description
Feature name	PortSecurity
Table name	InterfaceSecMAC
Table type	Multi-instance table
Row name	SecureMAC
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
VLANID	VLAN ID for this secure MAC address	Index	Unsigned integer. Value range: 1 to 4094.	N/A
MAC	Secure MAC address	Index	MAC address in the HH-HH-HH-HH-HH-HH format.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Sticky	Whether this secure MAC address can age out	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Can age out.</li> <li>• <b>false</b>—Cannot age out (default).</li> </ul>	N/A

# Contents

PortSecurity .....	1
PortSecurity/Common .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PortSecurity/OUIList .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
PortSecurity/Interfaces .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
PortSecurity/InterfaceSecMAC .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
PortSecurity/InterfaceBlkMAC .....	7
XML structure .....	7
Table description .....	7
Columns .....	8

# PortSecurity

## PortSecurity/Common

This table contains information about port security global parameters.

### XML structure

```
<PortSecurity>
  <Common>
    <Enable></Enable>
    <MACMove></MACMove>
    <AuthorStrict></AuthorStrict>
    <SecMACAgingInterval></SecMACAgingInterval>
    <IntrusionShutdownInterval></IntrusionShutdownInterval>
    <SecMACCnt></SecMACCnt>
  </Common>
</PortSecurity>
```

### Table description

Item	Description
Feature name	PortSecurity
Table name	Common
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Whether port security is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>
MACMove	Whether to allow 802.1X or MAC authenticated users to move between ports on a device	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Yes.</li><li><b>false</b>—No.</li></ul>
AuthorStrict	Whether to log off 802.1X or MAC authenticated users that have failed authorization	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Logs off the users.</li><li><b>false</b>—Keeps the users online.</li></ul>

Column name	Column description	Column type	Data type and restrictions
SecMACAgingInterval	Value for the secure MAC address aging timer	N/A	Unsigned integer. Value range: 0 to 129600 minutes.
IntrusionShutdownInterval	Value for intrusion protection's port shutdown timer	N/A	Unsigned integer. Value range: 20 to 300 seconds.
SecMACCnt	Number of secure MAC addresses in the system	N/A	Unsigned integer.

## PortSecurity/OUIList

This table contains an OUI list for port security's OUI authentication.

## XML structure

```

<PortSecurity>
  <OUIList>
    <OUIMAC>
      <Index></Index>
      <Address></Address>
    </OUIMAC>
  </OUIList>
</PortSecurity>

```

## Table description

Item	Description
Feature name	PortSecurity
Table name	OUIList
Table type	Multi-instance table
Row name	OUIMAC
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	OUI index	Index	Unsigned integer. Value range: 1 to 16.	N/A
Address	An OUI string of a 48-bit MAC address	N/A	MAC address in the HH-HH-HH-HH-HH-HH format.	The system uses only the 24 high-order bits as the OUI value.

Column name	Column description	Column type	Data type and restrictions	Remarks
				The system does not limit the number of OUIs in the list.

## PortSecurity/Interfaces

This table contains port Security information on interfaces.

### XML structure

```

<PortSecurity>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <AuthenMode></AuthenMode>
      <AuthorIgnore></AuthorIgnore>
      <ProtectionMode></ProtectionMode>
      <SecMACAgeMode></SecMACAgeMode>
      <SecMACSticky></SecMACSticky>
      <SecMACMaxCnt></SecMACMaxCnt>
      <SecMACCurrentCnt></SecMACCurrentCnt>
      <NTKMode></NTKMode>
      <FreeVlanList></FreeVlanList>
      <SecMACDynamic></SecMACDynamic>
    </Interface>
  </Interfaces>
</PortSecurity>

```

### Table description

Item	Description
Feature name	PortSecurity
Table name	Interfaces
Table type	Multi-instance table
Row name	interface
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
AuthenMode	Authentication mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—noRestrictions.</li> <li>2—autoLearn.</li> <li>3—macAddressWithRadius.</li> <li>4—macAddressElseUserLoginSecure.</li> <li>5—macAddressElseUserLoginSecureExt.</li> <li>6—secure.</li> <li>7—userLogin.</li> <li>8—userLoginSecure.</li> <li>9—userLoginSecureExt.</li> <li>10—macAddressOrUserLoginSecure.</li> <li>11—macAddressOrUserLoginSecureExt.</li> <li>12—userLoginWithOUI.</li> </ul>	N/A
AuthorIgnore	Whether to ignore authorization information from the server for users logging on from the interface	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes.</li> <li><b>false</b>—No.</li> </ul>	N/A
ProtectionMode	Protection action when an intrusion is detected	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Does not perform intrusion protection.</li> <li>2—Adds the source MAC address of the illegal packet to the blocked MAC address list.</li> <li>3—Shuts down the port that receives illegal packets permanently.</li> <li>4—Shuts down the port that receives illegal packets for some time.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SecMACAgeMode	Secure MAC aging mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Time aging.</li> <li>1—Inactivity aging.</li> </ul>	N/A
SecMACSticky	Whether to save secure MAC addresses on the interface to the startup configuration file	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul>	This column does not take effect.
SecMACMaxCnt	Maximum number of secure MAC addresses on the interface	N/A	Unsigned integer. Value range: 1 to 2147483647.	N/A
SecMACCurrentCnt	Current number of secure MAC addresses on the interface	N/A	Unsigned integer. Value range: 0 to 2147483647.	N/A
NTKMode	Need to Know mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—NTK is disabled.</li> <li>2—Allows only unicast packets and broadcasts with authenticated destination MAC addresses.</li> <li>3—Allows unicast packets, multicasts, and broadcasts with authenticated destination MAC addresses.</li> <li>4—Allows only unicast packets with authenticated destination MAC addresses.</li> </ul>	N/A
FreeVlanList	Authentication free VLAN list	N/A	Number string. The string is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	This column supports incremental editing. You can set the flag like "<FreeVlanList base:incremental='true'>". If the value is true, the VLAN list will be incrementally added or removed. If the value is false or no flag is set, the free VLANs issued on the current operation are all the effective free VLANs.
SecMACDynamic	Whether to enable the dynamic secure MAC feature	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No.</li> </ul>	N/A

# PortSecurity/InterfaceSecMAC

This table contains port security's secure MAC addresses on interfaces.

## XML structure

```
<PortSecurity>
  <InterfaceSecMAC>
    <SecureMAC>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <MAC></MAC>
      <Sticky></Sticky>
      <TimeLeft></TimeLeft>
    </SecureMAC>
  </InterfaceSecMAC>
</PortSecurity>
```

## Table description

Item	Description
Feature name	PortSecurity
Table name	InterfaceSecMAC
Table type	Multi-instance table
Row name	SecureMAC
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
VLANID	VLAN ID for this secure MAC address	Index	Unsigned integer. Value range: 1 to 4094.	N/A
MAC	Secure MAC address	Index	MAC address in the HH-HH-HH-HH-HH-HH format.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Sticky	Whether this secure MAC address can age out	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Can age out.</li> <li><b>false</b>—Cannot age out.</li> </ul>	N/A
TimeLeft	Remaining aging time for this MAC address	N/A	Unsigned integer.	If the remaining aging time is less than 60 seconds, the aging time is counted in seconds. If the aging time is not less than 60 seconds, the aging time is counted in minutes.

## PortSecurity/InterfaceBlkMAC

This table contains port security intrusion protection's blocked MAC addresses on interfaces.

### XML structure

```

<PortSecurity>
  <InterfaceBlkMAC>
    <BlockMAC>
      <IfIndex></IfIndex>
      <VLANID></VLANID>
      <MAC></MAC>
    </BlockMAC>
  </InterfaceBlkMAC>
</PortSecurity>

```

### Table description

Item	Description
Feature name	PortSecurity
Table name	InterfaceBlkMAC
Table type	Multi-instance table
Row name	BlockMAC
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see “Appendix” in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
VLANID	VLAN ID for this blocked MAC address	Index	Unsigned integer. Value range: 1 to 4094.	N/A
MAC	MAC address blocked by intrusion protection	Index	MAC address in the HH-HH-HH-HH-HH-HH format.	N/A

# Contents

Portsec .....1

    Portsec/Init .....1

# Portsec

## Portsec/Init

Message	Explanation
Can't set the security mode to autoLearn before you set the maximum number of users. 不能设置端口安全为自动学习模式，因为最大MAC地址数没有设置。	Can't set the security mode to autoLearn before you set the maximum number of users. 不能设置端口安全为自动学习模式，因为最大MAC地址数没有设置。
Can't enable port security when 802.1X is already enabled. 使能端口安全失败，因为已经使能802.1X。	Can't enable port security when 802.1X is already enabled. 使能端口安全失败，因为已经使能802.1X。
Can't enable port security when MAC authentication is already enabled. 使能端口安全失败，因为已经使能MAC地址认证。	Can't enable port security when MAC authentication is already enabled. 使能端口安全失败，因为已经使能MAC地址认证。
Can't change the port security mode. Please change the mode to noRestriction first. 不能更改端口安全模式。请首先更改为noRestriction模式。	Can't change the port security mode. Please change the mode to noRestriction first. 不能更改端口安全模式。请首先更改为noRestriction模式。
The number can't be less than the current number of secure MAC addresses. 配置的最大MAC地址数不能小于当前MAC地址数。	The number can't be less than the current number of secure MAC addresses. 配置的最大MAC地址数不能小于当前MAC地址数。
The maximum number of secure MAC addresses is not configurable in autoLearn mode. 在autoLearn模式下不能配置最大MAC地址数。	The maximum number of secure MAC addresses is not configurable in autoLearn mode. 在autoLearn模式下不能配置最大MAC地址数。
Can't configure port security mode on an 802.1X-enabled port. 不能配置端口安全模式，因为已经使能端口的802.1X功能。	Can't configure port security mode on an 802.1X-enabled port. 不能配置端口安全模式，因为已经使能端口的802.1X功能。
Can't configure port security mode on the port when 802.1X access control is not MAC based. 不能配置端口安全模式，因为802.1X端口接入方式不是基于MAC认证。	Can't configure port security mode on the port when 802.1X access control is not MAC based. 不能配置端口安全模式，因为802.1X端口接入方式不是基于MAC认证。
Can't configure port security mode on the port when 802.1X port authorization state is not auto. 不能配置端口安全模式，因为802.1X端口授权状态不是自动识别。	Can't configure port security mode on the port when 802.1X port authorization state is not auto. 不能配置端口安全模式，因为802.1X端口授权状态不是自动识别。
Can't configure port security mode on a MAC authentication-enabled port. 不能配置端口安全模式，因为已经使能端口的MAC地址认证功能。	Can't configure port security mode on a MAC authentication-enabled port. 不能配置端口安全模式，因为已经使能端口的MAC地址认证功能。
Can't enable port security on a link aggregation member port. 不能使能端口安全，因为这是一个聚合成员接口。	Can't enable port security on a link aggregation member port. 不能使能端口安全，因为这是一个聚合成员接口。
Can't add secure MAC addresses when port	Can't add secure MAC addresses when port security is disabled.

security is disabled. 不能添加安全MAC地址，因为端口安全没有使能。	不能添加安全MAC地址，因为端口安全没有使能。
Can't add secure MAC addresses on the port when the port security mode is not autoLearn. 不能添加安全MAC地址，因为该接口上的端口不是autoLearn模式。	Can't add secure MAC addresses on the port when the port security mode is not autoLearn. 不能添加安全MAC地址，因为该接口上的端口不是autoLearn模式。
Can't add secure MAC addresses when the maximum number of secure MAC addresses on the port is already reached. 不能添加安全MAC地址，因为接口上的安全MAC地址数已经达到了最大值。	Can't add secure MAC addresses when the maximum number of secure MAC addresses on the port is already reached. 不能添加安全MAC地址，因为接口上的安全MAC地址数已经达到了最大值。
Invalid MAC address. 无效的MAC地址。	Invalid MAC address. 无效的MAC地址。
The MAC address already exists on another interface. MAC地址已经在其他接口上存在。	The MAC address already exists on another interface. MAC地址已经在其他接口上存在。
Sticky can not be modified. Sticky属性不能被修改。	Sticky can not be modified. Sticky属性不能被修改。
Can't add sticky MAC addresses when dynamic secure MAC is enabled. 在动态模式下不能添加静态MAC地址。	Can't add sticky MAC addresses when dynamic secure MAC is enabled. 在动态模式下不能添加静态MAC地址。
No security MAC address matches the specified condition. 安全MAC地址和指定的环境不匹配。	No security MAC address matches the specified condition. 安全MAC地址和指定的环境不匹配。
Please create the VLAN first. 请首先创建相应的VLAN。	Please create the VLAN first. 请首先创建相应的VLAN。
The port is not assigned to the VLAN, or the VLAN is not permitted on the port. 该接口没有绑定VLAN，或者VLAN不允许该接口。	The port is not assigned to the VLAN, or the VLAN is not permitted on the port. 该接口没有绑定VLAN，或者VLAN不允许该接口。
The OUI value already exists. OUI值已经存在。	The OUI value already exists. OUI值已经存在。
The OUI index already exists. OUI索引已经存在。	The OUI index already exists. OUI索引已经存在。
OUI value must be specified. 没有指定OUI值。	OUI value must be specified. 没有指定OUI值。
Can't enable port security when EAD assistant is already enabled. 使能端口安全失败，因为已经使能EAD快速部署。	Can't enable port security when EAD assistant is already enabled. 使能端口安全失败，因为已经使能EAD快速部署。
Port security, MAC authentication, and 802.1X authentication are not supported on Layer 2 aggregate interfaces. 端口安全，MAC地址认证和802.1X认证不支持在二层以太网聚合接口上配置。	Port security, MAC authentication, and 802.1X authentication are not supported on Layer 2 aggregate interfaces. 端口安全，MAC地址认证和802.1X认证不支持在二层以太网聚合接口上配置。
The NTK feature can't be configured on aggregate interfaces. 聚合接口不能配置NTK特性。	The NTK feature can't be configured on aggregate interfaces. 聚合接口不能配置NTK特性。

The free VLAN feature is not supported on the port.

该接口不支持配置FreeVlan

The free VLAN feature is not supported on the port.

该接口不支持配置FreeVlan

# Contents

Portal.....	1
Portal/UserAccessSwitch.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Portal/DelForbiddenRule .....	1
XML structure.....	2
Table description.....	2
Columns.....	2
Portal/DelFreeRule.....	3
XMLstructure.....	3
Table description.....	4
Columns.....	4

# Portal

## Portal/UserAccessSwitch

Portal user access net switch table.

### XML structure

```
<Portal>
  <UserAccessSwitch>
    <AccessSwitch>
      <IPAddress></IPAddress>
      <Switch></Switch>
    </AccessSwitch>
  </UserAccessSwitch>
</Portal>
```

### Table description

Item	Description
Feature name	Portal
Table name	UserAccessSwitch
Table type	Multi-instance table
Row name	AccessSwitch
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPAddress	IP address of the user.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example:1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
Switch	Net Access.	N/A	Boolean: <ul style="list-style-type: none"><li><b>false</b>—OFF.</li><li><b>true</b>—ON.</li></ul>	N/A

## Portal/DeleteForbiddenRule

This table is used to delete portal-forbidden rules.



# XML structure

```
<Portal>
  <DelForbiddenRules>
    <DelForbiddenRule>
      <SrcIPAddr></SrcIPAddr>
      <SrcIPAddrLen></SrcIPAddrLen>
      <SrcProtocolType></SrcProtocolType>
      <SrcPortStart></SrcPortStart>
      <SrcPortEnd></SrcPortEnd>
      <DstIPAddr></DstIPAddr>
      <DstIPAddrLen></DstIPAddrLen>
      <DstProtocolType></DstProtocolType>
      <DstPortStart></DstPortStart>
      <DstPortEnd></DstPortEnd>
      <DstHostName></DstHostName>
      <SrcSsidName></SrcSsidName>
    </DelForbiddenRule>
  </DelForbiddenRules>
</Portal>
```

## Table description

Item	Description
Feature name	Portal
Table name	DelForbiddenRules
Table type	Multi-instance table
Row name	DelForbiddenRule
Restrictions	Not support modify

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIPAddr	Source IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
SrcIPAddrLen	Subnet mask length of the source IP address	N/A	Non-negative integer. Value range: 0 to 128.	N/A
SrcProtocolType	Source protocol type	N/A	Enumeration: <ul style="list-style-type: none"><li>6—TCP.</li><li>17—UDP.</li></ul>	N/A
SrcPortStart	Start port	N/A	Non-negative integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	number for the source protocol		Value range: 0 to 65535.	
SrcPortEnd	End port number for the source protocol	N/A	Non-negative integer Value range: 0 to 65535.	N/A
DstIPAddr	Destination IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
DstIPAddrLen	Subnet mask of the destination IP address	N/A	Non-negative integer. Value range: 0 to 128.	N/A
DstProtocolType	Destination protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP.</li> <li>17—UDP.</li> </ul>	N/A
DstPortStart	Start port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstPortEnd	End port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstHostName	Destination hostname	N/A	String. Length: 1 to 253 characters.	N/A
SrcSsidName	Source SSID name	N/A	String. Length: 1 to 32 characters.	N/A

## Portal/DelFreeRule

This table is used to delete portal-free rules

## XMLstructure

```

<Portal>
  <DelFreeRules>
    <DelFreeRule>
      <Layer3>
        <SrcIPAddr></SrcIPAddr>
        <SrcIPAddrLen></SrcIPAddrLen>
        <SrcProtocolType></SrcProtocolType>
        <SrcPortStart></SrcPortStart>
        <SrcPortEnd></SrcPortEnd>
        <DstIPAddr></DstIPAddr>
        <DstIPAddrLen></DstIPAddrLen>
        <DstProtocolType></DstProtocolType>

```

```

        <DstPortStart></DstPortStart>
        <DstPortEnd></DstPortEnd>
    </Layer3>
    <Layer2>
        <SrcIfIndex></SrcIfIndex>
        <SrcVlan></SrcVlan>
        <SrcMacAddr></SrcMacAddr>
    </Layer2>
    <ObjGroupName></ObjGroupName>
    <HostName></HostName>
</DelFreeRule>
</DelFreeRules>
</Portal>

```

## Table description

Item	Description
Table description	Portal FreeRule information table
Table type	Multi-instance table
Feature name	Portal
Table name	DelFreeRules
Row name	DelFreeRule
Restrictions	Not support modify

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Layer3	Layer3 information	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPAddr</li> <li>SrcIPAddrLen</li> <li>SrcProtocolType</li> <li>SrcPortStart</li> <li>SrcPortEnd</li> <li>DstIPAddr</li> <li>DstIPAddrLen</li> <li>DstProtocolType</li> <li>DstPortStart</li> <li>DstPortEnd</li> </ul>	N/A
SrcIPAddr	Source IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
SrcIPAddrLen	Subnet mask length of the source IP address	N/A	Non-negative integer. Value range: 0 to 128.	N/A
SrcProtocolType	Source	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	protocol type		<ul style="list-style-type: none"> <li>6—TCP</li> <li>17—UDP</li> </ul>	
SrcPortStart	Start port number for the source protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
SrcPortEnd	End port number for the source protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstIPAddr	Destination IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
DstIPAddrLen	Subnet mask of the destination IP address	N/A	Non-negative integer. Value range: 0 to 128.	N/A
DstProtocolType	Destination protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP</li> <li>17—UDP</li> </ul>	N/A
DstPortStart	Start port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstPortEnd	End port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535,	N/A
Layer2	Layer2 information	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIfIndex</li> <li>SrcVlan</li> <li>SrcMacAddr</li> </ul>	N/A
SrcIfIndex	Source interface index	N/A	Non-negative integer. Value range: 1 to 3221225471	N/A
SrcVlan	Source VLAN	N/A	Non-negative integer. Value range: 1 to 4094.	N/A
SrcMacAddr	Source MAC address	N/A	String: Format: HH-HH-HH-HH-HH-HH.	N/A
ObjGroupName	Source object group	N/A	String, Length: 1 to 31 characters.	N/A
HostName	Host name	N/A	String. Length: 1 to 253 characters.	N/A

# Contents

Portal.....	1
<b>Portal/PortalServers</b> .....	1
XMLstructure .....	1
Table description .....	1
Columns .....	2
<b>Portal/WebServers</b> .....	3
XMLstructure .....	3
Table description .....	3
Columns .....	3
<b>Portal/UriParams</b> .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
<b>Portal/FreeRule</b> .....	5
XML structure .....	5
Table information .....	6
Columns .....	6
<b>Portal/Interfaces</b> .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
<b>Portal/IPv4Interfaces</b> .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
<b>Portal/IPv6Interfaces</b> .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
Portal/IPv4ServiceTemplates .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
Portal/ IPv6ServiceTemplates .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
<b>Portal/WebRedirects</b> .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
<b>Portal/Ipv4AuthNetworks</b> .....	22
XML structure .....	22
Table description .....	22
Columns .....	22
<b>Portal/Ipv6AuthNetworks</b> .....	23
XML structure .....	23
Table description .....	23
Columns .....	24
<b>Portal/GlobalConf</b> .....	24
XML structure .....	24
Table description .....	25
Columns .....	25
<b>Portal/ProxyConf</b> .....	26
XML structure .....	26
Table description .....	26
Columns .....	26

<b>Portal/LocalWebServers</b> .....	27
XML structure.....	27
Table description.....	27
Columns.....	27
<b>Portal/ SelfDefSsidPage</b> .....	28
XML structure.....	28
Table description.....	28
Columns.....	28
<b>Portal/SelfDefDevTypePage</b> .....	29
XML structure.....	29
Table description.....	29
Columns.....	29
<b>Portal/SelfDefPage</b> .....	30
XML structure.....	30
Table description.....	30
Columns.....	30
<b>Portal/ExtendAuthServers</b> .....	31
XML structure.....	31
Table description.....	31
Columns.....	32
<b>Portal/MacServer</b> .....	33
XML structure.....	33
Table description.....	33
Columns.....	34
<b>Portal/ForbiddenRule</b> .....	35
XML structure.....	35
Table description.....	36
Columns.....	36

# Portal

## Portal/PortalServers

### XMLstructure

```
<Portal>
  <PortalServers>
    <PortalServer>
      <Name></Name>
      <IPAddressInfo>
        <IPAddress></IPAddress>
        <VRF></VRF>
        <Key></Key>
      </IPAddressInfo>
      <Port></Port>
      <Detect>
        <TimeOut></TimeOut>
        <Action></Action>
      </Detect>
      <UserSyncTime></UserSyncTime>
    </PortalServer>
  </PortalServers>
</Portal>
```

### Table description

Item	Description
Table description	Portal Server information table
Table type	Multi-instance table
Feature name	Portal
Table name	PortalServers
Row name	PortalServer
Restrictions	No
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Portal server name	Index	String, case-sensitive. Length: 1 to 32 characters.	N/A
IPAddressInfo	Portal server address	Data structure	Members include: IPAddress VRF Key	The IPAddress must be set for this column.
IPAddress	IP address of the portal server	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
VRF	VRF instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	If the portal server is on the public network, the length of characters is 0.
Key	Shared secret	N/A	String, case-sensitive. Length: 1 to 64 characters.	The key is used for communication between the portal server and the device. It supports only plaintext.
Port	Port number	N/A	Non-negative integer. Value range: 1 to 65534.	The default is 50100.
Detect	Portal server detection	Data structure	Members include: TimeOut Action	When you set the structure, the Action must be set. The timeout is 60 by default if not set.
TimeOut	Detection timeout	N/A	Non-negative integer. Value range: 10 to 3600 seconds.	The default is 60.
Action	Action to be performed when the detection times out.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—log</li> <li>2—trap</li> <li>3—Both</li> </ul>	N/A
UserSyncTime	User synchronization time	N/A	Non-negative integer. Value range: 60 to 18000 seconds.	The default is 1200.



# Portal/WebServers

## XMLstructure

```
<Portal>
  <WebServers>
    <WebServer>
      <Name></Name>
      <Url></Url>
      <Detect>
        <Interval></Interval>
        <Retry></Retry>
        <Action></Action>
      </Detect>
      <VRF></VRF>
      <CaptiveBypass></CaptiveBypass>
    </WebServer>
  </WebServers>
</Portal>
```

## Table description

Item	Description
Description	Portal WebServer information table
Table type	Multi-instance table
Feature name	Portal
Table name	WebServers
Row name	WebServer
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Description	Column type	Data type and restrictions	Remarks
Name	Name of the portal Web server	Index	String, case-sensitive. Length: 1 to 32 characters.	N/A
Url	Redirect URL	N/A	String. Length: 1 to 256 characters.	N/A

			Members include:	
Detect	Web server detection	Data structure	<ul style="list-style-type: none"> <li>Interval</li> <li>Retry</li> <li>Action</li> </ul>	The Action must be included.
Interval	Detection interval	N/A	Non-negative integer. Value range: 10 to 1200 seconds.	The default is 20
Retry	Maximum number of server detection attempts.	N/A	Non-negative integer. Value range: 1 to 10.	The default is 3
Action	Action to be performed when the detection attempts reaches the maximum number.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—log</li> <li>2—trap</li> <li>3—Both</li> </ul>	N/A
VRF	VRF instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	If the portal Web server is on the public network, the length of characters is 0.
CaptiveBypass	Captive bypass for ios or android	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—default</li> <li>1—enable</li> <li>2—optimize enable</li> <li>5—ios enable</li> <li>6—android enable</li> </ul>	N/A

## Portal/UrlParams

### XML structure

```

<Portal>
  <UrlParams>
    <UrlParam>
      <WebServerName></WebServerName>
      <ParamName></ParamName>
      <ParamType></ParamType>
      <SelfDefValue></SelfDefValue>
    </UrlParam>
  </UrlParams>
</Portal>

```

## Table description

Item	Description
Table description	Portal WebServer parameter information table
Table type	Multi-instance table
Feature name	Portal
Table name	UrlParams
Row name	UrlParam
Restrictions	There is no limit on the number of parameters carried in a Web server URL.
Support for row creation and deletion	Yes

## Columns

Column name	Description	Column type	Data type and restrictions	Remarks
WebServerName	Name of the portal Web server	Index	String, case-sensitive. Length: 1 to 32 characters.	N/A
ParamName	Parameter name	Index	String, case-sensitive. Length: 1 to 32 characters.	This column configures the parameter name carried in the redirect URL.
ParamType	Parameter type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—source-address</li><li>• 1—source-mac</li><li>• 2—original-url</li><li>• 3—selfDefine</li></ul>	This column must be defined.
SelfDefValue	Self-defined parameter	N/A	String. Length: 1 to 256 characters.	This column takes effect when the ParamType is selfDefine.

## Portal/FreeRule

### XML structure

```
<Portal>
  <FreeRules>
    <FreeRule>
      <RuleID></RuleID>
      <IsAllotID></IsAllotID>
```

```

<Description></Description>
<Layer3>
  <SrcIPAddr></SrcIPAddr>
  <SrcIPAddrLen></SrcIPAddrLen>
  <SrcProtocolType></SrcProtocolType>
  <SrcPortStart></SrcPortStart>
  <SrcPortEnd></SrcPortEnd>
  <DstIPAddr></DstIPAddr>
  <DstIPAddrLen></DstIPAddrLen>
  <DstProtocolType></DstProtocolType>
  <DstPortStart></DstPortStart>
  <DstPortEnd></DstPortEnd>
</Layer3>
<Layer2>
  <SrcIfIndex></SrcIfIndex>
  <SrcVlan></SrcVlan>
  <SrcMacAddr></SrcMacAddr>
</Layer2>
<HostName></HostName>
<ObjGroupName></ObjGroupName>
</FreeRule>
</FreeRules>
</Portal>

```

## Table information

Item	Description
Table description	Portal FreeRule information table
Table type	Multi-instance table
Feature name	Portal
Table name	FreeRules
Row name	FreeRule
Restrictions	Not support modify
Support for row creation and deletion	Yes

## Columns

Column name	Description	Column type	Data type restrictions and	Remarks
RuleID	Portal-free rule number	Index	Non-negative integer.	N/A

IsAllotID	Whether ID is allocated automatically		Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A
Description	Description for the portal free rule		String, <ul style="list-style-type: none"> <li>Length: 1 to 255 characters.</li> </ul> Members include: <ul style="list-style-type: none"> <li>SrcIPAddr</li> <li>SrcIPAddrLen</li> <li>SrcProtocolType</li> <li>SrcPortStart</li> <li>SrcPortEnd</li> <li>DstIPAddr</li> <li>DstIPAddrLen</li> <li>DstProtocolType</li> <li>DstPortStart</li> <li>DstPortEnd</li> </ul>	N/A
Layer3	N/A	Data structure		N/A
SrcIPAddr	Source IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 address example: 1.0.0.1 IPv6 address example: 2001:12::1:2
SrcIPAddrLen	Subnet mask length of the source IP address	N/A	Non-negative integer. Value range: 0 to 128.	When the SrcIPAddr is the IPv4 address type, the value range is 0 to 32. When the SrcIPAddr is the IPv6 address type, the value range is 0 to 128.
SrcProtocolType	Source protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP</li> <li>17—UDP</li> </ul>	When SrcProtocolType is configured, SrcPortStart and SrcPortEnd must be configured and use the same protocol type. Currently, only one port is supported, so SrcPortStart and SrcPortEnd must be the same.
SrcPortStart	Start port number for the source protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
SrcPortEnd	End port number for the source protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstIPAddr	Destination IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal	IPv4 address example: 1.0.0.1 IPv6 address

			string, colon-separated.	example: 2001:12::1:2
DstIPAddrLen	Subnet mask length of the destination IP address	N/A	Non-negative integer. Value range: 0 to 128.	When DstIPAddr is IPv4 address type, the value range is 0 to 32. When DstPAddr is IPv6 address type, the value range is 0 to 128.
DstProtocolType	Destination protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 6—TCP</li> <li>• 17—UDP</li> </ul>	When DstProtocolType is configured, DstPortStart and DstPortEnd must be configured and use the same protocol type. Currently, only one port is supported, so DstPortStart and DstPortEnd must be the same.
DstPortStart	Start port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstPortEnd	End port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
Layer2	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>• SrcIfIndex</li> <li>• SrcVlan</li> <li>• SrcMacAddr</li> </ul>	N/A
SrcIfIndex	Source interface index	N/A	Source interface index.	N/A
SrcVlan	Source VLAN	N/A	Non-negative integer. Value range: 1 to 4094.	N/A
SrcMacAddr	Source MAC address	N/A	MAC address in the HH-HH-HH-HH-HH-HH format.	Example: 00-0c-af-e3-5d-c0.
ObjGroupName	Source object group		String, Length: 1 to 31 characters.	N/A
HostName	Host name	N/A	String. Length: 1 to 253 characters.	Case-insensitive and can contains letters, digits, hyphens(-), dots (.), underscores (_), and wildcard(*). It must not be "ip" or "ipv6" or "i" or "ipv".

# Portal/Interfaces

## XML structure

```
<Portal>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <AuthorationCheck>
        <Userprofile></Userprofile>
        <Acl></Acl>
      </AuthorationCheck>
      <VsrpInStance></VsrpInStance>
    </Interface>
  </Interfaces>
</Portal>
```

## Table description

Item	Description
Table description	Portal interface information table
Table type	Muti-instance table
Feature name	Portal
Table name	Interfaces
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Non-negative integer.	N/A
AuthorationCheck	N/A	Data structure	Members include: <ul style="list-style-type: none"><li>Userprofile</li><li>Acl</li></ul>	N/A
Userprofile	Whether strict check is enabled for the authorized user profile	N/A	Boolean: <ul style="list-style-type: none"><li>true—Yes</li><li>false—No</li></ul>	N/A

Acl	Whether strict check is enabled for authorized ACL	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A
VsrpInStance	VSRP instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A

# Portal/IPv4Interfaces

## XML structure

```

<Portal>
  <IPv4Interfaces>
    <IPv4Interface>
      <IfIndex></IfIndex>
      <Method></Method>
      <WebServer>
        <WebServerName></WebServerName>
        <EscapeEnable></EscapeEnable>
      </WebServer>
      <Domain></Domain>
      <MaxUser></MaxUser>
      <BasIP></BasIP>
      <EscapeSvrName></EscapeSvrName>
      <PreAuthPoolName></PreAuthPoolName>
      <UserDetect>
        <UserDetectType></UserDetectType>
        <UserDetectIdleTime></UserDetectIdleTime>
        <UserDetectInterval></UserDetectInterval>
        <UserDetectRetry></UserDetectRetry>
      </UserDetect>
      <ExtendAuthDomain></ExtendAuthDomain>
      <TempPass>
        <TempPassEnable></TempPassEnable>
        <TempPassPeriod></TempPassPeriod>
      </TempPass>
      <MacSvrName></MacSvrName>
      <PreAuthPolicy></PreAuthPolicy>
    </IPv4Interface>
  </IPv4Interfaces>
</Portal>

```



## Table description

Item	Description
Table description	Portal IPv4 interface information table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv4Interfaces
Row name	IPv4Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column name	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Non-negative integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
Method	IPv4 portal authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Direct</li> <li>1—Layer3</li> <li>2—Redhcp</li> </ul>	N/A
WebServer	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>WebServerName</li> <li>EscapeEnable</li> </ul>	Both members must be included at the same time.
WebServerName	Name of the IPv4 portal Web server	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
EscapeEnable	Whether the fail-permit feature is enabled for the IPv4 portal Web server	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A
Domain	IPv4 authentication domain	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
MaxUser	Maximum number of IPv4 users	N/A	Non-negative integer. Value range: 1 to 4294967295.	N/A

BasIP	BAS-IP attribute specified for IPv4 user authentication	N/A	IPv4: String, dotted decimal notation.	N/A
EscapeSvrName	Name of the IPv4 portal server with the fail-permit feature enabled	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
PreAuthPoolName	Name of the IPv4 preauthentication user pool	N/A	String, case-insensitive. Length: 1 to 63 characters. Members include:	N/A
UserDetect	N/A	Data structure	<ul style="list-style-type: none"> <li>• UserDetectType</li> <li>• UserDetectIdleTime</li> <li>• UserDetectInterval</li> <li>• UserDetectRetry</li> </ul> Enumeration:	UserDetectType must be set, and other columns use default settings if not set.
UserDetectType	IPv4 user detection type	N/A	<ul style="list-style-type: none"> <li>• 0—ARP</li> <li>• 2—ICMP</li> </ul>	N/A
UserDetectIdleTime	IPv4 user detection idle time	N/A	Non-negative integer. Value range: 60 to 3600 seconds.	The default is 180 seconds.
UserDetectInterval	IPv4 user detection interval	N/A	Non-negative integer. Value range: 1 to 1200 seconds.	The default is 3 seconds.
UserDetectRetry	Number of IPv4 user detection attempts	N/A	Non-negative integer. Value range: 1 to 10.	The default is 3.
ExtendAuthDomain	IPv4 extended authentication domain	N/A	String. Length: 1 to 255 characters.	N/A
TempPass	TempPass feature that temporarily permits Internet access	Data structure	Members include: <ul style="list-style-type: none"> <li>• TempPassEnable</li> <li>• TempPassPeriod</li> </ul> Enumeration:	TempPassEnable must be included, and TempPassPeriod uses the default if not set.
TempPassEnable	TempPass status	N/A	<ul style="list-style-type: none"> <li>• 0—Disabled</li> <li>• 1—Enabled</li> </ul>	N/A
TempPassPeriod	Time interval during which Internet access is permitted	N/A	Unsigned integer. Value range: 10 to 180 seconds. Default: 30 seconds.	N/A
MacSvrName	IPv4 MacTrigger server name		String, case-sensitive. Length: 1 to 32 characters.	N/A
PreAuthPolicy	IPv4 Pre-Auth policy name	N/A	String, case-sensitive. Length: 1 to 255 characters.	N/A

# Portal/IPv6Interfaces

## XML structure

```
<Portal>
  <IPv6Interfaces>
    <IPv6Interface>
      <IfIndex></IfIndex>
      <Method></Method>
      <WebServer>
        <WebServerName></WebServerName>
        <EscapeEnable></EscapeEnable>
      </WebServer>
      <Domain></Domain>
      <MaxUser></MaxUser>
      <BasIP></BasIP>
      <EscapeSvrName></EscapeSvrName>
      <PreAuthPoolName></PreAuthPoolName>
      <UserDetect>
        <UserDetectType></UserDetectType>
        <UserDetectIdleTime></UserDetectIdleTime>
        <UserDetectInterval></UserDetectInterval>
        <UserDetectRetry></UserDetectRetry>
      </UserDetect>
      <ExtendAuthDomain></ExtendAuthDomain>
      <TempPass>
        <TempPassEnable></TempPassEnable>
        <TempPassPeriod></TempPassPeriod>
      </TempPass>
      <MacSvrName></MacSvrName>
      <PreAuthPolicy></PreAuthPolicy>
    </IPv6Interface>
  </IPv6Interfaces>
</Portal>
```

## Table description

Item	Description
Table description	Portal IPv6 interface information table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv6Interfaces

Row name	IPv6Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Non-negative integer.	N/A
Method	IPv6 authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>0.Direct</li> <li>1.Layer3</li> </ul>	N/A
WebServer	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>WebServerName</li> <li>EscapeEnable</li> </ul>	Both members must be included at the same time.
WebServerName	IPv6 Web server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
EscapeEnable	Whether the fail-permit feature is enabled for the IPv6 Web server	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A
Domain	IPv6 authentication domain	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
MaxUser	Maximum number of IPv6 users on the interface	N/A	Non-negative integer. Value range: 1 to 4294967295.	N/A
BasIP	BAS-IP attribute specified for IPv6 user authentication	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
EscapeSvrName	Name of the fail-permit enabled IPv6 portal server	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
PreAuthPoolName	Name of the IPv6 preauthentication user pool	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
UserDetect	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>UserDetectType</li> <li>UserDetectIdleTim</li> </ul>	UserDetectType must be set, other columns use default

			e	settings if not set.
			<ul style="list-style-type: none"> <li>UserDetectInterval</li> <li>UserDetectRetry</li> </ul> Enumeration:	
UserDetectType	IPv6 user detection type	N/A	<ul style="list-style-type: none"> <li>1—ND</li> <li>3—ICMPv6</li> </ul>	N/A
UserDetectIdleTime	IPv6 user detection idle time	N/A	Non-negative integer. Value range: 60 to 3600 seconds.	The default is 180 seconds.
UserDetectInterval	IPv6 user detection interval	N/A	Non-negative integer. Value range: 1 to 1200 seconds.	The default is 3 seconds.
UserDetectRetry	Number of IPv6 user detection attempts	N/A	Non-negative integer. Value range: 1 to 10.	The default is 3.
ExtendAuthDomain	IPv6 extended authentication domain	N/A	String. Length: 1 to 255 characters.	N/A
TempPass	TempPass feature that temporarily permits Internet access	Data structure	Members include: <ul style="list-style-type: none"> <li>TempPassEnable</li> <li>TempPassPeriod</li> </ul>	TempPassEnable must be included, and TempPassPeriod uses the default if not set.
TempPassEnable	TempPass status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled</li> <li>1—Enabled</li> </ul>	N/A
TempPassPeriod	Time interval during which Internet access is permitted	N/A	Unsigned integer. Value range: 10 to 180 seconds. Default: 30 seconds.	N/A
MacSvrName	IPv6 MacTrigger server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
PreAuthPolicy	IPv6 Pre-Auth policy name	N/A	String, case-sensitive. Length: 1 to 255 characters.	N/A

## Portal/IPv4ServiceTemplates

This table contains portal IPv4 service template information.

### XML structure

```

<Portal>
  <IPv4ServiceTemplates>
    <IPv4ServiceTemplate>
      <Name></Name>
      <Method></Method>
    
```

```

<WebServer>
  <WebServerName></WebServerName>
  <EscapeEnable></EscapeEnable>
</WebServer>
<Domain></Domain>
<MaxUser></MaxUser>
<BasIP></BasIP>
<EscapeSvrName></EscapeSvrName>
<UserDetect>
  <UserDetectType></UserDetectType>
  <UserDetectIdleTime></UserDetectIdleTime>
  <UserDetectInterval></UserDetectInterval>
  <UserDetectRetry></UserDetectRetry>
</UserDetect>
<ExtendAuthDomain></ExtendAuthDomain>
<TempPass>
  <TempPassEnable></TempPassEnable>
  <TempPassPeriod></TempPassPeriod>
</TempPass>
<MacSvrName></MacSvrName>
</IPv4ServiceTemplate>
</IPv4ServiceTemplates>
</Portal>

```

## Table description

Item	Description
Feature name	Portal
Table name	IPv4ServiceTemplates
Table type	Multi-instance table
Row name	IPv4ServiceTemplate
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Service template name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A

Method	IPv4 portal authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Direct</li> </ul>	N/A
WebServer	N/A	Data structure	Members include: WebServerName EscapeEnable	Both members must be included at the same time.
WebServerName	IPv4 portal Web server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
EscapeEnable	Enable the fail-permit feature for the IPv4 Web server	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Domain	IPv4 authentication domain	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
MaxUser	Maximum number of IPv4 users	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
BasIP	BAS-IP attribute specified for IPv4 user authentication	N/A	IPv4: String, dotted decimal notation.	N/A
EscapeSvrName	Name of the fail-permit enable IPv4 portal server	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
UserDetect	N/A	Data structure	Members include: UserDetectType UserDetectIdleTime UserDetectInterval UserDetectRetry	UserDetectType must be included, and other columns are specified as default if not set.
UserDetectType	IPv4 user detection type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—ARP</li> <li>2—ICMP</li> </ul>	N/A
UserDetectIdleTime	IPv4 user detection idle time	N/A	Unsigned integer. Value range: 60 to 3600 seconds. Default: 180 seconds.	N/A
UserDetectInterval	IPv4 user detection time interval	N/A	Unsigned integer. Value range: 1 to 1200 seconds. Default: 3 seconds.	N/A
UserDetectRetry	Number of IPv4 user detection attempts	N/A	Unsigned integer. Value range: 1 to 10. Default: 3.	N/A
ExtendAuthDo	IPv4 extended	N/A	String.	N/A

main	authentication domain		Length: 1 to 255 characters.	
TempPass	TempPass Feature that Temporarily permits internet access	Data structure	Members include: <ul style="list-style-type: none"> <li>TempPassEnable</li> <li>TempPassPeriod</li> </ul>	TempPassEnable must be included and TempPassPeriod uses the default if not set.
TempPassEnable	TempPass status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled</li> <li>1—Enabled</li> </ul>	N/A
TempPassPeriod	Time interval During which internet access is permitted	N/A	Value range: 10 to 180 seconds. Default: 30 seconds.	N/A
MacSvrName	IPv4 MacTrigger server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A

## Portal/IPv6ServiceTemplates

This table contains portal IPv6 service template information.

### XML structure

```

<Portal>
  <IPv6ServiceTemplates>
    <IPv6ServiceTemplate>
      <Name></Name>
      <Method></Method>
      <WebServer>
        <WebServerName></WebServerName>
        <EscapeEnable></EscapeEnable>
      </WebServer>
      <Domain></Domain>
      <MaxUser></MaxUser>
      <BasIP></BasIP>
      <EscapeSvrName></EscapeSvrName>
      <UserDetect>
        <UserDetectType></UserDetectType>
        <UserDetectIdleTime></UserDetectIdleTime>
        <UserDetectInterval></UserDetectInterval>
        <UserDetectRetry></UserDetectRetry>
      </UserDetect>
      <ExtendAuthDomain></ExtendAuthDomain>
      <TempPass>
        <TempPassEnable></TempPassEnable>
        <TempPassPeriod></TempPassPeriod>
      </TempPass>
    </IPv6ServiceTemplate>
  </IPv6ServiceTemplates>
</Portal>

```



```

        </TempPass>
        <MacSvrName></MacSvrName>
    </IPv6ServiceTemplate>
</IPv6ServiceTemplates>
</Portal>

```

## Table description

Item	Description
Feature name	Portal
Table name	IPv6ServiceTemplates
Table type	Multi-instance table
Row name	IPv6ServiceTemplate
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Service template name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
Method	IPv6 portal authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Direct</li> </ul>	N/A
WebServer	N/A	Data structure	Members include: WebServerName EscapeEnable	Both members must be included at the same time.
WebServerName	IPv6 Web server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
EscapeEnable	Enable the fail-permit feature for the IPv6 Web server	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
Domain	IPv6 authentication domain	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
MaxUser	Maximum number of IPv6 users	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
BasIP	BAS-IP attribute specified for IPv6 user authentication	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
EscapeSvrName	Name of the	N/A	String, case-sensitive.	N/A

	fail-permit enabled IPv6 portal server		Length: 1 to 32 characters.	
UserDetect	N/A	Data structure	Members include: UserDetectType UserDetectIdleTime UserDetectInterval UserDetectRetry Enumeration:	UserDetectType must be included, and other columns are specified as default if not set.
UserDetectType	IPv6 user detection type	N/A	<ul style="list-style-type: none"> <li>1—ND</li> <li>3—ICMPv6</li> </ul>	N/A
UserDetectIdleTime	IPv6 user detection idle time	N/A	Unsigned integer. Value range: 60 to 3600 seconds. Default: 180 seconds.	N/A
UserDetectInterval	IPv6 user detection time interval	N/A	Unsigned integer. Value range: 1 to 1200 seconds. Default: 3 seconds.	N/A
UserDetectRetry	Number of IPv6 user detection attempts	N/A	Unsigned integer. Value range: 1 to 10. Default: 3.	N/A
ExtendAuthDomain	IPv6 extended authentication domain	N/A	String. Length: 1 to 255 characters.	N/A
TempPass	TempPass Feature that temporarily permits Internet access	Data structure	Members include: <ul style="list-style-type: none"> <li>TempPassEnable</li> <li>TempPassPeriod</li> </ul>	TempPassEnable must be included and TempPassPeriod uses the default if not set.
TempPassEnable	TempPass status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled</li> <li>1—Enabled</li> </ul>	N/A
TempPassPeriod	Time interval During which Internet access is permitted	N/A	Value range: 10 to 180 seconds. Default: 30 seconds.	N/A
MacSvrName	IPv6 MacTrigger Server Name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A

## Portal/WebRedirects

### XML structure

```

<Portal>
  <WebRedirects>
    <WebRedirect>

```

```

<IfIndex></IfIndex>
<IPv4WebRedirect>
  <IPv4WebRedirectUrl></IPv4WebRedirectUrl>
  <IPv4WebRedirectInterVal></IPv4WebRedirectInterVal>
</IPv4WebRedirect>
<IPv6WebRedirect>
  <IPv6WebRedirectUrl></IPv6WebRedirectUrl>
  <IPv6WebRedirectInterVal></IPv6WebRedirectInterVal>
</IPv6WebRedirect>
</WebRedirect>
</WebRedirects>
</Portal>

```

## Table description

Item	Description
Table description	Portal WebRedirects information table
Table type	Multi-instance table
Feature name	Portal
Table name	WebRedirects
Row name	WebRedirect
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Non-negative integer. Members include:	N/A
IPv4WebRedirect	N/A	Data structure	<ul style="list-style-type: none"> <li>IPv4WebRedirectUrl</li> <li>IPv4WebRedirectInterVal</li> </ul>	N/A
IPv4WebRedirectUrl	Redirect URL for IPv4 users	N/A	String, case-sensitive. Length: 1 to 256 characters.	N/A
IPv4WebRedirectInterVal	URL redirect interval for IPv4 users	N/A	Non-negative integer. Value range: 60 to 86400 seconds. Members include:	The default is 86400 seconds.
IPv6WebRedirect	N/A	Data structure	<ul style="list-style-type: none"> <li>IPv6WebRedirectUrl</li> <li>IPv6WebRedirectInterVal</li> </ul>	N/A

IPv6WebRedirectUrl	Redirect URL for IPv6 users	N/A	String, case-sensitive. Length: 1 to 256 characters.	N/A
IPv6WebRedirectInterval	URL redirect interval for IPv6 users	N/A	Non-negative integer. Value range: 60 to 86400 seconds.	The default is 86400 seconds.

## Portal/Ipv4AuthNetworks

### XML structure

```

<Portal>
  <IPv4AuthNetWorks>
    <IPv4AuthNetWork>
      <IfIndex></IfIndex>
      <SrcAuthAddr></SrcAuthAddr>
      <SrcAuthMask></SrcAuthMask>
      <DstAuthAddr></DstAuthAddr>
      <DstAuthMask></DstAuthMask>
    </IPv4AuthNetWork>
  </IPv4AuthNetWorks>
</Portal>

```

### Table description

Item	Description
Table description	Portal IPv4 authentication-network table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv4AuthNetWorks
Row name	IPv4AuthNetWork
Restrictions	NO
Support for row creation and deletion	YES

### Columns

Column name	Description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Non-negative integer.	N/A

SrcAuthAddr	Source authentication network address for IPv4 users	N/A	IPv4: String, dotted decimal notation.	N/A
SrcAuthMask	Subnet mask length of the source authentication network for IPv4 users	N/A	Non-negative integer. Value range: 1 to 32.	N/A
DstAuthAddr	Destination authentication network address for IPv4 users	N/A	IPv4: String, dotted decimal notation.	N/A
DstAuthMask	Subnet mask length of the destination authentication network for IPv4 users	N/A	Non-negative integer. Value range: 1 to 32.	N/A

## Portal/Ipv6AuthNetworks

### XML structure

```

<Portal>
  <IPv6AuthNetWorks>
    <IPv6AuthNetWork>
      <IfIndex></IfIndex>
      <SrcAuthAddr></SrcAuthAddr>
      <SrcAuthPrefix></SrcAuthPrefix>
      <DstAuthAddr></DstAuthAddr>
      <DstAuthPrefix></DstAuthPrefix>
    </IPv6AuthNetWork>
  </IPv6AuthNetWorks>
</Portal>

```

### Table description

Item	Description
Table description	Portal IPv6 authentication-network table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv6AuthNetWorks
Row name	IPv6AuthNetWork

Restrictions	No
Support for row creation and deletion	Yes

## Columns

Column name	Column name	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Non-negative integer.	N/A
SrcAuthAddr	Source authentication network address for IPv6 users	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
SrcAuthPrefix	Prefix length of the source authentication network for IPv6 users	N/A	Non-negative integer. Value range: 1 to 128.	N/A
DstAuthAddr	Destination authentication network address for IPv6 users	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
DstAuthPrefix	Prefix length of the destination authentication network for IPv6 users	N/A	Non-negative integer. Value range: 1 to 128.	N/A

## Portal/GlobalConf

### XML structure

```

<Portal>
  <GlobalConf>
    <RoamEnable></RoamEnable>
    <NasPortIdFormat></NasPortIdFormat>
    <VsrpPort></VsrpPort>
    <MaxUser></MaxUser>
    <ClientGatewayIfIndex></ClientGatewayIfIndex>
    <CaptiveOptDelay></CaptiveOptDelay>
  </GlobalConf>
</Portal>

```

## Table description

Item	Description
Table description	Portal GlobalConf information table
Table type	Multi-instance table
Feature name	Portal
Table name	GlobalConf
Row name	None
Restrictions	None
Support for row creation and deletion	None

## Columns

Column name	Description	Column type	Data type and restrictions	Remarks
RoamEnable	Whether the portal roaming feature is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A
NasPortIdFormat	Format of the NAS-Port-ID attribute	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Format1</li> <li>2—Format2</li> <li>3—Format3</li> <li>4—Format4</li> </ul>	N/A
VsrpPort	TCP port for portal backup	N/A	Non-negative integer. Value range: 1 to 65535.	N/A
MaxUser	Maximum number of users on the device	N/A	Non-negative integer. The value range: 1 to 4294967295.	N/A
ClientGatewayIfIndex	Index of the gateway interface for clients to access the AC	N/A	Non-negative integer	N/A
CaptiveOptDelay	The timeout time for optimized captive bypass feature	N/A	Non-negative integer Value rang: 6 to 60 seconds Default: 6 seconds	N/A

# Portal/ProxyConf

## XML structure

```
<Portal>
  <ProxyConf>
    <Enable></Enable>
    <SourceIP></SourceIP>
    <PortalServerPort></PortalServerPort>
    <MacTriggerServerIP></MacTriggerServerIP>
    <MacTriggerServerPort></MacTriggerServerPort>
  </ProxyConf>
</Portal>
```

## Table description

Item	Description
Table description	Portal proxy configuration table
Table type	Single-instance table
Feature name	Portal
Table name	PorxyConf
Row name	None
Restrictions	None
Support for row creation and deletion	None

## Columns

Column name	Description	Column type	Data type and restrictions	Remarks
Enable	Enable the portal proxy feature	N/A	Boolean: <ul style="list-style-type: none"><li>true—Yes</li><li>false—No</li></ul>	N/A
SourceIP	Source IP address	N/A	IPv4: String, dotted decimal notation.	This column specifies the source address for the packets actively sent to the server. The IP address of the output interface is used if not specified.
PortalServerPort	Destination port	N/A	Non-negative integer. Value range: 1 to 65535.	This column specifies the destination port on the device. The default port is 2000.
MacTriggerServerIP	IP address of	N/A	IPv4: String,	By default, the device does



	the MAC binding server		dotted decimal notation.	not specify the IP address and port number of the MAC binding server.
MacTriggerServerPort	Port number of the MAC binding server	N/A	Non-negative integer. Value range: 1 to 65535.	The default port number is 50100.

## Portal/LocalWebServers

### XML structure

```

<Portal>
  <LocalWebServers>
    <LocalWebServer>
      <Type></Type>
      <SSLServerPolicy></SSLServerPolicy>
      <DefLogonPage></DefLogonPage>
      <TCPPort></TCPPort>
    </LocalWebServer>
  </LocalWebServers>
</Portal>

```

### Table description

Item	Description
Table description	Portal LocalWebServer information table
Table type	Multi-instance table
Feature name	Portal
Table name	LocalWebServers
Row name	PortalServer
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Description	Column type	Data type and restrictions	Remarks
Type	Protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—HTTP</li> <li>1—HTTPS</li> </ul>	This column configures the protocol used between the local portal Web server and

				the client.
SSLServerPolicy	SSL server policy name	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column takes effect only when the Type is HTTPS.
DefLogonPage	Default authentication page file	N/A	String. Length: 1 to 91 characters.	Case-sensitive and contains letters, digits, dots (.), and underscores (_).
TCPPort	TCP port number	N/A	Non-negative integer. Value range: 1 to 65535.	The default HTTP listening port number is 80 and the default HTTPS listening port number is 443.

## Portal/ SelfDefSsidPage

This table contains information about the self-defined SSID page file.

### XML structure

```
<Portal>
  <SelfDefSsidPages>
    <SelfDefSsidPage>
      <Type></Type>
      <ssid></ssid>
      <LogonPageFile></LogonPageFile>
    </SelfDefSsidPage>
  </SelfDefSsidPages>
</Portal>
```

### Table description

Item	Description
Feature name	Portal
Table name	SelfDefSsidPages
Table type	Multi-instance table
Row name	SelfDefSsidPage
Restrictions	Local portal server can configure self-defined SSID page file
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—HTTP.</li> </ul>	This column configures the

			<ul style="list-style-type: none"> <li>1—HTTPS.</li> </ul>	protocol type for the local Web server.
ssid	SSID name	Index	String, case-sensitive. Length: 1 to 32 characters.	This column assigns a specific SSID to the designated page file.
LogonPageFile	Authentication page file	N/A	String, including letters, numbers, and underscores(_). Length: 1 to 91 characters.	N/A

## Portal/SelfDefDevTypePage

This table contains information about the self-defined device type page file.

### XML structure

```
<Portal>
  <SelfDefDevTypePages>
    <SelfDefDevTypePage>
      <Type></Type>
      <DeviceType></DeviceType>
      <LogonPageFile></LogonPageFile>
    </SelfDefDevTypePage>
  </SelfDefDevTypePages>
</Portal>
```

### Table description

Item	Description
Feature name	Portal
Table name	SelfDefDevTypePages
Table type	Multi-instance table
Row name	SelfDefDevTypePage
Restrictions	Local portal server can configure self-defined device type page file
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—HTTP.</li> <li>1—HTTPS.</li> </ul>	This column configures the protocol type for the local Web server.
DeviceType	Device type	Index	String, case-sensitive.	This column assigns a

			Length: 1 to 127 characters.	specific device type to the designated page file.
LogonPageFile	Authentication page file.	N/A	String, including letters, numbers, and underscores (_). Length: 1 to 91 characters.	N/A

## Portal/SelfDefPage

This table contains information about the self-defined page file.

### XML structure

```
<Portal>
  <SelfDefPages>
    <SelfDefPage>
      <Type></Type>
      <ssid></ssid>
      <DeviceType></DeviceType>
      <LogonPageFile></LogonPageFile>
    </SelfDefPage>
  </SelfDefPages>
</Portal>
```

### Table description

Item	Description
Feature name	Portal
Table name	SelfDefPages
Table type	Multi-instance table
Row name	SelfDefPage
Restrictions	Local portal server can configure self-defined SSID and device type page file.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—HTTP.</li> <li>1—HTTPS.</li> </ul>	This column configures the protocol type for the local Web server.

ssid	SSID name	Index	String, case-sensitive. Length: 1 to 32 characters.	This column assigns a specific SSID to the designated page file.
DeviceType	Device type	Index	String, case-sensitive. Length: 1 to 127 characters.	This column assigns a specific device type to the designated page file.
LogonPageFile	Authentication page file.	N/A	String, including letters, numbers, and underscores (_). Length: 1 to 91 characters.	N/A

## Portal/ExtendAuthServers

This table contains information about portal extended authentication servers.

### XML structure

```

<Portal>
  <ExtendAuthServers>
    <ExtendAuthServer>
      <Type></Type>
      <AuthUrl></AuthUrl>
      <AppId></AppId>
      <AppKey></AppKey>
      <RedirectUrl></RedirectUrl>
      <MailProtocol></MailProtocol>
      <MailDomain>
        <MailDomainName></MailDomainName>
      </MailDomain>
    </ExtendAuthServer>
  </ExtendAuthServers>
</Portal>

```

### Table description

Item	Description
Feature name	Portal
Table name	ExtendAuthServers
Table type	Multi-instance table
Row name	ExtendAuthServer
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Extended authentication service type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—QQ.</li> <li>1—Mail.</li> </ul>	N/A
AuthUrl	Authentication URL	N/A	String. Length: 1 to 256 characters. Default: https://graph.qq.com (when the Type field is specified as 0).	This column takes effect only when the Type field is specified as 0.
AppId	App ID which supports for extended authentication	N/A	String. Length: 1 to 32 characters.	This column takes effect only when the Type field is specified as 0. The default value is the App ID of the Lvzhou application in the QQ open platform.
AppKey	The key of App ID	N/A	String. Length: 1 to 64 characters.	This column takes effect only when the Type field is specified as 0, and can only be used as plain text input and cannot return to users. The default value is the App key of the Lvzhou application in the QQ open platform.
RedirectUrl	Authentication redirect URL	N/A	String. Length: 1 to 256 characters.	This column takes effect only when the Type field is specified as 0. The default value is the callback address of the Lvzhou application in the QQ open platform.
MailProtocol	Mail authentication protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—POP3.</li> <li>2—IMAP.</li> <li>3—POP3 and IMAP.</li> </ul>	This column takes effect only when the Type field is specified as 1.
MailDomain	Mail domain	Data structure	Members include: <ul style="list-style-type: none"> <li>MailDomainName</li> </ul>	This column takes effect only when the Type field is specified as 1. MailDomainName must be set. You can specify 1 to 16

MailDomainName	Mail domain name	N/A	String. Length: 1 to 255 characters	domain names. The value of the column must be the Email domain format. For example: @qq.com.
----------------	------------------	-----	--	---

## Portal/MacServer

This table contains information about portal mac trigger servers.

### XML structure

```
<Portal>
  <MacTriggerServers>
    <MacTriggerServer>
      <Name></Name>
      <IPAddressInfo>
        <IPAddress></IPAddress>
        <VRF></VRF>
        <Key></Key>
      </IPAddressInfo>
      <Threshold></Threshold>
      <NasType></NasType>
      <MacSvrPort></MacSvrPort>
      <Detect>
        <MacSvrRetries></MacSvrRetries>
        <MacSvrRetryInterval></MacSvrRetryInterval>
      </Detect>
      <MacServerType></MacServerType>
      <Version></Version>
      <MacSvrAuthTimeOut></MacSvrAuthTimeOut>
      <AgingTime></AgingTime>
      <LocalBindingEnable></LocalBindingEnable>
      <LocalBindingAgingTime></LocalBindingAgingTime>
      <CloudBindingEnable></CloudBindingEnable>
    </MacTriggerServer>
  </MacTriggerServers>
</portal>
```

### Table description

Item	Description
Feature name	Portal

Table name	MacTriggerServers
Table type	Multi-instance table
Row name	MacTriggerServer
Restrictions	None

## Columns

Column name	Description	Column type	Data type and restrictions	Remarks
Name	Portal mac-trigger server name	Index	String, case-sensitive. Length: 1 to 32 characters.	N/A
IPAddressInfo	Portal mac-trigger server address	Data structure	Members include: IPAddress VRF	N/A
IPAddress	IP address of the portal mac-trigger server	N/A	IPv4: String, dotted decimal notation.	N/A
VRF	VRF instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	If the portal mac-trigger server is on the public network, the length of characters is 0.
Key	Shared secret	N/A	String, case-sensitive. Length: 1 to 64 characters.	The key is used for communication between the portal mac-trigger server and the device. It supports only plaintext.
Threshold	the threshold for MAC-triggered authentication	N/A	Unsigned integer. Value range: 0 to 10240000	The default free-traffic threshold is 0 bytes.
NasType	NAS-Port-Type value	N/A	Unsigned integer. Value range: 1 to 255	The default NAS-Port-Type value carried in RADIUS requests is 0.
MacSvrPort	UDP port number	N/A	Unsigned integer. Value range: 1 to 65534	The default MAC binding server listens for MAC binding query packets on UDP port 50100.
Detect	Portal Mac-trigger server detection	Data structure	Members include: <ul style="list-style-type: none"> <li>Retry</li> <li>Interval</li> </ul>	N/A
MacSvrRetries	Maximum number of portal	N/A	Unsigned integer. Value range: 1~10	The default maximum number



	Mac-trigger server detection attempts			of query attempts is 3.
MacSvrRetryInterval	Detection interval	N/A	Unsigned integer. Value range:1~60	The default maximum number of query interval is 1 second.
MacServerType	a MAC binding server type	N/A	Boolean: <ul style="list-style-type: none"> <li>0.imc</li> <li>1.cmcc</li> </ul>	The default type of a MAC binding server is IMC.
Version	Version number	N/A	Unsigned integer. Value range:1~3	The default version of the portal protocol is 1.
MacSvrAuthTimeOut	Set the timeout time the device waits for portal authentication to complete	N/A	Unsigned integer. Value range:1~15	The default portal authentication timeout time is 3 minutes.
AgingTime	Set the aging time for MAC-trigger entries	N/A	Unsigned integer. Value range:60~7200	The default aging time for MAC-trigger entries is 300 seconds.
LocalBindingEnable	enable portal MAC-Trigger local-binding	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A
LocalBindingAgingTime	the aging time for MAC-trigger local-binding entry	N/A	Unsigned integer. Value range:1~2160	N/A
CloudBindingEnable	Enable portal MAC-Trigger cloud binding	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A

## Portal/ForbiddenRule

This table contains information about portal-forbidden rules.

### XML structure

```

<Portal>
  <ForbiddenRules>
    <ForbiddenRule>
      <RuleID></RuleID>
      <IsAllotID></IsAllotID>
      <SrcIPAddr></SrcIPAddr>
      <SrcIPAddrLen></SrcIPAddrLen>
      <SrcProtocolType></SrcProtocolType>
      <SrcPortStart></SrcPortStart>
      <SrcPortEnd></SrcPortEnd>
      <DstIPAddr></DstIPAddr>
    </ForbiddenRule>
  </ForbiddenRules>
</Portal>

```

```

        <DstIPAddrLen></DstIPAddrLen>
        <DstProtocolType></DstProtocolType>
        <DstPortStart></DstPortStart>
        <DstPortEnd></DstPortEnd>
        <DstHostName></DstHostName>
        <SrcSsidName></SrcSsidName>
    </ForbiddenRule>
</ForbiddenRules>
</Portal>

```

## Table description

Item	Description
Feature name	Portal
Table name	ForbiddenRules
Table type	Multi-instance table
Row name	ForbiddenRule
Restrictions	Not support modify
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleID	Portal-forbidden rule number	Index	Non-negative integer.	N/A
IsAllotID	Whether the rule number is allocated automatically	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A
SrcIPAddr	Source IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 address example: 1.0.0.1 IPv6 address example: 2001:12::1:2
SrcIPAddrLen	Subnet mask length of the source IP address	N/A	Non-negative integer. Value range: <ul style="list-style-type: none"> <li>0 to 32 for a source IPv4 address.</li> <li>0 to 128 for a source IPv6 address.</li> </ul>	N/A
SrcProtocolType	Source protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP.</li> <li>17—UDP.</li> </ul>	When SrcProtocolType is configured, SrcPortStart and SrcPortEnd must be configured and use the same protocol type.
SrcPortStart	Start port number for the	N/A	Non-negative integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	source protocol		Value range: 0 to 65535.	
SrcPortEnd	End port number for the source protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstIPAddr	Destination IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 address example: 1.0.0.1 IPv6 address example: 2001:12::1:2
DstIPAddrLen	Subnet mask length of the destination IP address	N/A	Non-negative integer. Value range: <ul style="list-style-type: none"> <li>0 to 32 for a destination IPv4 address.</li> <li>0 to 128 for a destination IPv6 address.</li> </ul>	N/A
DstProtocolType	Destination protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP.</li> <li>17—UDP.</li> </ul>	When DstProtocolType is configured, DstPortStart and DstPortEnd must be configured and use the same protocol type.
DstPortStart	Start port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstPortEnd	End port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstHostName	Destination hostname	N/A	String. Length: 1 to 253 characters.	Case-insensitive and can contains letters, digits, hyphens(-), dots (.), underscores (_), and wildcard(*). It must not be "ip" or "ipv6" or "i" or "ipv".
SrcSsidName	Source SSID name	N/A	String. Length: 1 to 32 characters.	N/A

# Contents

Portal.....	1
Portal/PortalServers .....	1
XML structure .....	1
Table description.....	1
Columns.....	1
Portal/WebServer.....	2
XMLstructure.....	2
Table description.....	3
Columns.....	3
Portal/UriParams .....	4
XMLstructure.....	4
Table description.....	4
Columns.....	4
Portal/FreeRule .....	5
XMLstructure.....	5
Table description.....	6
Columns.....	6
Portal/Interfaces .....	8
XMLstructure.....	8
Table description.....	8
Columns.....	8
Portal/IPv4Interfaces .....	9
XMLstructure.....	9
Table description.....	10
Columns.....	10
Portal/IPv6Interfaces .....	12
XMLstructure.....	12
Table description.....	12
Columns.....	13
Portal/IPv4ServiceTemplates .....	14
XML structure .....	14
Table description.....	15
Columns.....	15
Portal/IPv6ServiceTemplates .....	17
XML structure .....	17
Table description.....	18
Columns.....	18
Portal/WebRedirects.....	19
XMLstructure.....	19
Table description.....	20
Columns.....	20
Portal/Ipv4AuthNetworks .....	21
XML structure.....	21
Table description.....	21
Columns.....	21
Portal/Ipv6AuthNetworks .....	22
XML structure.....	22
Table description.....	22
Columns.....	22
Portal/GlobalConf.....	23
XML structure.....	23
Table description.....	23
Columns.....	23
Portal/ProxyConf.....	24
XML structure.....	24
Table description.....	24
Columns.....	25

Portal/OnlineUsers .....	25
XML structure .....	25
Table description .....	26
Columns .....	26
Portal/PortalServerStats .....	27
XML structure .....	27
Table description .....	29
Columns .....	30
Portal/PortalProxyStats .....	38
XML structure .....	38
Table description .....	39
Columns .....	40
Portal/IPv4StaticRule .....	46
XML structure .....	46
Table description .....	47
Columns .....	47
Portal/IPv6StaticRule .....	48
XML structure .....	48
Table description .....	49
Columns .....	49
Portal/UserRule .....	50
XML structure .....	50
Table description .....	51
Columns .....	51
Portal/LocalWebServers .....	52
XML structure .....	52
Table description .....	52
Columns .....	52
Portal/SelfDefSsidPage .....	53
XML structure .....	53
Table description .....	53
Columns .....	53
Portal/SelfDefDevTypePage .....	53
XML structure .....	54
Table description .....	54
Columns .....	54
Portal/SelfDefPage .....	54
XML structure .....	54
Table description .....	55
Columns .....	55
Portal/ExtendAuthServers .....	55
XML structure .....	55
Table description .....	56
Columns .....	56
Portal/HistoryOnlineUserNums .....	57
XML structure .....	57
Table description .....	57
Columns .....	57
Portal/CurrentOnlineUserNums .....	58
XML structure .....	58
Table description .....	58
Columns .....	58
Portal/ObjectGroupStatistics .....	58
XML structure .....	59
Table description .....	59
Columns .....	59
Portal/MacServer .....	59
XML structure .....	59
Table description .....	60
Columns .....	60
Portal/ForbiddenRule .....	62
XML structure .....	62

Table description..... 62

Columns..... 63

# Portal

## Portal/PortalServers

### XML structure

```
<Portal>
  <PortalServers>
    <PortalServer>
      <Name></Name>
      <IPAddressInfo>
        <IPAddress></IPAddress>
        <VRF></VRF>
      </IPAddressInfo>
      <Port></Port>
      <Detect>
        <TimeOut></TimeOut>
        <Action></Action>
      </Detect>
      <UserSyncTime></UserSyncTime>
      <Status></Status>
    </PortalServer>
  </PortalServers>
</Portal>
```

### Table description

Item	Description
Table description	Portal Server information table
Table type	Multi-instance table
Feature name	Portal
Table name	PortalServers
Row name	PortalServer
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Portal server name	Index	String, case-sensitive. Length:1 to32characters.	N/A
IPAddressInfo	Portal server	Data	Members include:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	address	structure	<ul style="list-style-type: none"> <li>IPAddress</li> <li>VRF</li> </ul>	
IPAddress	IP address of the portal server	N/A	IPv4:String,dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
VRF	VRF instance name	N/A	String, case-sensitive. Length:1 to 31 characters.	N/A
Port	Port number	N/A	Value range: 1 to 65534.	N/A
Detect	Portal server detection	Data structure	Members include: <ul style="list-style-type: none"> <li>TimeOut</li> <li>Action</li> </ul>	N/A
TimeOut	Detect timeout	N/A	Value range: 10 to 3600 seconds.	N/A
Action	Action to be performed when the detection times out	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—log</li> <li>2—trap</li> <li>3—Both</li> </ul>	N/A
UserSyncTime	User synchronization time	N/A	Non-negative integer. Value range: 60 to 18000 seconds.	N/A
Status	Status of the portal server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Up</li> <li>1—Down</li> </ul>	N/A

## Portal/WebServer

### XMLstructure

```

<Portal>
  <WebServers>
    <WebServer>
      <Name></Name>
      <Url></Url>
      <Detect>
        <Interval></Interval>
        <Retry></Retry>
        <Action></Action>
      </Detect>
      <VRF></VRF>
      <CaptiveBypass></CaptiveBypass>
      <IPv4Status></IPv4Status>
      <IPv6Status></IPv6Status>
    </WebServer>
  </WebServers>
</Portal>

```



```
</WebServers>
</Portal>
```

## Table description

Item	Description
Description	Portal WebServer information table
Table type	Multi-instance table
Feature name	Portal
Table name	WebServers
Row name	WebServer

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the portal Web server	Index	String, case-sensitive. Length: 1 to 32 characters.	N/A
Url	Redirect URL	N/A	String. Length: 1 to 256 characters.	N/A
Detect	Portal Web server detection	Data structure	Members include: <ul style="list-style-type: none"> <li>Interval</li> <li>Retry</li> <li>Action</li> </ul>	N/A
Interval	Detection interval	N/A	Non-negative integer. Value range: 10 to 1200 seconds.	N/A
Retry	Maximum number of portal Web server detection attempts	N/A	Non-negative integer. Value range: 1 to 10.	N/A
Action	Action to be performed when server detection reaches the maximum number	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—log</li> <li>2—trap</li> <li>3—Both</li> </ul>	N/A
VRF	VRF instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
CaptiveBypass	Captive bypass for ios or android	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0—default</b></li> <li><b>1—enable</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—optimize enable</li> <li>5—ios enable</li> <li>6—android enable</li> </ul>	
IPv4Status	Status of the IPv4 portal Web server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Up</li> <li>1—Down</li> </ul>	N/A
IPv6Status	Status of the IPv6 portal Web server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Up</li> <li>1—Down</li> </ul>	N/A

## Portal/UrlParams

### XMLstructure

```

<Portal>
  <UrlParams>
    <UrlParam>
      <WebServerName></WebServerName>
      <ParamName></ParamName>
      <ParamType></ParamType>
      <SelfDefValue></SelfDefValue>
    </UrlParam>
  </UrlParams>
</Portal>

```

### Table description

Item	Description
Table description	Portal WebServer parameter information table
Table type	Multi-instance table
Feature name	Portal
Table name	UrlParams
Row name	UrlParam
Restrictions	There is no limit on the number of parameters carried in a Web server URL.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
WebServerName	Name of the portal Web server	Index	String, case-sensitive. Length: 1 to 32 characters.	This column configures the protocol type for the local portal Web server.

Column name	Column description	Column type	Data type and restrictions	Remarks
ParamName	Parameter name	Index	String, case-sensitive. Length: 1 to 32 characters.	This column assigns a specific SSID to the designated page file.
ParamType	Parameter type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—source-address</li> <li>1—source-mac</li> <li>2—original-url</li> <li>3—selfDefine</li> </ul>	This column assigns a specific device type to the designated page file.
SelfDefValue	Self-defined parameter	N/A	String Length: 1 to 256 characters.	N/A
WebServerName	Name of the portal Web server	Index	String, case-sensitive. Length: 1 to 32 characters.	N/A

## Portal/FreeRule

### XMLstructure

```

<Portal>
  <FreeRules>
    <FreeRule>
      <RuleID></RuleID>
      <IsAllotID></IsAllotID>
      <Description></Description>
      <Layer3>
        <SrcIPAddr></SrcIPAddr>
        <SrcIPAddrLen></SrcIPAddrLen>
        <SrcProtocolType></SrcProtocolType>
        <SrcPortStart></SrcPortStart>
        <SrcPortEnd></SrcPortEnd>
        <DstIPAddr></DstIPAddr>
        <DstIPAddrLen></DstIPAddrLen>
        <DstProtocolType></DstProtocolType>
        <DstPortStart></DstPortStart>
        <DstPortEnd></DstPortEnd>
      </Layer3>
      <Layer2>
        <SrcIfIndex></SrcIfIndex>
        <SrcVlan></SrcVlan>
        <SrcMacAddr></SrcMacAddr>
      </Layer2>
      <ObjGroupName></ObjGroupName>
      <HostName></HostName>
    </FreeRule>
  </FreeRules>
</Portal>

```

```
</FreeRules>
</Portal>
```

## Table description

Item	Description
Table description	Portal FreeRule information table
Table type	Multi-instance table
Feature name	Portal
Table name	FreeRules
Row name	FreeRule
Restrictions	Not support modify

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleID	Portal-free rule number	Index	Non-negative integer.	N/A
IsAllotID	Whether ID is allocated automatically	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true—Yes</b></li> <li><b>false—No</b></li> </ul>	N/A
Description	Description for the portal free rule	N/A	String,Length: 1 to 255 characters.	N/A
Layer3	Layer3	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPAddr</li> <li>SrcIPAddrLen</li> <li>SrcProtocolType</li> <li>SrcPortStart</li> <li>SrcPortEnd</li> <li>DstIPAddr</li> <li>DstIPAddrLen</li> <li>DstProtocolType</li> <li>DstPortStart</li> <li>DstPortEnd</li> </ul>	N/A
SrcIPAddr	Source IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
SrcIPAddrLen	Subnet mask length of the source IP address	N/A	Non-negative integer. Value range: 0 to 128.	N/A
SrcProtocolType	Source protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP</li> <li>17—UDP</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcPortStart	Start port number for the source protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
SrcPortEnd	End port number for the source protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstIPAddr	Destination IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
DstIPAddrLen	Subnet mask of the destination IP address	N/A	Non-negative integer. Value range: 0 to 128.	N/A
DstProtocolType	Destination protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP</li> <li>17—UDP</li> </ul>	N/A
DstPortStart	Start port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstPortEnd	End port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
Layer2	Layer2	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIfIndex</li> <li>SrcVlan</li> <li>SrcMacAddr</li> </ul>	N/A
SrcIfIndex	Source interface index	N/A	Source interface index.	N/A
SrcVlan	Source VLAN	N/A	Non-negative integer. Value range: 1 to 4094.	N/A
SrcMacAddr	Source MAC address	N/A	MAC address in the HH-HH-HH-HH-HH-HH format.	N/A
ObjGroupName	Source object group	N/A	String, Length: 1 to 31 characters.	N/A
HostName	Host name	N/A	String. Length: 1 to 253 characters.	N/A

# Portal/Interfaces

## XMLstructure

```
<Portal>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <AuthorationCheck>
        <Userprofile></Userprofile>
        <Acl></Acl>
      </AuthorationCheck>
      <VsrpInStance></VsrpInStance>
      <VsrpStatus></VsrpStatus>
    </Interface>
  </Interfaces>
</Portal>
```

## Table description

Item	Description
Table description	Portal interface information table
Table type	Muti-instance table
Feature name	Portal
Table name	Interfaces
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Non-negative integer.	N/A
AuthorationCheck	AuthorationCheck	Data structure	Members include: <ul style="list-style-type: none"><li>Userprofile</li><li>Acl</li></ul>	N/A
Userprofile	Whether strict check is enabled for the authorized user profile	N/A	Boolean: <ul style="list-style-type: none"><li>true—Yes</li><li>false—No</li></ul>	N/A
Acl	Whether strict check is enabled for the authorized ACL	N/A	Boolean: <ul style="list-style-type: none"><li>true—Yes</li><li>false—No</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
VsrpInStance	VSRP instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
VsrpStatus	VSRP status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Master</li> <li>2—Backup</li> <li>3—Down</li> <li>4—BUTT</li> </ul>	N/A

## Portal/IPv4Interfaces

### XMLstructure

```

<Portal>
  <IPv4Interfaces>
    <IPv4Interface>
      <IfIndex></IfIndex>
      <OnlineUserNum></OnlineUserNum>
      <Method></Method>
      <WebServer>
        <WebServerName></WebServerName>
        <EscapeEnable></EscapeEnable>
      </WebServer>
      <Domain></Domain>
      <MaxUser></MaxUser>
      <BasIP></BasIP>
      <EscapeSvrName></EscapeSvrName>
      <PreAuthPoolName></PreAuthPoolName>
      <UserDetect>
        <UserDetectType></UserDetectType>
        <UserDetectIdleTime></UserDetectIdleTime>
        <UserDetectInterval></UserDetectInterval>
        <UserDetectRetry></UserDetectRetry>
      </UserDetect>
      <TempPass>
        <TempPassEnable></TempPassEnable>
        <TempPassPeriod></TempPassPeriod>
      </TempPass>
      <MacSvrName></MacSvrName>
      <PreAuthPolicy></PreAuthPolicy>
    </IPv4Interface>
  </IPv4Interfaces>
</Portal>

```

## Table description

Item	Description
Table description	Portal IPv4 interface information table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv4Interfaces
Row name	IPv4Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Non-negative integer.	N/A
OnlineUserNum	IPv4 online users	N/A	Value range: 0 to $2^{32} - 1$ .	N/A
Method	IPv4 authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Direct</li> <li>1—Layer3</li> <li>2—Redhcp</li> </ul>	N/A
WebServer	WebServer	Data structure	Members include: <ul style="list-style-type: none"> <li>WebServerName</li> <li>EscapeEnable</li> </ul>	N/A
WebServerName	Name of the IPv4 portal Web server	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
EscapeEnable	Whether the fail-permit feature is enabled for the IPv4 portal Web server	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A
Domain	IPv4 authentication domain	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
MaxUser	Maximum number of IPv4 users on the interface	N/A	Non-negative integer. Value range: 1 to 4294967295.	N/A
Ipv4BasIP	BAS-IP attribute specified for IPv4 user authentication	N/A	IPv4: String, dotted decimal notation.	N/A
EscapeSvrName	Name of the IPv4 portal server with the	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	fail-permit feature enabled			
PreAuthPoolName	Name of the IPv4 preauthentication user pool	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
UserDetect		Data structure	Members include: <ul style="list-style-type: none"> <li>UserDetectType</li> <li>UserDetectIdleTime</li> <li>UserDetectInterval</li> <li>UserDetectRetry</li> </ul>	N/A
UserDetectType	IPv4 user detection type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—ARP</li> <li>2—ICMP</li> </ul>	N/A
UserDetectIdleTime	IPv4 user detection idle time	N/A	Non-negative integer. Value range: 60 to 3600 seconds.	N/A
UserDetectInterval	IPv4 user detection interval	N/A	Non-negative integer. Value range: 1 to 1200 seconds.	N/A
UserDetectRetry	Number of IPv4 user detection attempts	N/A	Non-negative integer. Value range: 1 to 10.	N/A
ExtendAuthDomain	IPv4 extended authentication domain	N/A	String. Length: 1 to 255 characters.	N/A
TempPass	TempPass feature that temporarily permits Internet access	Data structure	Members include: <ul style="list-style-type: none"> <li>TempPassEnable</li> <li>TempPassPeriod</li> </ul>	N/A
TempPassEnable	TempPass status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> </ul>	N/A
TempPassPeriod	Time interval during which Internet access is permitted	N/A	Unsigned integer. Value range: 10 to 180 seconds. Default: 30 seconds.	N/A
MacSvrName	IPv4 Mactrigger server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
PreAuthPolicy	IPv4 Pre-Auth policy name	N/A	String, case-sensitive. Length: 1 to 255 characters.	N/A

# Portal/IPv6Interfaces

## XMLstructure

```
<Portal>
  <IPv6Interfaces>
    <IPv6Interface>
      <IfIndex></IfIndex>
      <OnlineUserNum></OnlineUserNum>
      <Method></Method>
      <WebServer>
        <WebServerName></WebServerName>
        <EscapeEnable></EscapeEnable>
      </WebServer>
      <Domain></Domain>
      <MaxUser></MaxUser>
      <BasIP></BasIP>
      <EscapeSvrName></EscapeSvrName>
      <PreAuthPoolName></PreAuthPoolName>
      <UserDetect>
        <UserDetectType></UserDetectType>
        <UserDetectIdleTime></UserDetectIdleTime>
        <UserDetectInterval></UserDetectInterval>
        <UserDetectRetry></UserDetectRetry>
      </UserDetect>
      <TempPass>
        <TempPassEnable></TempPassEnable>
        <TempPassPeriod></TempPassPeriod>
      </TempPass>
      <MacSvrName></MacSvrName>
      <PreAuthPolicy></PreAuthPolicy>
    </IPv6Interface>
  </IPv6Interfaces>
</Portal>
```

## Table description

Item	Description
Table description	Portal IPv6 interface information table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv6Interfaces
Row name	IPv6Interface
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Non-negative integer.	N/A
OnlineUserNum	Number of IPv6 online users	N/A	Value range: 0 to $2^{32} - 1$ .	N/A
Method	IPv6 authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Direct</li> <li>1—Layer3</li> </ul>	N/A
WebServer	WebServer	Data structure	Members include: <ul style="list-style-type: none"> <li>WebServerName</li> <li>EscapeEnable</li> </ul>	N/A
WebServerName	IPv6 Web server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
EscapeEnable	Whether the fail-permit feature is enabled for the IPv6 Web server	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A
Domain	IPv6 authentication domain	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
MaxUser	Maximum number of IPv6 users on the interface	N/A	Non-negative integer. Value range: 1 to 4294967295.	N/A
BasIP	BAS-IP attribute specified for IPv6 user authentication	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
EscapeSvrName	Name of the fail-permit enabled IPv6 portal server	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
PreAuthPoolName	Name of the IPv6 preauthentication user pool	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
UserDetect	UserDetect	Data structure	Members include: <ul style="list-style-type: none"> <li>UserDetectType</li> <li>UserDetectIdleTime</li> <li>UserDetectInterval</li> <li>UserDetectRetry</li> </ul>	N/A
UserDetectType	IPv6 user detection type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—ND</li> <li>3—ICMPv6</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
UserDetectIdleTime	IPv6 user detection idle time	N/A	Non-negative integer. Value range: 60 to 3600 seconds.	N/A
UserDetectInterval	IPv6 user detection interval	N/A	Non-negative integer. Value range: 1 to 1200 seconds.	N/A
UserDetectRetry	Number of IPv6 user detection attempts	N/A	Non-negative integer. Value range: 1 to 10.	N/A
ExtendAuthDomain	IPv6 extended authentication domain	N/A	String. Length: 1 to 255 characters.	N/A
TempPass	TempPass feature that temporarily permits Internet access	Data structure	Members include: <ul style="list-style-type: none"> <li>TempPassEnable</li> <li>TempPassPeriod</li> </ul>	N/A
TempPassEnable	TempPass status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> </ul>	N/A
TempPassPeriod	Time interval during which Internet access is permitted	N/A	Unsigned integer. Value range: 10 to 180 seconds. Default: 30 seconds.	N/A
MacSvrName	IPv6 Mactrigger server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
PreAuthPolicy	IPv6 Pre-Auth policy name	N/A	String, case-sensitive. Length: 1 to 255 characters.	N/A

## Portal/IPv4ServiceTemplates

This table contains portal IPv4 service template information.

### XML structure

```

<Portal>
  <IPv4ServiceTemplates>
    <IPv4ServiceTemplate>
      <Name></Name>
      <Method></Method>
      <WebServer>
        <WebServerName></WebServerName>
        <EscapeEnable></EscapeEnable>
      </WebServer>
    </IPv4ServiceTemplate>
  </IPv4ServiceTemplates>
</Portal>

```

```

</WebServer>
<Domain></Domain>
<MaxUser></MaxUser>
<BasIP></BasIP>
<EscapeSvrName></EscapeSvrName>
<UserDetect>
  <UserDetectType></UserDetectType>
  <UserDetectIdleTime></UserDetectIdleTime>
  <UserDetectInterval></UserDetectInterval>
  <UserDetectRetry></UserDetectRetry>
</UserDetect>
<TempPass>
  <TempPassEnable></TempPassEnable>
  <TempPassPeriod></TempPassPeriod>
</TempPass>
<MacSvrName></MacSvrName>
<ExtendAuthDomain></ExtendAuthDomain>
</IPv4ServiceTemplate>
</IPv4ServiceTemplates>
</Portal>

```

## Table description

Item	Description
Feature name	Portal
Table name	IPv4ServiceTemplates
Table type	Multi-instance table
Row name	IPv4ServiceTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Service template name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
Method	IPv4 portal authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Direct</li> </ul>	N/A
WebServer	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>WebServerName</li> <li>EscapeEnable</li> </ul>	N/A
WebServerName	IPv4 portal Web server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
EscapeEnable	Enable the fail-permit feature for the IPv4 portal Web server	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
Domain	IPv4 authentication domain	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
MaxUser	Maximum number of IPv4 users	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
BasIP	BAS-IP attribute specified for IPv4 user authentication	N/A	IPv4: String, dotted decimal notation.	N/A
EscapeSvrName	Name of the IPv4 portal server with the fail-permit feature enabled	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
UserDetect	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>UserDetectType</li> <li>UserDetectIdleTime</li> <li>UserDetectInterval</li> <li>UserDetectRetry</li> </ul>	N/A
UserDetectType	IPv4 user detection type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—ARP</li> <li>2—ICMP</li> </ul>	N/A
UserDetectIdleTime	IPv4 user detection idle time	N/A	Unsigned integer. Value range: 60 to 3600 seconds. Default: 180 seconds.	N/A
UserDetectInterval	IPv4 user detection time interval	N/A	Unsigned integer. Value range: 1 to 1200 seconds. Default: 3 seconds.	N/A
UserDetectRetry	Number of IPv4 user detection attempts	N/A	Unsigned integer. Value range: 1 to 10. Default: 3.	N/A
ExtendAuthDomain	IPv4 extended authentication domain	N/A	String. Length: 1 to 255 characters.	N/A
TempPass	TempPass feature that temporarily permits Internet access	Data structure	Members include: <ul style="list-style-type: none"> <li>TempPassEnable</li> <li>TempPassPeriod</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TempPassEnable	TempPass status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> </ul>	N/A
TempPassPeriod	Time interval during which Internet access is permitted	N/A	Unsigned integer. Value range: 10 to 180 seconds. Default: 30 seconds.	N/A
MacSvrName	IPv4 Mactrigger server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A

## Portal/IPv6ServiceTemplates

This table contains portal IPv6 service template information.

### XML structure

```

<Portal>
  <IPv6ServiceTemplates>
    <IPv6ServiceTemplate>
      <Name></Name>
      <Method></Method>
      <WebServer>
        <WebServerName></WebServerName>
        <EscapeEnable></EscapeEnable>
      </WebServer>
      <Domain></Domain>
      <MaxUser></MaxUser>
      <BasIP></BasIP>
      <EscapeSvrName></EscapeSvrName>
      <UserDetect>
        <UserDetectType></UserDetectType>
        <UserDetectIdleTime></UserDetectIdleTime>
        <UserDetectInterval></UserDetectInterval>
        <UserDetectRetry></UserDetectRetry>
      </UserDetect>
      <TempPass>
        <TempPassEnable></TempPassEnable>
        <TempPassPeriod></TempPassPeriod>
      </TempPass>
      <MacSvrName></MacSvrName>
      <ExtendAuthDomain></ExtendAuthDomain>
    </IPv6ServiceTemplate>
  </IPv6ServiceTemplates>
</Portal>

```

## Table description

Item	Description
Feature name	Portal
Table name	IPv6ServiceTemplates
Table type	Multi-instance table
Row name	IPv6ServiceTemplate
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Service template name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
Method	IPv6 portal authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Direct</li> </ul>	N/A
WebServer	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>WebServerName</li> <li>EscapeEnable</li> </ul>	N/A
WebServerName	IPv6 portal Web server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
EscapeEnable	Enable the fail-permit feature for the IPv6 portal Web server	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
Domain	IPv6 authentication domain	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
MaxUser	Maximum number of IPv6 users	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
BasIP	BAS-IP attribute specified for IPv6 user authentication	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
EscapeSvrName	Name of the fail-permit enabled IPv6 portal server	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
UserDetect	N/A	Data structure	Members include: <ul style="list-style-type: none"> <li>UserDetectType</li> <li>UserDetectIdleTime</li> <li>UserDetectInterval</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>UserDetectRetry</li> </ul>	
UserDetectType	IPv6 user detection type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—ND</li> <li>3—ICMPv6</li> </ul>	N/A
UserDetectIdleTime	IPv6 user detection idle time	N/A	Unsigned integer. Value range: 60 to 3600 seconds. Default: 180 seconds.	N/A
UserDetectInterval	IPv6 user detection time interval	N/A	Unsigned integer. Value range: 1 to 1200 seconds. Default: 3 seconds.	N/A
UserDetectRetry	Number of IPv6 user detection attempts	N/A	Unsigned integer. Value range: 1 to 10. Default: 3.	N/A
ExtendAuthDomain	IPv6 extended authentication domain	N/A	String. Length: 1 to 255 characters.	N/A
TempPass	TempPass feature that temporarily permits Internet access	Data structure	Members include: <ul style="list-style-type: none"> <li>TempPassEnable</li> <li>TempPassPeriod</li> </ul>	N/A
TempPassEnable	TempPass status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable</li> <li>1—Enable</li> </ul>	N/A
TempPassPeriod	Time interval during which Internet access is permitted	N/A	Unsigned integer. Value range: 10 to 180 seconds. Default: 30 seconds.	N/A
MacSvrName	IPv6 Mactrigger server name	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A

## Portal/WebRedirects

### XMLstructure

```

<Portal>
  <WebRedirects>
    <WebRedirect>
      <IfIndex></IfIndex>
      <IPv4WebRedirect>
        <IPv4WebRedirectUrl></IPv4WebRedirectUrl>
      </IPv4WebRedirect>
    </WebRedirect>
  </WebRedirects>
</Portal>

```

```

        <IPv4WebRedirectInterVal></IPv4WebRedirectInterVal>
    </IPv4WebRedirect>
    <IPv6WebRedirect>
        <IPv6WebRedirectUrl></IPv6WebRedirectUrl>
        <IPv6WebRedirectInterVal></IPv6WebRedirectInterVal>
    </IPv6WebRedirect>
</WebRedirect>
</WebRedirects>
</Portal>

```

## Table description

Item	Description
Table description	Portal WebRedirects information table
Table type	Multi-instance table
Feature name	Portal
Table name	WebRedirects
Row name	WebRedirect
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Non-negative integer.	N/A
IPv4WebRedirect	IPv4WebRedirect	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4WebRedirectUrl</li> <li>IPv4WebRedirectInterVal</li> </ul>	N/A
IPv4WebRedirectUrl	Redirect URL for IPv4 users	N/A	String, case-sensitive. Length: 1 to 256 characters.	N/A
IPv4WebRedirectInterVal	URL redirect intervals for IPv4 users	N/A	Non-negative integer. Value range: 60 to 86400 seconds.	N/A
IPv6WebRedirect	IPv6WebRedirect	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv6WebRedirectUrl</li> <li>IPv6WebRedirectInterVal</li> </ul>	N/A
IPv6WebRedirectUrl	Redirect URL for IPv6 users	N/A	String, case-sensitive. Length: 1 to 256 characters.	N/A
IPv6WebRedirectInterVal	URL redirect interval for IPv6 users	N/A	Non-negative integer. Value range: 60 to 86400 seconds.	N/A

# Portal/Ipv4AuthNetworks

## XML structure

```
<Portal>
  <IPv4AuthNetWorks>
    <IPv4AuthNetWork>
      <IfIndex></IfIndex>
      <SrcAuthAddr></SrcAuthAddr>
      <SrcAuthMask></SrcAuthMask>
      <DstAuthAddr></DstAuthAddr>
      <DstAuthMask></DstAuthMask>
    </IPv4AuthNetWork>
  </IPv4AuthNetWorks>
</Portal>
```

## Table description

Item	Description
Table description	Portal IPv4 authentication-network table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv4AuthNetWorks
Row name	IPv4AuthNetWork
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Non-negative integer.	N/A
SrcAuthAddr	Source authentication network address for IPv4 users	Index	IPv4: String, dotted decimal notation.	N/A
SrcAuthMask	Subnet mask length of the source authentication network for IPv4 users	N/A	Non-negative integer. Value range: 1 to 32.	N/A
DstAuthAddr	Destination authentication network address for IPv4 users	N/A	IPv4: String, dotted decimal notation.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DstAuthMask	Subnet mask length of the destination authentication network for IPv4 users	N/A	Non-negative integer. Value range: 1 to 32.	N/A

## Portal/Ipv6AuthNetworks

### XML structure

```

<Portal>
  <IPv6AuthNetWorks>
    <IPv6AuthNetWork>
      <IfIndex></IfIndex>
      <SrcAuthAddr></SrcAuthAddr>
      <SrcAuthPrefix></SrcAuthPrefix>
      <DstAuthAddr></DstAuthAddr>
      <DstAuthPrefix></DstAuthPrefix>
    </IPv6AuthNetWork>
  </IPv6AuthNetWorks>
</Portal>

```

### Table description

Item	Description
Table description	Portal IPv6 authentication-network table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv6AuthNetWorks
Row name	IPv6AuthNetWork
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	index	Non-negative integer.	N/A
SrcAuthAddr	Source authentication network address for IPv6 users	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
SrcAuthPrefix	Prefix length	N/A	Non-negative integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	of the source authentication network for IPv6 users		Value range: 1 to 128.	
DstAuthAddr	Destination authentication network address for IPv6 users	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
DstAuthPrefix	Prefix length of the destination authentication network for IPv6 users	N/A	Non-negative integer. Value range: 1 to 128.	N/A

## Portal/GlobalConf

### XML structure

```

<Portal>
  <GlobalConf>
    <RoamEnable></RoamEnable>
    <NasPortIdFormat></NasPortIdFormat>
    <VsrpPort></VsrpPort>
    <MaxUser></MaxUser>
    <ClientGatewayIfIndex></ClientGatewayIfIndex>
    <CaptiveOptDelay></CaptiveOptDelay>
  </GlobalConf>
</Portal>

```

### Table description

Item	Description
Table description	PortalGlobalConf information table
Table type	Single-instance table
Feature name	Portal
Table name	GlobalConf
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoamEnable	Whether the	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	portal roaming feature is enabled		<ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	
NasPortIdFormat	Format of the NAS-Port-ID attribute	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Format1</li> <li>2—Format2</li> </ul>	N/A
VsrpPort	TCP port for portal backup	N/A	Non-negative integer. Value range: 1 to 65535.	N/A
MaxUser	Maximum number of users on the device	N/A	Non-negative integer. The value range depends on the device model.	N/A
ClientGatewayIndex	Index of the gateway interface for clients to access the AC	N/A	Non-negative integer.	N/A
CaptiveOptDelay	The timeout time for optimized	N/A	Non-negative integer. Value range: 6 to 60 seconds.	N/A

## Portal/ProxyConf

### XML structure

```

<Portal>
  <ProxyConf>
    <Enable></Enable>
    <SourceIP></SourceIP>
    <PortalServerPort></PortalServerPort>
    <MacTriggerServerIP></MacTriggerServerIP>
    <MacTriggerServerPort></MacTriggerServerPort>
  </ProxyConf>
</Portal>

```

### Table description

Item	Description
Table description	Portal proxy configuration table
Table type	Single-instance table
Feature name	Portal
Table name	ProxyConf
Row name	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enable the portal proxy feature	N/A		N/A
SourceIP	Source IP address	N/A	IPv4: String, dotted decimal notation.	This column specifies the source address for the packets actively sent to the server. The IP address of the output interface is used if not specified.
PortalServerPort	Destination port	N/A	Non-negative integer. Value range: 1 to 65535.	This column specifies the destination port on the device. The default port is 2000.
MacTriggerServerIP	IP address of the MAC binding server	N/A	IPv4: String, dotted decimal notation.	By default, the device does not specify the IP address and port number of the MAC binding server.
MacTriggerServerPort	Port number of the MAC binding server	N/A	Non-negative integer. Value range: 1 to 65535.	The default port number is 50100.

## Portal/OnlineUsers

### XML structure

```

<Portal>
  <OnlineUsers>
    <OnlineUser>
      <IfIndex></IfIndex>
      <IPAddress></IPAddress>
      <UserName></UserName>
      <MacAddress></MacAddress>
      <VLAN></VLAN>
      <VRF></VRF>
      <ServerName></ServerName>
      <LoginTime></LoginTime>
      <OnlineDuration></OnlineDuration>
      <FlowStats>
        <SendPktNum></SendPktNum>
        <SendByteNum></SendByteNum>
        <RecvPktNum></RecvPktNum>
        <RecvByteNum></RecvByteNum>
      </FlowStats>
      <ObjectGroup></ObjectGroup>
      <InboundFlowRate></InboundFlowRate>
      <OutboundFlowRate></OutboundFlowRate>
    </OnlineUser>
  </OnlineUsers>
</Portal>

```

```

        <AccessSwitch></AccessSwitch>
    </OnlineUser>
</OnlineUsers>
</Portal>

```

## Table description

Item	Description
Feature name	Portal
Table name	OnlineUsers
Table type	Multi-instance table
Row name	OnlineUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	IfIndex.	Index	Non-negative integer.	N/A
IPAddress	IP address of the user.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
UserName	User name.	N/A	String. Length: 1 to 253 characters.	N/A
MacAddress	MAC address of the user.	N/A	MAC address in the HH-HH-HH-HH-HH-HH format.	N/A
VLAN	VLAN where the user resides.	N/A	Value range: 1 to 4049.	N/A
VRF	MPLS L3VPN where the users resides.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
ServerName	Name of the portal server.	N/A	String, case-sensitive. Length: 1 to 32 characters.	N/A
LoginTime	Time when the user logged in	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
OnlineDuration	User online duration.	N/A	Non-negative integer. The unit is second.	N/A
FlowStats	Flow statistics for the user.	Data structure	Members include: <ul style="list-style-type: none"> <li>SendPktNum</li> <li>SendByteNum</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>RecvPktNum</li> <li>RecvByteNum</li> </ul>	
SendPktNum	Number of packets sent by the user.	N/A	Value range: 0 to $2^{64}-1$ .	N/A
SendByteNum	Number of bytes sent by the user.	N/A	Value range: 0 to $2^{64}-1$ .	N/A
RecvPktNum	Number of packets received by the user.	N/A	Value range: 0 to $2^{64}-1$ .	N/A
RecvByteNum	Number of bytes received by the user.	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ObjectGroup	Users belong to the group of object.	N/A	String. Length: 1 to 31 characters.	N/A
InboundFlowRate	Inbound Real time rate.	N/A	Value range: 0 to $2^{64}-1$ .	bytes per second
OutboundFlowRate	Outbound Real time rate.	N/A	Value range: 0 to $2^{64}-1$ .	bytes per second
AccessSwitch	Whether the user can access the network.	N/A	Boolean: <ul style="list-style-type: none"> <li>false—OFF</li> <li>true—ON</li> </ul>	N/A

## Portal/PortalServerStats

### XML structure

```

<Portal>
  <PortalServerStats>
    <Name></Name>
    <InvalidPkts></InvalidPkts>
    <ReqChallenge>
      <ReqChallengeTotal><ReqChallengeTotal>
      <ReqChallengeDrop></ReqChallengeDrop>
      <ReqChallengeError></ReqChallengeError>
    </ReqChallenge>
    <AckChallenge>
      <AckChallengeTotal></AckChallengeTotal>
      <AckChallengeDrop></AckChallengeDrop>
      <AckChallengeError></AckChallengeError>
    </AckChallenge>
    <ReqAuth>
      <ReqAuthTotal></ReqAuthTotal>
      <ReqAuthDrop></ReqAuthDrop>

```

```

    <ReqAuthError></ReqAuthError>
</ReqAuth>
<AckAuth>
    <AckAuthTotal></AckAuthTotal>
    <AckAuthDrop></AckAuthDrop>
    <AckAuthError></AckAuthError>
</AckAuth>
<ReqLogout>
    <ReqLogoutTotal></ReqLogoutTotal>
    <ReqLogoutDrop></ReqLogoutDrop>
    <ReqLogoutError></ReqLogoutError>
</ReqLogout>
<AckLogout>
    <AckLogoutTotal></AckLogoutTotal>
    <AckLogoutDrop></AckLogoutDrop>
    <AckLogoutError></AckLogoutError>
</AckLogout>
<AffAckAuth>
    <AffAckAuthTotal></AffAckAuthTotal>
    <AffAckAuthDrop></AffAckAuthDrop>
    <AffAckAuthError></AffAckAuthError>
</AffAckAuth>
<NtfLogout>
    <NtfLogoutTotal></NtfLogoutTotal>
    <NtfLogoutDrop></NtfLogoutDrop>
    <NtfLogoutError></NtfLogoutError>
</NtfLogout>
<ReqInfo>
    <ReqInfoTotal></ReqInfoTotal>
    <ReqInfoDrop></ReqInfoDrop>
    <ReqInfoError></ReqInfoError>
</ReqInfo>
<AckInfo>
    <AckInfoTotal></AckInfoTotal>
    <AckInfoDrop></AckInfoDrop>
    <AckInfoError></AckInfoError>
</AckInfo>
<NtfUserDisCover>
    <NtfUserDisCoverTotal></NtfUserDisCoverTotal>
    <NtfUserDisCoverDrop></NtfUserDisCoverDrop>
    <NtfUserDisCoverError></NtfUserDisCoverError>
</NtfUserDisCover>
<NtfUserIpChange>
    <NtfUserIpChangeTotal></NtfUserIpChangeTotal>
    <NtfUserIpChangeDrop></NtfUserIpChangeDrop>
    <NtfUserIpChangeError></NtfUserIpChangeError>
</NtfUserIpChange>
<AffNtfUserIpChange>

```

```

    <AffNtfUserIpChangeTotal></AffNtfUserIpChangeTotal>
    <AffNtfUserIpChangeDrop></AffNtfUserIpChangeDrop>
    <AffNtfUserIpChangeError></AffNtfUserIpChangeError>
  </AffNtfUserIpChange>
  <AckNtfLogout>
    <AckNtfLogoutTotal></AckNtfLogoutTotal>
    <AckNtfLogoutDrop></AckNtfLogoutDrop>
    <AckNtfLogoutError></AckNtfLogoutError>
  </AckNtfLogout>
  <NtfHeartBeat>
    <NtfHeartBeatTotal></NtfHeartBeatTotal>
    <NtfHeartBeatDrop></NtfHeartBeatDrop>
    <NtfHeartBeatError></NtfHeartBeatError>
  </NtfHeartBeat>
  <NtfUserHeartBeat>
    <NtfUserHeartBeatTotal></NtfUserHeartBeatTotal>
    <NtfUserHeartBeatDrop></NtfUserHeartBeatDrop>
    <NtfUserHeartBeatError></NtfUserHeartBeatError>
  </NtfUserHeartBeat>
  <AckNtfUserHeartBeat>
    <AckNtfUserHeartBeatTotal></AckNtfUserHeartBeatTotal>
    <AckNtfUserHeartBeatDrop></AckNtfUserHeartBeatDrop>
    <AckNtfUserHeartBeatError></AckNtfUserHeartBeatError>
  </AckNtfUserHeartBeat>
  <NtfChallenge>
    <NtfChallengeTotal></NtfChallengeTotal>
    <NtfChallengeDrop></NtfChallengeDrop>
    <NtfChallengeError></NtfChallengeError>
  </NtfChallenge>
  <NtfUserNotify>
    <NtfUserNotifyTotal></NtfUserNotifyTotal>
    <NtfUserNotifyDrop></NtfUserNotifyDrop>
    <NtfUserNotifyError></NtfUserNotifyError>
  </NtfUserNotify>
  <AffNtfUserNotify>
    <AffNtfUserNotifyTotal></AffNtfUserNotifyTotal>
    <AffNtfUserNotifyDrop></AffNtfUserNotifyDrop>
    <AffNtfUserNotifyError></AffNtfUserNotifyError>
  </AffNtfUserNotify>
</PortalServerStats>
</Portal>

```

## Table description

Item	Description
Table description	Portal Server packets statistics table
Table type	Multi-instance table

Feature name	Portal
Table name	PortalServerStats
Row name	Name
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the portal server	Index	String. Length: 1 to 32 characters.	N/A
InvalidPkts	Number of invalid packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqChallenge	Challenge request packet the portal server sent to the device	Data structure		N/A
ReqChallengeTotal	Total number of challenge request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqChallengeDrop	Number of dropped challenge request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqChallengeError	Number of erroneous challenge request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckChallenge	Challenge acknowledgment packet the device sent to the portal server	N/A		N/A
AckChallengeTotal	Total number of challenge acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckChallengeDrop	Number of dropped challenge acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckChallengeError	Number of erroneous challenge acknowledgment	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	ent packets			
ReqAuth	Authentication request packet the portal server sent to the device	N/A		N/A
ReqAuthTotal	Total number of Authentication request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqAuthDrop	Number of dropped authentication request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqAuthError	Number of erroneous authentication request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckAuth	Authentication acknowledgment packet the device sent to the portal server	N/A		N/A
AckAuthTotal	Total number of authentication acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckAuthDrop	Number of dropped authentication acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckAuthError	Number of erroneous authentication acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqLogout	Logout request packet the portal server sent to the device.	N/A		N/A
ReqLogoutTotal	Total number of logout request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqLogoutDrop	Number of dropped logout request	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	packets			
ReqLogoutError	Number of erroneous logout request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckLogout	Logout acknowledgment packet the device sent to the portal server	N/A		N/A
AckLogoutTotal	Total number of logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckLogoutDrop	Number of dropped logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckLogoutError	Number of erroneous logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffAckAuth	Affirmation packet the portal server sent to the device after receiving an authentication acknowledgment packet.	N/A		N/A
AffAckAuthTotal	Total number of affirmation packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffAckAuthDrop	Number of dropped affirmation packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffAckAuthError	Number of erroneous affirmation packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfLogout	Forced logout notification packet the device sent to the portal server	N/A		N/A
NtfLogoutTotal	Total number of forced logout notification	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	packets			
NtfLogoutDrop	Number of dropped forced logout notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfLogoutError	Number of erroneous forced logout notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqInfo	Information request packet	N/A		N/A
ReqInfoTotal	Total number of information request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqInfoDrop	Number of dropped information request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqInfoError	Number of erroneous information request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckInfo	Information acknowledgment packet	N/A		N/A
AckInfoTotal	Total number of information acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckInfoDrop	Number of dropped information acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckInfoError	Number of erroneous information acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfUserDiscovery	User discovery notification packet the portal server sent to the device	N/A		N/A
NtfUserDiscoveryTotal	Total number of user discovery	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	notification packets			
NtfUserDiscoveryDrop	Number of dropped user discovery notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfUserDiscoveryError	Number of erroneous user discovery notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfUserIpChange	User IP change notification packet the device sent to the portal server	N/A		N/A
NtfUserIpChangeTotal	Total number of user IP change notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfUserIpChangeDrop	Number of dropped user IP change notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfUserIpChangeError	Number of erroneous user IP change notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffNtfUserIpChange	User IP change success notification packet the portal server sent to the device	N/A		N/A
AffNtfUserIpChangeTotal	Total number of user IP change success notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffNtfUserIpChangeDrop	Number of dropped user IP change success notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffNtfUserIpChange	Number of	N/A	Value range: 0 to $2^{64}-1$ .	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
ngeError	erroneous user IP change success notification packets			
AckNtfLogout	Forced logout acknowledgment packet the portal server sent to the device	N/A		N/A
AckNtfLogoutTotal	Total number of forced logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckNtfLogoutDrop	Number of dropped forced logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckNtfLogoutError	Number of erroneous forced logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfHeartBeat	Server heartbeat packet the portal server periodically sent to the device	N/A		N/A
NtfHeartBeatTotal	Total number of server heartbeat packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfHeartBeatDrop	Number of dropped server heartbeat packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfHeartBeatError	Number of erroneous server heartbeat packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfUserHeartBeat	User synchronization packet the portal server sent to the device	N/A		N/A
NtfUserHeartBeatTotal	Total number of user	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	synchronization packets			
NtfUserHeartBeatDrop	Number of dropped user synchronization packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfUserHeartBeatError	Number of erroneous user synchronization packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckNtfUserHeartBeat	User synchronization acknowledgment packet the device sent to the portal server	N/A		N/A
AckNtfUserHeartBeatTotal	Total number of user synchronization acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckNtfUserHeartBeatDrop	Number of dropped user synchronization acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckNtfUserHeartBeatError	Number of erroneous user synchronization acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfChallenge	Challenge request packet the device sent to the portal server	N/A		N/A
NtfChallengeTotal	Total number of challenge request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfChallengeDrop	Number of dropped challenge request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfChallengeError	Number of erroneous challenge	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	request packets			
NtfUserNotify	User information notification packet the device sent to the portal server	N/A		N/A
NtfUserNotifyTotal	Total number of user information notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfUserNotifyDrop	Number of dropped user information notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfUserNotifyError	Number of erroneous user information notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffNtfUserNotify	NTF_USER_NOTIFY acknowledgment packet the portal server sent to the device	N/A		N/A
AffNtfUserNotifyTotal	Total number of NTF_USER_NOTIFY acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffNtfUserNotifyDrop	Number of dropped NTF_USER_NOTIFY acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffNtfUserNotifyError	Number of erroneous NTF_USER_NOTIFY acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A

# Portal/PortalProxyStats

## XML structure

```
<Portal>
  <PortalProxyStats>
    <Status></Status>
    <InvalidPkts></InvalidPkts>
    <ReqInfo>
      <ReqInfoReceived></ReqInfoReceived>
      <ReqInfoDrop></ReqInfoDrop>
      <ReqInfoError></ReqInfoError>
    </ReqInfo>
    <AckInfo>
      <AckInfoReceived></AckInfoReceived>
      <AckInfoDrop></AckInfoDrop>
      <AckInfoError></AckInfoError>
    </AckInfo>
    <ReqChallenge>
      <ReqChallengeReceived><ReqChallengeReceived>
      <ReqChallengeDrop></ReqChallengeDrop>
      <ReqChallengeError></ReqChallengeError>
    </ReqChallenge>
    <AckChallenge>
      <AckChallengeReceived></AckChallengeReceived>
      <AckChallengeDrop></AckChallengeDrop>
      <AckChallengeError></AckChallengeError>
    </AckChallenge>
    <ReqAuth>
      <ReqAuthReceived></ReqAuthReceived>
      <ReqAuthDrop></ReqAuthDrop>
      <ReqAuthError></ReqAuthError>
    </ReqAuth>
    <AckAuth>
      <AckAuthReceived></AckAuthReceived>
      <AckAuthDrop></AckAuthDrop>
      <AckAuthError></AckAuthError>
    </AckAuth>
    <AffAckAuth>
      <AffAckAuthTotal></AffAckAuthTotal>
      <AffAckAuthDrop></AffAckAuthDrop>
      <AffAckAuthError></AffAckAuthError>
    </AffAckAuth>
    <ReqLogout>
      <ReqLogoutReceived></ReqLogoutReceived>
      <ReqLogoutDrop></ReqLogoutDrop>
      <ReqLogoutError></ReqLogoutError>
```

```

</ReqLogout>
<AckLogout>
  <AckLogoutReceived></AckLogoutReceived>
  <AckLogoutDrop></AckLogoutDrop>
  <AckLogoutError></AckLogoutError>
</AckLogout>
<NtfLogout>
  <NtfLogoutReceived></NtfLogoutReceived>
  <NtfLogoutDrop></NtfLogoutDrop>
  <NtfLogoutError></NtfLogoutError>
</NtfLogout>
<AckNtfLogout>
  <AckNtfLogoutReceived></AckNtfLogoutReceived>
  <AckNtfLogoutDrop></AckNtfLogoutDrop>
  <AckNtfLogoutError></AckNtfLogoutError>
</AckNtfLogout>
<ReqMacBind>
  <ReqMacBindReceived></ReqMacBindReceived>
  <ReqMacBindDrop></ReqMacBindDrop>
  <ReqMacBindError></ReqMacBindError>
</ReqMacBind>
<AckMacBind>
  <AckMacBindReceived></AckMacBindReceived>
  <AckMacBindDrop></AckMacBindDrop>
  <AckMacBindError></AckMacBindError>
</AckMacBind>
<NtfMacBindLogon>
  <NtfMacBindLogonReceived><NtfMacBindLogonReceived>
  <NtfMacBindLogonDrop></NtfMacBindLogonDrop>
  <NtfMacBindLogonError></NtfMacBindLogonError>
</NtfMacBindLogon>
<NtfMacBindLogout>
  <NtfMacBindLogoutReceived><NtfMacBindLogoutReceived>
  <NtfMacBindLogoutDrop></NtfMacBindLogoutDrop>
  <NtfMacBindLogoutError></NtfMacBindLogoutError>
</NtfMacBindLogout>
<AffMacBindLogout>
  <AffMacBindLogoutReceived><AffMacBindLogoutReceived>
  <AffMacBindLogoutDrop></AffMacBindLogoutDrop>
  <AffMacBindLogoutError></AffMacBindLogoutError>
</AffMacBindLogout>
</PortalProxyStats>
</Portal>

```

## Table description

Item	Description
Table description	Portal proxy packet statistics table

Table type	Single-instance table
Feature name	Portal
Table name	PortalProxyStats
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Status of the portal proxy server	N/A	Boolean: <ul style="list-style-type: none"> <li>1—Enabled</li> <li>2—Disabled</li> </ul>	N/A
InvalidPkts	Number of invalid packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqInfo	Information request packet	N/A		N/A
ReqInfoReceived	Number of received information request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqInfoDrop	Number of dropped information request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqInfoError	Number of erroneous information request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckInfo	Information acknowledgment packet	N/A		N/A
AckInfoReceived	Number of received information acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckInfoDrop	Number of dropped information acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckInfoError	Number of erroneous information acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ReqChallenge	Challenge request packet the portal server sent to the device	Data structure		N/A
ReqChallengeReceived	Number of received challenge request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqChallengeDrop	Number of dropped challenge request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqChallengeError	Number of erroneous challenge request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckChallenge	Challenge acknowledgment packet the device sent to the portal server	N/A		N/A
AckChallengeReceived	Number of received challenge acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckChallengeDrop	Number of dropped challenge acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckChallengeError	Number of erroneous challenge acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqAuth	Authentication request packet the portal server sent to the device	N/A		N/A
ReqAuthReceived	Number of received authentication request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqAuthDrop	Number of dropped authentication	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	request packets			
ReqAuthError	Number of erroneous authentication request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckAuth	Authentication acknowledgment packet the device sent to the portal server	N/A		N/A
AckAuthReceived	Number of received authentication acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckAuthDrop	Number of dropped authentication acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckAuthError	Number of erroneous authentication acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffAckAuth	Affirmation packet the portal server sent to the device after receiving an authentication acknowledgment packet	N/A		N/A
AffAckAuthReceived	Number of received affirmation packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffAckAuthDrop	Number of dropped affirmation packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffAckAuthError	Number of erroneous affirmation packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqLogout	Logout request packet the portal server sent to the device	N/A		N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
ReqLogoutReceived	Number of received logout request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqLogoutDrop	Number of dropped logout request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqLogoutError	Number of erroneous logout request packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckLogout	Logout acknowledgment packet the device sent to the portal server	N/A		N/A
AckLogoutReceived	Number of received logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckLogoutDrop	Number of dropped logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckLogoutError	Number of erroneous logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfLogout	Forced logout notification packet the device sent to the portal server	N/A		N/A
NtfLogoutReceived	Number of received forced logout notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfLogoutDrop	Number of dropped forced logout notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfLogoutError	Number of erroneous forced logout notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckNtfLogout	Forced logout	N/A		N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	acknowledgment packet from the portal server			
AckNtfLogoutReceived	Number of received forced logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckNtfLogoutDrop	Number of dropped forced logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckNtfLogoutError	Number of erroneous forced logout acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqMacBind	MAC binding query the device sent to the MAC binding server	N/A		N/A
ReqMacBindReceived	Number of received MAC binding queries	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqMacBindDrop	Number of dropped MAC binding queries	N/A	Value range: 0 to $2^{64}-1$ .	N/A
ReqMacBindError	Number of erroneous MAC binding queries	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckMacBind	MAC binding query acknowledgment packet the MAC binding server sent to the device	N/A		N/A
AckMacBindReceived	Number of received MAC binding query acknowledgment packet	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckMacBindDrop	Number of dropped MAC binding query acknowledgment packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AckMacBindError	Number of erroneous MAC binding	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	query acknowledgment packets			
NtfMacBindLogon	User logon notification packet the device sent to the MAC binding server	N/A		N/A
NtfMacBindLogonReceived	Number of received user logon notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfMacBindLogonDrop	Number of dropped user logon notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfMacBindLogonError	Number of erroneous user logon notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfMacBindLogout	User logoff notification packet the device sent to the MAC binding server	N/A		N/A
NtfMacBindLogoutReceived	Number of received user logoff notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfMacBindLogoutDrop	Number of dropped user logoff notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
NtfMacBindLogoutError	Number of erroneous user logoff notification packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffMacBindLogout	Forced logout affirmation packet sent by Mac-Trigger server	N/A		N/A
AffMacBindLogoutReceived	Number of received forced logout affirmation packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AffMacBindLogoutDrop	Number of dropped forced logout affirmation packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A
AffMacBindLogoutError	Number of erroneous forced logout affirmation packets	N/A	Value range: 0 to $2^{64}-1$ .	N/A

## Portal/IPv4StaticRule

### XML structure

```

<Portal>
  <IPv4StaticRules>
    <IPv4StaticRule>
      <IfIndex></IfIndex>
      <Action></Action>
      <Status></Status>
      <Protocol></Protocol>
      <SrcIPv4>
        <SrcIPv4Addr></SrcIPv4Addr>
        <SrcIPv4AddrMask></SrcIPv4AddrMask>
      </SrcIPv4>
      <SrcPort>
        <SrcPortValue1></SrcPortValue1>
      </SrcPort>
      <SrcIfIndex></SrcIfIndex>
      <SrcVlan></SrcVlan>
      <SrcMacAddr></SrcMacAddr>
      <DstIPv4>
        <DstIPv4Addr></DstIPv4Addr>
        <DstIPv4AddrMask></DstIPv4AddrMask>
      </DstIPv4>
      <DstPort>
        <DstPortValue1></DstPortValue1>
      </DstPort>
    </IPv4StaticRule>
  </IPv4StaticRules>
</Portal>

```

## Table description

Item	Description
Table description	Portal IPV4 static-rule table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv4StaticRules
Row name	IPv4StaticRule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Non-negative integer.	N/A
Action	Action to be taken on packets matching the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1–Permit</li> <li>2–Redirect</li> <li>3–Deny</li> </ul>	N/A
Status	Status of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1–Active</li> <li>2–Deactive</li> <li>3–N/A</li> </ul>	N/A
Protocol	Transport layer protocol number in the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1–TCP</li> <li>2–UDP</li> <li>3–Any</li> </ul>	N/A
SrcIPv4	Source IPv4 address information	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv4Addr</li> <li>SrcIPv4AddrMask</li> </ul>	N/A
SrcIPv4Addr	Source IPv4 address	N/A	IPv4: String, dotted decimal notation.	N/A
SrcIPv4AddrMask	Subnet mask length of the source IPv4 address	N/A	Non-negative integer. Value range: 1 to 32.	N/A
SrcPort		Data Structure	Members include: SrcPortValue1	N/A
SrcPortValue1	Source port number	N/A	Non-negative integer. Value range: 1 to 65535.	N/A
SrcIfIndex	Source interface	N/A	Layer2 interface index. Non-negative integer.	N/A
SrcVlan	Source VLAN	N/A	Non-negative integer. Value range: 1 to 4094.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcMacAddr	Source MAC address	N/A	MAC address in the HH-HH-HH-HH-HH-HH format. Example: 00-0c-af-e3-5d-c0.	N/A
DstIPv4		Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv4Addr</li> <li>DstIPv4AddrMask</li> </ul>	N/A
DstIPv4Addr	Destination IPv4 address		IPv4: String, dotted decimal notation.	N/A
DstIPv4AddrMask	Subnet mask length of the destination IPv4 mask	N/A	Non-negative integer. Value range: 1 to 32.	N/A
DstPort		Data structure	Members include: DstPortValue1	N/A
DstPortValue1	Source port number	N/A	Non-negative integer. Value range: 1 to 65535.	N/A

## Portal/IPv6StaticRule

### XML structure

```

<Portal>
  <IPv6StaticRules>
    <IPv6StaticRule>
      <IfIndex></IfIndex>
      <Action></Action>
      <Status></Status>
      <Protocol></Protocol>
      <SrcIPv6>
        <SrcIPv6Addr></SrcIPv6Addr>
        <SrcIPv6AddrPrefix></SrcIPv6AddrPrefix>
      </SrcIPv6>
      <SrcPort>
        <SrcPortValue1></SrcPortValue1>
      </SrcPort>
      <SrcIfIndex></SrcIfIndex>
      <SrcVlan></SrcVlan>
      <SrcMacAddr></SrcMacAddr>
      <DstIPv6>
        <DstIPv6Addr></DstIPv6Addr>
        <DstIPv6AddrPrefix></DstIPv6AddrPrefix>
      </DstIPv6>
      <DstPort>
        <DstPortValue1></DstPortValue1>

```

```

    </DstPort>
  </IPv6StaticRule>
</IPv6StaticRules>
</Portal>

```

## Table description

Item	Description
Table description	Portal IPV6 static-rule table
Table type	Multi-instance table
Feature name	Portal
Table name	IPv6StaticRules
Row name	IPv6StaticRule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Non-negative integer	N/A
Action	Action to be taken on packets matching the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Permit</li> <li>2—Redirect</li> <li>3—Deny</li> </ul>	N/A
Status	Status of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Active</li> <li>2—Deactive</li> <li>3—N/A</li> </ul>	N/A
Protocol	Transport layer protocol number in the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—TCP</li> <li>2—UDP</li> <li>3—Any</li> </ul>	N/A
SrcIPv6	Source IPv6 address information	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcIPv6Addr</li> <li>SrcIPv6AddrPrefix</li> </ul>	N/A
SrcIPv6Addr	Source IPv6 address	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
SrcIPv6AddrPrefix	Prefix length of the source IPv6 address	N/A	Non-negative integer. Value range: 1 to 128.	N/A
SrcPort		Data Structure	Members include: SrcPortValue1	N/A
SrcPortValue1	Source port number	N/A	Non-negative integer. Value range: 1 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcIfIndex	Source interface	N/A	Layer2 interface index. Non-negative integer.	N/A
SrcVlan	Source VLAN	N/A	Non-negative integer. Value range: 1 to 4094.	N/A
SrcMacAddr	Source MAC address	N/A	MAC address in the HH-HH-HH-HH-HH-HH format. Example: 00-0c-af-e3-5d-c0.	N/A
DstIPv6		Data structure	Members include: <ul style="list-style-type: none"> <li>DstIPv6Addr</li> <li>DstIPv6AddrPrefix</li> </ul>	N/A
DstIPv6Addr	Destination IPv6 address	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
DstIPv6AddrPrefix	Prefix length of the destination IPv6 address	N/A	Non-negative integer. Value range: 1 to 128.	N/A
DstPort		Data structure	Members include: DstPortValue1	N/A
DstPortValue1	Source port number	N/A	Non-negative integer. Value range: 1 to 65535.	N/A

## Portal/UserRule

### XML structure

```

<Portal>
  <UserRules>
    <UserRule>
      <IfIndex></IfIndex>
      <Action></Action>
      <Status></Status>
      <IPAddr></IPAddr>
      <L2IfIndex></L2IfIndex>
      <Vlan></Vlan>
      <MacAddr ></MacAddr>
      <AuthorationInfo>
        <AclNumber></AclNumber>
        <Userprofile></Userprofile>
      </AuthorationInfo>
    </UserRule>
  </UserRules>
</Portal>

```



## Table description

Item	Description
Table description	Portal user-rule table
Table type	Multi-instance table
Feature name	Portal
Table name	UserRules
Row name	UserRule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Non-negative integer.	N/A
Action	Action to be taken on packets matching the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>1—Permit</li> </ul>	N/A
Status	Status of the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Active</li> <li>2—Deactive</li> <li>3—N/A</li> </ul>	N/A
IPAddr	IP address of the user	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPAddr
L2IfIndex	Layer 2 interface	N/A	Non-negative integer.	L2IfIndex
Vlan	VLAN where the user resides	N/A	Non-negative integer. Value range: 1 to 4094.	Vlan
MacAddr	MAC address of the user	N/A	MAC address in the HH-HH-HH-HH-HH-HH format. Example: 00-0c-af-e3-5d-c0.	MacAddr
AuthorationInfo	Authorization information	Data structure		AuthorationInfo
AclNumber	Authorized ACL number	N/A	Non-negative integer.	AclNumber
Userprofile	Authorized user profile name	N/A	String, case-insensitive. Length: 1 to 31 characters.	Userprofile

# Portal/LocalWebServers

## XML structure

```
<Portal>
  <LocalWebServers>
    <LocalWebServer>
      <Type></Type>
      <SSLServerPolicy></SSLServerPolicy>
      <DefLogonPage></DefLogonPage>
      <TCPPort></TCPPort>
    </LocalWebServer>
  </LocalWebServers>
</Portal>
```

## Table description

Item	Description
Table description	Portal local WebServer information table
Table type	Multi-instance table
Feature name	Portal
Table name	LocalWebServers
Row name	PortalServer
Restrictions	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Protocol type	Index	Enumeration: <ul style="list-style-type: none"><li>0—HTTP</li><li>1—HTTPS</li></ul>	N/A
SSLServerPolicy	SSL server policy name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DefLogonPage	Default authentication page file	N/A	String, case-sensitive and contains letters, digits, dots (.), and underscores (_). Length: 1 to 91 characters.	N/A
TCPPort	TCP port number	N/A	Non-negative integer. Value range: 1 to 65535.	N/A

# Portal/SelfDefSsidPage

This table contains information about the self-defined SSID page file.

## XML structure

```
<Portal>
  <SelfDefSsidPages>
    <SelfDefSsidPage>
      <Type></Type>
      <ssid></ssid>
      <LogonPageFile></LogonPageFile>
    </SelfDefSsidPage>
  </SelfDefSsidPages>
</Portal>
```

## Table description

Item	Description
Feature name	Portal
Table name	SelfDefSsidPages
Table type	Multi-instance table
Row name	SelfDefSsidPage
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Protocol type	Index	Enumeration: <ul style="list-style-type: none"><li>0—HTTP.</li><li>1—HTTPS.</li></ul>	This column configures the protocol type for the local portal Web server.
ssid	SSID name	Index	String, case sensitive. Length: 1 to 32 characters.	This column assigns a specific SSID to the designated page file.
LogonPageFile	Authentication page file.	N/A	String, including letters, numbers, and underscores (_). Length: 1 to 91 characters.	N/A

# Portal/SelfDefDevTypePage

This table contains information about the self-defined device type page file.

## XML structure

```
<Portal>
  <SelfDefDevTypePages>
    <SelfDefDevTypePage>
      <Type></Type>
      <DeviceType></DeviceType>
      <LogonPageFile></LogonPageFile>
    </SelfDefDevTypePage>
  </SelfDefDevTypePages>
</Portal>
```

## Table description

Item	Description
Feature name	Portal
Table name	SelfDefDevTypePages
Table type	Multi-instance table
Row name	SelfDefDevTypePage
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Protocol type	Index	Enumeration: <ul style="list-style-type: none"><li>0—HTTP.</li><li>1—HTTPS.</li></ul>	This column configures the protocol type for the local portal Web server.
DeviceType	Device type	Index	String, case-sensitive. Length: 1 to 127 characters.	This column assigns a specific device type to the designated page file.
LogonPageFile	Authentication page file.	N/A	String, including letters, numbers, and underscores (_). Length: 1 to 91 characters.	N/A

## Portal/SelfDefPage

This table contains information about the self-defined page file.

## XML structure

```
<Portal>
  <SelfDefPages>
    <SelfDefPage>
```

```

    <Type></Type>
    <ssid></ssid>
    <DeviceType></DeviceType>
    <LogonPageFile></LogonPageFile>
  </SelfDefPage>
</SelfDefPages>
</Portal>

```

## Table description

Item	Description
Feature name	Portal
Table name	SelfDefPages
Table type	Multi-instance table
Row name	SelfDefPage
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Protocol type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—HTTP.</li> <li>1—HTTPS.</li> </ul>	This column configures the protocol type for the local portal Web server.
ssid	SSID name	Index	String, case-sensitive. Length: 1 to 32 characters.	This column assigns a specific SSID to the designated page file.
DeviceType	Device type	Index	String, case-sensitive. Length: 1 to 127 characters.	This column assigns a specific device type to the designated page file.
LogonPageFile	Authentication page file.	N/A	String, including letters, numbers, and underscores (_). Length: 1 to 91 characters.	N/A

## Portal/ExtendAuthServers

This table contains information about portal extended authentication servers.

## XML structure

```

<Portal>
  <ExtendAuthServers>
    <ExtendAuthServer>
      <Type></Type>

```

```

    <AuthUrl></AuthUrl>
    <AppId></AppId>
    <AppKey></AppKey>
    <RedirectUrl></RedirectUrl>
    <MailProtocol></MailProtocol>
    <MailDomain>
        <MailDomainName></MailDomainName>
    </MailDomain>
</ExtendAuthServer>
</ExtendAuthServers>
</Portal>

```

## Table description

Item	Description
Feature name	Portal
Table name	ExtendAuthServers
Table type	Multi-instance table
Row name	ExtendAuthServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Extended authentication service type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—QQ.</li> <li>1—Mail.</li> </ul>	N/A
AuthUrl	Authentication URL	N/A	String. Length: 1 to 256 characters. Default: https://graph.qq.com (when the Type field is specified as 0).	N/A.
AppId	App ID which supports for extended authentication	N/A	String. Length: 1 to 32 characters.	The default value is the App ID of the Lvzhou application in the QQ open platform.
AppKey	The key of App ID	N/A	String. Length: 1 to 64 characters.	App key needs to be kept confidential and not returned to users.
RedirectUrl	Authentication redirect URL	N/A	String. Length: 1 to 256 characters.	The default value is the callback address of the Lvzhou application in the QQ open platform.
MailProtocol	Mail authentication	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—POP3.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	protocol type		<ul style="list-style-type: none"> <li>2—IMAP.</li> <li>3—POP3 and IMAP.</li> </ul>	
MailDomain	Maildomain	Data structure	<b>Members include:</b> <ul style="list-style-type: none"> <li><b>MailDomainName</b></li> </ul>	This column takes effect only when the type field is specified as 1. MailDomainName must be set. You can specify 1 to 16 domain names.
MailDomainName	Mail domain name	N/A	String. Length: 1 to 255 characters.	The value of the column must be the Email domain format. For example: @qq.com

## Portal/HistoryOnlineUserNums

This table contains the statistics on the number of historical online users.

### XML structure

```

<Portal>
  <HistoryOnlineUserNums>
    <HistoryOnlineUserNum>
      <Interval></Interval>
      <TimeStamp></TimeStamp>
      <Num></Num>
    </HistoryOnlineUserNum>
  </HistoryOnlineUserNums>
</Portal>

```

### Table description

Item	Description
Feature name	Portal
Table name	HistoryOnlineUserNums
Table type	Multi-instance table
Row name	HistryOnlineUserNum
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interval	Time interval	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Hour</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1-Day</li> </ul>	
TimeStamp	Recording time.	Index	DateTime.Format: YYYY-MM-DDTHH:MM:SS.	N/A
Num	Online user number.	N/A	Value range: 0 to $2^{32} - 1$ .	N/A

## Portal/CurrentOnlineUserNums

This table shows the number of the current online users.

### XML structure

```

<Portal>
  <CurrentOnlineUserNums>
    <CurrentOnlineUserNum>
      <Num></Num>
    </CurrentOnlineUserNum>
  </CurrentOnlineUserNums>
</Portal>

```

### Table description

Item	Description
Feature name	Portal
Table name	CurrentOnlineUserNums
Table type	Single-instance table
Row name	CurrentOnlineUserNum
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Num	Online user number	N/A	Value range: 0 to $2^{32} - 1$ .	N/A

## Portal/ObjectGroupStatistics

This table shows the number of online users per object group.



## XML structure

```
<Portal>
  <ObjectGroupStatistics>
    <ObjectGroup>
      <GroupName></GroupName>
      <OnlineUserNum></OnlineUserNum>
    </ObjectGroup>
  </ObjectGroupStatistics>
</Portal>
```

## Table description

Item	Description
Feature name	Portal
Table name	ObjectGroupStatistics
Table type	Multi-instance table
Row name	ObjectGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of group.	Index	String. Length: 1 to 31 characters.	N/A
OnlineUserNum	Online user num.	N/A	Value range: 0 to $2^{32} - 1$ .	N/A

## Portal/MacServer

This table contains information about portal mac trigger servers.

## XML structure

```
<Portal>
  <MacTriggerSevers>
    <MacTriggerServer>
      <Name></Name>
      <IPAddressInfo>
        <IPAddress></IPAddress>
        <VRF></VRF>
        <Key></Key>
      </IPAddressInfo>
    </MacTriggerServer>
  </MacTriggerSevers>
</Portal>
```

```

<Threshold></Threshold>
<NasType></NasType>
<MacSvrPort></MacSvrPort>
<Detect>
  <MacSvrRetries></MacSvrRetries>
  <MacSvrRetryInterval></MacSvrRetryInterval>
</Detect>
<MacServerType></MacServerType>
<Version></Version>
<MacSvrAuthTimeOut></MacSvrAuthTimeOut>
<AgingTime></AgingTime>
<LocalBindingEnable></LocalBindingEnable>
<LocalBindingAgingTime></LocalBindingAgingTime>
<CloudBindingEnable></CloudBindingEnable>
</MacTriggerServer>
</MacTriggerServers>
</portal>

```

## Table description

Item	Description
Feature name	Portal
Table name	MacTriggerServers
Table type	Multi-instance table
Row name	MacTriggerServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Portal mac-trigger server name	Index	String, case-sensitive. Length: 1 to 32 characters.	N/A
IPAddressInfo	Portal mac-trigger server address	Data structure	Members include: IPAddress VRF	N/A
IPAddress	IP address of the portal mac-trigger server	N/A	IPv4: String, dotted decimal notation.	N/A
VRF	VRF instance name	N/A	String, case-sensitive. Length: 1 to 31 characters.	If the portal mac-trigger server is on the public network, the length of characters is 0.

Column name	Column description	Column type	Data type and restrictions	Remarks
Key	Shared secret	N/A	String, case-sensitive. Length: 1 to 64 characters.	The key is used for communication between the portal mac-trigger server and the device. It supports only plaintext.
Threshold	the threshold for MAC-triggered authentication	N/A	Unsigned integer. Value range: 0 to 10240000	The default free-traffic threshold is 0 bytes.
NasType	NAS-Port-Type value	N/A	Unsigned integer. Value range: 1 to 255	The default NAS-Port-Type value carried in RADIUS requests is 0.
MacSvrPort	UDP port number	N/A	Unsigned integer. Value range: 1 to 65534	The default MAC binding server listens for MAC binding query packets on UDP port 50100.
Detect	Portal Mac-trigger server detection	Data structure	Members include: • Retry Interval	N/A
MacSvrRetries	Maximum number of portal Mac-trigger server detection attempts	N/A	Unsigned integer. Value range: 1~10	The default maximum number of query attempts is 3.
MacSvrRetryInterval	Detection interval	N/A	Unsigned integer. Value range:1~60	The default maximum number of query interval is 1 second.
MacServerType	a MAC binding server type	N/A	Boolean: • 0.imc 1.cmcc	The default type of a MAC binding server is IMC.
Version	Version number	N/A	Unsigned integer. Value range:1~3	The default version of the portal protocol is 1.
MacSvrAuthTimeout	Set the timeout time the device waits for portal authentication to complete	N/A	Unsigned integer. Value range:1~15	The default portal authentication timeout time is 3 minutes.
AgingTime	Set the aging time for MAC-trigger entries	N/A	Unsigned integer. Value range:60~7200	The default aging time for MAC-trigger entries is 300 seconds.
LocalBindingEnable	enable portal MAC-Trigger local-binding	N/A	Boolean: • true—Yes false—No	N/A
LocalBindingAgingTime	the aging time for MAC-trigger local-binding	N/A	Unsigned integer. Value range:1~2160	N/A

Column name	Column description entry	Column type	Data type and restrictions	Remarks
CloudBindingEnable	Enable portal MAC-Trigger cloud binding	N/A	Boolean: • true—Yes false—No	N/A

## Portal/ForbiddenRule

This table contains information about portal-forbidden rules.

### XML structure

```

<Portal>
  <ForbiddenRules>
    <ForbiddenRule>
      <RuleID></RuleID>
      <IsAllotID></IsAllotID>
      <SrcIPAddr></SrcIPAddr>
      <SrcIPAddrLen></SrcIPAddrLen>
      <SrcProtocolType></SrcProtocolType>
      <SrcPortStart></SrcPortStart>
      <SrcPortEnd></SrcPortEnd>
      <DstIPAddr></DstIPAddr>
      <DstIPAddrLen></DstIPAddrLen>
      <DstProtocolType></DstProtocolType>
      <DstPortStart></DstPortStart>
      <DstPortEnd></DstPortEnd>
      <DstHostName></DstHostName>
      <SrcSsidName></SrcSsidName>
    </ForbiddenRule>
  </ForbiddenRules>
</Portal>

```

### Table description

Item	Description
Feature name	Portal
Table name	ForbiddenRules
Table type	Multi-instance table
Row name	ForbiddenRule
Restrictions	Not support modify

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleID	Portal-forbidden rule number	Index	Non-negative integer.	N/A
IsAllotID	Whether the rule number is allocated automatically	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Yes</li> <li><b>false</b>—No</li> </ul>	N/A
SrcIPAddr	Source IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
SrcIPAddrLen	Subnet mask length of the source IP address	N/A	Non-negative integer. Value range: 0 to 128.	N/A
SrcProtocolType	Source protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP.</li> <li>17—UDP.</li> </ul>	N/A
SrcPortStart	Start port number for the source protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
SrcPortEnd	End port number for the source protocol	N/A	Non-negative integer Value range:0 to 65535.	N/A
DstIPAddr	Destination IP address	N/A	IPv4:String,dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	N/A
DstIPAddrLen	Subnet mask of the destination IP address	N/A	Non-negative integer. Value range: 0 to 128.	N/A
DstProtocolType	Destination protocol type	N/A	Enumeration: <ul style="list-style-type: none"> <li>6—TCP.</li> <li>17—UDP.</li> </ul>	N/A
DstPortStart	Start port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535.	N/A
DstPortEnd	End port number for the destination protocol	N/A	Non-negative integer. Value range: 0 to 65535,	N/A
DstHostName	Destination hostname	N/A	String. Length: 1 to 253 characters.	N/A
SrcSsidName	Source SSID name	N/A	String. Length: 1 to 32 characters	N/A



# Contents

Portal.....	2
Portal/PortalServers .....	2
Portal/FreeRule .....	2
Portal/IPv4Interfaces .....	3
Portal/IPv6Interfaces .....	3
Portal/WebServers .....	4
Portal/LocalWebServers.....	4
Portal/IPv4ServiceTemplates.....	4
Portal/IPv6ServiceTemplates.....	5
Portal/SelfDefDevTypePage.....	5

# Portal

## Portal/PortalServers

Message	Explanation
Portal detection configuration is not complete. 探测功能配置不完整。	Portal detection configuration is not complete. 探测功能配置不完整。
Another portal authentication server is using the IP address. 指定Portal认证服务器的IP地址冲突。	Another portal authentication server is using the IP address. 指定的ip已经被其他Portal认证服务器使用。
IP address configuration is not complete. IP地址配置不完整。	IP address configuration is not complete. 配置vpn和key之前首先要配置ip。
Invalid shared key. 无效的共享密钥。	Invalid shared key. 用户发来的明文密码要加密,加密失败。
Another portal authentication server is using the IP address. 指定Portal认证服务器的IP地址冲突。	Another portal authentication server is using the IP address. 指定的ip已经被其他Portal认证服务器使用。
Invalid IP address. 无效IP地址值。	Invalid IP address. 无效IP地址值。
Failed to configure the trap action because this action is not supported. 不支持向网管服务器发送Trap信息。	Failed to configure the trap action because this action is not supported. 不支持向网管服务器发送Trap信息。

## Portal/FreeRule

Message	Explanation
A portal-free rule with the same filtering criteria already exists. 已经存在相同内容的免认证规则。	A portal-free rule with the same filtering criteria already exists. 配置的portal free rule和已配置free rule参数一样,提示已经存在。
The portal free-rule already exists. 这条免认证规则已经存在。	The portal free-rule already exists. 配置的portal free rule id已经存在。
The source port number and destination port number must belong to the same transport layer protocol. 源和目的端口号所属的传输层协议类型必须保持一致。	The source port number and destination port number must belong to the same transport layer protocol. 配置的free-rule源和目的端口号类型不同。
The source IP address and destination IP address of a portal-free rule must be the same IP version. 免认证规则的源IP地址和目的IP地址的版本必须保持一致。	The source IP address and destination IP address of a portal-free rule must be the same IP version. 免认证规则的源IP地址和目的IP地址的版本必须保持一致。
A portal-free rule can't contain both Layer 3 and	A portal-free rule can't contain both Layer 3 and Layer 2



Layer 2 parameters. 在同一个免认证规则中不可以同时配置有关二层和三层的参数。	parameters. 在同一个免认证规则中不可以同时配置有关二层和三层的相关参数。
The portal-free rule can't be empty. 配置的免认证规则内容不能为空。	The portal-free rule can't be empty. 配置的免认证规则内容不能为空。
Invalid MAC address. 无效的MAC地址。	Invalid MAC address. 无效的MAC地址。
Invalid IP address. 无效IP地址值。	Invalid IP address. 无效IP地址值。

## Portal/IPv4Interfaces

Message	Explanation
Invalid BAS-IP. 无效的BAS-IP。	Invalid BAS-IP. 无效的BAS-IP。
Failed to change method of the interface, because it is enabled with portal. 无法改变接口的认证方式，因为该接口已经使能了Portal认证。	Failed to change method of the interface, because it is enabled with portal. 无法改变接口的认证方式，因为该接口已经使能了Portal认证。
Portal detection configuration is not complete. 探测功能配置不完整。	Portal detection configuration is not complete. 探测功能配置不完整。
Portal Web server configuration is not complete. Web服务配置不完整。	Portal Web server configuration is not complete. WebServerName和EscapeEnable需要都配置，不能配置其中一个

## Portal/IPv6Interfaces

Message	Explanation
Invalid BAS-IPv6. 无效的BAS-IPv6。	Invalid BAS-IPv6. 无效的BAS-IPv6。
Failed to change method of the interface, because it is enabled with portal. 无法改变接口的认证方式，因为该接口已经使能了Portal认证。	Failed to change method of the interface, because it is enabled with portal. 无法改变接口的认证方式，因为该接口已经使能了Portal认证。
Portal detection configuration is not complete. 探测功能配置不完整。	Portal detection configuration is not complete. 探测功能配置不完整。
Portal Web server configuration is not complete. Web服务配置不完整。	Portal Web server configuration is not complete. WebServerName和EscapeEnable需要都配置，不能配置其中一个

# Portal/WebServers

Message	Explanation
The portal Web server doesn't exist. 该Portal Web服务器不存在。	The portal Web server doesn't exist. 该Portal Web服务器不存在。
The URL parameter of this type already exists. 该类型的URL参数配置已存在。	The URL parameter of this type already exists. 该类型的URL参数配置已存在。

# Portal/LocalWebServers

Message	Explanation
Please specify an SSL server policy. 请引用SSL服务器端策略名。	Please specify an SSL server policy. 请引用SSL服务器端策略名。
HTTPS has been configured for the local portal Web server and the SSL server policy name can't be modified. 本地Portal Web服务器的HTTPS已经存在，SSL服务器端策略名不能被修改。	HTTPS has been configured for the local portal Web server and the SSL server policy name can't be modified. 本地Portal Web服务器的HTTPS已经存在，SSL服务器端策略名不能被修改。
The specified port is being used by another service. Please specify another port. 配置的本地Portal Web服务器的TCP端口号已经被占用。	The specified port is being used by another service. Please specify another port. 配置的本地Portal Web服务器的TCP端口号已经被占用。
The local-portal Web server doesn't exist. 配置的本地Portal Web服务器不存在。	The local-portal Web server doesn't exist. 配置的本地Portal Web服务器不存在。
Failed to configure the local portal Web server because of port conflict. Please specify another port. 配置的端口号冲突，请指定其它TCP端口号。	Failed to configure the local portal Web server because of port conflict. Please specify another port. 配置的端口号冲突，请指定其它TCP端口号。
Failed to configure HTTPS for the local portal Web server because of SSL server policy isn't exist. Please check SSL server policy. 指定的SSL服务策略不存在，请检查SSL配置。	Failed to configure HTTPS for the local portal Web server because of SSL server policy isn't exist. Please check SSL server policy. 指定的SSL服务策略不存在，请检查SSL配置。
Portal detection configuration is not complete. 探测功能配置不完整。	Portal detection configuration is not complete. 探测功能配置不完整。
Failed to configure the trap action because this action is not supported. 不支持向网管服务器发送Trap信息。	Failed to configure the trap action because this action is not supported. 不支持向网管服务器发送Trap信息。

# Portal/IPv4ServiceTemplates

Message	Explanation
Portal detection configuration is not complete. 探测功能配置不完整。	Portal detection configuration is not complete. 探测功能配置不完整。

Portal Web server configuration is not complete. Web服务配置不完整。	Portal Web server configuration is not complete. WebServerName和EscapeEnable需要都配置，不能配置其中一个
The service-template doesn't exist. 配置的服务模版不存在。	The service-template doesn't exist. 配置的服务模版不存在。

## Portal/IPv6ServiceTemplates

Message	Explanation
Portal detection configuration is not complete. 探测功能配置不完整。	Portal detection configuration is not complete. 探测功能配置不完整。
Portal Web server configuration is not complete. Web服务配置不完整。	Portal Web server configuration is not complete. WebServerName和EscapeEnable需要都配置，不能配置其中一个
The service-template doesn't exist. 配置的服务模版不存在。	The service-template doesn't exist. 配置的服务模版不存在。

## Portal/SelfDefDevTypePage

Message	Explanation
Please specify a custom authentication page file. 请指定自定义认证页面文件。	Please specify a custom authentication page file. 请指定自定义认证页面文件。

# Contents

PortalProxy .....	1
PortalProxy/ProxyEnable .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PortalProxy/ProxyPort .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
PortalProxy/AddrEntries .....	2
XML structure .....	2
Table description .....	3
Columns .....	3

# PortalProxy

## PortalProxy/ProxyEnable

This table contains global enabling portal proxy function.

### XML structure

```
<PortalProxy>
  <ProxyEnable>
    <Enable></Enable>
  </ProxyEnable>
</PortalProxy>
```

### Table description

Item	Description
Feature name	PortalProxy
Table name	ProxyEnable
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether the portal proxy feature is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	Default value: false.

## PortalProxy/ProxyPort

This table contains port for receiving portal packet.

### XML structure

```
<PortalProxy>
  <ProxyPort>
    <Port></Port>
  </ProxyPort>
</PortalProxy>
```

```

    </ProxyPort>
  </PortalProxy>

```

## Table description

Item	Description
Feature name	PortalProxy
Table name	ProxyPort
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Port	Port for receiving portal packet	N/A	Non-negative integer. Value range: 1 to 65535.	Example: 2000.

## PortalProxy/AddrEntries

This table contains ipv4 address about portal proxy bas.and user-ip range.

## XML structure

```

<PortalProxy>
  <AddrEntries>
    <AddrEntry>
      <AddrGrpName></AddrGrpName>
      <BasIP></BasIP>
      <UserAddrRang>
        <Addr></Addr>
        <MaskLen></MaskLen>
      </UserAddrRang>
    </AddrEntry>
  </AddrEntries>
</PortalProxy>

```

## Table description

Item	Description
Feature name	PortalProxy
Table name	AddrEntries
Table type	Multi-instance table
Row name	AddrEntry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddrGrpName	Group of a user address range	Index	String,case-sensitive. Length: 1 to 63 characters.	N/A
BasIP	IP of portal bas	N/A	IPv4: String,dotted decimal notation.	N/A
UserAddrRange	User IP address range group	Data structure	Members include: <ul style="list-style-type: none"><li>Addr.</li><li>MaskLen.</li></ul>	This column can appear at most 8 times in this row.
Addr	IP address range	N/A	IPv4: String,dotted decimal notation.	N/A
MaskLen	Mask length	N/A	Value: 1 to 32.	Example: 16.

# Contents

PortalProxy .....	1
PortalProxy/ProxyEnable .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PortalProxy/ProxyPort .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
PortalProxy/AddrEntries .....	2
XML structure .....	2
Table description .....	2
Columns .....	3



# PortalProxy

## PortalProxy/ProxyEnable

This table contains global enabling portal proxy function.

### XML structure

```
<PortalProxy>
  <ProxyEnable>
    <Enable></Enable>
  </ProxyEnable>
</PortalProxy>
```

### Table description

Item	Description
Feature name	PortalProxy
Table name	ProxyEnable
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether the portal proxy feature is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A

## PortalProxy/ProxyPort

This table contains port for receiving portal packet.

### XML structure

```
<PortalProxy>
  <ProxyPort>
    <Port></Port>
  </ProxyPort>
</PortalProxy>
```

## Table description

Item	Description
Feature name	PortalProxy
Table name	ProxyPort
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Port	Port for receiving portal packet	N/A	Non-negative integer. Value range: 1 to 65535.	Example: 2000.

## PortalProxy/AddrEntries

This table contains ipv4 address about portal proxy bas.and user-ip range.

## XML structure

```
<PortalProxy>
  <AddrEntries>
    <AddrEntry>
      <AddrGrpName></AddrGrpName>
      <BasIP></BasIP>
      <UserAddrRang>
        <Addr></Addr>
        <MaskLen></MaskLen>
      </UserAddrRang>
    </AddrEntry>
  </AddrEntries>
</PortalProxy>
```

## Table description

Item	Description
Feature name	PortalProxy
Table name	AddrEntries
Table type	Multi-instance table

Row name	AddrEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddrGrpName	Group of a user address range	Index	String,case-sensitive. <ul style="list-style-type: none"> <li>Length: 1 to 63 characters.</li> </ul>	N/A
BasIP	IP of portal bas	N/A	IPv4: String,dotted decimal notation.	N/A
UserAddrRange	User IP address range group	Data structure	Members include: <ul style="list-style-type: none"> <li>Addr.</li> <li>MaskLen.</li> </ul>	This column can appear at most 8 times in this row.
Addr	IP address range	N/A	IPv4: String,dotted decimal notation.	N/A
MaskLen	Mask length	N/A	Value: 1 to 32.	Example: 16.

# Contents

PortalProxy .....2

    PortalProxy/ProxyPort .....2

    PortalProxy/AddrEntries .....2

---

# PortalProxy

## PortalProxy/ProxyPort

Message	Explanation
The port is already in use. 端口已被占用。	The port is already in use. 配置的 portal-proxy listen-port 已被占用。

## PortalProxy/AddrEntries

Message	Explanation
The user network conflict with other instance. 该用户网段与其他实例冲突。	The user network conflict with other instance. 配置的 user-ip-network 已经存在。
Invalid IP address. 无效的IP地址。	Invalid IP address. 配置的 nas-ip 和 user-ip-network 是无效的IP地址。

---

# Contents

PPP.....	1
PPP/PPPAuth/Table .....	1
XML structure.....	1
Table description .....	1
Columns.....	2
PPP/PPPUserPap/Table .....	2
XML structure.....	2
Table description .....	3
Columns.....	3
PPP/PPPDNS/Table .....	3
XML structure.....	4
Table description .....	4
Columns.....	4
PPP/PPPUserChap/Table .....	5
XML structure.....	5
Table description .....	5
Columns.....	6
PPP/PPPipPool/Table.....	6
XML structure.....	6
Table description .....	6
Columns.....	7
PPP/PPPRmtAddr/Table .....	7
XML structure.....	7
Table description .....	7
Columns.....	8
PPP/PPPDNSAccept/Table .....	8
XML structure.....	8
Table description .....	8
Columns.....	9
PPP/PPPDNSRequest/Table .....	9
XML structure.....	9
Table description .....	10
Columns.....	10

# PPP

## PPP/PPPAuth/Table

This table contains the information about using **ppp authentication-mode** to configure PPP authentication.

### XML structure

```
<PPP>
  <PPPAuth>
    <AuthMode>
      <IfIndex></IfIndex>
      <Mode></Mode>
      <Callin></Callin>
      <Domain></Domain>
      <DefaultDomain></DefaultDomain>
    </AuthMode>
  </PPPAuth>
</PPP>
```

### Table description

Item	Description
Feature name	PPP
Table name	PPPAuth
Table type	Multi-instance table
Row name	AuthMode
	This table supports interface types: virtual-template interface virtual-ppp interface/subinterface analogmodem interface
Restrictions	isdn bri interface cpos interface async interface aux interface serial interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Mode	Authentication mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—pap.</li> <li>• <b>2</b>—chap.</li> <li>• <b>4</b>—ms-chap.</li> <li>• <b>8</b>—ms-chap-v2.</li> </ul>	PPP authentication includes the following categories: PAP and CHAP and ms-chap and ms-chap-v2. You can configure multiple authentication modes. For example the Mode is 10 when Authentication mode types are chap and ms-chap-v2
Callin	Authenticates the call-in users only.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	Authenticates the call-in users only. This keyword can be configured when the local end acts as the receiving end of DDR calls.
Domain	ISP domain name.	N/A	String,case-insensitive. Length: 1 to 255 characters.	Specifies the ISP domain name for authentication.
DefaultDomain	ISP default domain name.	N/A	String,case-insensitive. Length: 1 to 255 characters.	N/A

## PPP/PPPUserPap/Table

This table contains the information about PPP Pap.

## XML structure

```

<PPP>
  <PPPUserPap>
    <UserPap>
      <IfIndex></IfIndex>
      <UserName></UserName>
      <PassWord></PassWord>
    </UserPap>
  
```



```

    </PPUserPap>
  </PPP>

```

## Table description

Item	Description
Feature name	PPP
Table name	PPUserPap
Table type	Multi-instance table
Row name	UserPap
Restrictions	<p>This table supports interface types:</p> <ul style="list-style-type: none"> <li>virtual-template interface</li> <li>virtual-ppp interface/subinterface</li> <li>analogmodem interface</li> <li>isdn bri interface</li> <li>pos interface</li> <li>async interface</li> <li>aux interface</li> <li>serial interface</li> </ul>
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
UserName	Username of Pap mode	N/A	String. case-sensitive. Length: 1 to 80 characters.	N/A
PassWord	Password of Pap mode	N/A	String. case-sensitive. Length: 1 to 255 characters.	N/A

## PPP/PPPDNS/Table

This table contains the information of PPP DNS server IP addresses.

## XML structure

```
<PPP>
  <PPPDNS>
    <IpcpDNS>
      <IfIndex></IfIndex>
      <PriAddr></PriAddr>
      <SecAddr></SecAddr>
    </IpcpDNS>
  </PPPDNS>
</PPP>
```

## Table description

Item	Description
Feature name	PPP
Table name	PPPDNS
Table type	Multi-instance table
Row name	IpcpDNS
Restrictions	This table supports interface types: virtual-template interface virtual-ppp interface/subinterface analogmodem interface isdn bri interface cpos interface async interface aux interface serial interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
PriAddr	Specifies a primary DNS server IP address.	N/A	String, dotted decimal notation.	N/A
SecAddr	Specifies a secondary DNS server IP address.	N/A	String, dotted decimal notation.	N/A

## PPP/PPPOuserChap/Table

This table contains the information about using PPP authentication-mode chap to configure PPP authentication.

### XML structure

```

<PPP>
  <PPPOuserChap>
    <UserChap>
      <IfIndex></IfIndex>
      <UserName></UserName>
      <PassWord></PassWord>
    </UserChap>
  </PPPOuserChap>
</PPP>

```

### Table description

Item	Description
Feature name	PPP
Table name	PPPOuserChap
Table type	Multi-instance table
Row name	UserChap
Restrictions	<p>This table supports interface types:</p> <ul style="list-style-type: none"> <li>virtual-template interface</li> <li>virtual-ppp interface/subinterface</li> <li>analogmodem interface</li> <li>isdn bri interface</li> <li>pos interface</li> <li>async interface</li> <li>aux interface</li> <li>serial interface</li> </ul>
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
UserName	Username of chap mode	N/A	String. case-sensitive. Length: 1 to 80 characters.	N/A
PassWord	Password of chap mode	N/A	String. case-sensitive. Length: 1 to 255 characters.	N/A

## PPP/PPPIpPool/Table

This table contains ip pool of PPP configuration information.

## XML structure

```
<PPP>
  <PPPIpPool>
    <IpPool>
      <GroupName></GroupName>
      <PoolName></PoolName>
      <StartIPAddr></StartIPAddr>
      <EndIPAddr></EndIPAddr>
    </IpPool>
  </PPPIpPool>
</PPP>
```

## Table description

Item	Description
Feature name	PPP
Table name	PPPIpPool
Table type	Multi-instance table
Row name	IpPool
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	PPP ip pool group name	Index	String, case sensitive. Length: 1 to 31 characters.	Group name must be "default" when you set the default group.
PoolName	PPP ip pool name	Index	String, case sensitive. Length: 1 to 31 characters.	N/A
StartIPAddr	Start IP address of IP address range in a PPP address pool for dynamic allocation	Index	String, dotted decimal notation.	N/A
EndIPAddr	End IP address of IP address range in a PPP address pool for dynamic allocation	Index	String, dotted decimal notation.	It is equal with the StartIPAddr when it is empty. EndIPAddr must be no less than the StartIPAddr.

## PPP/PPPRmtAddr/Table

This table contains PPP remote address configuration information.

## XML structure

```
<PPP>
  <PPPRmtAddr>
    <RmtAddr>
      <IfIndex></IfIndex>
      <IPAddress></IPAddress>
      <PoolName></PoolName>
    </RmtAddr>
  </PPPRmtAddr>
</PPP>
```

## Table description

Item	Description
Feature name	PPP
Table name	PPPRmtAddr
Table type	Multi-instance table

Row name	RmtAddr
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
IPaddress	Start IP address of IP address range in a PPP address pool for dynamic allocation	N/A	String, dotted decimal notation.	N/A
PoolName	PPP ip pool name	N/A	String, case sensitive. Length: 1 to 31 characters.	N/A

## PPP/PPPDNSAccept/Table

This table contains PPP ipcp dns admit-any configuration information.

## XML structure

```

<PPP>
  <PPPDNSAccept>
    <DNSAdmitAny>
      <IfIndex></IfIndex>
      <AdmitAny></AdmitAny>
    </DNSAdmitAny>
  </PPPDNSAccept>
</PPP>

```

## Table description

Item	Description
Feature name	PPP

Table name	PPPDNSAccept
Table type	Multi-instance table
Row name	DNSAdmitAny
Restrictions	<p>This table supports interface types:</p> <p>virtual-template interface</p> <p>virtual-ppp interface/subinterface</p> <p>analogmodem interface</p> <p>isdn bri interface</p> <p>cpos interface</p> <p>async interface</p> <p>aux interface</p> <p>serial interface</p>
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
AdmitAny	Configure an interface to accept the DNS server IP address assigned by the peer.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	You can config an interface to accept the DNS server IP address assigned by the peer, through which domain names can be resolved for the device.

## PPP/PPPDNSRequest/Table

This table contains PPP ipcp dns admit-any configuration information.

## XML structure

```

<PPP>
  <PPPDNSRequest>
    <DNSRequest>
      <IfIndex></IfIndex>
    
```

```

    <Request></Request>
  </DNSRequest>
</PPPDNSRequest>
</PPP>

```

## Table description

Item	Description
Feature name	PPP
Table name	PPPDNSRequest
Table type	Multi-instance table
Row name	DNSRequest
Restrictions	<p>This table supports interface types:</p> <ul style="list-style-type: none"> <li>virtual-template interface</li> <li>virtual-ppp interface/subinterface</li> <li>analogmodem interface</li> <li>isdn bri interface</li> <li>cpos interface</li> <li>async interface</li> <li>aux interface</li> <li>serial interface</li> </ul>
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Request	Configure an interface to actively request the DNS server IP address its peer.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>	If a device is connected to a provider's access server through a PPP link, you can use this command. Then, the device can obtain the specified DNS server IP address from the access server during IPCP negotiation.





---

# Contents

<b>PPP</b> .....	1
PPP/PPPAuth/Table .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
PPP/PPPUserPap/Table .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
PPP/PPPDNS/Table .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
PPP/PPPUserChap/Table .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
PPP/PPPOEUserNumInfo/Table .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
PPP/PPPOEUserInfo/Table .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
PPP/PPPUserInfo/Table .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
PPP/PPPipPool/Table .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
PPP/PPPRmtAddr/Table .....	12
XML structure .....	13
Table description .....	13
Columns .....	13
PPP/PPPDNSAccept/Table .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
PPP/PPPDNSRequest/Table .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
PPP/HistoryUserInfo/Table .....	16
XML structure .....	16
Table description .....	17
Columns .....	17

# PPP

## PPP/PPPAuth/Table

This table contains the information about using ppp authentication-mode to configure PPP authentication.

### XML structure

```
<PPP>
  <PPPAuth>
    <AuthMode>
      <IfIndex></IfIndex>
      <Mode></Mode>
      <Callin></Callin>
      <Domain></Domain>
      <DefaultDomain></DefaultDomain>
    </AuthMode>
  </PPPAuth>
</PPP>
```

### Table description

Item	Description
Feature name	PPP
Table name	PPPAuth
Table type	Multi-instance table
Row name	AuthMode
Restrictions	This table supports interface types: virtual-template interface virtual-ppp interface/subinterface analogmodem interface isdn bri interface cpos interface async interface aux interface serial interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Mode	Authentication mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pap.</li> <li>2—chap.</li> <li>4—ms-chap.</li> <li>8—ms-chap-v2.</li> </ul>	N/A
Callin	Authenticates the call-in users only.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Domain	ISP domain name.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
DefaultDomain	ISP default domain name.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## PPP/PPPPUserPap/Table

This table contains the information about PPP Pap.

## XML structure

```

<PPP>
  <PPPPUserPap>
    <UserPap>
      <IfIndex></IfIndex>
      <UserName></UserName>
      <PassWord></PassWord>
    </UserPap>
  </PPPPUserPap>
</PPP>

```

## Table description

Item	Description
Feature name	PPP
Table name	PPPUserPap
Table type	Multi-instance table
Row name	UserPap
Restrictions	This table supports interface types: virtual-template interface virtual-ppp interface/subinterface analogmodem interface isdn bri interface pos interface async interface aux interface serial interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
UserName	Username of Pap mode	N/A	String. case-sensitive. Length: 1 to 80 characters.	N/A
PassWord	Password of Pap mode	N/A	String. case-sensitive. Length: 1 to 255 characters.	N/A

## PPP/PPPDNS/Table

This table contains the information of PPP DNS server IP addresses.

## XML structure

```
<PPP>
  <PPPDNS>
```

```

<IpcpDNS>
  <IfIndex></IfIndex>
  <PriAddr></PriAddr>
  <SecAddr></SecAddr>
</IpcpDNS>
</PPPDNS>
</PPP>

```

## Table description

Item	Description
Feature name	PPP
Table name	PPPDNS
Table type	Multi-instance table
Row name	IpcpDNS
Restrictions	<p>This table supports interface types:</p> <ul style="list-style-type: none"> <li>virtual-template interface</li> <li>virtual-ppp interface/subinterface</li> <li>analogmodem interface</li> <li>isdn bri interface</li> <li>cpos interface</li> <li>async interface</li> <li>aux interface</li> <li>serial interface</li> </ul>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
PriAddr	Specifies a primary DNS server IP address.	N/A	String, dotted decimal notation.	N/A
SecAddr	Specifies a secondary DNS server IP address.	N/A	String, dotted decimal notation.	N/A

# PPP/PPPUserChap/Table

This table contains the information about using PPP authentication-mode Chap to configure PPP authentication.

## XML structure

```
<PPP>
  <PPPUserChap>
    <UserChap>
      <IfIndex></IfIndex>
      <UserName></UserName>
      <PassWord></PassWord>
    </UserChap>
  </PPPUserChap>
</PPP>
```

## Table description

Item	Description
Feature name	PPP
Table name	PPPUserChap
Table type	Multi-instance table
Row name	UserChap
	This table supports interface types:
	virtual-template interface
	virtual-ppp interface/subinterface
	analogmodem interface
Restrictions	isdn bri interface
	pos interface
	async interface
	aux interface
	serial interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
UserName	Username of chap mode	N/A	String. case-sensitive. Length: 1 to 80 characters.	N/A
PassWord	Password of chap mode	N/A	String. case-sensitive. Length: 1 to 255 characters.	N/A

## PPP/PPPOEUserNumInfo/Table

This table contains the number of PPPoE user information.

### XML structure

```

<PPP>
  <PPPOEUserNumInfo>
    <Num></Num>
  </PPPOEUserNumInfo>
</PPP>

```

### Table description

Item	Description
Feature name	PPP
Table name	PPPOEUserNumInfo
Table type	Single-instance table
Row name	N/A
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Num	PPPoE user number.	N/A	Unsigned integer.	N/A

## PPP/PPPOEUserInfo/Table

This table contains PPPoE user information.

## XML structure

```
<PPP>
  <PPPOEUserInfo>
    <PPPOEUser>
      <IfIndex></IfIndex>
      <UserName></UserName>
      <MacAddr></MacAddr>
      <IpAddr></IpAddr>
      <ObjectGroup></ObjectGroup>
    </PPPOEUser>
  </PPPOEUserInfo>
</PPP>
```

## Table description

Item	Description
Feature name	PPP
Table name	PPPOEUserInfo
Table type	Multi-instance table
Row name	PPPOEUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Unsigned integer. Value range: 0 to $2^{64} - 1$ . Unsigned integer. Value range: 0 to $2^{64} - 1$ . This don't support name index.
UserName	User name.	N/A	String. Length: 1 to 80 characters.	N/A
MacAddr	MAC address .	N/A	String, dotted decimal notation.	N/A
IpAddr	Ip address.	N/A	String, dotted decimal notation.	N/A
ObjectGroup	Group name	N/A	String. Length: 1 to 31 characters.	N/A

## PPP/PPPUUserInfo/Table

This table contains PPP user information.

## XML structure

```

<PPP>
  <PPPUUserInfo>
    <PPPUser>
      <PPPIndex></PPPIndex>
      <UserType></UserType>
      <State></State>
      <UserName></UserName>
      <MacAddr></MacAddr>
      <IpAddr></IpAddr>
      <IPv6Addr></IPv6Addr>
      <AuthenDomain></AuthenDomain>
      <AuthorDomain></AuthorDomain>
      <VPNInstanceName></VPNInstanceName>
      <UserID></UserID>
      <ServiceVLAN></ServiceVLAN>
      <CustomerVLAN></CustomerVLAN>
      <IPv4Pool></IPv4Pool>
      <IPv6Pool></IPv6Pool>
      <IPv6NDPool></IPv6NDPool>
      <VxLANID></VxLANID>
      <LoginTime></LoginTime>
      <OnlineTime></OnlineTime>
      <RemainTime></RemainTime>
    
```

```

<UserProfile></UserProfile>
<GroupUserProfile></GroupUserProfile>
<InboundCAR></InboundCAR>
<OutboundCAR></OutboundCAR>
<InboundPIR></InboundPIR>
<OutboundPIR></OutboundPIR>
<IPv4FlowStat></IPv4FlowStat>
<IPv6FlowStat></IPv6FlowStat>
<AccessInterface></AccessInterface>
<BasInterface></BasInterface>
<CfgInterface></CfgInterface>
</PPPUser>
</PPPUserInfo>
</PPP>

```

## Table description

Item	Description
Feature name	PPP
Table name	PPPUserInfo
Table type	Multi-instance table
Row name	PPPUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PPPIIndex	PPP index.	Index	Unsigned integer.	Unsigned integer. Value range: 0 to $2^{64} - 1$ .
UserType	User Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—LAC.</li> <li>2—LNS.</li> <li>3—PPPOA.</li> <li>4—PPPOE</li> <li>5—PPPPHY</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
State	PPP Phase	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—PHASE_DEAD.</li> <li>1—PHASE_ESTABLISH</li> <li>2—PHASE_AUTHENTICATE</li> <li>3—PHASE_DDRAUTH</li> <li>4—PHASE_MULTILINK</li> <li>5—PHASE_NETWORK</li> <li>6—PHASE_TERMINATE</li> </ul>	N/A
UserName	User name.	N/A	String. Length: 1 to 80 characters.	N/A
MacAddr	MAC address .	N/A	Six groups of two hexadecimal digits, hyphen-separated.	N/A
IpAddr	Ip address.	N/A	String, dotted decimal notation.	N/A
IPv6Addr	IPv6 address	N/A	Hexadecimal string, colon-separated.	N/A
AuthenDomain	Domain name for authentication	N/A	String. Length: 1 to 255 characters.	N/A
AuthorDomain	Domain name for authorization	N/A	String. Length: 1 to 255 characters.	N/A
VPNInstanceName	Authorized VPN instance name	N/A	Length: 1 to 31 characters.	N/A
UserID	User ID assigned to an user in online state	N/A	Unsigned integer	N/A
ServiceVLAN	Service provider VLAN	N/A	Unsigned short.	N/A
CustomerVLAN	Customer VLAN	N/A	Unsigned short.	N/A
IPv4Pool	PPP IPCP address pool name	N/A	String. Length: 1 to 31 characters.	N/A
IPv6Pool	PPP IPV6 address pool name	N/A	String, Length: 1 to 63 characters.	N/A
IPv6NDPool	PPP IPV6 ND prefix address pool name	N/A	String, Length: 1 to 63 characters.	N/A
VxLANID	VXLAN ID	N/A	Unsigned integer.	N/A
LoginTime	User login time	N/A	DateTime.	Example: YYYY-MM-DDT hh:mm:ss

Column name	Column description	Column type	Data type and restrictions	Remarks
OnlineTime	User online time	N/A	DateTime.	Example: hh:mm:ss
RemainTime	Session duration from AAA	N/A	Unsigned integer.	Unit: seconds
UserProfile	Authorized User profile name from AAA	N/A	String. Length: 1 to 31 characters.	N/A
GroupUserProfile	Authorized Group user profile name from AAA	N/A	String. Length: 1 to 31 characters.	N/A
InboundCAR	Authorized inbound average rate value	N/A	Unsigned integer.	Unit: kbps
OutboundCAR	Authorized outbound average rate value	N/A	Unsigned integer.	Unit: kbps
InboundPIR	Authorized inbound peak rate value	N/A	Unsigned integer.	Unit: kbps
OutboundPIR	Authorized outbound peak rate value	N/A	Unsigned integer.	Unit: kbps
IPv4FlowStat	IPv4 flow statistics	N/A	String. Length: 1 to 80 characters.	Include uplink packets/bytes and downlink packets/bytes
IPv6FlowStat	IPv6flow statistics	N/A	String. Length: 1 to 80 characters.	Include uplink packets/bytes and downlink packets/bytes
AccessInterface	Access interface	N/A	Unsigned integer	N/A
BasInterface	Bas interface	N/A	Unsigned integer	N/A
CfgInterface	Configuration interface	N/A	Unsigned integer	N/A

## PPP/PPPIpPool/Table

This table contains ip pool of PPP configuration information.

## XML structure

```
<PPP>
  <PPPIpPool>
```

```

<IpPool>
  <GroupName></GroupName>
  <PoolName></PoolName>
  <StartIPAddr></StartIPAddr>
  <EndIPAddr></EndIPAddr>
</IpPool>
</PPPIpPool>
</PPP>

```

## Table description

Item	Description
Feature name	PPP
Table name	PPPIpPool
Table type	Multi-instance table
Row name	IpPool
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	PPP ip pool group name	Index	String, case sensitive. Length: 1 to 31 characters.	Group name must be "default" when you set the default group.
PoolName	PPP ip pool name	Index	String, case sensitive. Length: 1 to 31 characters.	N/A
StartIPAddr	Start IP address of IP address range in a PPP address pool for dynamic allocation	Index	String, dotted decimal notation.	N/A
EndIPAddr	End IP address of IP address range in a PPP address pool for dynamic allocation	Index	String, dotted decimal notation.	It is equal with the StartIPAddr when it is empty. EndIPAddr must be no less than the StartIPAddr.

## PPP/PPPRmtAddr/Table

This table contains PPP remote address configuration information.

## XML structure

```
<PPP>
  <PPPRmtAddr>
    <RmtAddr>
      <IfIndex></IfIndex>
      <IPAddress></IPAddress>
      <PoolName></PoolName>
    </RmtAddr>
  </PPPRmtAddr>
</PPP>
```

## Table description

Item	Description
Feature name	PPP
Table name	PPPRmtAddr
Table type	Multi-instance table
Row name	RmtAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IPAddress	Start IP address of IP address range in a PPP address pool for dynamic allocation	N/A	String, dotted decimal notation.	N/A
PoolName	PPP ip pool name	N/A	String, case sensitive. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

## PPP/PPPDNSAccept/Table

This table contains PPP ipcp dns admit-any configuration information.

### XML structure

```

<PPP>
  <PPPDNSAccept>
    <DNSAdmitAny>
      <IfIndex></IfIndex>
      <AdmitAny></AdmitAny>
    </DNSAdmitAny>
  </PPPDNSAccept>
</PPP>

```

### Table description

Item	Description
Feature name	PPP
Table name	PPPDNSAccept
Table type	Multi-instance table
Row name	DNSAdmitAny
Restrictions	This table supports interface types: virtual-template interface virtual-ppp interface/subinterface analogmodem interface isdn bri interface cpos interface async interface aux interface serial interface



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
AdmitAny	Configure an interface to accept the DNS server IP address assigned by the peer.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true.</b></li><li>• <b>false.</b></li></ul>	You can config an interface to accept the DNS server IP address assigned by the peer, through which domain names can be resolved for the device.

## PPP/PPPDNSRequest/Table

This table contains PPP ipcp dns admit-any configuration information.

## XML structure

```
<PPP>
  <PPPDNSRequest>
    <DNSRequest>
      <IfIndex></IfIndex>
      <Request></Request>
    </DNSRequest>
  </PPPDNSRequest>
</PPP>
```

## Table description

Item	Description
Feature name	PPP
Table name	PPPDNSRequest
Table type	Multi-instance table
Row name	DNSRequest
Restrictions	This table supports interface types: virtual-template interface

virtual-ppp interface/subinterface
analogmodem interface
isdn bri interface
cpos interface
async interface
aux interface
serial interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
lflIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about lflIndex, see "Appendix" in lflmgr NETCONF XML API Configuration Reference.
Request	Configure an interface to actively request the DNS server IP address its peer.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	If a device is connected to a provider's access server through a PPP link, you can use this command. Then, the device can obtain the specified DNS server IP address from the access server during IPCP negotiation.

## PPP/HistoryUserInfo/Table

This table contains PPP history user information.

## XML structure

```

<PPP>
  <HistoryUserInfo>
    <HistoryUser>
      <Interval></Interval>
      <Index></Index>
      <TimeStamp></TimeStamp>
      <Num></Num>
    </HistoryUser>
  </HistoryUserInfo>

```

</PPP>

## Table description

Item	Description
Feature name	PPP
Table name	HistoryUserInfo
Table type	Multi-instance table
Row name	HistoryUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Interval	The time interval of getting user information	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—hour.</li><li>• 1—day.</li></ul>	When Interval = 0, obtain ppp user information at a time every ten minutes. When Interval = 1, obtain ppp user information at a time every one hour.
Index	The serial number of information	Index	Unsigned integer. Value range: 1 to 60.	The smaller the Index, obtained information from the closer now.
TimeStamp	The time when getting information	N/A	Date time	N/A
Num	PPP user total	N/A	Unsigned integer.	N/A

---

# Contents

Comware 7 PPP NETCONF XML API Error Message Reference.....	1
PPP/PPPAuthMode .....	1
PPP/PPPUserPap.....	1
PPP/PPPDNS .....	1
PPP/PPPUserChap.....	2
PPP/PPPipPool .....	2
PPP/PPPRmtAddr .....	2
PPP/PPPDNSAccept.....	3
PPP/PPPDNSRequest.....	3

# Comware 7 PPP NETCONF XML API Error Message Reference

## PPP/PPPAuthMode

Message	Explanation
Configuration items don't meet the requirements. 不符合配置要求。	The <Mode> column has been set and the < Callin > column has been set to true, but the < Domain > column and the < DefaultDomain > don't been set. <Mode>列存在设置, <Callin>设为真, 但<Domain>和<DefaultDomain>行没有设置。
In aux interface, async-mode protocol should be issued first. 在AUX口, async-mode protocol命令应该先下发。	Async-mode protocol should be issued first. Async-mode protocol命令应该先下发
Domain cannot be set as "default". Domain列不能被设置为"default"。	Avoid to conflict with command. 防止与命令行冲突。

## PPP/PPPUserPap

Message	Explanation
In aux interface, async-mode protocol should be issued first. 在AUX口, async-mode protocol命令应该先下发。	Async-mode protocol should be issued first. Async-mode protocol命令应该先下发

## PPP/PPPDNS

Message	Explanation
Invalid start IPv4 address. 非法的IPv4开始地址。	The <PriAddr> column should be a valid IP address. <PriAddr>列必须是合法的IP地址。
Invalid end IPv4 address. 非法的IPv4结束地址。	The <SecAddr> column should be a valid IP address. <SecAddr>列必须是合法的IP地址。
Configuration items don't meet the requirements. 不符合配置要求。	The <PriAddr> column doesn't been set, but the <SecAddr> column has bee set. <PriAddr>列没有进行配置, 但<SecAddr>列存在配置
In aux interface, async-mode protocol should be issued first. 在AUX口, async-mode protocol命令应该先下发。	Async-mode protocol should be issued first. Async-mode protocol命令应该先下发

## PPP/PPPUUserChap

Message	Explanation
In aux interface, async-mode protocol should be issued first. 在AUX口，async-mode protocol命令应该先下发。	Async-mode protocol should be issued first. Async-mode protocol命令应该先下发

## PPP/PPPipPool

Message	Explanation
Invalid start IPv4 address. 非法的IPv4开始地址。	The <StartIPAddr> column should be a valid IP address. <StartIPAddr>列必须是合法的IP地址。
Invalid end IPv4 address. 非法的IPv4结束地址。	The <EndIPAddr> column should be a valid IP address. <EndIPAddr>列必须是合法的IP地址。
Total IP address number in this range exceeds 65535. 该IP范围内IP地址个数已达上限。	Total IP address number in this range exceeds 65535. 该IP范围内IP地址个数已达上限。
Total IP address number in this pool exceeds 65535. 该IP地址池内IP地址个数已达上限。	Total IP address number in this pool exceeds 65535. 该IP地址池内IP地址个数已达上限。
This pool is not allowed, because the pool is already in another group. 该IP地址池已存在其他组内	This pool is not allowed, because the pool is already in another group. 该IP地址池已存在其他组内
The IP address range overlaps with existing IP address ranges in other group. 该IP地址范围与其他组内的IP地址范围相互覆盖。	The IP address range overlaps with existing IP address ranges in other group. 该IP地址范围与其他组内的IP地址范围相互覆盖。
The start IP address should be less than or equal to the end IP address. 开始IP地址必须小于等于结束IP地址。	The start IP address should be less than or equal to the end IP address. 开始IP地址必须小于等于结束IP地址。
Operation failed, The pool is being used. 操作失败，地址池正在使用。	Operation failed, The pool is being used. 操作失败，地址池正在使用。

## PPP/PPPRmtAddr

Message	Explanation
Invalid IPv4 address. 非法的IPv4地址。	The <PAddress> column should be a valid IP address. <IPAddress>列必须是合法的IP地址。
Configuration items don't meet the requirements. 不符合配置要求。	The <PAddress> column and <PoolName > column can't be set at the same time. <PAddress> 和<PoolName >不能同时配置。

## PPP/PPPDNSAccept

Message	Explanation
In aux interface,async-mode protocol should be issued first.	Async-mode protocol should be issued first.
在AUX口， async-mode protocol命令应该先下发。	Async-mode protocol命令应该先下发

## PPP/PPPDNSRequest

Message	Explanation
In aux interface,async-mode protocol should be issued first.	Async-mode protocol should be issued first.
在AUX口， async-mode protocol命令应该先下发。	Async-mode protocol命令应该先下发

---

# Contents

- PPPOEC ..... 1**
- PPPOEC/PppoecClient ..... 1
  - XML structure ..... 1
  - Table description ..... 1
  - Columns ..... 2



# PPPOEC

## PPPOEC/PppoecClient

This table contains PPPOE client configuration information.

### XML structure

```
<PPPOEC>
  <PppoecClient>
    <Client>
      <IfIndex></IfIndex>
      <BundleNum></BundleNum>
      <Hostuniq></Hostuniq>
    </Client>
  </PppoecClient>
</PPPOEC>
```

### Table description

Item	Description
Feature name	PPPOEC
Table name	PppoecClient
Table type	Multi-instance table
Row name	Client
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 GigabitEthernet interface/subinterface Layer 3 Ten-GigabitEthernet interface/subinterface Layer 3 Forty-GigEthernet interface/subinterface Layer 3 Hundred-GigEthernet interface/subinterface Layer 3 Virtual-Ethernet interface/subinterface Layer 3 WLAN-Ethernet interface/subinterface Layer 3 Twenty-GigEthernet interface/subinterface Layer 3 Smartrate-Ethernet interface/subinterface Layer 3 EFM interface/subinterface Layer 3 Eth-channel interface/subinterface VLAN interface
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
BundleNum	PPPOE client bundle number	Index	Unsigned integer. Value range: MinBundleNum to MaxBundleNum.	The value of MinBundleNum and MaxBundleNum depend on the device model.
Hostuniq	Whether is Host-Uniq is enable or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>(default)</li> <li>• <b>false</b>.</li> </ul>	N/A

---

# Contents

- PPPOEC** ..... 1
- PPPOEC/PppoecClient ..... 1
  - XML structure ..... 1
  - Table description ..... 1
  - Columns ..... 2
- PPPOEC/PppoecSpecification ..... 2
  - XML structure ..... 2
  - Table description ..... 2
  - Columns ..... 3

# PPPOEC

## PPPOEC/PppoecClient

This table contains ip pool of PPPOE client configuration information.

### XML structure

```
<PPPOEC>
  <PppoecClient>
    <Client>
      <IfIndex></IfIndex>
      <BundleNum></BundleNum>
      <Hostuniq></Hostuniq>
    </Client>
  </PppoecClient>
</PPPOEC>
```

### Table description

Item	Description
Feature name	PPPOEC
Table name	PppoecClient
Table type	Multi-instance table
Row name	Client
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 GigabitEthernet interface/subinterface Layer 3 Ten-GigabitEthernet interface/subinterface Layer 3 Forty-GigEthernet interface/subinterface Layer 3 Hundred-GigEthernet interface/subinterface Layer 3 Virtual-Ethernet interface/subinterface Layer 3 WLAN-Ethernet interface/subinterface Layer 3 Twenty-GigEthernet interface/subinterface Layer 3 Smartrate-Ethernet interface/subinterface Layer 3 EFM interface/subinterface Layer 3 Eth-channel interface/subinterface VLAN interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
BundleNum	PPPOE client bundle number	Index	Unsigned integer. Value range: MinBundleNum to MaxBundleNum.	The value of MinBundleNum and MaxBundleNum depend on the device model.
Hostuniq	Whether is Host-Uniq is enable or not.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b>.</li></ul>	N/A

## PPPOEC/PppoecSpecification

This table contains PPPOEC specification information.

### XML structure

```
<PPPOEC>
  <PppoecSpecification>
    <MinBundleNum></MinBundleNum>
    <MaxBundleNum></MaxBundleNum>
  </PppoecSpecification>
</PPPOEC>
```

### Table description

Item	Description
Feature name	PPPOEC
Table name	PppoecSpecification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinBundleNum	The minimum of bundle number.	N/A	Unsigned integer.	N/A
MaxBundleNum	The maximum of bundle number.	N/A	Unsigned integer.	N/A

---

# Contents

Comware 7 PPPOEC NETCONF XML API Error Message Reference ..... 1

    PPPOEC/PppoecClient ..... 1

# Comware 7 PPPOEC NETCONF XML API Error Message Reference

## PPPOEC/PppoecClient

Message	Explanation
Failed to enable the PPPoE client. 创建PPPOE会话客户端失败。	Failed to enable the PPPoE client. 创建PPPOE会话客户端失败。
Failed to disable the PPPoE client. 删除PPPOE会话客户端失败。	Failed to disable the PPPoE client. 删除PPPOE会话客户端失败。
Operation failed because the bundle-number is occupied by another interface. 操作失败，该Bundle编号已经被其他接口占用。	The dialer bundle number is occupied by another interface. dialer bundle number已被别的接口占用。
The value is out of range. 参数值超出范围。	The dialer bundle number is out of range. 配置的dialer bundle number超出范围。



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# Contents

PPPOES .....	1
PPPOES/PppoesBind/Table .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
PPPOES/PppoesIfLimit/Table .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
PPPOES/PppoesAccessDelay/Table .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# PPPOES

## PPPOES/PppoesBind/Table

This table contains the information about using **pppoe-server bind** to enable the PPPoE server on an interface and bind the interface to a VT interface.

### XML structure

```
<PPPOES>
  <PppoesBind>
    <BindVT>
      <IfIndex></IfIndex>
      <VTNum></VTNum>
    </BindVT>
  </PppoesBind>
</PPPOES>
```

### Table description

Item	Description
Feature name	PPPOES
Table name	PppoesBind
Table type	Multi-instance table
Row name	BindVT
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 GigabitEthernet interface/subinterface Layer 3 Ten-GigabitEthernet interface/subinterface Layer 3 Forty-GigEthernet interface/subinterface Layer 3 Hundred-GigEthernet interface/subinterface Layer 3 Virtual-Ethernet interface/subinterface Layer 3 VE L3VPN interface/subinterface Layer 3 Smartrate-Ethernet interface/subinterface Layer 3 EFM interface/subinterface Layer 3 reth interface/subinterface VLAN interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
VTNum	VT number.	N/A	Unsigned integer.	The value of VTNum depends on the device model.

## PPPOES/PppoesIfLimit/Table

This table contains PPPOE server sessions limit on interface configuration information.

## XML structure

```
<PPPOES>
  <PppoesIfLimit>
    <IfLimit>
      <IfIndex></IfIndex>
      <LimitIf></LimitIf>
      <LimitClnMac></LimitClnMac>
    </IfLimit>
  </PppoesIfLimit>
</PPPOES>
```

## Table description

Item	Description
Feature name	PPPOES
Table name	PppoesIfLimit
Table type	Multi-instance table
Row name	IfLimit
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 GigabitEthernet interface/subinterface Layer 3 Ten-GigabitEthernet interface/subinterface

	Layer 3 Forty-GigEthernet interface/subinterface
	Layer 3 Hundred-GigEthernet interface/subinterface
	Layer 3 Virtual-Ethernet interface/subinterface
	Layer 3 VE L3VPN interface/subinterface
	Layer 3 Smartrate-Ethernet interface/subinterface
	Layer 3 EFM interface/subinterface
	Layer 3 reth interface/subinterface
	VLAN interface
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
LimitIf	The maximum number of PPPoE sessions on an interface.	N/A	Unsigned integer. Value range: 1 to 65534. Default: 65534.	N/A
LimitClnMac	The maximum number of PPPoE sessions for a user	N/A	Unsigned integer. Value range: 1 to 65534. Default: 1.	N/A

## PPPOES/PppoesAccessDelay/Table

This table contains information about setting the response delay time on an interface.

## XML structure

```

<PPPOES>
  <PppoesAccessDelay>
    <AccessDelay>
      <IfIndex></IfIndex>
      <Mode></Mode>
      <DelayTime></DelayTime>
    </AccessDelay>
  </PppoesAccessDelay>
</PPPOES>

```

```

    </AccessDelay>
  </PppoesAccessDelay>
</PPPOES>

```

## Table description

Item	Description
Feature name	PPPOES
Table name	PppoesAccessDelay
Table type	Multi-instance table
Row name	AccessDelay
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Mode	The mode of delaytime	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0—all</b></li> <li>• <b>1—even-mac</b></li> <li>• <b>2—odd-mac</b></li> </ul>	N/A
DelayTime	Specifies the response delay time	N/A	Unsigned integer. Value range: 10 to 25500. Default: 0.	Unit: milliseconds

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# Contents

PPPOES .....	1
PPPOES/PppoesBind/Table .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
PPPOES/PppoesIfLimit/Table .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
PPPOES/PppoesSpecification/Table .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
PPPOES/PppoesAccessDelay/Table .....	4
XML structure .....	4
Table description .....	4
Columns .....	5

# PPPOES

## PPPOES/PppoesBind/Table

This table contains the information about using **pppoe-server bind** to enable the PPPoE server on an interface and bind the interface to a VT interface.

### XML structure

```
<PPPOES>
  <PppoesBind>
    <BindVT>
      <IfIndex></IfIndex>
      <VTNum></VTNum>
    </BindVT>
  </PppoesBind>
</PPPOES>
```

### Table description

Item	Description
Feature name	PPPOES
Table name	PppoesBind
Table type	Multi-instance table
Row name	BindVT
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 GigabitEthernet interface/subinterface Layer 3 Ten-GigabitEthernet interface/subinterface Layer 3 Forty-GigEthernet interface/subinterface Layer 3 Hundred-GigEthernet interface/subinterface Layer 3 Virtual-Ethernet interface/subinterface Layer 3 VE L3VPN interface/subinterface Layer 3 Smartrate-Ethernet interface/subinterface Layer 3 EFM interface/subinterface Layer 3 reth interface/subinterface VLAN interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
VTNum	VT number.	N/A	Unsigned integer.	The value of VTNum depends on the device model.

## PPPOES/PppoesIfLimit/Table

This table contains PPPOE server sessions limit on interface configuration information.

## XML structure

```
<PPPOES>
  <PppoesIfLimit>
    <IfLimit>
      <IfIndex></IfIndex>
      <LimitIf></LimitIf>
      <LimitClnMac></LimitClnMac>
    </IfLimit>
  </PppoesIfLimit>
</PPPOES>
```

## Table description

Item	Description
Feature name	PPPOES
Table name	PppoesIfLimit
Table type	Multi-instance table
Row name	IfLimit
Restrictions	This table supports interface types: Layer 3 Ethernet interface/subinterface Layer 3 GigabitEthernet interface/subinterface Layer 3 Ten-GigabitEthernet interface/subinterface



Layer 3 Forty-GigEthernet interface/subinterface
Layer 3 Hundred-GigEthernet interface/subinterface
Layer 3 Virtual-Ethernet interface/subinterface
Layer 3 VE L3VPN interface/subinterface
Layer 3 Smartrate-Ethernet interface/subinterface
Layer 3 EFM interface/subinterface
Layer 3 reth interface/subinterface
VLAN interface

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
lflIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about lflIndex, see "Appendix" in lfmgr NETCONF XML API Configuration Reference.
limitlfl	The maximum number of PPPoE sessions on an interface.	N/A	Unsigned integer. Value range: 1 to 65534.	N/A
limitClnMac	The maximum number of PPPoE sessions for a user	N/A	Unsigned integer. Value range: 1 to 65534.	N/A

## PPPOES/PppoesSpecification/Table

This table contains the information about specification of VT number.

## XML structure

```

<PPPOES>
  <PppoesSpecification>
    <MinVTNum></MinVTNum>
    <MaxVTNum></MaxVTNum>
  </PppoesSpecification>
</PPPOES>

```

## Table description

Item	Description
Feature name	PPPOES
Table name	PppoesSpecification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinVTNum	Min VT number	N/A	Unsigned integer	N/A
MaxVTNum	Max VT number	N/A	Unsigned integer	N/A

## PPPOES/PppoesAccessDelay/Table

This table contains information about setting the response delay time on an interface.

## XML structure

```
<PPPOES>
  <PppoesAccessDelay>
    <AccessDelay>
      <IfIndex></IfIndex>
      <Mode></Mode>
      <DelayTime></DelayTime>
    </AccessDelay>
  </PppoesAccessDelay>
</PPPOES>
```

## Table description

Item	Description
Feature name	PPPOES
Table name	PppoesAccessDelay
Table type	Multi-instance table
Row name	AccessDelay

Restrictions	N/A
--------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Mode	The mode of delaytime	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0—all</b></li> <li>• <b>1—even-mac</b></li> <li>• <b>2—odd-mac</b></li> </ul>	N/A
DelayTime	Specifies the response delay time	N/A	Unsigned integer. Value range: 10 to 25500.	Unit: milliseconds

---

# Contents

- Comware 7 PPPOES NETCONF XML API Error Message Reference ..... 1
  - PPPOES/PppoesIfLimit ..... 1
  - PPPOES/PppoesBind ..... 1
  - PPPOES/PppoesAccessDelay ..... 2

# Comware 7 PPPOES NETCONF XML API Error Message Reference

## PPPOES/PppoesIfLimit

Message	Explanation
Config interface session limit failed. 配置接口上所能创建PPPoE会话的最大数目失败。	For some reasons like invalid parameter, Config interface session limit failed. 因为参数不在合法范围内等原因，配置接口下最大PPPoE会话限制失败。
Config session limit per client MAC failed. 配置接口上每个用户所能创建PPPoE会话的最大数目失败。	For some reasons like invalid parameter, Config session limit per client MAC failed. 因为参数不在合法范围内等原因，配置每个MAC地址对应的最大PPPoE会话数失败。

## PPPOES/PppoesBind

Message	Explanation
Another virtual template is bound with the interface. To bind a new one, remove the existing binding first. 该接口已绑定其他VT口。如果想绑定新的VT口，先删除已经绑定的VT口。	The interface can bind one virtual template. To bind a new one, remove the existing binding first. 接口下只能绑定一个VT口，绑定新VT需要先删除旧的。
The operation is not supported on this interface. 接口上不支持该操作。	The operation is not supported on this interface. 接口上不支持该操作。
Failed to config PPPoE server. 配置失败。	Failed to config PPPoE server. 配置失败。
Operation failed. You can execute this command only after all users on the interface go offline. 操作失败。在此接口所有用户下线后你才能执行这条命令。	You can execute this command only after all users on the interface go offline. 有用户在线不能去捆绑VT口。
Failed to Craete Bas-interface. 创建Bas接口失败。	Failed to Craete Bas-interface. 创建Bas接口失败。
The specified virtual-template interface doesn't exist. 指定的VT口不存在。	You can execute this command only after the specified virtual-template interface exist. VT口存在才能做PPPOES捆绑。
The VTNum cannot be bigger than the supported max VTNum. 下发的VTNum不能大于设备支持的最大VTNum。	The VTNum is out of range. 配置的VTNum超出范围。

# PPPOES/PppoesAccessDelay

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration parameter is incomplete. 配置参数不全。

# Contents

PRIMAP .....	1
PRIMAP/MapTables .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PRIMAP/PortPriority .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
PRIMAP/PortTrustMode .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
PRIMAP/GlobalTrustMode .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
PRIMAP/FlexMapTables .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
PRIMAP/FlexMapItems .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
PRIMAP/FlexMapTableApply .....	9
XML structure .....	9
Table description .....	9
Columns .....	9

# PRIMAP

## PRIMAP/MapTables

This table contains information about priority mapping tables.

### XML structure

```
<PRIMAP>
  <MapTables>
    <MapTable>
      <Source></Source>
      <Target></Target>
      <Color></Color>
      <Direction></Direction>
      <Import></Import>
      <Export></Export>
    </MapTable>
  </MapTables>
</PRIMAP>
```

### Table description

Item	Description
Feature name	PRIMAP
Table name	MapTables
Table type	Multi-instance table
Row name	MapTable
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Source	The source type of priority.	Index	Enumeration: <ul style="list-style-type: none"><li>1—dot11e</li><li>2—dot1p</li><li>3—dscp</li><li>4—exp</li><li>5—IP precedence</li><li>6—Local precedence</li><li>7—User priority</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Target	The target type of priority.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—dot11e</li> <li>2—dot1p</li> <li>3—Drop priority</li> <li>4—dscp</li> <li>5—exp</li> <li>6—Forwarding-class priority</li> <li>7—Local precedence</li> <li>8—RPR priority</li> <li>9—User priority</li> </ul>	N/A
Color	The color of priority mapping table.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Uncolored.</li> <li>1—Green.</li> <li>2—Yellow.</li> <li>3—Red.</li> </ul>	N/A
Direction	The direction of priority mapping table.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> <li>2—Both.</li> </ul>	N/A
Import	Input value of priority mapping table.	Index	Unsigned integer. Value range: 0 to 63.	Different priority has different range of export value. dot1p: 0 to 7 dscp: 0 to 63 lp: 0 to 7 exp: 0 to 7 IP Precedence: 0 to 7 up: 0 to 7 dot11e: 0 to 7
Export	Output value of priority mapping table.	N/A	Unsigned integer. Value range: 0 to 63.	Different priority has different range of export value. dot1p: 0 to 7 dscp: 0 to 63 lp: 0 to 7 exp: 0 to 7 up: 0 to 7 dot11e: 0 to 7 fc: 0 to 7 rpr: 0 to 2 drop priority: 0 to 2

## PRIMAP/PortPriority

This table contains information about port priority.

# XML structure

```
<PRIMAP>
  <PortPriority>
    <Port>
      <IfIndex></IfIndex>
      <Priority></Priority>
      <Dscp></Dscp>
      <Dot1p></Dot1p>
      <Exp></Exp>
      <DropPriority></DropPriority>
      <LocalPrecedence></LocalPrecedence>
    </Port>
  </PortPriority>
</PRIMAP>
```

## Table description

Item	Description
Feature name	PRIMAP
Table name	PortPriority
Table type	Multi-instance table
Row name	Port
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Priority	Port default priority.	N/A	Unsigned integer. Value range: 0 to 7.	When this priority is supported, the default value is 0.
Dscp	DSCP.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
Dot1p	Dot1p.	N/A	Unsigned integer. Value range: 0 to 7.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Exp	MPLS EXP.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
DropPriority	Drop priority.	N/A	Unsigned integer. Value range: 0 to 2.	When this priority is supported, the default value is 0.
LocalPrecedence	Local precedence.	N/A	Unsigned integer. Value range: 0 to 7.	When this priority is supported, the default value is 2.

## PRIMAP/PortTrustMode

This table contains information about port priority trust mode.

### XML structure

```

<PRIMAP>
  <PortTrustMode>
    <Port>
      <IfIndex></IfIndex>
      <TrustMode></TrustMode>
      <Override></Override>
    </Port>
  </PortTrustMode>
</PRIMAP>

```

### Table description

Item	Description
Feature name	PRIMAP
Table name	PortTrustMode
Table type	Multi-instance table
Row name	Port
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of

Column name	Column description	Column type	Data type and restrictions	Remarks
				your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
TrustMode	Port priority trust mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Untrust.</li> <li>2—Dot1p.</li> <li>3—DSCP.</li> <li>4—EXP.</li> <li>5—IP precedence.</li> <li>6—Dot11e.</li> <li>7—Auto.</li> </ul>	Required. The default priority trust mode on an interface varies by device.
Override	Whether overwrite the original priority carried in the packet	N/A	Boolean: <ul style="list-style-type: none"> <li><b>false</b>—Do not overwrite the priority (default).</li> <li><b>true</b>—Overwrite the priority.</li> </ul>	Required. Both TrustMode and Override are specified, or both are not specified. If there is no TrustMode specified, the default value of Override is false.

## PRIMAP/GlobalTrustMode

This table contains information about global priority trust mode.  
Vxlan mode is supported only.

### XML structure

```
<PRIMAP>
  <GlobalTrustMode>
    <TunnelDscp></TunnelDscp>
  </GlobalTrustMode>
</PRIMAP>
```

### Table description

Item	Description
Feature name	PRIMAP
Table name	GlobalTrustMode
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelDscp	Global priority trust mode specifies the priority mapping for tunnel packets.	N/A	Boolean: <ul style="list-style-type: none"><li><b>false</b>—Trust the inner DSCP value in tunnel packets (default).</li><li><b>true</b>—Trust the DSCP value in tunnel encapsulation.</li></ul>	Vxlan mode is supported only

## PRIMAP/FlexMapTables

This table contains information about flexible priority mapping tables.

### XML structure

```
<PRIMAP>
  <FlexMapTables>
    <FlexMapTable>
      <TableName></TableName>
    </FlexMapTable>
  </FlexMapTables>
</PRIMAP>
```

### Table description

Item	Description
Feature name	PRIMAP
Table name	FlexMapTables
Table type	Multi-instance table
Row name	FlexMapTable
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TableName	The name of flexible priority mapping table	Index	String. Length: 1 to 31 characters.	N/A

# PRIMAP/FlexMapItems

This table contains information about flexible priority mapping items.

## XML structure

```
<PRIMAP>
  <FlexMapItems>
    <FlexMapItem>
      <TableName></TableName>
      <Source></Source>
      <Target></Target>
      <ImportColor></ImportColor>
      <Import></Import>
      <Export></Export>
      <ExportColor></ExportColor>
    </FlexMapItem>
  </FlexMapItems>
</PRIMAP>
```

## Table description

Item	Description
Feature name	PRIMAP
Table name	FlexMapItems
Table type	Multi-instance table
Row name	FlexMapItem
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TableName	The name of flexible priority mapping table	Index	String. Length: 1 to 31 characters.	N/A
Source	The source type of priority.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—dot11e</li><li>• 2—dot1p</li><li>• 3—dscp</li><li>• 4—exp</li><li>• 5—IP precedence</li><li>• 6—Local precedence</li><li>• 7—User priority</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Target	The target type of priority.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—dot11e</li> <li>2—dot1p</li> <li>3—Drop priority</li> <li>4—dscp</li> <li>5—exp</li> <li>6—Forwarding-class priority</li> <li>7—Local precedence</li> <li>8—RPR priority</li> <li>9—User priority</li> </ul>	N/A
ImportColor	The color of priority mapping table.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Uncolored.</li> <li>1—Green.</li> <li>2—Yellow.</li> <li>3—Red.</li> </ul>	N/A
Import	Input value of priority mapping table.	Index	Unsigned integer. Value range: 0 to 63.	Different priority types have different ranges of import values. dot1p: 0 to 7 dscp: 0 to 63 lp: 0 to 7 exp: 0 to 7 IP Precedence: 0 to 7 up: 0 to 7 dot11e: 0 to 7
Export	Output value of priority mapping table.	N/A	Unsigned integer. Value range: 0 to 63.	Required. Different priority types have different ranges of export values. dot1p: 0 to 7 dscp: 0 to 63 lp: 0 to 7 exp: 0 to 7 up: 0 to 7 dot11e: 0 to 7 fc: 0 to 7 rpr: 0 to 2 drop priority: 0 to 2
ExportColor	The color of priority mapping table.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Uncolored.</li> <li>1—Green.</li> <li>2—Yellow.</li> <li>3—Red.</li> </ul>	This column is available when the <b>ImportColor</b> column is 0.

# PRIMAP/FlexMapTableApply

This table contains information about flexible priority mapping tables applied to interfaces.

## XML structure

```
<PRIMAP>
  <FlexMapTableApply>
    <FlexMapTable>
      <IfIndex></IfIndex>
      <AppDirection></AppDirection>
      <FlexTableName></FlexTableName>
    </FlexMapTable>
  </FlexMapTableApply>
</PRIMAP>
```

## Table description

Item	Description
Feature name	PRIMAP
Table name	FlexMapTableApply
Table type	Multi-instance table
Row name	FlexMapTable
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
AppDirection	Application direction.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
FlexTableName	The name of flexible priority mapping.table	N/A	String. Length: 1 to 31 characters.	Required.



# Contents

PRIMAP .....	1
PRIMAP/MapTables .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
PRIMAP/PortPriority .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
PRIMAP/PortTrustMode .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
PRIMAP/GlobalTrustMode .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
PRIMAP/MapTablesCapability .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
PRIMAP/PortTrustCapability .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
PRIMAP/FlexMapTables .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
PRIMAP/FlexMapItems .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
PRIMAP/FlexMapTableApply .....	11
XML structure .....	11
Table description .....	11
Columns .....	12

# PRIMAP

## PRIMAP/MapTables

This table contains information about priority mapping tables.

### XML structure

```
<PRIMAP>
  <MapTables>
    <MapTable>
      <Source></Source>
      <Target></Target>
      <Color></Color>
      <Direction></Direction>
      <Import></Import>
      <Export></Export>
    </MapTable>
  </MapTables>
</PRIMAP>
```

### Table description

Item	Description
Feature name	PRIMAP
Table name	MapTables
Table type	Multi-instance table
Row name	MapTable
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Source	The source type of priority.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—dot11e</li><li>• 2—dot1p</li><li>• 3—dscp</li><li>• 4—exp</li><li>• 5—IP precedence</li><li>• 6—Local precedence</li><li>• 7—User priority</li></ul>	N/A
Target	The target type of priority.	Index	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—dot11e</li> <li>2—dot1p</li> <li>3—Drop priority</li> <li>4—dscp</li> <li>5—exp</li> <li>6—Forwarding-class priority</li> <li>7—Local precedence</li> <li>8—RPR priority</li> <li>9—User priority</li> </ul>	
Color	The color of priority mapping table.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Uncolored.</li> <li>1—Green.</li> <li>2—Yellow.</li> <li>3—Red.</li> </ul>	N/A
Direction	The direction of priority mapping table.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> <li>2—Both.</li> </ul>	N/A
Import	Input value of priority mapping table.	Index	Unsigned integer. Value range: 0 to 63.	Different priority has different range of export value. dot1p: 0 to 7 dscp: 0 to 63 lp: 0 to 7 exp: 0 to 7 IP Precedence: 0 to 7 up: 0 to 7 dot11e: 0 to 7
Export	Output value of priority mapping table.	N/A	Unsigned integer. Value range: 0 to 63.	Different priority has different range of export value. dot1p: 0 to 7 dscp: 0 to 63 lp: 0 to 7 exp: 0 to 7 up: 0 to 7 dot11e: 0 to 7 fc: 0 to 7 rpr: 0 to 2 drop priority: 0 to 2

## PRIMAP/PortPriority

This table contains information about port priority.

# XML structure

```
<PRIMAP>
  <PortPriority>
    <Port>
      <IfIndex></IfIndex>
      <Priority></Priority>
      <Dscp></Dscp>
      <Dot1p></Dot1p>
      <Exp></Exp>
      <DropPriority></DropPriority>
      <LocalPrecedence></LocalPrecedence>
    </Port>
  </PortPriority>
</PRIMAP>
```

## Table description

Item	Description
Feature name	PRIMAP
Table name	PortPriority
Table type	Multi-instance table
Row name	Port
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Priority	Port default priority.	N/A	Unsigned integer. Value range: 0 to 7.	When this priority is supported, the default value is 0.
Dscp	DSCP.	N/A	Unsigned integer. Value range: 0 to 63.	N/A
Dot1p	Dot1p.	N/A	Unsigned integer. Value range: 0 to 7.	N/A
Exp	MPLS EXP.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 7.	
DropPriority	Drop priority.	N/A	Unsigned integer. Value range: 0 to 2.	When this priority is supported, the default value is 0.
LocalPrecedence	Local precedence.	N/A	Unsigned integer. Value range: 0 to 7.	When this priority is supported, the default value is 2.

## PRIMAP/PortTrustMode

This table contains information about port priority trust mode.

### XML structure

```

<PRIMAP>
  <PortTrustMode>
    <Port>
      <IfIndex></IfIndex>
      <TrustMode></TrustMode>
      <Override></Override>
    </Port>
  </PortTrustMode>
</PRIMAP>

```

### Table description

Item	Description
Feature name	PRIMAP
Table name	PortTrustMode
Table type	Multi-instance table
Row name	Port
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr

Column name	Column description	Column type	Data type and restrictions	Remarks
				NETCONF XML API Configuration Reference.
TrustMode	Port priority trust mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Untrust.</li> <li>2—Dot1p.</li> <li>3—DSCP.</li> <li>4—EXP.</li> <li>5—IP precedence.</li> <li>6—Dot11e.</li> <li>7—Auto.</li> </ul>	The default priority trust mode on an interface varies by device.
Override	Whether overwrite the original priority carried in the packet	N/A	Boolean: <ul style="list-style-type: none"> <li><b>false</b>—Do not overwrite the priority.</li> <li><b>true</b>—Overwrite the priority.</li> </ul>	N/A

## PRIMAP/GlobalTrustMode

This table contains information about global priority trust mode.

Vxlan mode is supported only.

## XML structure

```

<PRIMAP>
  <GlobalTrustMode>
    <TunnelDscp></TunnelDscp>
  </GlobalTrustMode>
</PRIMAP>

```

## Table description

Item	Description
Feature name	PRIMAP
Table name	GlobalTrustMode
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelDscp	Global priority trust mode	N/A	Boolean:	Vxlan mode is supported

Column name	Column description	Column type	Data type and restrictions	Remarks
	specifies the priority mapping for tunnel packets.		<ul style="list-style-type: none"> <li><b>false</b>—Trust the inner DSCP value in tunnel packets.</li> <li><b>true</b>—Trust the DSCP value in tunnel encapsulation.</li> </ul>	only

## PRIMAP/MapTablesCapability

This table contains information about priority mapping table capabilities.

### XML structure

```
<PRIMAP>
  <MapTablesCapability>
    <Capability>
      <MapTable></MapTable>
      <MaxExportValue></MaxExportValue>
    </Capability>
  </MapTablesCapability>
</PRIMAP>
```

### Table description

Item	Description
Feature name	PRIMAP
Table name	MapTablesCapability
Table type	Multi-instance table
Row name	Capability
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MapTable	Made up of "map from" priority type and "map to" priority type.	Index	String: <ul style="list-style-type: none"> <li>dot1p-lp</li> <li>dot1p-dp</li> <li>exp-lp</li> <li>dscp-lp</li> <li>exp-dp</li> <li>dscp-dp</li> <li>dscp-dot1p</li> </ul>	Different products support different map tables.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• dot1p-dscp</li> <li>• dscp-dscp</li> <li>• dscp-exp</li> <li>• exp-dscp</li> <li>• exp-dot1p</li> <li>• exp-exp</li> <li>• lp-dot1p</li> <li>• dot1p-rpr</li> <li>• dscp-rpr</li> <li>• exp-rpr</li> <li>• ippre-rpr</li> <li>• up-dot1p</li> <li>• up-dscp</li> <li>• up-exp</li> <li>• up-dp</li> <li>• up-lp</li> <li>• up-rpr</li> <li>• up-fc</li> <li>• lp-dscp</li> <li>• dot11e-lp</li> <li>• lp-dot11e</li> <li>• lp-lp</li> <li>• dot1p-exp</li> <li>• lp-exp</li> <li>• lp-dp</li> <li>• up-up</li> <li>• dot1p-dot1p</li> </ul>	
MaxExportValue	The max export value of the map table.	N/A	Unsigned integer.	N/A

## PRIMAP/PortTrustCapability

This table contains information about port priority trust mode capabilities.

### XML structure

```

<PRIMAP>
  <PortTrustCapability>
    <Capability>
      <IfIndex></IfIndex>
      <TrustMode></TrustMode>
      <DefaultMode></DefaultMode>
    </Capability>
  </PortTrustCapability>
</PRIMAP>

```



## Table description

Item	Description
Feature name	PRIMAP
Table name	PortTrustCapability
Table type	Multi-instance table
Row name	Capability
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
TrustMode	Port priority trust mode	N/A	Each bit represents a mode as follows: <ul style="list-style-type: none"><li>• 1—Untrust.</li><li>• 2—Dot1p.</li><li>• 4—DSCP.</li><li>• 8—EXP.</li><li>• 16—IP precedence.</li><li>• 32—Dot11e.</li><li>• 64—Auto.</li></ul>	N/A
DefaultMode	Default port priority trust mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Untrust.</li><li>• 2—Dot1p.</li><li>• 3—DSCP.</li><li>• 4—EXP.</li><li>• 5—IP precedence.</li><li>• 6—Dot11e.</li><li>• 7—Auto.</li></ul>	N/A

## PRIMAP/FlexMapTables

This table contains information about flexible priority mapping tables.

## XML structure

<PRIMAP>

```

<FlexMapTables>
  <FlexMapTable>
    <TableName></TableName>
  </FlexMapTable>
</FlexMapTables>
</PRIMAP>

```

## Table description

Item	Description
Feature name	PRIMAP
Table name	FlexMapTables
Table type	Multi-instance table
Row name	FlexMapTable
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TableName	The name of flexible priority mapping table.	Index	String. Length: 1 to 31 characters.	N/A

## PRIMAP/FlexMapItems

This table contains information about flexible priority mapping items.

## XML structure

```

<PRIMAP>
  <FlexMapItems>
    <FlexMapItem>
      <TableName></TableName>
      <Source></Source>
      <Target></Target>
      <ImportColor></ImportColor>
      <Import></Import>
      <Export></Export>
      <ExportColor></ExportColor>
    </FlexMapItem>
  </FlexMapItems>
</PRIMAP>

```

## Table description

Item	Description
Feature name	PRIMAP
Table name	FlexMapItems
Table type	Multi-instance table
Row name	FlexMapItem
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TableName	The name of flexible priority mapping table.	Index	String. Length: 1 to 31 characters.	N/A
Source	The source type of priority.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—dot11e</li> <li>2—dot1p</li> <li>3—dscp</li> <li>4—exp</li> <li>5—IP precedence</li> <li>6—Local precedence</li> <li>7—User priority</li> </ul>	N/A
Target	The target type of priority.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—dot11e</li> <li>2—dot1p</li> <li>3—Drop priority</li> <li>4—dscp</li> <li>5—exp</li> <li>6—Forwarding-class priority</li> <li>7—Local precedence</li> <li>8—RPR priority</li> <li>9—User priority</li> </ul>	N/A
ImportColor	The color of priority mapping table.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Uncolored.</li> <li>1—Green.</li> <li>2—Yellow.</li> <li>3—Red.</li> </ul>	N/A
Import	Input value of priority mapping table.	Index	Unsigned integer. Value range: 0 to 63.	Different priority types have different ranges of import values. dot1p: 0 to 7 dscp: 0 to 63 lp: 0 to 7 exp: 0 to 7

Column name	Column description	Column type	Data type and restrictions	Remarks
				IP Precedence: 0 to 7 up: 0 to 7 dot11e: 0 to 7
Export	Output value of priority mapping table.	N/A	Unsigned integer. Value range: 0 to 63.	Different priority types have different ranges of export values. dot1p: 0 to 7 dscp: 0 to 63 lp: 0 to 7 exp: 0 to 7 up: 0 to 7 dot11e: 0 to 7 fc: 0 to 7 rpr: 0 to 2 drop priority: 0 to 2
ExportColor	The color of priority mapping table.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Uncolored.</li> <li>1—Green.</li> <li>2—Yellow.</li> <li>3—Red.</li> </ul>	N/A

## PRIMAP/FlexMapTableApply

This table contains information about flexible priority mapping tables applied to interfaces.

### XML structure

```

<PRIMAP>
  <FlexMapTableApply>
    <FlexMapTable>
      <IfIndex></IfIndex>
      <AppDirection></AppDirection>
      <FlexTableName></FlexTableName>
    </FlexMapTable>
  </FlexMapTableApply>
</PRIMAP>

```

### Table description

Item	Description
Feature name	PRIMAP
Table name	FlexMapTableApply
Table type	Multi-instance table

Item	Description
Row name	FlexMapTable
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
AppDirection	Application direction.	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—Inbound</li> <li>• 1—Outbound.</li> </ul>	N/A
FlexTableName	The name of flexible priority mapping.table	N/A	String. Length: 1 to 31 characters.	N/A

# Contents

PRIMAP .....1

    PRIMAP.....1

# PRIMAP

## PRIMAP

Message	Explanation
Failed to configure the mapping. 配置映射表失败。	Failed to configure the mapping. 配置映射表失败。
Failed to set the port priority. 配置端口优先级失败。	Failed to set the port priority. 配置端口优先级失败。
Failed to set the priority trust mode. 配置端口信任模式失败。	Failed to set the priority trust mode. 配置端口信任模式失败。

# Contents

PTP.....	1
PTP/Base.....	1
This table contains global PTP information.XML structure .....	1
Table description .....	1
Columns.....	1
PTP/Clock .....	1
XML structure .....	1
Table description .....	2
Columns.....	2
PTP/Interfaces .....	2
XML structure .....	3
Table description .....	3
Columns.....	3



# PTP

## PTP/Base

This table contains global PTP information.XML structure

```
<PTP>
  <Base>
    <Profile></Profile>
  </Base>
</PTP>
```

### Table description

Item	Description
Feature name	PTP
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table contains only global PTP information.

### Columns

Column name	Column description	Column type	Data type and restrictions
Profile	PTP profile	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Invalid.</li><li>• <b>1</b>—IEEE 1588 version 2.</li><li>• <b>2</b>—IEEE 802.1AS.</li><li>• <b>3</b>—ITU-T G.8275.1.</li></ul>

## PTP/Clock

This table contains PTP clock information.

### XML structure

```
<PTP>
  <Clock>
    <ClockId></ClockId>
    <ClockType></ClockType>
    <ReceiveIfIndex></ReceiveIfIndex>
    <StepsRemoved></StepsRemoved>
```

```

    <TimeLockStatus></TimeLockStatus>
  </Clock>
</PTP>

```

## Table description

Item	Description
Feature name	PTP
Table name	Clock
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClockId	Clock ID	N/A	Octet string. Length: 18.	It's a hexadecimal string. Example: 18C2DF-FFFE-EA0100.
ClockType	Clock type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Invalid.</li> <li>1—Local.</li> <li>2—Tod0.</li> <li>3—Tod1.</li> </ul>	N/A
ReceiveIfIndex	Index of the receiving interface	N/A	Unsigned integer. Length: 32 bits.	N/A
StepsRemoved	Hops from the GM to the device	N/A	Unsigned integer. Value range: 0 to 255, 65535.	The value 65535 is invalid. If the device is a TC node or is in Force state, this column takes this value.
TimeLockStatus	Whether the device is in locked state	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## PTP/Interfaces

This table contains PTP interface information.

## XML structure

```
<PTP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <PortState></PortState>
    </Interface>
  </Interfaces>
</PTP>
```

## Table description

Item	Description
Feature name	PTP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.	In certain versions, this column supports interface name-to-index conversion.
PortState	Interface state	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Invalid.</li><li>• 1—Initializing.</li><li>• 2—Faulty.</li><li>• 3—Disabled.</li><li>• 4—Listening.</li><li>• 5—Premaster.</li><li>• 6—Master.</li><li>• 7—Passive.</li><li>• 8—Uncalibrated.</li><li>• 9—Slave.</li></ul>	N/A

# Contents

qos.....	1
qos/qosDss.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
qos/qosDss/qosBas.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
qos/qosDss/qosPhbs.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
qos/qosIfQoss.....	4
XML structure.....	5
Table description.....	5
Columns.....	5
qos/qosIfQoss/qosIfTrusts.....	5
XML structure.....	6
Table description.....	6
Columns.....	6

# qos

## qos/qosDss

This table contains information about Diff-Serv domain.

### XML structure

```
<qos>
  <qosDss>
    <qosDs>
      <dsName></dsName>
      <dsId></dsId>
      <qosBas>
        <qosBa>
          <baType></baType>
          <baValue></baValue>
          <serviceClass></serviceClass>
          <color></color>
        </qosBa>
      </qosBas>
      <qosPhbs>
        <qosPhb>
          <phbType></phbType>
          <serviceClass></serviceClass>
          <color></color>
          <phbValue></phbValue>
        </qosPhb>
      </qosPhbs>
    </qosDs>
  </qosDss>
</qos>
```

### Table description

Item	Description
Feature name	qos
Table name	qosDss
Table type	Multi-instance table
List Table	qosDs
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
dsName	The name of Diff-Serv domain.	Index	String. Length: 1 to 48 characters.	Only supports 1 to 31 characters.
dsId	The ID of Diff-Serv domain.	N/A	Unsigned integer. Value range: 0 to 255.	The value of this column setting does not take effect.
qosBas	Qos Bas tables	Sublist	N/A	For more information, see the qosBas table.
qosPhbs	Qos Phbs tables	Sublist	N/A	For more information, see the qosPhbs table.

## qos/qosDss/qosBas

This table contains external priority mapping to local priority information.

## XML structure

Please refer to the XML structure of qos/qosDss.

## Table description

Item	Description
Feature name	qos
Table name	qosBas
Table type	Multi-instance table
Row name	qosBa
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
dsName	The name of Diff-Serv domain.	Index	String. Length: 1 to 48 characters.	Only supports 1 to 31 characters.
baType	The priority type.	Index	Enumeration: <ul style="list-style-type: none"><li>0—8021p</li><li>1—ipDscp</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—mplsExp</li> <li>3—userPriority</li> </ul>	
baValue	External priority value.	Index	Unsigned integer. Value range: 0 to 63.	Different priority types have different ranges of source priority values. 8021p: 0 to 7 ipDscp: 0 to 63 mplsExp: 0 to 7 userPriority: 0 to 7
serviceClass	Local priority value.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—be</li> <li>1—af1</li> <li>2—af2</li> <li>3—af3</li> <li>4—af4</li> <li>5—ef</li> <li>6—cs6</li> <li>7—cs7</li> <li>8—total</li> <li>9—cos0</li> <li>10—cos1</li> <li>11—cos2</li> <li>12—cos3</li> </ul>	Required. Only supports 0 to 7.
color	Local color type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—green</li> <li>1—yellow</li> <li>2—red</li> </ul>	N/A

## qos/qosDss/qosPhbs

This table contains local priority mapping to external priority information.

## XML structure

Please refer to the XML structure of qos/qosDss.

## Table description

Item	Description
Feature name	qos
Table name	qosPhbs
Table type	Multi-instance table
Row name	qosPhb
Restrictions	None

Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
dsName	The name of Diff-Serv domain.	Index	String. Length: 1 to 48 characters.	Only supports 1 to 31 characters.
phbType	The priority type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—8021p</li> <li>1—ipDscp</li> <li>2—mplsExp</li> <li>3—userPriority</li> </ul>	N/A
serviceClass	Local priority value.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—be</li> <li>1—af1</li> <li>2—af2</li> <li>3—af3</li> <li>4—af4</li> <li>5—ef</li> <li>6—cs6</li> <li>7—cs7</li> <li>8—total</li> <li>9—cos0</li> <li>10—cos1</li> <li>11—cos2</li> <li>12—cos3</li> </ul>	Only supports 0 to 7.
color	Local color type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—green</li> <li>1—yellow</li> <li>2—red</li> </ul>	N/A
phbValue	Target priority value.	N/A	Unsigned integer. Value range: 0 to 63.	Required. Different priority types have different ranges of target priority values. 8021p: 0 to 7 ipDscp: 0 to 63 mplsExp: 0 to 7 userPriority: 0 to 7

## qos/qosIfQoss

This table contains about interface Qos configuration information.



## XML structure

```
<qos>
  <qosIfQoss>
    <qosIfQos>
      <ifName></ifName>
      <qosIfTrusts>
        <qosIfTrust>
          <trustType></trustType>
          <directType></directType>
          <vlanMode></vlanMode>
          <groupId></groupId>
          <dsName></dsName>
          <vpnMode></vpnMode>
          <vlanId></vlanId>
        </qosIfTrust>
      </qosIfTrusts>
    </qosIfQos>
  </qosIfQoss>
</qos>
```

## Table description

Item	Description
Feature name	qos
Table name	qosIfQoss
Table type	Multi-instance table
List Table	qosIfQos
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Interface name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
qosIfTrusts	Qos interface trust mode information.	Sublist	N/A	For more information, see the qosIfTrusts table.

## qos/qosIfQoss/qosIfTrusts

This table contains about interface Qos trust mode information.

# XML structure

Please refer to the XML structure of qos/qosIfQoss.

## Table description

Item	Description
Feature name	qos
Table name	qosIfTrusts
Table type	Multi-instance table
Row name	qosIfTrust
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Interface name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
trustType	Port priority trust type.	Index	Enumeration: <ul style="list-style-type: none"><li>0—8021p</li><li>1—ds</li><li>2—inner-8021p</li><li>3—outer-8021p</li></ul>	Not supported when the column is outer-8021p.
directType	The direction of priority trust.	Index	Enumeration: <ul style="list-style-type: none"><li>0—inbound</li><li>1—outbound</li></ul>	This column only supports inbound when the <b>trustType</b> is not 1.
vlanMode	The vlan mode of priority trust.	Index	Boolean: <ul style="list-style-type: none"><li><b>false</b>.</li><li><b>true</b>.</li></ul>	This column can only be <b>false</b> .
groupId	The group id of priority trust.	Index	Unsigned integer.	The value of this column setting does not take effect.
dsName	The name of Diff-Serv domain.	N/A	String. Length: 1 to 48 characters.	Only supports 1 to 31 characters. This column can only be specified when the <b>trustType</b> is 1.
vpnMode	The vpn mode of priority trust.	N/A	Boolean: <ul style="list-style-type: none"><li><b>false</b> (default).</li><li><b>true</b>.</li></ul>	The column does not support.
vlanId	The vlan id of priority trust.	N/A	Unsigned integer. Value range: 1 to 4094.	The column does not support.



# Contents

qos.....	1
qos/qosDss.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
qos/qosDss/qosBas.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
qos/qosDss/qosPhbs.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
qos/qosIfQoss.....	4
XML structure.....	4
Table description.....	5
Columns.....	5
qos/qosIfQoss/qosIfTrusts.....	5
XML structure.....	5
Table description.....	6
Columns.....	6

# qos

## qos/qosDss

This table contains information about Diff-Serv domain.

### XML structure

```
<qos>
  <qosDss>
    <qosDs>
      <dsName></dsName>
      <dsId></dsId>
      <qosBas>
        <qosBa>
          <baType></baType>
          <baValue></baValue>
          <serviceClass></serviceClass>
          <color></color>
        </qosBa>
      </qosBas>
      <qosPhbs>
        <qosPhb>
          <phbType></phbType>
          <serviceClass></serviceClass>
          <color></color>
          <phbValue></phbValue>
        </qosPhb>
      </qosPhbs>
    </qosDs>
  </qosDss>
</qos>
```

### Table description

Item	Description
Feature name	qos
Table name	qosDss
Table type	Multi-instance table
List Table	qosDs
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
dsName	The name of Diff-Serv domain.	Index	String. Length: 1 to 48 characters.	Only supports 1 to 31 characters.
dsId	The ID of Diff-Serv domain.	N/A	Unsigned integer. Value range: 0 to 255.	The value of this column setting does not take effect.
qosBas	Qos Bas tables	Sublist	N/A	For more information, see the qosBas table.
qosPhbs	Qos Phbs tables	Sublist	N/A	For more information, see the qosPhbs table.

## qos/qosDss/qosBas

This table contains external priority mapping to local priority information.

## XML structure

Please refer to the XML structure of qos/qosDss.

## Table description

Item	Description
Feature name	qos
Table name	qosBas
Table type	Multi-instance table
Row name	qosBa
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
dsName	The name of Diff-Serv domain.	Index	String. Length: 1 to 48 characters.	Only supports 1 to 31 characters.
baType	The priority type.	Index	Enumeration: <ul style="list-style-type: none"><li>0—8021p</li><li>1—ipDscp</li><li>2—mplsExp</li><li>3—userPriority</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
baValue	External priority value.	Index	Unsigned integer. Value range: 0 to 63.	Different priority types have different ranges of source priority values. 8021p: 0 to 7 ipDscp: 0 to 63 mplsExp: 0 to 7 userPriority: 0 to 7
serviceClass	Local priority value.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—be</li> <li>• 1—af1</li> <li>• 2—af2</li> <li>• 3—af3</li> <li>• 4—af4</li> <li>• 5—ef</li> <li>• 6—cs6</li> <li>• 7—cs7</li> <li>• 8—total</li> <li>• 9—cos0</li> <li>• 10—cos1</li> <li>• 11—cos2</li> <li>• 12—cos3</li> </ul>	Only supports 0 to 7.
color	Local color type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—green</li> <li>• 1—yellow</li> <li>• 2—red</li> </ul>	N/A

## qos/qosDss/qosPhbs

This table contains local priority mapping to external priority information.

## XML structure

Please refer to the XML structure of qos/qosDss.

## Table description

Item	Description
Feature name	qos
Table name	qosPhbs
Table type	Multi-instance table
Row name	qosPhb
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
dsName	The name of Diff-Serv domain.	Index	String. Length: 1 to 48 characters.	Only supports 1 to 31 characters.
phbType	The priority type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—8021p</li> <li>1—ipDscp</li> <li>2—mplsExp</li> <li>3—userPriority</li> </ul>	N/A
serviceClass	Local priority value.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—be</li> <li>1—af1</li> <li>2—af2</li> <li>3—af3</li> <li>4—af4</li> <li>5—ef</li> <li>6—cs6</li> <li>7—cs7</li> <li>8—total</li> <li>9—cos0</li> <li>10—cos1</li> <li>11—cos2</li> <li>12—cos3</li> </ul>	Only supports 0 to 7.
color	Local color type.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—green</li> <li>1—yellow</li> <li>2—red</li> </ul>	N/A
phbValue	Target priority value.	N/A	Unsigned integer. Value range: 0 to 63.	Different priority types have different ranges of target priority values. 8021p: 0 to 7 ipDscp: 0 to 63 mplsExp: 0 to 7 userPriority: 0 to 7

## qos/qosIfQoss

This table contains about interface Qos configuration information.

## XML structure

```
<qos>
  <qosIfQoss>
```



```

<qosIfQos>
  <ifName></ifName>
  <qosIfTrusts>
    <qosIfTrust>
      <trustType></trustType>
      <directType></directType>
      <vlanMode></vlanMode>
      <groupId></groupId>
      <dsName></dsName>
      <vpnMode></vpnMode>
      <vlanId></vlanId>
    </qosIfTrust>
  </qosIfTrusts>
</qosIfQos>
</qos>

```

## Table description

Item	Description
Feature name	qos
Table name	qosIfQoss
Table type	Multi-instance table
List Table	qosIfQos
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Interface name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
qosIfTrusts	Qos interface trust mode information.	Sublist	N/A	For more information, see the qosIfTrusts table.

## qos/qosIfQoss/qosIfTrusts

This table contains about interface Qos trust mode information.

## XML structure

Please refer to the XML structure of qos/qosIfQoss.

## Table description

Item	Description
Feature name	qos
Table name	qosIfTrusts
Table type	Multi-instance table
Row name	qosIfTrust
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ifName	Interface name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
trustType	Port priority trust type.	Index	Enumeration: <ul style="list-style-type: none"><li>0—8021p</li><li>1—ds</li><li>2—inner-8021p</li><li>3—outer-8021p</li></ul>	Not supported when the column is outer-8021p.
directType	The direction of priority trust.	Index	Enumeration: <ul style="list-style-type: none"><li>0—inbound</li><li>1—outbound</li></ul>	This column only supports inbound when the <b>trustType</b> is not 1.
vlanMode	The vlan mode of priority trust.	Index	Boolean: <ul style="list-style-type: none"><li><b>false.</b></li><li><b>true.</b></li></ul>	This column can only be <b>false.</b>
groupId	The group id of priority trust.	Index	Unsigned integer.	The value of this column setting does not take effect.
dsName	The name of Diff-Serv domain.	N/A	String. Length: 1 to 48 characters.	Only supports 1 to 31 characters. This column can only be specified when the <b>trustType</b> is 1.
vpnMode	The vpn mode of priority trust.	N/A	Boolean: <ul style="list-style-type: none"><li><b>false.</b></li><li><b>true.</b></li></ul>	The column does not support.
vlanId	The vlan id of priority trust.	N/A	Unsigned integer. Value range: 1 to 4094.	The column does not support.

# Contents

- QSTAT .....1
  - QSTAT/QueueCounters .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# QSTAT

## QSTAT/QueueCounters

This table contains information about queue-based traffic accounting.

### XML structure

```
<QSTAT>
  <QueueCounters>
    <QueueCounter>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <CountClear></CountClear>
    </QueueCounter>
  </QueueCounters>
</QSTAT>
```

### Table description

Item	Description
Feature name	QSTAT
Table name	QueueCounters
Table type	Multi-instance table
Row name	QueueCounter
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	N/A	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>0—Inbound.</li><li>1—Outbound.</li></ul>	N/A
CountClear	Clears the counters	N/A	This column must be empty.	N/A



# Contents

- QSTAT .....1
  - QSTAT/QueueCounters .....1
    - XML structure .....1
    - Table description.....1
    - Columns.....1

# QSTAT

## QSTAT/QueueCounters

This table contains information about queue-based traffic accounting.

### XML structure

```
<QSTAT>
  <QueueCounters>
    <QueueCounter>
      <Direction></Direction>
      <Counting></Counting>
    </QueueCounter>
  </QueueCounters>
</QSTAT>
```

### Table description

Item	Description
Feature name	QSTAT
Table name	QueueCounters
Table type	Multi-instance table
Row name	QueueCounter
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Inbound.</li><li>• <b>1</b>—Outbound.</li></ul>	N/A
Counting	Whether to enable queue-based traffic accounting	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable (default).</li><li>• <b>false</b>—Disable.</li></ul>	N/A

# Contents

QSTAT .....	1
QSTAT/QueueCounters .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
QSTAT/InterfaceStat .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
QSTAT/QueueStat .....	3
XML structure .....	3
Table description .....	4
Columns .....	4



# QSTAT

## QSTAT/QueueCounters

This table contains information about queue-based traffic accounting.

### XML structure

```
<QSTAT>
  <QueueCounters>
    <QueueCounter>
      <Direction></Direction>
      <Counting></Counting>
    </QueueCounter>
  </QueueCounters>
</QSTAT>
```

### Table description

Item	Description
Feature name	QSTAT
Table name	QueueCounters
Table type	Multi-instance table
Row name	QueueCounter
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Inbound.</li><li>• <b>1</b>—Outbound.</li></ul>	N/A
Counting	Whether to enable queue-based traffic accounting	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disable.</li></ul>	N/A

## QSTAT/InterfaceStat

This table contains total queue statistics of interfaces.

# XML structure

```
<QSTAT>
  <InterfaceStat>
    <Statistics>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <PassPacket></PassPacket>
      <PassByte></PassByte>
      <DropPacket></DropPacket>
      <DropByte></DropByte>
      <AgingPacket></AgingPacket>
      <AgingByte></AgingByte>
      <CurrQueLenByte></CurrQueLenByte>
      <PeakQueSize></PeakQueSize>
    </Statistics>
  </InterfaceStat>
</QSTAT>
```

## Table description

Item	Description
Feature name	QSTAT
Table name	SumStat
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
PassPacket	Number of passed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
PassByte	Number of passed bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DropPacket	Number of dropped packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DropByte	Number of dropped bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
AgingPacket	Number of aged packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
AgingByte	Number of aged bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
CurrQueLenByte	Current length(in bytes) of all queues	N/A	Unsigned integer.	N/A
PeakQueSize	Total peak size(in bytes) of all queues	N/A	Unsigned integer.	N/A

## QSTAT/QueueStat

This table contains per-queue statistics of interfaces.

### XML structure

```

<QSTAT>
  <QueueStat>
    <Statistics>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <QueueID></QueueID>
      <PassPkt></PassPkt>
      <PassByte></PassByte>
      <DropPkt></DropPkt>
      <DropByte></DropByte>
      <GreenPassPkt></GreenPassPkt>
      <GreenPassByte></GreenPassByte>
      <GreenDropPkt></GreenDropPkt>
      <GreenDropByte></GreenDropByte>
      <YellowPassPkt></YellowPassPkt>
      <YellowPassByte></YellowPassByte>
      <YellowDropPkt></YellowDropPkt>
      <YellowDropByte></YellowDropByte>
      <RedPassPkt></RedPassPkt>
      <RedPassByte></RedPassByte>
      <RedDropPkt></RedDropPkt>
      <RedDropByte></RedDropByte>
      <PacketRate></PacketRate>
      <BitRate></BitRate>

```

```

    <TotalQueLen></TotalQueLen>
    <CurrQueLen></CurrQueLen>
    <CurrQueLenByte></CurrQueLenByte>
    <QueUseRatio></QueUseRatio>
    <QuePeakSize></QuePeakSize>
  </Statistics>
</QueueStat>
</QSTAT>

```

## Table description

Item	Description
Feature name	QSTAT
Table name	QueueStat
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
QueueID	Queue ID	Index	Unsigned integer.	N/A
PassPkt	Number of passed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
PassByte	Number of passed bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DropPkt	Number of dropped packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DropByte	Number of dropped bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenPassPkt	Number of green passed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenPassByte	Number of green passed bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
GreenDropPkt	Number of green dropped packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenDropByte	Number of green dropped bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPassPkt	Number of yellow passed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPassByte	Number of yellow passed bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowDropPkt	Number of yellow dropped packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowDropByte	Number of yellow dropped bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPassPkt	Number of red passed packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPassByte	Number of red passed bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedDropPkt	Number of red dropped packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedDropByte	Number of red dropped bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
PacketRate	Rate of pass Packet	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
BitRate	Rate of pass Bit	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
TotalQueueLen	Total length of the queue	N/A	Unsigned integer.	N/A
CurrQueueLen	Current length of the queue	N/A	Unsigned integer.	N/A
CurrQueueLenByte	Current length (in bytes) of the queue	N/A	Unsigned integer.	N/A
QueueUseRatio	Queue usage ratio	N/A	Unsigned integer.	N/A
QueuePeakSize	Peak size (in bytes) of the queue	N/A	Unsigned integer.	N/A

# Contents

Radius .....	1
Radius/AuthServerState .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Radius/AcctServerState .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
Radius/ClearAllStatistic .....	3
XML structure .....	4
Table description .....	4
Columns .....	4

# Radius

## Radius/AuthServerState

RADIUS authentication server status table.

### XML structure

```
<Radius>
  <AuthServerState>
    <VRF></VRF>
    <IpType></IpType>
    <Host></Host>
    <Port></Port>
    <State></State>
  </AuthServerState>
</Radius>
```

### Table description

Item	Description
Feature name	Radius
Table name	AuthServerState
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the RADIUS authentication server address.	Index NULL is allowed.	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—IPv4.</li><li>• <b>1</b>—IPv6.</li><li>• <b>2</b>—FQDN.</li></ul>	The value 2 for IpType is not supported currently.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	RADIUS authentication	Index NULL is	IPv4: String, dotted decimal notation.	If the IpType value is 0, this column represents

Column name	Column description	Column type	Data type and restrictions	Remarks
	server.	allowed.	IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	the IPv4 address of the server.  If the IpType value is 1, this column represents the IPv6 address of the server.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	UDP port number of the RADIUS authentication server.	Index NULL is allowed.	Unsigned integer. Value range: 1 to 65535.	Default: 1812.
State	Status of the RADIUS authentication server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Active</li> <li>1—Block</li> </ul>	Default: 0.

## Radius/AcctServerState

RADIUS accounting server status table.

### XML structure

```

<Radius>
  <AcctServerState>
    <VRF></VRF>
    <IpType></IpType>
    <Host></Host>
    <Port></Port>
    <State></State>
  </AcctServerState>
</Radius>

```

### Table description

Item	Description
Feature name	Radius
Table name	AcctServerState
Table type	Single-instance table



Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the RADIUS accounting server address.	Index NULL is allowed.	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—IPv4.</li> <li>• <b>1</b>—IPv6.</li> <li>• <b>2</b>—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	RADIUS accounting server.	Index NULL is allowed.	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	If the IpType value is 0, this column represents the IPv4 address of the server.  If the IpType value is 1, this column represents the IPv6 address of the server.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	UDP port number of the RADIUS accounting server.	Index NULL is allowed.	Unsigned integer. Value range: 1 to 65535.	Default: 1813.
State	Status of the RADIUS accounting server.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Active</li> <li>• <b>1</b>—Block</li> </ul>	Default: 0.

## Radius/ClearAllStatistic

Clear all RADIUS statistics.

## XML structure

```
<Radius>
  <CleanAllStatistic>
    <Clear></Clear>
  </CleanAllStatistic>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	ClearAllStatistic
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clear all RADIUS statistics.	N/A	This column must be empty.

# Contents

Radius .....	1
Radius/Trap .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Radius/Dscp .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
Radius/Client/GlobalNasIps .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
Radius/Client/GlobalNasIpIf .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
Radius/Client/ServerTestProfiles .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
Radius/Client/Schemes .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
Radius/Client/AuthServers .....	9
XML structure .....	10
Table description .....	10
Columns .....	10
Radius/Client/AcctServers .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
Radius/Server/SessCtrlService .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
Radius/Server/SessCtrlClients .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
Radius/Server/DaeService .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
Radius/Server/DaeClients .....	16
XML structure .....	16
Table description .....	17
Columns .....	17

# Radius

## Radius/Trap

SNMP notification information table of RADIUS.

### XML structure

```
<Radius>
  <Trap>
    <AuthErrThreshold></AuthErrThreshold>
    <Switchs>
      <AuthServerDown></AuthServerDown>
      <AuthServerUp></AuthServerUp>
      <AcctServerDown></AcctServerDown>
      <AcctServerUp></AcctServerUp>
      <AuthErrReachThreshold></AuthErrReachThreshold>
    </Switchs>
  </Trap>
</Radius>
```

### Table description

Item	Description
Feature name	Radius
Table name	Trap
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthErrThreshhold	The threshold for authentication failure notification	N/A	Unsigned integer. Value range: 1 to 100.	Default threshold: 30. An authentication failure notification will be sent if the number of authentication failures compared to the total number of authentication attempts exceeds the specified threshold.

Column name	Column description	Column type	Data type and restrictions	Remarks
				This column is not supported to configure at present.
Switchs	Whether to enable each type of notification	Data structure	Members include: <ul style="list-style-type: none"> <li>AuthServerDown.</li> <li>AuthServerUp.</li> <li>AcctServerDown.</li> <li>AcctServerUp.</li> <li>AuthErrReachThreshold.</li> </ul>	N/A
AuthServerDown	Whether to send a notification after a RADIUS authentication server is down	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AuthServerUp	Whether to send a notification after a RADIUS authentication server is up	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AcctServerDown	Whether to send a notification after a RADIUS accounting server is down	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AcctServerUp	Whether to send a notification after a RADIUS accounting server is up	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AuthErrReachThreshold	Whether to send a notification when the number of authentication failures compared to the total number of authentication attempts exceeds the specified threshold	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.

## Radius/Dscp

The DSCP priority of RADIUS packets.

## XML structure

```
<Radius>
  <Dscp>
    <Ipv4></Ipv4>
```

```

        <Ipv6></Ipv6>
    </Dscp>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	Dscp
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4	DSCP priority of IPv4 RADIUS packets	N/A	Unsigned integer. Value range: 0 to 63.	Default: 0.
Ipv6	DSCP priority of IPv6 RADIUS packets	N/A	Unsigned integer. Value range: 0 to 63.	Default: 0.

## Radius/Client/GlobalNasIps

RADIUS global NAS IP information table.

## XML structure

```

<Radius>
  <Client>
    <GlobalNasIps>
      <GlobalNasIp>
        <VRF></VRF>
        <IpType></IpType>
        <IpAddress></IpAddress>
      </GlobalNasIp>
    </GlobalNasIps>
  </Client>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	GlobalNasIps
Table type	Multi-instance table
Row name	GlobalNasIp
Restrictions	A maximum of 16 global NAS IP addresses are supported.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the source IP address for outgoing RADIUS packets	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4.</li><li>• 1—IPv6.</li></ul>	N/A
IpAddress	Source IP address for outgoing RADIUS packets	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	If the IpType value is 0, this column represents an IPv4 address. For example, 1.0.0.1. If the IpType value is 1, this column represents an IPv6 address. For example, 2001:12::1:2.

## Radius/Client/GlobalNasIpIf

This table contains the global source interface of outgoing RADIUS packets.

## XML structure

```
<Radius>
  <Client>
    <GlobalNasIpIf>
      <IfIndex></IfIndex>
    </GlobalNasIpIf>
  </Client>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	GlobalNasIpIpf
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Index of the interface that provides the source IP address of outgoing RADIUS packets	N/A	Unsigned integer.

## Radius/Client/ServerTestProfiles

The test profile table for RADIUS server status detection.

## XML structure

```
<Radius>
  <Client>
    <ServerTestProfiles>
      <ServerTestProfile>
        <ProfileName></ProfileName>
        <UserName></UserName>
        <Interval></Interval>
      </ServerTestProfile>
    </ServerTestProfiles>
  </Client>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	ServerTestProfiles
Table type	Multi-instance table
Row name	ServerTestProfile
Restrictions	None



Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the RADIUS test profile	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
UserName	User name for the RADIUS test profile	N/A	String, case-sensitive. Length: 1 to 253 characters.	This column is required.
Interval	Period for sending test packets	N/A	Unsigned integer. Value range: 1 to 3600, in minutes.	Default: 60 minutes.

## Radius/Client/Schemes

RADIUS scheme table.

## XML structure

```

<Radius>
  <Client>
    <Schemes>
      <Scheme>
        <SchemeName></SchemeName>
        <TimeUnitage></TimeUnitage>
        <RealAcctInterval></RealAcctInterval>
        <TimeOut></TimeOut>
        <QuietTime></QuietTime>
        <PktRetryTimes></PktRetryTimes>
        <RealAcctRetryTimes></RealAcctRetryTimes>
        <UserNameFormat></UserNameFormat>
        <BytesUnit></BytesUnit>
        <PacketsUnit></PacketsUnit>
        <NasIpv4Address></NasIpv4Address>
        <NasIpv6Address></NasIpv6Address>
        <AuthenKey></AuthenKey>
        <AcctKey></AcctKey>
        <VRF></VRF>
        <ClassType></ClassType>
        <AcctOnEnable></AcctOnEnable>
        <AcctOnSendInterval></AcctOnSendInterval>
        <AcctOnSendTimes></AcctOnSendTimes>
        <ChangePassword></ChangePassword>
      </Scheme>
    </Schemes>
  </Client>
</Radius>

```

```

        <StopAcctPktSendForce></StopAcctPktSendForce>
    </Scheme>
</Schemes>
</Client>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	Schemes
Table type	Multi-instance table
Row name	Scheme
Restrictions	The device supports a maximum of 16 RADIUS schemes.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	RADIUS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
TimeUnitage	Measurement unit of the interval for sending realtime accounting packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Minute.</li> <li>1—Second.</li> </ul>	Default: 0.
RealAcctInterval	Realtime accounting interval	N/A	Unsigned integer. Value range: 0 to 71582.	<p>Default: 12 minutes.</p> <p>Zero indicates that the device does not send realtime accounting packets to the RADIUS accounting server.</p> <p>The unit of the realtime accounting interval is set through the TimeUnitage column. If the TimeUnitage column is not set, the unit is minute.</p> <p>The device converts the interval value to a value in seconds even if the configured measurement unit is minute.</p> <p>After the realtime accounting interval is set, only deleting the</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				TimeUnitage column does not affect the interval.
TimeOut	RADIUS server response timeout period	N/A	Unsigned integer. Value range: 1 to 10, in seconds.	Default: 3 seconds.
QuietTime	Quiet timer for the servers specified in the RADIUS scheme	N/A	Unsigned integer. Value range: 1 to 255, in minutes.	Default: 5 minutes.
PktRetryTimes	Max number of attempts to send a RADIUS packet to a single RADIUS server	N/A	Unsigned integer. Value range: 1 to 20.	Default: 3.
RealAcctRetryTimes	Max number of realtime accounting attempts	N/A	Unsigned integer. Value range: 1 to 255.	Default: 5.
UserNameFormat	Format of user names to be sent to RADIUS servers	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—keep-original.</li> <li>1—with-domain.</li> <li>2—without-domain.</li> </ul>	Default: 1.
BytesUnit	Data flow measurement unit for traffic statistics	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—byte.</li> <li>1—kilo-byte.</li> <li>2—mega-byte.</li> <li>3—giga-byte.</li> </ul>	Default: 0.
PacketsUnit	Packet measurement unit for traffic statistics	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—one-packet.</li> <li>1—kilo-packet.</li> <li>2—mega-packet.</li> <li>3—giga-packet.</li> </ul>	Default: 0.
NasIpv4Address	Source IPv4 address for outgoing RADIUS packets	N/A	String in dotted decimal notation.	For example, 10.1.1.1.
NasIpv6Address	Source IPv6 address for outgoing RADIUS packets	N/A	Hexadecimal string, colon-separated.	For example, 2001:12::22:33.
AuthenKey	Authentication shared key	N/A	In non-FIPS mode, a plaintext shared key is a string of 1 to 64 characters.  In FIPS mode, a plaintext shared key is a string of 15 to 64 characters that must contain digits, uppercase letters, lowercase letters, and	The shared key is in plain text.

Column name	Column description	Column type	Data type and restrictions	Remarks
			special characters.	
AcctKey	Accounting shared key	N/A	In non-FIPS mode, a plaintext shared key is a string of 1 to 64 characters.  In FIPS mode, a plaintext shared key is a string of 15 to 64 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	The shared key is in plain text.
VRF	VPN instance name for the RADIUS scheme	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
ClassType	Whether to interpret the RADIUS class attribute (attribute 25) as CAR parameters	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Standard.</li> <li>1—CAR.</li> </ul>	Default: 0.
AcctOnEnable	Whether to enable the accounting-on feature	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AcctOnSendInterval	Interval for retransmitting an accounting-on packet	N/A	Unsigned integer. Value range: 1 to 15, in seconds.	Default: 3 seconds. Only when the AcctOnEnable column is true, this column is effective.
AcctOnSendTimes	Max number of accounting-on packet transmission attempts	N/A	Unsigned integer. Value range: 1 to 255.	Default: 50. Only when the AcctOnEnable column is true, this column is effective.
ChangePassword	Whether to enable the online password change feature	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Default: 0.
StopAcctPktSendForce	Whether to send stop-accounting packets when users for which no start-accounting packets are sent go offline	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.

## Radius/Client/AuthServers

RADIUS authentication server table.

## XML structure

```
<Radius>
  <Client>
    <AuthServers>
      <AuthServer>
        <SchemeName></SchemeName>
        <Priority></Priority>
        <VRF></VRF>
        <IpType></IpType>
        <Host></Host>
        <Port></Port>
        <Key></Key>
        <SvrTestProfileName></SvrTestProfileName>
      </AuthServer>
    </AuthServers>
  </Client>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	AuthServers
Table type	Multi-instance table
Row name	AuthServer
Restrictions	You can create one primary authentication server and a maximum of 16 secondary servers in one RADIUS scheme. To change the primary server, you must remove the old primary server first, and then specify a new primary server.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	RADIUS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"><li>0—Primary authentication server.</li><li>1—Secondary authentication server.</li></ul>	N/A
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IpType	Type of the RADIUS authentication server address	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—IPv4.</li> <li>• 1—IPv6.</li> <li>• 2—FQDN.</li> </ul>	<p>The value 2 for IpType is not supported currently.</p> <p>The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.</p>
Host	RADIUS authentication server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	<p>If the IpType value is 0, this column represents the IPv4 address of the server.</p> <p>If the IpType value is 1, this column represents the IPv6 address of the server.</p> <p>The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.</p>
Port	UDP port number of the RADIUS authentication server	Index	Unsigned integer. Value range: 1 to 65535.	Default: 1812.
Key	Shared key of RADIUS authentication packets	N/A	In non-FIPS mode, a plaintext shared key is a string of 1 to 64 characters. In FIPS mode, a plaintext shared key is a string of 15 to 64 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	The shared key is in plain text.
SvrTestProfileName	Name of the test profile	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A

## Radius/Client/AcctServers

RADIUS accounting server table.

### XML structure

```
<Radius>
  <Client>
```

```

<AcctServers>
  <AcctServer>
    <SchemeName></SchemeName>
    <Priority></Priority>
    <VRF></VRF>
    <IpType></IpType>
    <Host></Host>
    <Port></Port>
    <Key></Key>
  </AcctServer>
</AcctServers>
</Client>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	AcctServers
Table type	Multi-instance table
Row name	AcctServer
Restrictions	You can create one primary accounting server and a maximum of 16 secondary servers in one RADIUS scheme. To change the primary server, you must remove the old primary server first, and then specify a new primary server.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	RADIUS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Primary accounting server.</li> <li>1—Secondary accounting server.</li> </ul>	N/A
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the RADIUS accounting server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently.  The value in this column is valid only when the IpType value is available. If either the

Column name	Column description	Column type	Data type and restrictions	Remarks
				IpType value or the Host value is unavailable, the system reports an error.
Host	RADIUS accounting server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	If the IpType value is 0, this column represents the IPv4 address of the server.  If the IpType value is 1, this column represents the IPv6 address of the server.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	UDP port number of the RADIUS accounting server	Index	Unsigned integer. Value range: 1 to 65535.	Default: 1813.
Key	Shared key of RADIUS accounting packets	N/A	In non-FIPS mode, a plaintext shared key is a string of 1 to 64 characters.  In FIPS mode, a plaintext shared key is a string of 15 to 64 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	The shared key is in plain text.

## Radius/Server/SessCtrlService

RADIUS session-control feature table.

### XML structure

```

<Radius>
  <Server>
    <SessCtrlService>
      <Status></Status>
      <Port></Port>
    </SessCtrlService>
  </Server>
</Radius>

```



## Table description

Item	Description
Feature name	Radius
Table name	SessCtrlService
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Whether to enable the RADIUS session-control feature	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	Default: false.
Port	UDP port listening for RADIUS session-control packets	N/A	Unsigned integer. Value range: 1 to 65535.	Default: 1812. The value is not supported to configure at present.

## Radius/Server/SessCtrlClients

RADIUS session-control client table.

## XML structure

```
<Radius>
  <Server>
    <SessCtrlClients>
      <SessCtrlClient>
        <VRF></VRF>
        <IpType></IpType>
        <IpAddress></IpAddress>
        <Key></Key>
      </SessCtrlClient>
    </SessCtrlClients>
  </Server>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	SessCtrlClients
Table type	Multi-instance table
Row name	SessCtrlClient
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the session-control client IP address	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4.</li><li>• 1—IPv6.</li></ul>	N/A
IpAddress	IP address of the session-control client	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	If the IpType value is 0, this column represents the IPv4 address of the client. For example, 1.0.0.1. If the IpType value is 1, this column represents the IPv6 address of the client. For example, 2001:12::1:2.
Key	Shared key of RADIUS session-control packets	N/A	In non-FIPS mode, a plaintext shared key is a string of 1 to 64 characters. In FIPS mode, a plaintext shared key is a string of 15 to 64 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	The shared key is in plain text.

## Radius/Server/DaeService

RADIUS DAE server feature table.

## XML structure

```
<Radius>
  <Server>
    <DaeService>
```

```

        <Status></Status>
        <Port></Port>
    </DaeService>
</Server>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	DaeService
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Whether to enable the RADIUS DAE server feature	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
Port	UDP port listening for RADIUS DAE packets	N/A	Unsigned integer. Value range: 1 to 65535.	Default: 3799. This column is effective only when the Status column is true.

## Radius/Server/DaeClients

RADIUS DAE client table.

## XML structure

```

<Radius>
  <Server>
    <DaeClients>
      <DaeClient>
        <VRF></VRF>
        <IpType></IpType>
        <IpAddress></IpAddress>
        <Key></Key>
      </DaeClient>
    </DaeClients>
  </Server>

```

</Radius>

## Table description

Item	Description
Feature name	Radius
Table name	DaeClients
Table type	Multi-instance table
Row name	DaeClient
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the DAE client IP address	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4.</li><li>• 1—IPv6.</li></ul>	N/A
IpAddress	IP address of the DAE client	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	If the IpType value is 0, this column represents the IPv4 address of the client. For example, 1.0.0.1. If the IpType value is 1, this column represents the IPv6 address of the client. For example, 2001:12::1:2.
Key	Shared key of RADIUS DAE packets	N/A	In non-FIPS mode, a plaintext shared key is a string of 1 to 64 characters. In FIPS mode, a plaintext shared key is a string of 15 to 64 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	The shared key is in plain text.

# Contents

Radius .....	1
Radius/Trap .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Radius/Dscp .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
Radius/Client/GlobalNasIps .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
Radius/Client/GlobalNasIpIf .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
Radius/Client/ServerTestProfiles .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
Radius/Client/Schemes .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
Radius/Client/AuthServers .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
Radius/Client/AcctServers .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
Radius/Server/SessCtrlService .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
Radius/Server/SessCtrlClients .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
Radius/Server/DaeService .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
Radius/Server/DaeClients .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
Radius/Statistic/AuthServers .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
Radius/Statistic/AcctServers .....	19
XML structure .....	19
Table description .....	20
Columns .....	20

Radius/Statistic/SessCtrl .....	23
XML structure .....	23
Table description .....	23
Columns .....	23
Radius/Statistic/Dae .....	24
XML structure .....	25
Table description .....	25
Columns .....	25
Radius/PasswordLimit .....	26
XML structure .....	26
Table description .....	26
Columns .....	27

# Radius

## Radius/Trap

SNMP notification information table of RADIUS.

### XML structure

```
<Radius>
  <Trap>
    <AuthErrThreshold></AuthErrThreshold>
    <Switchs>
      <AuthServerDown></AuthServerDown>
      <AuthServerUp></AuthServerUp>
      <AcctServerDown></AcctServerDown>
      <AcctServerUp></AcctServerUp>
      <AuthErrReachThreshold></AuthErrReachThreshold>
    </Switchs>
  </Trap>
</Radius>
```

### Table description

Item	Description
Feature name	Radius
Table name	Trap
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthErrThresh hold	The threshold for authentication failure notification	N/A	Unsigned integer. Value range: 1 to 100.	Default: 30. An authentication failure notification will be sent if the number of authentication failures compared to the total number of authentication attempts exceeds the specified threshold. This column is not supported to configure

Column name	Column description	Column type	Data type and restrictions	Remarks
				at present.
Switchs	Whether to enable each type of notification	Data structure	Members include: <ul style="list-style-type: none"> <li>AuthServerDown.</li> <li>AuthServerUp.</li> <li>AcctServerDown.</li> <li>AcctServerUp.</li> <li>AuthErrReachThreshold.</li> </ul>	N/A
AuthServerDown	Whether to send a notification after a RADIUS authentication server is down	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AuthServerUp	Whether to send a notification after a RADIUS authentication server is up	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AcctServerDown	Whether to send a notification after a RADIUS accounting server is down	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AcctServerUp	Whether to send a notification after a RADIUS accounting server is up	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AuthErrReachThreshold	Whether to send a notification when the number of authentication failures compared to the total number of authentication attempts exceeds the specified threshold	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.

## Radius/Dscp

The DSCP priority of RADIUS packets.

### XML structure

```

<Radius>
  <Dscp>
    <Ipv4></Ipv4>
    <Ipv6></Ipv6>
  </Dscp>

```



</Radius>

## Table description

Item	Description
Feature name	Radius
Table name	Dscp
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4	DSCP priority of IPv4 RADIUS packets	N/A	Unsigned integer. Value range: 0 to 63.	Default: 0.
Ipv6	DSCP priority of IPv6 RADIUS packets	N/A	Unsigned integer. Value range: 0 to 63.	Default: 0.

## Radius/Client/GlobalNasIps

RADIUS global NAS IP information table.

## XML structure

```
<Radius>
  <Client>
    <GlobalNasIps>
      <GlobalNasIp>
        <VRF></VRF>
        <IpType></IpType>
        <IpAddress></IpAddress>
      </GlobalNasIp>
    </GlobalNasIps>
  </Client>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	GlobalNasIps

Item	Description
Table type	Multi-instance table
Row name	GlobalNasIp
Restrictions	A maximum of 16 global NAS IP addresses are supported.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the source IP address for outgoing RADIUS packets	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
IpAddress	Source IP address for outgoing RADIUS packets	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	If the IpType value is 0, this column represents an IPv4 address. For example, 1.0.0.1. If the IpType value is 1, this column represents an IPv6 address. For example, 2001:12::1:2.

## Radius/Client/GlobalNasIpIf

This table contains the global source interface of outgoing RADIUS packets.

## XML structure

```

<Radius>
  <Client>
    <GlobalNasIpIf>
      <IfIndex></IfIndex>
    </GlobalNasIpIf>
  </Client>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	GlobalNasIpIf
Table type	Single-instance table

Item	Description
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
lflIndex	Index of the interface that provides the source IP address of outgoing RADIUS packets	N/A	Unsigned integer.

# Radius/Client/ServerTestProfiles

The test profile table for RADIUS server status detection.

## XML structure

```

<Radius>
  <Client>
    <ServerTestProfiles>
      <ServerTestProfile>
        <ProfileName></ProfileName>
        <UserName></UserName>
        <Interval></Interval>
      </ServerTestProfile>
    </ServerTestProfiles>
  </Client>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	ServerTestProfiles
Table type	Multi-instance table
Row name	ServerTestProfile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the RADIUS test	Index	String, case-sensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	profile		Length: 1 to 31 characters.	
UserName	User name for the RADIUS test profile	N/A	String, case-sensitive. Length: 1 to 253 characters.	This column is required.
Interval	Period for sending test packets	N/A	Unsigned integer. Value range: 1 to 3600, in minutes.	Default: 60 minutes.

## Radius/Client/Schemes

RADIUS scheme table.

### XML structure

```

<Radius>
  <Client>
    <Schemes>
      <Scheme>
        <SchemeName></SchemeName>
        <RealAcctInterval></RealAcctInterval>
        <Timeout></Timeout>
        <QuietTime></QuietTime>
        <PktRetryTimes></PktRetryTimes>
        <RealAcctRetryTimes></RealAcctRetryTimes>
        <UserNameFormat></UserNameFormat>
        <BytesUnit></BytesUnit>
        <PacketsUnit></PacketsUnit>
        <NasIpv4Address></NasIpv4Address>
        <NasIpv6Address></NasIpv6Address>
        <VRF></VRF>
        <ClassType></ClassType>
        <AcctOnEnable></AcctOnEnable>
        <AcctOnSendInterval></AcctOnSendInterval>
        <AcctOnSendTimes></AcctOnSendTimes>
        <ChangePassword></ChangePassword>
        <StopAcctPktSendForce></StopAcctPktSendForce>
      </Scheme>
    </Schemes>
  </Client>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	Schemes
Table type	Multi-instance table
Row name	Scheme
Restrictions	A maximum of 16 RADIUS schemes are supported.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	RADIUS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
RealAcctInterval	Realtime accounting interval	N/A	Unsigned integer. Value range: 0 to 71582, in seconds.	The device converts the interval value to a value in seconds even if the configured measurement unit is minute.  Zero indicates that the device doesn't send realtime accounting packets to the RADIUS accounting server.
TimeOut	RADIUS server response timeout period	N/A	Unsigned integer. Value range: 1 to 10, in seconds.	Default: 3 seconds.
QuietTime	Quiet timer for the servers specified in the RADIUS scheme	N/A	Unsigned integer. Value range: 1 to 255, in minutes.	Default: 5 minutes.
PktRetryTimes	Max number of attempts to send a RADIUS packet to a single RADIUS server	N/A	Unsigned integer. Value range: 1 to 20.	Default: 3.
RealAcctRetryTimes	Max number of realtime accounting attempts	N/A	Unsigned integer. Value range: 1 to 255.	Default: 5.
UserNameFormat	Format of user names to be sent to RADIUS servers	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—keep-original.</li> <li>1—with-domain.</li> <li>2—without-domain.</li> </ul>	Default: 1.
BytesUnit	Data flow measurement unit for traffic	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—byte.</li> </ul>	Default: 0.

Column name	Column description	Column type	Data type and restrictions	Remarks
	statistics		<ul style="list-style-type: none"> <li>1—kilo-byte.</li> <li>2—mega-byte.</li> <li>3—giga-byte.</li> </ul>	
PacketsUnit	Packet measurement unit for traffic statistics	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—one-packet.</li> <li>1—kilo-packet.</li> <li>2—mega-packet.</li> <li>3—giga-packet.</li> </ul>	Default: 0.
NasIpv4Address	Source IPv4 address for outgoing RADIUS packets	N/A	String in dotted decimal notation.	For example, 10.1.1.1.
NasIpv6Address	Source IPv6 address for outgoing RADIUS packets	N/A	Hexadecimal string, colon-separated.	For example, 2001:12::22:33.
VRF	VPN instance name for the RADIUS scheme	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
ClassType	Whether to interpret the RADIUS class attribute (attribute 25) as CAR parameters	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Standard.</li> <li>1—CAR.</li> </ul>	Default: 0.
AcctOnEnable	Whether to enable the accounting-on feature	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
AcctOnSendInterval	Time interval for retransmitting an accounting-on packet	N/A	Unsigned integer. Value range: 1 to 15, in seconds.	Default: 3 seconds. This column is effective only when the AcctOnEnable value is true.
AcctOnSendTimes	Max number of attempts for transmitting an accounting-on packet	N/A	Unsigned integer. Value range: 1 to 255.	Default: 50. This column is effective only when the AcctOnEnable value is true.
ChangePassword	Enabling status of the online password change feature	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled.</li> <li>1—Enabled.</li> </ul>	N/A
StopAcctPktSendForce	Whether to send stop-accounting packets when users for which no start-accounting packets are sent go offline	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.

# Radius/Client/AuthServers

RADIUS authentication server table.

## XML structure

```
<Radius>
  <Client>
    <AuthServers>
      <AuthServer>
        <SchemeName></SchemeName>
        <Priority></Priority>
        <VRF></VRF>
        <IpType></IpType>
        <Host></Host>
        <Port></Port>
        <SvrTestProfileName></SvrTestProfileName>
        <State></State>
      </AuthServer>
    </AuthServers>
  </Client>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	AuthServers
Table type	Multi-instance table
Row name	AuthServer
Restrictions	You can specify one primary authentication server and a maximum of 16 secondary servers in one RADIUS scheme. To change the primary server, you must remove the old primary server first, and then specify a new primary server.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	RADIUS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"><li>0—Primary authentication server.</li><li>1—Secondary</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			authentication server.	
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the RADIUS authentication server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	RADIUS authentication server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	If the IpType value is 0, this column represents the IPv4 address of the server. If the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	UDP port number of the RADIUS authentication server	Index	Unsigned integer. Value range: 1 to 65535.	Default: 1812.
SvrTestProfileName	Name of the test profile	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
State	Status of the RADIUS authentication server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Active.</li> <li>1—Blocked.</li> </ul>	N/A

## Radius/Client/AcctServers

RADIUS accounting server table.

### XML structure

```
<Radius>
  <Client>
    <AcctServers>
```



```

<AcctServer>
  <SchemeName></SchemeName>
  <Priority></Priority>
  <VRF></VRF>
  <IpType></IpType>
  <Host></Host>
  <Port></Port>
  <State></State>
</AcctServer>
</AcctServers>
</Client>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	AcctServers
Table type	Multi-instance table
Row name	AcctServer
Restrictions	You can specify one primary accounting server and a maximum of 16 secondary servers in one RADIUS scheme. To change the primary server, you must remove the old primary server first, and then specify a new primary server.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	RADIUS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Primary accounting server.</li> <li>1—Secondary accounting server.</li> </ul>	N/A
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the RADIUS accounting server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system

Column name	Column description	Column type	Data type and restrictions	Remarks
				reports an error.
Host	RADIUS accounting server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	If the IpType value is 0, this column represents the IPv4 address of the server.  If the IpType value is 1, this column represents the IPv6 address of the server.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	UDP port number of the RADIUS accounting server	Index	Unsigned integer. Value range: 1 to 65535.	Default: 1813.
State	Status of the RADIUS accounting server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Active.</li> <li>1—Blocked.</li> </ul>	N/A

## Radius/Server/SessCtrlService

RADIUS session-control feature table.

### XML structure

```

<Radius>
  <Server>
    <SessCtrlService>
      <Status></Status>
      <Port></Port>
    </SessCtrlService>
  </Server>
</Radius>

```

### Table description

Item	Description
Feature name	Radius
Table name	SessCtrlService
Table type	Single-instance table

Item	Description
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Whether to enable the RADIUS session-control feature	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default: false.
Port	UDP port listening for RADIUS session-control packets	N/A	Unsigned integer. Value range: 1 to 65535.	Default: 1812. The value is not supported to configure at present.

## Radius/Server/SessCtrlClients

RADIUS session-control client table.

## XML structure

```

<Radius>
  <Server>
    <SessCtrlClients>
      <SessCtrlClient>
        <VRF></VRF>
        <IpType></IpType>
        <IpAddress></IpAddress>
      </SessCtrlClient>
    </SessCtrlClients>
  </Server>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	SessCtrlClients
Table type	Multi-instance table
Row name	SessCtrlClient
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the session-control client address	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—IPv4.</li><li>• 1—IPv6.</li></ul>	N/A
IpAddress	IP address of the session-control client	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	If the IpType value is 0, this column represents the IPv4 address of the client. For example, 1.0.0.1. If the IpType value is 1, this column represents the IPv6 address of the client. For example, 2001:12::1:2.

## Radius/Server/DaeService

RADIUS DAE server feature table.

## XML structure

```
<Radius>
  <Server>
    <DaeService>
      <Status></Status>
      <Port></Port>
    </DaeService>
  </Server>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	DaeService
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Whether to enable the RADIUS DAE server feature	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	Default: false.
Port	UDP port listening for RADIUS DAE packets	N/A	Unsigned integer. Value range: 1 to 65535.	Default: 3799. This column is effective only when the Status column is true.

## Radius/Server/DaeClients

RADIUS DAE client table.

## XML structure

```
<Radius>
  <Server>
    <DaeClients>
      <DaeClient>
        <VRF></VRF>
        <IpType></IpType>
        <IpAddress></IpAddress>
      </DaeClient>
    </DaeClients>
  </Server>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	DaeClients
Table type	Multi-instance table
Row name	DaeClient
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance	Index	String, case-sensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	name		Length: 1 to 31 characters.	
IpType	Type of the DAE client IP address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
IpAddress	IP address of the DAE client	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	If the IpType value is 0, this column represents the IPv4 address of the client. For example, 1.0.0.1. If the IpType value is 1, this column represents the IPv6 address of the client. For example, 2001:12::1:2.

## Radius/Statistic/AuthServers

RADIUS authentication server statistics table.

### XML structure

```

<Radius>
  <Statistic>
    <AuthServers>
      <AuthServer>
        <VRF></VRF>
        <IpType></IpType>
        <Host></Host>
        <Port></Port>
        <Request></Request>
        <ReTrans></ReTrans>
        <Accept></Accept>
        <Reject></Reject>
        <Challenge></Challenge>
        <Malformed></Malformed>
        <BadAuthenticator></BadAuthenticator>
        <PendingRequest></PendingRequest>
        <TimeOut></TimeOut>
        <UnKnownType></UnKnownType>
        <Dropped></Dropped>
        <LastRoundTripTime></LastRoundTripTime>
      </AuthServer>
    </AuthServers>
  </Statistic>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	AuthServers
Table type	Multi-instance table
Row name	AuthServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the RADIUS authentication server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	RADIUS authentication server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	If the IpType value is 0, this column represents the IPv4 address of the server.  If the IpType value is 1, this column represents the IPv6 address of the server.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	UDP port number for the RADIUS authentication server	Index	Unsigned integer. Value range: 1 to 65535.	Default: 1812.
Request	Number of RADIUS Access-Request packets sent to this server	N/A	Unsigned integer.	Only valid Access-Request packets are counted.  This column does not include

Column name	Column description	Column type	Data type and restrictions	Remarks
				retransmissions.
ReTrans	Number of times that RADIUS Access-Request packets were retransmitted	N/A	Unsigned integer.	N/A
Accept	Number of RADIUS Access-Accept packets (valid or invalid) received from this server	N/A	Unsigned integer.	N/A
Reject	Number of RADIUS Access-Reject packets (valid or invalid) received from this server	N/A	Unsigned integer.	N/A
Challenge	Number of RADIUS Access-Challenge packets (valid or invalid) received from this server	N/A	Unsigned integer.	N/A
Malformed	Number of malformed RADIUS authentication responses received from this server	N/A	Unsigned integer.	The BadAuthenticator and UnknownType statistics are not included. Malformed packets include packets with an invalid length.
BadAuthenticator	Number of RADIUS authentication responses received from this server	N/A	Unsigned integer.	The packets contain invalid authenticators or Signature attributes.
PendingRequest	Number of RADIUS Access-Request packets waiting for responses	N/A	Unsigned integer.	This variable is incremented when an Access-Request is sent. This variable is decremented because of the receipt of an Access-Accept, Access-Reject, or Access-Challenge, or because of a request timeout or retransmission.
TimeOut	Number of authentication timeouts to this server	N/A	Unsigned integer.	After a timeout, the client may retransmit the authentication request to the same server, send a new



Column name	Column description	Column type	Data type and restrictions	Remarks
				request to another server, or give up.
UnKnownType	Number of unknown-type RADIUS packets that were received from this server on the authentication port	N/A	Unsigned integer.	N/A
Dropped	Number of RADIUS packets that were received from this server on the authentication port and dropped for some other reason	N/A	Unsigned integer.	N/A
LastRoundTripTime	Time interval (in hundredths of a second) between the most recent authentication response and request exchanged with the RADIUS authentication server	N/A	Unsigned integer.	N/A

## Radius/Statistic/AcctServers

RADIUS accounting server statistics table.

### XML structure

```

<Radius>
  <Statistic>
    <AcctServers>
      <AcctServer>
        <VRF></VRF>
        <IpType></IpType>
        <Host></Host>
        <Port></Port>
        <Request></Request>
        <ReTrans></ReTrans>
        <Response></Response>
        <Malformed></Malformed>
        <BadAuthenticator></BadAuthenticator>
        <PendingRequest></PendingRequest>
      </AcctServer>
    </AcctServers>
  </Statistic>
</Radius>

```

```

    <TimeOut></TimeOut>
    <UnKnownType></UnKnownType>
    <Dropped></Dropped>
    <LastRoundTripTime></LastRoundTripTime>
    <AcctStartRequest></AcctStartRequest>
    <AcctStartResponse></AcctStartResponse>
    <AcctUpdateRequest></AcctUpdateRequest>
    <AcctUpdateResponse></AcctUpdateResponse>
    <AcctStopRequest></AcctStopRequest>
    <AcctStopResponse></AcctStopResponse>
  </AcctServer>
</AcctServers>
</Statistic>
</Radius>

```

## Table description

Item	Description
Feature name	Radius
Table name	AcctServers
Table type	Multi-instance table
Row name	AcctServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the RADIUS accounting server	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	RADIUS accounting server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	If the IpType value is 0, this column represents the IPv4 address of the server.  If the IpType value is 1, this column represents the IPv6 address of the server.

Column name	Column description	Column type	Data type and restrictions	Remarks
				The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	UDP port number of the RADIUS accounting server	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Request	Number of RADIUS Accounting-Request packets sent to this server	N/A	Unsigned integer.	Only valid Accounting-Request packets are counted. This column does not include retransmissions.
ReTrans	Number of times that RADIUS Accounting-Request packets were retransmitted	N/A	Unsigned integer.	Retransmissions include the retries in which the Identifier and Acct-Delay have been updated, as well as the retries in which the Identifier and Acct-Delay have not been updated.
Response	Number of RADIUS packets received on the accounting port from this server	N/A	Unsigned integer.	N/A
Malformed	Number of malformed RADIUS Accounting-Response packets received from this server	N/A	Unsigned integer.	The BadAuthenticator and UnknownType statistics are not included. Malformed packets include packets with an invalid length.
BadAuthenticator	Number of RADIUS Accounting-Response packets received from this server	N/A	Unsigned integer.	The packets contain invalid authenticators.
PendingRequest	Number of RADIUS Accounting-Request packets waiting for responses	N/A	Unsigned integer.	This variable is incremented when an Accounting-Request is sent. This variable is decremented because of the receipt of an Accounting-Response or a request timeout or retransmission.

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeOut	Number of accounting timeouts to this server	N/A	Unsigned integer.	After a timeout, the client may retransmit the accounting request to the same server, send a new request to another server, or give up.
UnKnownType	Number of unknown-type RADIUS packets that were received from this server on the accounting port	N/A	Unsigned integer.	N/A
Dropped	Number of RADIUS packets that were received from this server on the accounting port and dropped for some other reason	N/A	Unsigned integer.	N/A
LastRoundTripTime	Time interval between the most recent Accounting-Response and the Accounting-Request exchanged with the RADIUS accounting server	N/A	Unsigned integer.	N/A
AcctStartRequest	Number of start accounting requests sent to this server	N/A	Unsigned integer.	N/A
AcctStartResponse	Number of start accounting responses received from this server	N/A	Unsigned integer.	N/A
AcctUpdateRequest	Number of realtime accounting requests sent to this server	N/A	Unsigned integer.	N/A
AcctUpdateResponse	Number of realtime accounting responses received from this server	N/A	Unsigned integer.	N/A
AcctStopRequest	Number of stop accounting requests sent to	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	this server			
AcctStopResponse	Number of stop accounting responses received from this server	N/A	Unsigned integer.	N/A

## Radius/Statistic/SessCtrl

The statistics table of the session-control feature.

### XML structure

```

<Radius>
  <Statistic>
    <SessCtrl>
      <Request></Request>
      <Response></Response>
      <Dropped></Dropped>
      <CheckFail></CheckFail>
      <Terminate></Terminate>
      <SetPolicy></SetPolicy>
      <ReTrans></ReTrans>
      <UnKnownType></UnKnownType>
      <Malformed></Malformed>
    </SessCtrl>
  </Statistic>
</Radius>

```

### Table description

Item	Description
Feature name	Radius
Table name	SessCtrl
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Request	Number of received	N/A	Unsigned integer.	Only valid session-control request

Column name	Column description	Column type	Data type and restrictions	Remarks
	session-control request packets			packets are counted. This column does not include retransmissions.
Response	Number of sent session-control response packets	N/A	Unsigned integer.	N/A
Dropped	Number of discarded session-control request packets	N/A	Unsigned integer.	This column includes statistics for session-control request packets that were discarded for reasons other than CheckFail, UnknownType, and Malformed.
CheckFail	Number of check-failed session-control request packets	N/A	Unsigned integer.	Check-failed packets refer to packets that contain invalid authenticators.
Terminate	Number of user-offline session-control request packets	N/A	Unsigned integer.	N/A
SetPolicy	Number of session-control request packets for modifying user permissions	N/A	Unsigned integer.	N/A
ReTrans	Number of times that session-control request packets were retransmitted	N/A	Unsigned integer.	N/A
UnKnownType	Number of unknown-type session-control request packets	N/A	Unsigned integer.	N/A
Malformed	Number of malformed session-control request packets	N/A	Unsigned integer.	Malformed packets refer to packets with an invalid length and packets received from clients not associated with the session-control server.

## Radius/Statistic/Dae

The statistics table of the DAE server feature.

## XML structure

```
<Radius>
  <Statistic>
    <Dae>
      <Request></Request>
      <ReTrans></ReTrans>
      <Response></Response>
      <Dropped></Dropped>
      <CheckFail></CheckFail>
      <Disconnect></Disconnect>
      <Coa></Coa>
      <UnknownType></UnknownType>
      <Malformed></Malformed>
    </Dae>
  </Statistic>
</Radius>
```

## Table description

Item	Description
Feature name	Radius
Table name	Dae
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Request	Number of received DAE request packets	N/A	Unsigned integer.	Only valid DAE request packets are counted. This column does not include retransmissions.
ReTrans	Number of times that DAE request packets were retransmitted	N/A	Unsigned integer.	N/A
Response	Number of DAE response packets sent to the DAE clients	N/A	Unsigned integer.	N/A
Dropped	Number of discarded DAE request packets	N/A	Unsigned integer.	This column includes statistics for DAE request packets that were discarded for

Column name	Column description	Column type	Data type and restrictions	Remarks
				reasons other than CheckFail, UnknownType, and Malformed
CheckFail	Number of check-failed DAE request packets	N/A	Unsigned integer.	Check-failed packets refer to packets that contain invalid authenticators.
UnknownType	Number of unknown DAE request packets	N/A	Unsigned integer.	N/A
Disconnect	Number of user-offline DAE request packets	N/A	Unsigned integer.	N/A
Coa	Number of DAE request packets for modifying user permissions	N/A	Unsigned integer.	N/A
Malformed	Number of malformed DAE request packets	N/A	Unsigned integer.	Malformed packets refer to packets with an invalid length and packets received from clients not associated with the DAE server.

## Radius/PasswordLimit

Requirements to meet when you configure passwords for the RADIUS module.

### XML structure

```

<Radius>
  <PasswordLimit>
    <MinLen></MinLen>
    <MaxLen></MaxLen>
    <MinTypeNum></MinTypeNum>
  </PasswordLimit>
</Radius>

```

### Table description

Item	Description
Feature name	Radius
Table name	PasswordLimit
Table type	Single-instance table
Row name	None
Restrictions	<ul style="list-style-type: none"> <li>The configuration takes effect on the following</li> </ul>



Item	Description
	<p>items:</p> <ul style="list-style-type: none"> <li>Radius/Client/Schemes table:  &lt;AuthenKey&gt;&lt;/AuthenKey&gt;  &lt;AcctKey&gt;&lt;/AcctKey&gt;</li> <li>Radius/Client/AuthServers table:  &lt;Key&gt;&lt;/Key&gt;</li> <li>Radius/Client/AcctServers table:  &lt;Key&gt;&lt;/Key&gt;</li> <li>Radius/Server/SessCtrlClients table:  &lt;Key&gt;&lt;/Key&gt;</li> <li>Radius/Server/DaeClients table:  &lt;Key&gt;&lt;/Key&gt;</li> <li>Radius/Proxy/DaeProxyClients table:  &lt;Key&gt;&lt;/Key&gt;</li> </ul> <ul style="list-style-type: none"> <li>Data restrictions acquired in FIPS mode are different from the data restrictions acquired in non-FIPS mode.</li> </ul>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinLen	Minimum password length	N/A	Unsigned integer.	N/A
MaxLen	Maximum password length	N/A	Unsigned integer.	N/A
MinTypeNum	Minimum number of character types that the password must contain	N/A	Unsigned integer.	Character types include digit, uppercase letter, lowercase letter, and special character. For example, if the value is set to 3, the password string must include three or more character types.

# Contents

Radius .....	1
Radius/Client/GlobalNasIps.....	1
Radius/Client/GlobalNasIpf .....	1
Radius/Client/ServerTestProfiles .....	1
Radius/Client/Schemes .....	1
Radius/Client/AuthServers .....	2
Radius/Client/AcctServers .....	2
Radius/Server/SessCtrlClients .....	2
Radius/Server/DaeService .....	2
Radius/Server/DaeClients.....	3
Radius/AuthServerState .....	3
Radius/AcctServerState .....	3

# Radius

## Radius/Client/GlobalNasIps

Message	Explanation
Maximum number of NAS-IP addresses already reached. NAS-IP的数目已经达到最大值。	Maximum number of NAS-IP addresses already reached. NAS-IP的数目已经达到最大值。
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。

## Radius/Client/GlobalNasIpf

Message	Explanation
Interface type not supported. 接口类型不支持。	An interface of the specified type cannot be specified as the source interface of outgoing RADIUS packets. 指定的接口类型不支持作为RADIUS报文的源IP地址所属的接口。

## Radius/Client/ServerTestProfiles

Message	Explanation
The number of test-profile has reached the maximum. 探测模版的数目已经达到最大值。	The number of test-profile has reached the maximum. 探测模版的数目已经达到最大值。

## Radius/Client/Schemes

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。
The number of RADIUS schemes has reached the maximum. RADIUS方案的数目已经达到上限。	The number of RADIUS schemes has reached the maximum. RADIUS方案的数目已经达到上限。
The RADIUS scheme does not exist. 指定的RADIUS方案不存在。	The RADIUS scheme does not exist. 指定的RADIUS方案不存在。

## Radius/Client/AuthServers

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。
The specified server does not exist. 指定的RADIUS服务器不存在。	The specified server does not exist. 指定的RADIUS服务器不存在。
The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。	The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。
Maximum number of RADIUS servers already reached. RADIUS服务器的数目已经达到上限。	Maximum number of RADIUS servers already reached. RADIUS服务器的数目已经达到上限。

## Radius/Client/AcctServers

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。
The specified server does not exist. 指定的RADIUS服务器不存在。	The specified server does not exist. 指定的RADIUS服务器不存在。
The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。	The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。
Maximum number of RADIUS servers already reached. RADIUS服务器的数目已经达到上限。	Maximum number of RADIUS servers already reached. RADIUS服务器的数目已经达到上限。

## Radius/Server/SessCtrlClients

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。

## Radius/Server/DaeService

Message	Explanation
Can't set the DAE listening port when disabling RADIUS DAE. 关闭RADIUS DAE代理功能的同时不能设置DAE服务器的监听端口。	Can't set the DAE listening port when disabling RADIUS DAE. 关闭RADIUS DAE代理功能的同时不能设置DAE服务器的监听端口。

Message	Explanation
Can't set the DAE listening port when RADIUS DAE is disabled.  RADIUS DAE代理功能处于关闭状态时不能设置DAE服务器的监听端口。	Can't set the DAE listening port when RADIUS DAE is disabled.  RADIUS DAE代理功能处于关闭状态时不能设置DAE服务器的监听端口。

## Radius/Server/DaeClients

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。

## Radius/AuthServerState

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。

## Radius/AcctServerState

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。

# Contents

- RadiusServer .....1
  - RadiusServer/ActivateConfiguration.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# RadiusServer

## RadiusServer/ActivateConfiguration

This table activates all RADIUS server settings.

### XML structure

```
<RadiusServer>
  <ActivateConfiguration>
    <Activate></Activate>
  </ActivateConfiguration>
</RadiusServer>
```

### Table description

Item	Description
Feature name	RadiusServer
Table name	ActivateConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Activate	Activate all RADIUS server settings	N/A	This column must be empty.

# Contents

- RadiusServer .....1
  - RadiusServer/Client/ClientInfos.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1



# RadiusServer

## RadiusServer/Client/ClientInfos

This table contains RADIUS client parameters.

### XML structure

```
<RadiusServer>
  <Client>
    <ClientInfos>
      <ClientInfo>
        <IpAddress></IpAddress>
        <VRF></VRF>
        <Key></Key>
      </ClientInfo>
    </ClientInfos>
  </Client>
</RadiusServer>
```

### Table description

Item	Description
Feature name	RadiusServer
Table name	ClientInfos
Table type	Multi-instance table
Row name	ClientInfo
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpAddress	IP address of the client	Index	IPv4: String, dotted decimal notation.	IPv4 example: 1.1.1.1.
VRF	VPN instance name	Index	String, case-sensitive. Length: 0 to 31 characters.	Only support the public network. The string length must be 0.
Key	Shared key of RADIUS packets	N/A	String, case-sensitive. Length: 1 to 64 characters.	The shared key is in plaintext form.



# Contents

RadiusServer .....	1
RadiusServer/Client/ClientInfos.....	1
XML structure .....	1
Table description .....	1
Columns.....	1
RadiusServer/Client/ActiveClients .....	1
XML structure .....	2
Table description .....	2
Columns.....	2
RadiusServer/Server/ActiveUsers.....	2
XML structure .....	2
Table description .....	3
Columns.....	3

# RadiusServer

## RadiusServer/Client/ClientInfos

This table contains RADIUS client information.

### XML structure

```
<RadiusServer>
  <Client>
    <ClientInfos>
      <ClientInfo>
        <IpAddress></IpAddress>
        <VRF></VRF>
      </ClientInfo>
    </ClientInfos>
  </Client>
</RadiusServer>
```

### Table description

Item	Description
Feature name	RadiusServer
Table name	ClientInfos
Table type	Multi-instance table
Row name	ClientInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpAddress	IP address of the client	Index	IPv4: String, dotted decimal notation.	IPv4 example: 1.1.1.1.
VRF	VPN instance name	Index	String, case-sensitive. Length: 0 to 31 characters.	Only support the public network. The string length must be 0.

## RadiusServer/Client/ActiveClients

This table contains active RADIUS client information.

## XML structure

```
<RadiusServer>
  <Client>
    <ActiveClients>
      <ActiveClient>
        <IpAddress></IpAddress>
        <VRF></VRF>
      </ActiveClient>
    </ActiveClients>
  </Client>
</RadiusServer>
```

## Table description

Item	Description
Feature name	RadiusServer
Table name	ActiveClients
Table type	Multi-instance table
Row name	ActiveClient
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpAddress	IP address of the client	Index	IPv4: String, dotted decimal notation.	IPv4 example: 1.1.1.1.
VRF	VPN instance name	Index	String, case-sensitive. Length: 0 to 31 characters.	Only support the public network. The string length must be 0.

## RadiusServer/Server/ActiveUsers

This table contains active RADIUS user information for the RADIUS server feature.

## XML structure

```
<RadiusServer>
  <Server>
    <ActiveUsers>
      <ActiveUser>
        <Name></Name>
        <Description></Description>
        <ValidityDateTime>
```

```

        <EndValidityDateTime></EndValidityDateTime>
    </ValidityDateTime>
    <AuthorizationInfo>
        <AclNumber></AclNumber>
        <VLANID></VLANID>
    </AuthorizationInfo>
</ActiveUser>
</ActiveUsers>
</Server>
</RadiusServer>

```

## Table description

Item	Description
Feature name	RadiusServer
Table name	ActiveUsers
Table type	Multi-instance table
Row name	ActiveUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Username	Index	String, case-sensitive. Length: 1 to 55 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and it cannot contain any of the following characters: \   / : * ? < > @
Description	User description	N/A	String, case-sensitive. Length: 1 to 255 characters.	N/A
ValidityDateTime	User account validity period	Data structure	Members include: <ul style="list-style-type: none"> <li>EndValidityDateTime.</li> </ul>	N/A
EndValidityDateTime	Expiration time for the user account	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
AuthorizationInfo	Authorization information	Data structure	Members include: <ul style="list-style-type: none"> <li>AclNumber.</li> <li>VLANID.</li> </ul>	N/A
AclNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 5999.	N/A
VLANID	VLAN ID assigned to the local user	N/A	Unsigned integer. Value range: 1 to 4094.	N/A

# Contents

RadiusServer .....2

    RadiusServer/Client/ClientInfos.....2

# RadiusServer

## RadiusServer/Client/ClientInfos

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。
Maximum number of RADIUS clients already reached. RADIUS客户端数目达到最大值。	Maximum number of RADIUS clients already reached. RADIUS客户端数目达到最大值。



# Contents

RBAC .....	1
RBAC/Roles .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
RBAC/Rules .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
RBAC/Policies/InterfacePolicies .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
RBAC/Policies/VLANPolicies .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
RBAC/Policies/VRFPolicies .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
RBAC/Policies/SecZonePolicies .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
RBAC/FeatureGroups .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
RBAC/FeaturesInGroup .....	9
XML structure .....	9
Table description .....	9
Columns .....	9

# RBAC

## RBAC/Roles

RBAC role table.

### XML structure

```
<RBAC>
  <Roles>
    <Role>
      <RoleName></RoleName>
      <Description></Description>
      <PermitAllInterface></PermitAllInterface>
      <PermitAllVLAN></PermitAllVLAN>
      <PermitAllVRF></PermitAllVRF>
      <PermitAllSecZone></PermitAllSecZone>
    </Role>
  </Roles>
</RBAC>
```

### Table description

Item	Description
Feature name	RBAC
Table name	Roles
Table type	Multi-instance table
Row name	Role
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.	N/A
Description	Description of the role	N/A	String. Length: 1 to 128 characters.	Predefined roles have default descriptions, which are different. User-defined roles do not have default

Column name	Column description	Column type	Data type and restrictions	Remarks
				descriptions.
PermitAllInterface	Whether to allow access to all interfaces	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default value is true.
PermitAllVLAN	Whether to allow access to all VLANs	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default value is true.
PermitAllVRF	Whether to allow access to all VRFs	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default value is true.
PermitAllSecurityZone	Whether to allow access to all security zones	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default value is true.

## RBAC/Rules

RBAC rule table.

## XML structure

```

<RBAC>
  <Rules>
    <Rule>
      <RoleName></RoleName>
      <RuleIndex></RuleIndex>
      <Action></Action>
      <ReadOperation></ReadOperation>
      <WriteOperation></WriteOperation>
      <ExecOperation></ExecOperation>
      <EntityType></EntityType>
      <Entity></Entity>
    </Rule>
  </Rules>
</RBAC>

```

## Table description

Item	Description
Feature name	RBAC
Table name	Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	When the EntityType value is <b>feature</b> , the Entity value

	must be selected from the RBAC/Features table, and the RoleName value must be selected from the RBAC/Roles table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.	N/A
RuleIndex	Index of the rule	Index	Unsigned integer. Value range: 1 to 256.	The bigger the index, the higher the priority. RBAC rules are matched in descending order of priority.
Action	Action	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	N/A
ReadOperation	Whether it is a read operation	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Perform a read operation on the entity.
WriteOperation	Whether it is a write operation	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Perform a write operation on the entity.
ExecOperation	Whether it is an execute operation	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Perform an execute operation on the entity.
EntityType	Type of the entity	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Command.</li> <li>1—Feature.</li> <li>2—Feature group.</li> <li>3—Web menu.</li> <li>4—XML element.</li> <li>5—SNMP OID.</li> </ul>	The system ignores values of the ReadOperation, WriteOperation, and ExecOperation columns of entities of <b>command</b> type.
Entity	Entity	N/A	Command: String. Length: 1 to 128 characters. Feature: String. Length: 1 to 15 characters. Feature group: String. Length: 1 to 31 characters. Web menu: String.	For information about different types of entities, see the RBAC configuration in the user manual.

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 255 characters. XML element: String. Length: 1 to 255 characters. SNMP OID: String. Length: 1 to 255 characters.	

## RBAC/Policies/InterfacePolicies

RBAC interface policy table.

### XML structure

```

<RBAC>
  <Policies>
    <InterfacePolicies>
      <Policy>
        <RoleName></RoleName>
        <InterfaceListPermitted></InterfaceListPermitted>
      </Policy>
    </InterfacePolicies>
  </Policies>
</RBAC>

```

### Table description

Item	Description
Feature name	RBAC
Table name	InterfacePolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	Select the value of RoleName from the RBAC/Roles table. Before configuring the table, first set the value of PermitAllInterface to false in the RBAC/Roles table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.	N/A
InterfaceListPermitted	A list of permitted interfaces specified by full names	N/A	String. Length: 0 to 32767 characters.	To specify an interface range, make sure the interfaces are located on the same chassis, slot, or subslot. Specify the interface range with the last portion of the interface number. For example, set the list the following: GigabitEthernet0/0/1, GigabitEthernet0/0/10 to GigabitEthernet0/0/20, GigabitEthernet0/0/25

## RBAC/Policies/VLANPolicies

RBAC VLAN policy table.

## XML structure

```
<RBAC>
  <Policies>
    <VLANPolicies>
      <Policy>
        <RoleName></RoleName>
        <VLANListPermitted></VLANListPermitted>
      </Policy>
    </VLANPolicies>
  </Policies>
</RBAC>
```

## Table description

Item	Description
Feature name	RBAC
Table name	VLANPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	Select the value of RoleName from the RBAC/Roles table. Before configuring the table, first set the value of PermitAllVLAN to false in the RBAC/Roles table.

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.	N/A
VLANListPermitted	A list of permitted VLANs	N/A	String. Length: 0 to 32767 characters.	The string can contain only numbers, minus signs, and commas, and cannot end with a comma or minus sign. The string does not support blank characters. For example, 1,2,3,5-8,10-20.

## RBAC/Policies/VRF Policies

RBAC VRF policy table.

## XML structure

```
<RBAC>
  <Policies>
    <VRFPolicies>
      <Policy>
        <RoleName></RoleName>
        <VRFPermitted></VRFPermitted>
      </Policy>
    </VRFPolicies>
  </Policies>
</RBAC>
```

## Table description

Item	Description
Feature name	RBAC
Table name	VRFPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	Select the value of RoleName from the RBAC/Roles table. Before configuring the table, first set the value of PermitAllVRF to false in the RBAC/Roles table.

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.
VRFPermitted	Name of the permitted VRF instance	Index	String. Length: 1 to 31 characters.

## RBAC/Policies/SecZonePolicies

RBAC security zone policy table.

## XML structure

```

<RBAC>
  <Policies>
    <SecZonePolicies>
      <Policy>
        <RoleName></RoleName>
        <SecZonePermitted></SecZonePermitted>
      </Policy>
    </SecZonePolicies>
  </Policies>
</RBAC>

```

## Table description

Item	Description
Feature name	RBAC
Table name	SecZonePolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	Select the value of RoleName from the RBAC/Roles table. Before configuring the table, first set the value of PermitAllSecZone to false in the RBAC/Roles table.
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.
SecZonePermitted	Name of the permitted security zone	Index	String. Length: 1 to 13 characters.

## RBAC/FeatureGroups

RBAC feature group table.

## XML structure

```
<RBAC>
  <FeatureGroups>
    <FeatureGroup>
      <Name></Name>
    </FeatureGroup>
  </FeatureGroups>
</RBAC>
```

## Table description

Item	Description
Feature name	RBAC
Table name	FeatureGroups
Table type	Multi-instance table
Row name	FeatureGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the feature group	Index	String. Length: 1 to 31 characters.	The predefined feature groups named <b>L2</b> and <b>L3</b> cannot be modified.

# RBAC/FeaturesInGroup

RBAC Feature In Group table.

## XML structure

```
<RBAC>
  <FeaturesInGroup>
    <Feature>
      <GroupName></GroupName>
      <FeatureName></FeatureName>
    </Feature>
  </FeaturesInGroup>
</RBAC>
```

## Table description

Item	Description
Feature name	RBAC
Table name	FeaturesInGroup
Table type	Multi-instance table
Row name	Feature
Restrictions	The value of FeatureName must be selected from the RBAC/Features table. The value of GroupName must be selected from the RBAC/FeatureGroups table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Name of the group	Index	String. Length: 1 to 31 characters.
FeatureName	Name of the feature	Index	String. Length: 1 to 15 characters.

# Contents

RBAC .....	1
RBAC/Roles .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
RBAC/Rules .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
RBAC/Policies/InterfacePolicies .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
RBAC/Policies/VLANPolicies .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
RBAC/Policies/VRFPolicies .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
RBAC/Policies/SecZonePolicies .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
RBAC/Features .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
RBAC/FeatureGroups .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
RBAC/FeaturesInGroup .....	9
XML structure .....	9
Table description .....	10
Columns .....	10

# RBAC

## RBAC/Roles

RBAC role table.

## XML structure

```
<RBAC>
  <Roles>
    <Role>
      <RoleName></RoleName>
      <Description></Description>
      <PermitAllInterface></PermitAllInterface>
      <PermitAllVLAN></PermitAllVLAN>
      <PermitAllVRF></PermitAllVRF>
      <PermitAllSecZone></PermitAllSecZone>
      <IsPreDefined></IsPreDefined>
      <CanAddRules></CanAddRules>
    </Role>
  </Roles>
</RBAC>
```

## Table description

Item	Description
Feature name	RBAC
Table name	Roles
Table type	Multi-instance table
Row name	Role
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.	N/A
Description	Description of the role	N/A	String. Length: 1 to 128 characters.	Predefined roles have default descriptions, which are different. User-defined roles do not have default descriptions.

Column name	Column description	Column type	Data type and restrictions	Remarks
PermitAllInterface	Whether to allow access to all interfaces	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default value is true.
PermitAllVLAN	Whether to allow access to all VLANs	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default value is true.
PermitAllVRF	Whether to allow access to all VRFs	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default value is true.
PermitAllSecZone	Whether to allow access to all security zones	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default value is true.
IsPreDefined	Whether it is a predefined role	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Predefined roles include network-admin, network-operator, and level-0 to level-15 users.
CanAddRules	Whether to allow users to add rules	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	All user-defined roles, and part of the predefined roles allow users to add rules.

## RBAC/Rules

RBAC rule table.

## XML structure

```

<RBAC>
  <Rules>
    <Rule>
      <RoleName></RoleName>
      <RuleIndex></RuleIndex>
      <IsPreDefined></IsPreDefined>
      <Action></Action>
      <ReadOperation></ReadOperation>
      <WriteOperation></WriteOperation>
      <ExecOperation></ExecOperation>
      <EntityType></EntityType>
      <Entity></Entity>
    </Rule>
  </Rules>
</RBAC>

```

## Table description

Item	Description
Feature name	RBAC
Table name	Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.	N/A
RuleIndex	Index of the rule	Index	Unsigned integer. Value range: 1 to 256.	The bigger the index, the higher the priority. RBAC rules are matched in descending order of priority.
IsPreDefined	Whether it is a predefined rule	Index	Boolean: true false	Predefine rules can not be modified.
Action	Action	N/A	Enumeration: • <b>0</b> —permit. • <b>1</b> —deny.	N/A
ReadOperation	Whether it is a read operation	N/A	Boolean: • true • false	Perform a read operation on the entity.
WriteOperation	Whether it is a write operation	N/A	Boolean: • true • false	Perform a write operation on the entity.
ExecOperation	Whether it is an execute operation	N/A	Boolean: • true • false	Perform an execute operation on the entity.
EntityType	Type of the entity	N/A	Enumeration: • <b>0</b> —Command. • <b>1</b> —Feature. • <b>2</b> —Feature group. • <b>3</b> —Web menu. • <b>4</b> —XML element. • <b>5</b> —SNMP OID.	The system ignores values of the ReadOperation, WriteOperation, and ExecOperation columns of entities of <b>command</b> type.
Entity	Entity	N/A	Command: String. Length: 1 to 128 characters.	For information about different types of entities, see the RBAC configuration in the user

Column name	Column description	Column type	Data type and restrictions	Remarks
			Feature: String. Length: 1 to 15 characters. Feature group: String. Length: 1 to 31 characters. Web menu: String. Length: 1 to 255 characters. XML element: String. Length: 1 to 255 characters. SNMP OID: String. Length: 1 to 255 characters.	manual.

## RBAC/Policies/InterfacePolicies

RBAC interface policy table.

### XML structure

```

<RBAC>
  <Policies>
    <InterfacePolicies>
      <Policy>
        <RoleName></RoleName>
        <InterfaceListPermitted></InterfaceListPermitted>
      </Policy>
    </InterfacePolicies>
  </Policies>
</RBAC>

```

### Table description

Item	Description
Feature name	RBAC
Table name	InterfacePolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.	N/A
InterfaceListPermitted	A list of permitted interfaces specified by full names	N/A	String. Length: 0 to 32767 characters.	To specify an interface range, make sure the interfaces are located on the same chassis, slot, or subslot. Specify the interface range with the last portion of the interface number. For example, set the list the following: GigabitEthernet0/0/1, GigabitEthernet0/0/10 to GigabitEthernet0/0/20, GigabitEthernet0/0/25

## RBAC/Policies/VLANPolicies

RBAC VLAN policy table.

## XML structure

```
<RBAC>
  <Policies>
    <VLANPolicies>
      <Policy>
        <RoleName></RoleName>
        <VLANListPermitted></VLANListPermitted>
      </Policy>
    </VLANPolicies>
  </Policies>
</RBAC>
```

## Table description

Item	Description
Feature name	RBAC
Table name	VLANPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.	N/A
VLANListPermitted	A list of permitted VLANs	N/A	String. Length: 0 to 32767 characters.	The string can contain only numbers, minus signs, and commas, and cannot end with a comma or minus sign. The string does not support blank characters. For example, 1,2,3,5-8,10-20.

## RBAC/Policies/VRF Policies

RBAC VRF policy table.

## XML structure

```
<RBAC>
  <Policies>
    <VRFPolicies>
      <Policy>
        <RoleName></RoleName>
        <VRFPermitted></VRFPermitted>
      </Policy>
    </VRFPolicies>
  </Policies>
</RBAC>
```

## Table description

Item	Description
Feature name	RBAC
Table name	VRFPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.
VRFPermitted	Name of the permitted VRF instance	Index	String. Length: 1 to 31 characters.

## RBAC/Policies/SecZonePolicies

RBAC security zone policy table.

## XML structure

```
<RBAC>
  <Policies>
    <SecZonePolicies>
      <Policy>
        <RoleName></RoleName>
        <SecZonePermitted></SecZonePermitted>
      </Policy>
    </SecZonePolicies>
  </Policies>
</RBAC>
```

## Table description

Item	Description
Feature name	RBAC
Table name	SecZonePolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
RoleName	Name of the role	Index	String. Length: 1 to 63 characters.
SecZonePermitted	Name of the permitted	Index	String.

Column name	Column description	Column type	Data type and restrictions
	security zone		Length: 1 to 31 characters.

## RBAC/Features

RBAC feature table.

### XML structure

```

<RBAC>
  <Features>
    <Feature>
      <Name></Name>
      <Description></Description>
    </Feature>
  </Features>
</RBAC>

```

### Table description

Item	Description
Feature name	RBAC
Table name	Features
Table type	Multi-instance table
Row name	Feature
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the feature group	Index	String. Length: 1 to 31 characters.	The predefined feature groups named L2 and L3 cannot be modified.

## RBAC/FeatureGroups

RBAC feature group table.

### XML structure

```

<RBAC>
  <FeatureGroups>

```

```

    <FeatureGroup>
      <Name></Name>
      <IsPreDefined></IsPreDefined>
    </FeatureGroup>
  </FeatureGroups>
</RBAC>

```

## Table description

Item	Description
Feature name	RBAC
Table name	FeatureGroups
Table type	Multi-instance table
Row name	FeatureGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Name of the group	Index	String. Length: 1 to 31 characters.
IsPreDefined	Whether it is a predefined group	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>

## RBAC/FeaturesInGroup

RBAC Feature In Group table.

## XML structure

```

<RBAC>
  <FeaturesInGroup>
    <Feature>
      <GroupName></GroupName>
      <FeatureName></FeatureName>
    </Feature>
  </FeaturesInGroup>
</RBAC>

```

## Table description

Item	Description
Feature name	RBAC
Table name	FeaturesInGroup
Table type	Multi-instance table
Row name	Feature
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Name of the group	Index	String. Length: 1 to 31 characters.
FeatureName	Name of the feature	Index	String. Length: 1 to 15 characters.

# Contents

RBAC .....	2
RBAC/Roles .....	2
RBAC/Rules .....	2
RBAC/Policies/InterfacePolicies .....	3
RBAC/Policies/VLANPolicies .....	3
RBAC/Policies/VRFPolicies .....	3
RBAC/FeatureGroups .....	4

# RBAC

## RBAC/Roles

Message	Explanation
Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。	Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。
Maximum number of user roles already reached. 用户角色数量已达到最大。	Maximum number of user roles already reached. 用户角色数量已达到最大。
The user role doesn't exist. 指定的用户角色不存在。	The user role doesn't exist. 指定的用户角色不存在。

## RBAC/Rules

Message	Explanation
Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。	Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。
Maximum number of rules already reached. 规则数量已达到最大。	Maximum number of rules already reached. 规则数量已达到最大。
The deny operation should be configured before the permit operation. 配置该策略之前，应该先禁止所有实例的操作权限。	The deny operation should be configured before the permit operation. 配置该策略之前，应该先禁止所有实例的操作权限。
The user role doesn't exist. 该用户角色不存在。	The user role doesn't exist. 该用户角色不存在。
Only the middle position of the last segment can contain the wildcard (*). 通配符*只能存在于最后一段的中间位置。	Only the middle position of the last segment can contain the wildcard (*). 通配符*只能存在于最后一段的中间位置。
A segment starting with the wildcard (*) can't contain any other characters, and it must be the last segment. 以通配符*开头的段只能存在通配符且必须是最后一段。	A segment starting with the wildcard (*) can't contain any other characters, and it must be the last segment. 以通配符*开头的段只能存在通配符且必须是最后一段。
No unprintable characters other than TAB and blank spaces are allowed. 不允许出现TAB键和空格以外的不可见字符。	No unprintable characters other than TAB and blank spaces are allowed. 不允许出现TAB键和空格以外的不可见字符。
Every segment of the command matching string contains at least one printable character. 命令字符串的每段至少包含一个可见字符。	Every segment of the command matching string contains at least one printable character. 命令字符串的每段至少包含一个可见字符。

# RBAC/Policies/InterfacePolicies

Message	Explanation
Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。	Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。
The deny operation should be configured before the permit operation. 配置该策略之前，应该先禁止所有实例的操作权限。	The deny operation should be configured before the permit operation. 配置该策略之前，应该先禁止所有实例的操作权限。
The user role doesn't exist. 该用户角色不存在。	The user role doesn't exist. 该用户角色不存在。
The start and end interfaces must be of the same type, and the end interface number must be greater than the start interface number. 起始接口类型必须和终止接口类型一致且结束接口号必须大于起始接口号。	The start and end interfaces must be of the same type, and the end interface number must be greater than the start interface number. 起始接口类型必须和终止接口类型一致且结束接口号必须大于起始接口号。

# RBAC/Policies/VLANPolicies

Message	Explanation
Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。	Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。
The deny operation should be configured before the permit operation. 配置该策略之前，应该先禁止所有实例的操作权限。	The deny operation should be configured before the permit operation. 配置该策略之前，应该先禁止所有实例的操作权限。
The user role doesn't exist. 该用户角色不存在。	The user role doesn't exist. 该用户角色不存在。
The end VLAN ID must be greater than the start VLAN ID. 结束VLAN ID必须大于起始VLAN ID。	The end VLAN ID must be greater than the start VLAN ID. 结束VLAN ID必须大于起始VLAN ID。

# RBAC/Policies/VRFPolicies

Message	Explanation
Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。	Can't delete or modify this system predefined user role. 系统预定义用户角色不能被删除或修改。
The deny operation should be configured before the permit operation. 配置该策略之前，应该先禁止所有实例的操作权限。	The deny operation should be configured before the permit operation. 配置该策略之前，应该先禁止所有实例的操作权限。
The user role doesn't exist. 该用户角色不存在。	The user role doesn't exist. 该用户角色不存在。



# RBAC/FeatureGroups

Message	Explanation
The feature group doesn't exist. 特性组不存在。	The feature group doesn't exist. 特性组不存在。
Can't delete or modify the system predefined feature group. 系统预定义的特性组不能删除或修改。	Can't delete or modify the system predefined feature group. 系统预定义的特性组不能删除或修改。
Maximum number of feature groups already reached. 特性组数量已达到最大。	Maximum number of feature groups already reached. 特性组数量已达到最大。

# Contents

RDDC.....	1
RDDC/RedundancySwitchoverRequest .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
RDDC/RedundancySwitchoverReset .....	1
XML structure.....	1
Table description.....	2
Columns.....	2
RDDC/ RedundancyGroupClear .....	2
XML structure.....	2
Table description.....	2
Columns.....	3

# RDDC

## RDDC/RedundancySwitchoverRequest

This table is used to switch over the redundancy group manually.

### XML structure

```
<RDDC>
  <RedundancySwitchoverRequest>
    <SwitchoverRequest>
      <GroupName></GroupName>
    </SwitchoverRequest>
  </RedundancySwitchoverRequest>
</RDDC>
```

### Table description

Item	Description
Feature name	RDDC
Table name	RedundancySwitchoverRequest
Table type	Multi-instance table
Row name	SwitchoverRequest
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.

## RDDC/RedundancySwitchoverReset

This table is used to trigger preemption in redundancy group manually.

### XML structure

```
<RDDC>
  <RedundancySwitchoverReset>
    <SwitchoverReset>
      <GroupName></GroupName>
    </SwitchoverReset>
  </RedundancySwitchoverReset>
</RDDC>
```

```

    </SwitchoverReset>
  </RedundancySwitchoverReset>
</RDDC>

```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancySwitchoverReset
Table type	Multi-instance table
Row name	SwitchoverReset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.

## RDDC/RedundancyGroupClear

This table is used to clear redundancy group node or redundancy group itself.

## XML structure

```

<RDDC>
  <RedundancyGroupClear>
    <RedundancyClear>
      <GroupName></GroupName>
      <NodeID></NodeID>
    </RedundancyClear>
  </RedundancyGroupClear>
</RDDC>

```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroupClear
Table type	Multi-instance table
Row name	RedundancyClear
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
NodeID	Redundancy group node ID	Index	Unsigned integer. Value range: 1 to 2.	If you do not specify this column, clear the group.

# Contents

RDDC.....	1
RDDC/RedundancyInterfaceMember .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
RDDC/RedundancyGroup.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
RDDC/RedundancyGroupMember.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
RDDC/RedundancyFailoverGroup .....	4
XML structure.....	4
Table description.....	4
Columns.....	4
RDDC/RedundancyGroupNode .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
RDDC/RedundancyGroupTrack .....	5
XML structure.....	5
Table description.....	6
Columns.....	6
RDDC/RedundancyGroupNodeMember .....	6
XML structure.....	6
Table description.....	7
Columns.....	7

# RDDC

## RDDC/RedundancyInterfaceMember

This table contains member interface information in redundancy interface.

### XML structure

```
<RDDC>
  <RedundancyInterfaceMember>
    <MemberInterface>
      <IfIndex></IfIndex>
      <MemberIfIndex></MemberIfIndex>
      <Priority></Priority>
    </MemberInterface>
  </RedundancyInterfaceMember>
</RDDC>
```

### Table description

Item	Description
Feature name	RDDC
Table name	RedundancyInterfaceMember
Table type	Multi-instance table
Row name	MemberInterface
Restrictions	This table supports member interface types: Layer 3 Ethernet interface Layer 3 aggregate interface
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only redundancy interfaces are supported.
MemberIfIndex	Member interface index.	Index	Unsigned integer.	N/A
Priority	Priority of the member interface	N/A	Unsigned integer. Value range: 1 to 255.	Required. The higher the value, the greater the priority.

# RDDC/RedundancyGroup

This table contains redundancy group information.

## XML structure

```
<RDDC>
  <RedundancyGroup>
    <Group>
      <GroupName></GroupName>
      <PreemptDelay></PreemptDelay>
      <HoldDownInterval></HoldDownInterval>
    </Group>
  </RedundancyGroup>
</RDDC>
```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroup
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
PreemptDelay	Preempt delay time of redundancy group node	N/A	Unsigned integer. Value range: 0 to 12 minutes. Default: 1 minute.	0 means no switchover.
HoldDownInterval	Hold-down time	N/A	Unsigned integer. Value range: 0 to 1800 seconds. Default: 1 second	0 means not to hold down in switchover.



# RDDC/RedundancyGroupMember

This table contains redundancy interface information in redundancy group.

## XML structure

```
<RDDC>
  <RedundancyGroupMember>
    <MemberInterface>
      <GroupName></GroupName>
      <IfIndex></IfIndex>
    </MemberInterface>
  </RedundancyGroupMember>
</RDDC>
```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroupMember
Table type	Multi-instance table
Row name	MemberInterface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
IfIndex	Interface index.	Index	Unsigned integer.	Only redundancy interfaces are supported. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.

# RDDC/RedundancyFailoverGroup

This table contains failover group information in redundancy group.

## XML structure

```
<RDDC>
  <RedundancyFailoverGroup>
    <FailoverGroup>
      <GroupName></GroupName>
      <FailoverGroupName></FailoverGroupName>
    </FailoverGroup>
  </RedundancyFailoverGroup>
</RDDC>
```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancyFailoverGroup
Table type	Multi-instance table
Row name	FailoverGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
FailoverGroupUpName	Failover group name	Index	String, case-sensitive. Length: 1 to 63 characters.	N/A

# RDDC/RedundancyGroupNode

This table contains redundancy group node information in redundancy group.

## XML structure

```
<RDDC>
  <RedundancyGroupNode>
    <Node>
      <GroupName></GroupName>
```

```

    <NodeID></NodeID>
    <Priority></Priority>
    <BindChassis></BindChassis>
  </Node>
</RedundancyGroupNode>
</RDDC>

```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroupNode
Table type	Multi-instance table
Row name	Node
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
NodeID	Redundancy group node ID	Index	Unsigned integer. Value range: 1 to 2.	N/A
Priority	Priority of this redundancy group node	N/A	Unsigned integer. Value range: 1 to 255. Default: 1.	The higher the value, the greater the priority.
BindChassis	The bound chassis ID	N/A	Unsigned integer.	N/A

## RDDC/RedundancyGroupTrack

This table contains track information of redundancy group node.

## XML structure

```

<RDDC>
  <RedundancyGroupTrack>
    <Track>
      <GroupName></GroupName>
      <NodeID></NodeID>
      <TrackID></TrackID>
      <ReducePriority></ReducePriority>
    </Track>
  </RedundancyGroupTrack>
</RDDC>

```

```

        <IfIndex></IfIndex>
    </Track>
</RedundancyGroupTrack>
</RDDC>

```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroupTrack
Table type	Multi-instance table
Row name	Track
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
NodeID	Redundancy group node ID	Index	Unsigned integer. Value range: 1to 2.	N/A
TrackID	The track ID	Index	Unsigned integer. Value range: 1to 1024.	N/A
ReducePriority	Reduce priority of redundancy group node	N/A	Unsigned integer. Value range: 1to 255. Default: 255.	N/A
IfIndex	Track interface index.	N/A	Unsigned integer.	N/A

## RDDC/RedundancyGroupNodeMember

This table contains member interface information in redundancy group node.

## XML structure

```

<RDDC>
  <RedundancyGroupNodeMember>
    <MemberInterface>
      <GroupName></GroupName>
      <NodeID></NodeID>
      <IfIndex></IfIndex>
    </MemberInterface>
  </RedundancyGroupNodeMember>
</RDDC>

```

```

    </RedundancyGroupNodeMember>
  </RDDC>

```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroupNodeMember
Table type	Multi-instance table
Row name	MemberInterface
Restrictions	Bind redundancy group node with chassis first. This table supports member interface types: Layer 2 Ethernet interface Layer 3 Ethernet interface
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
NodeID	Redundancy group node ID	Index	Unsigned integer. Value range: 1 to 2.	N/A
IfIndex	Interface index.	Index	Unsigned integer.	The interface must belong to the chassis bound with the redundancy group node. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.

# Contents

RDDC.....	1
RDDC/RedundancyInterfaceMember .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
RDDC/RedundancyGroup.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
RDDC/RedundancyGroupMember.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
RDDC/RedundancyFailoverGroup .....	4
XML structure.....	4
Table description.....	4
Columns.....	4
RDDC/RedundancyGroupNode .....	5
XML structure.....	5
Table description.....	5
Columns.....	5
RDDC/RedundancyGroupTrack .....	6
XML structure.....	6
Table description.....	6
Columns.....	6
RDDC/RedundancyGroupNodeMember .....	7
XML structure.....	7
Table description.....	7
Columns.....	8

# RDDC

## RDDC/RedundancyInterfaceMember

This table contains member interface information in redundancy interface.

### XML structure

```
<RDDC>
  <RedundancyInterfaceMember>
    <MemberInterface>
      <IfIndex></IfIndex>
      <MemberIfIndex></MemberIfIndex>
      <Priority></Priority>
      <ActiveStatus></ActiveStatus>
      <HoldStatus></HoldStatus>
    </MemberInterface>
  </RedundancyInterfaceMember>
</RDDC>
```

### Table description

Item	Description
Feature name	RDDC
Table name	RedundancyInterfaceMember
Table type	Multi-instance table
Row name	MemberInterface
Restrictions	This table supports member interface types: Layer 3 Ethernet interface Layer 3 aggregate interface

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Only redundancy interfaces are supported.
MemberIfIndex	Member interface index.	Index	Unsigned integer.	N/A
Priority	Priority of the member interface	N/A	Unsigned integer. Value range: 1 to 255.	The higher the value, the greater the priority.

Column name	Column description	Column type	Data type and restrictions	Remarks
ActiveStatus	Active status of member interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Inactive.</li> <li>1—Active.</li> </ul>	N/A
HoldStatus	Hold status of member interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Absent.</li> <li>1—Normal.</li> </ul>	N/A

## RDDC/RedundancyGroup

This table contains redundancy group information.

### XML structure

```

<RDDC>
  <RedundancyGroup>
    <Group>
      <GroupName></GroupName>
      <PreemptDelay></PreemptDelay>
      <HoldDownInterval></HoldDownInterval>
      <HoldDownTimeRemained></HoldDownTimeRemained>
      <PreemptDelayRemained></PreemptDelayRemained>
      <SwitchoverRequest></SwitchoverRequest>
    </Group>
  </RedundancyGroup>
</RDDC>

```

### Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroup
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
PreemptDelay	Preempt delay time of redundancy group node	N/A	Unsigned integer. Value range: 0 to 12 minutes.	0 means no switchover.
HoldDownInterval	Hold-down time	N/A	Unsigned integer. Value range: 0 to 1800 seconds.	0 means not to hold down in switchover.
HoldDownTimeRemained	Remained hold-down time when a switchover occurred or a failover recovery.	N/A	Unsigned integer. Value range: 0 to 1800 seconds.	N/A
PreemptDelayRemained	Preempt delay time remained when a failover recovery.	N/A	Unsigned integer. Value range: 0 to 12 minutes.	N/A
SwitchoverRequest	Whether request a switchover to the low-priority node or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false(default)</b></li> </ul>	N/A

## RDDC/RedundancyGroupMember

This table contains redundancy interface information in redundancy group.

### XML structure

```

<RDDC>
  <RedundancyGroupMember>
    <MemberInterface>
      <GroupName></GroupName>
      <IfIndex></IfIndex>
    </MemberInterface>
  </RedundancyGroupMember>
</RDDC>

```

### Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroupMember
Table type	Multi-instance table
Row name	MemberInterface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	<b>N/A</b>
IfIndex	Interface index.	Index	Unsigned integer.	Only redundancy interfaces are supported.

## RDDC/RedundancyFailoverGroup

This table contains failover group information in redundancy group.

## XML structure

```
<RDDC>
  <RedundancyFailoverGroup>
    <FailoverGroup>
      <GroupName></GroupName>
      <FailoverGroupName></FailoverGroupName>
    </FailoverGroup>
  </RedundancyFailoverGroup>
</RDDC>
```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancyFailoverGroup
Table type	Multi-instance table
Row name	FailoverGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
FailoverGroupUpName	Failover group name	Index	String, case-sensitive. Length: 1 to 63 characters.	N/A

# RDDC/RedundancyGroupNode

This table contains the information of redundancy group node.

## XML structure

```
<RDDC>
  <RedundancyGroupNode>
    <Node>
      <GroupName></GroupName>
      <NodeID></NodeID>
      <Priority></Priority>
      <BindChassis></BindChassis>
      <TrackWeight></TrackWeight>
      <Status></Status>
    </Node>
  </RedundancyGroupNode>
</RDDC>
```

## Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroupNode
Table type	Multi-instance table
Row name	Node
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
NodeID	Redundancy group node ID	Index	Unsigned integer. Value range: 1 to 2.	N/A
Priority	Priority of this redundancy group node	N/A	Unsigned integer. Value range: 1 to 255.	The higher the value, the greater the priority.
BindChassis	The bound chassis ID	N/A	Unsigned integer.	N/A
TrackWeight	The current weight of this redundancy group node.	N/A	Integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	The current status of this redundancy group node.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Secondary.</li> <li>2—Primary.</li> </ul>	N/A

## RDDC/RedundancyGroupTrack

This table contains track information of redundancy group node.

### XML structure

```

<RDDC>
  <RedundancyGroupTrack>
    <Track>
      <GroupName></GroupName>
      <NodeID></NodeID>
      <TrackID></TrackID>
      <ReducePriority></ReducePriority>
      <Status></Status>
      <IfIndex></IfIndex>
      <FailInterface></FailInterface>
      <HoldStatus></HoldStatus>
    </Track>
  </RedundancyGroupTrack>
</RDDC>

```

### Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroupTrack
Table type	Multi-instance table
Row name	Track
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.
NodeID	Redundancy group node ID	Index	Unsigned integer. Value range: 1 to 2.

Column name	Column description	Column type	Data type and restrictions
TrackID	The track ID	Index	Unsigned integer. Value range: 1 to 1024.
ReducePriority	Reduce priority of redundancy group node	N/A	Unsigned integer. Value range: 1 to 255.
Status	Track Status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Positive.</li> <li>2—Negative.</li> </ul>
IfIndex	Track interface index.	N/A	Unsigned integer.
FailInterface	Whether the trace interface is fault.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>
HoldStatus	The trace interface status.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Absend.</li> <li>1—Normal.</li> </ul>

## RDDC/RedundancyGroupNodeMember

This table contains member interface information in redundancy group node.

### XML structure

```

<RDDC>
  <RedundancyGroupNodeMember>
    <MemberInterface>
      <GroupName></GroupName>
      <NodeID></NodeID>
      <IfIndex></IfIndex>
      <RedundancyDown></RedundancyDown>
    </MemberInterface>
  </RedundancyGroupNodeMember>
</RDDC>

```

### Table description

Item	Description
Feature name	RDDC
Table name	RedundancyGroupNodeMember
Table type	Multi-instance table
Row name	MemberInterface
Restrictions	This table supports member interface types: Layer 2 Ethernet interface

	Layer 3 Ethernet interface
--	----------------------------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Redundancy group name	Index	String, case-sensitive. Length: 1 to 15 characters.	N/A
NodeID	Redundancy group node ID	Index	Unsigned integer. Value range: 1 to 2.	N/A
IfIndex	Interface index.	Index	Unsigned integer.	N/A
Redundancy Down	Whether the interface is redundancy down.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# Contents

RDDC.....	1
RDDC/RedundancyInterfaceMember .....	1
RDDC/RedundancyGroup.....	2
RDDC/RedundancyGroupMember.....	2
RDDC/RedundancyFailoverGroup .....	2
RDDC/RedundancyGroupNode .....	3
RDDC/RedundancyGroupTrack .....	3
RDDC/RedundancyGroupNodeMember .....	4
RDDC/RedundancySwitchoverRequest .....	5
RDDC/RedundancySwitchoverReset .....	5
RDDC/RedundancyGroupClear .....	5

# RDDC

## RDDC/RedundancyInterfaceMember

Message	Explanation
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please modify configuration under guidance. 当前配置不符合配置要求。请按照配置指导进行配置。
Number of redundancy groups exceeded the limit. 冗余组个数超过上限。	Number of redundancy groups exceeded the limit, please check the specifications of the device. 冗余组个数超过上限。请检查设备规格。
The interface is already a member of another Reth interface. 该接口已经是其它冗余口的成员接口。	The interface is already a member of another Reth interface, please modify configuration under guidance. 该接口已经是其它冗余口的成员接口。请按照配置指导进行配置。
A member interface with the same priority already exists. 相同优先级的成员接口已经存在。	A member interface with the same priority already exists, please modify configuration under guidance. 相同优先级的成员接口已经存在。请按照配置指导进行配置。
Number of members exceeded the limit on the Reth interface. 冗余口的成员接口个数超过上限。	Number of members exceeded the limit on the Reth interface, please check the specifications of the device. 冗余口的成员接口个数超过上限。请检查设备规格。
This interface is already a member of the Reth interface. 该接口已经是此以太网冗余接口的成员。	This interface is already a member of the Reth interface, please modify configuration under guidance. 该接口已经是此以太网冗余接口的成员。请按照配置指导进行配置。
The interface is already a member of a redundancy group. 该接口已经是一个冗余组的成员接口。	The interface is already a member of a redundancy group, please modify configuration under guidance. 该接口已经是一个冗余组的成员接口。请按照配置指导进行配置。
The configuration doesn't meet the requirements. 当前配置不符合配置要求。	The configuration doesn't meet the requirements, please modify configuration under guidance. 当前配置不符合配置要求。请按照配置指导进行配置。
Members of a Reth interface can't be members of an aggregation group. 冗余口的成员接口不能为聚合口的成员接口。	Members of a Reth interface can't be members of an aggregation group, please modify configuration under guidance. 冗余口的成员接口不能为聚合口的成员接口。请按照配置指导进行配置。



# RDDC/RedundancyGroup

Message	Explanation
Number of redundancy groups exceeded the limit. 冗余组个数超过上限。	Number of redundancy groups exceeded the limit, please check the specifications of the device. 冗余组个数超过上限。请检查设备规格。
Can't delete the redundancy group because it contains members (Reth interfaces or failover groups) or redundancy group nodes. 冗余组内存在冗余口、备份组或者冗余组节点，不能删除。	Can't delete the redundancy group because it contains members (Reth interfaces or failover groups) or redundancy group nodes, please modify configuration under guidance. 冗余组内存在冗余口、备份组或者冗余组节点，不能删除。请按照配置指导进行配置。

# RDDC/RedundancyGroupMember

Message	Explanation
The Reth interface is already in another redundancy group. 该冗余口已加入其它冗余组。	The Reth interface is already in another redundancy group, please modify configuration under guidance. 该冗余口已加入其它冗余组。请按照配置指导进行配置。
The specified redundancy group doesn't exist. 指定的冗余组不存在。	The specified redundancy group doesn't exist, please modify configuration under guidance. 指定的冗余组不存在。请按照配置指导进行配置。

# RDDC/RedundancyFailoverGroup

Message	Explanation
The failover group is already in another redundancy group. 该备份组已加入其它冗余组。	The failover group is already in another redundancy group, please modify configuration under guidance. 该备份组已加入其它冗余组。请按照配置指导进行配置。
Number of failover groups exceeded the limit. 备份组成员个数超过上限。	Number of failover groups exceeded the limit, please check the specifications of the device. 备份组成员个数超过上限。请检查设备规格。
Number of Reth interfaces exceeded the limit. 冗余组的成员接口个数超过上限。	Number of Reth interfaces exceeded the limit, please check the specifications of the device. 冗余组的成员接口个数超过上限。请检查设备规格。
The specified redundancy group doesn't exist. 指定的冗余组不存在。	The specified redundancy group doesn't exist please modify configuration under guidance. 指定的冗余组不存在。请按照配置指导进行配置。
The specified failover group doesn't exist. 指定的备份组不存在。	The specified failover group doesn't exist please modify configuration under guidance. 指定的备份组不存在。请按照配置指导进行配置。

# RDDC/RedundancyGroupNode

Message	Explanation
<p>Please first remove the node and chassis binding.</p> <p>请先解除冗余组节点和成员设备间的绑定关系。</p>	<p>Invalid configuration, please modify configuration under guidance.</p> <p>请先解除冗余组节点和成员设备间的绑定关系。请按照配置指导进行配置。</p>
<p>This node has members or Track configuration.</p> <p>该冗余组节点下存在成员或者Track配置。</p>	<p>This node has members or Track configuration, please modify configuration under guidance.</p> <p>该冗余组节点下存在成员或者Track配置。请按照配置指导进行配置。</p>
<p>The chassis has been bound to the other node of the redundancy group.</p> <p>该成员设备已和该冗余组下的另一节点绑定。</p>	<p>The chassis has been bound to the other node of the redundancy group, please modify configuration under guidance.</p> <p>该成员设备已和该冗余组下的另一节点绑定。请按照配置指导进行配置。</p>
<p>The specified redundancy group doesn't exist.</p> <p>指定的冗余组不存在。</p>	<p>The specified redundancy group doesn't exist, please modify configuration under guidance.</p> <p>指定的冗余组不存在。请按照配置指导进行配置。</p>
<p>Invalid chassis number.</p> <p>非法的成员编号。</p>	<p>Invalid chassis number, please modify configuration under guidance.</p> <p>非法的成员编号。请按照配置指导进行配置。</p>
<p>Members of a Reth interface can't be interfaces shared by contexts.</p> <p>冗余口的成员接口不能为共享口。</p>	<p>Members of a Reth interface can't be interfaces shared by contexts, please modify configuration under guidance.</p> <p>冗余口的成员接口不能为共享口。请按照配置指导进行配置。</p>

# RDDC/RedundancyGroupTrack

Message	Explanation
<p>Can't specify the same interface in track entries associated with chassis in the same redundancy group.</p> <p>同一冗余组的Track项不能关联同一个接口。</p>	<p>Can't specify the same interface in track entries associated with chassis in the same redundancy group, please modify configuration under guidance.</p> <p>同一冗余组的Track项不能关联同一个接口。请按照配置指导进行配置。</p>
<p>Number of track entries associated with the chassis exceeded the limit.</p> <p>和冗余组成员设备关联的Track项的个数超过上限。</p>	<p>Number of track entries associated with the chassis exceeded the limit, please modify configuration under guidance.</p> <p>和冗余组成员设备关联的Track项的个数超过上限。请按照配置指导进行配置。</p>
<p>The track entry has been associated with</p>	<p>The track entry has been associated with another chassis,</p>

another chassis. 该Track项已关联其它成员设备。	please modify configuration under guidance. 该Track项已关联其它成员设备。请按照配置指导进行配置。
Please first bind a chassis to the node. 请先为节点绑定成员设备。	Invalid configuration, please modify configuration under guidance. 请先为节点绑定成员设备。请按照配置指导进行配置。
Malloc failure. 内存分配失败。	The device does not have enough memory resource. 设备内存不足，请减少部门配置，释放内存。
Track entry registration failure. 注册Track项失败。	Track entry registration failure, please modify configuration under guidance. 注册Track项失败。请按照配置指导进行配置。
This interface is not on the chassis bound to the redundancy group. 接口不在与冗余组绑定的成员设备上。	This interface is not on the chassis bound to the redundancy group, please modify configuration under guidance. 接口不在与冗余组绑定的成员设备上。请按照配置指导进行配置。
Number of chassis-specific member interfaces exceeded the limit. 该成员设备绑定的成员接口个数超过上限。	Number of chassis-specific member interfaces exceeded the limit, please modify configuration under guidance. 该成员设备绑定的成员接口个数超过上限。请按照配置指导进行配置。
Can't add the interface because it is a member of a Reth interface. 不能加入该接口，该接口已经是冗余口的成员接口。	Can't add the interface because it is a member of a Reth interface, please modify configuration under guidance. 不能加入该接口，该接口已经是冗余口的成员接口。请按照配置指导进行配置。
This interface has been assigned to another redundancy group. 该接口已加入其它冗余组。	This interface has been assigned to another redundancy group, please modify configuration under guidance. 该接口已加入其它冗余组。请按照配置指导进行配置。
The chassis has been bound to another redundancy group. 该机框已经绑定到其他冗余组上。	The chassis has been bound to another redundancy group, please modify configuration under guidance. 该机框已经绑定到其他冗余组上。请按照配置指导进行配置。
The specified redundancy group doesn't exist. 指定的冗余组不存在。	The specified redundancy group doesn't exist, please modify configuration under guidance. 指定的冗余组不存在。请按照配置指导进行配置。
The specified chassis doesn't exist. 指定的冗余组成员设备不存在。	The specified chassis doesn't exist, please modify configuration under guidance. 指定的冗余组成员设备不存在。请按照配置指导进行配置。

## RDDC/RedundancyGroupNodeMember

Message	Explanation
The specified redundancy group doesn't exist. 指定的冗余组不存在。	The specified redundancy group doesn't exist, please modify configuration under guidance. 指定的冗余组不存在。请按照配置指导进行配置。

The specified chassis doesn't exist. 指定的冗余组成员设备不存在。	The specified chassis doesn't exist, please modify configuration under guidance. 指定的冗余组成员设备不存在。请按照配置指导进行配置。

## RDDC/RedundancySwitchoverRequest

Message	Explanation

## RDDC/RedundancySwitchoverReset

Message	Explanation

## RDDC/RedundancyGroupClear

Message	Explanation

# Contents

- REDISDBM.....1
  - REDISDBM/ServerVpn .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# REDISDBM

## REDISDBM/ServerVpn

This table is used to specify the VRF used to connect to the Redis servers.

### XML structure

```
<REDISDBM>
  <ServerVpn>
    <VRF></VRF>
  </ServerVpn>
</REDISDBM>
```

### Table description

Item	Description
Feature name	REDISDBM
Table name	ServerVpn
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	Public instances don't support the column.

# Contents

- REDISDBM.....1
  - REDISDBM/ServerVpn .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# REDISDBM

## REDISDBM/ServerVpn

This table is used to get the VRF used to connect to the Redis servers .

### XML structure

```
<REDISDBM>
  <ServerVpn>
    <VRF></VRF>
  </ServerVpn>
</REDISDBM>
```

### Table description

Item	Description
Feature name	REDISDBM
Table name	ServerVpn
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A



# Contents

- ResourceMonitor.....1
  - ResourceMonitor/Configuration.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1
  - ResourceMonitor/Resources .....2
    - XML structure.....2
    - Table description.....2
    - Columns.....3

# ResourceMonitor

## ResourceMonitor/Configuration

This table contains usage information about the resource monitor.

### XML structure

```
<ResourceMonitor>
  <Configuration>
    <MinorResendEnable></MinorResendEnable>
    <SyslogOutput></SyslogOutput>
    <SnmpNotificationOutput></SnmpNotificationOutput>
    <NetconfEventOutput></NetconfEventOutput>
  </Configuration>
</ResourceMonitor>
```

### Table description

Item	Description
Feature name	ResourceMonitor
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinorResendEnable	Minor event resend enable monitoring	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: true	N/A
SyslogOutput	output enable for syslog	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: true	N/A
SnmpNotificationOutput	output enable for SNMP notification		Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>false</b></li> </ul> Default: true	
NetconfEventOutput	output enable for NETCONF event		Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul> Default: true	N/A

## ResourceMonitor/Resources

This table contains usage information about the resource monitor.

### XML structure

```

<ResourceMonitor>
  < Resources >
    <Resource>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <Name></Name>
      <Unit></Unit>
      <MinorThreshold></MinorThreshold>
      <SevereThreshold></SevereThreshold>
    </Resource>
  </Resources>
</ResourceMonitor>

```

### Table description

Item	Description
Feature name	ResourceMonitor
Table name	Resources
Table type	Multi-instance table
Row name	Resource
Restrictions	None
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Position information of the device Node.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>	N/A
Chassis	Member ID of the member device where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU Identification.	Index	Unsigned integer. Value range: 0 to 7.	N/A
Name	Resource name	Index	String: Size:1~31	N/A
Unit	Unit of resource monitor threshold	N/A	Enumeration: <ul style="list-style-type: none"> <li>absolute</li> <li>percentage</li> </ul>	N/A
MinorThreshold	The free resource threshold for minor condition	N/A	Unsigned integer. When unit is percentage, value range: 1 to 100. When unit is absolute, value range 0 to $2^{32} - 1$	N/A
SevereThreshold	The free resource threshold for severe condition	N/A	Unsigned integer. When unit is percentage, value range: 1 to 100. When unit is absolute, value range 0 to $2^{32} - 1$	N/A

# Contents

ResourceMonitor.....	1
ResourceMonitor/Configuration.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
ResourceMonitor/Resources .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
ResourceMonitor/Monitors .....	3
XML structure.....	3
Table description.....	4
Columns.....	4

# ResourceMonitor

## ResourceMonitor/Configuration

This table contains system configuration about the resource monitor.

### XML structure

```
<ResourceMonitor>
  <Configuration>
    <MinorResendEnable></MinorResendEnable>
    <SyslogOutput></SyslogOutput>
    <SnmpNotificationOutput></SnmpNotificationOutput>
    <NetconfEventOutput></NetconfEventOutput>
  </Configuration>
</ResourceMonitor>
```

### Table description

Item	Description
Feature name	ResourceMonitor
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinorResendEnable	Minor event resend enable monitoring	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: true	N/A
SyslogOutput	Output enable for syslog	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: true	N/A
SnmpNotificationOutput	Output enable for SNMP notification		Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: true	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
NetconfEventOutput	Output enable for NETCONF event		Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul> Default: true	N/A

## ResourceMonitor/Resources

This table contains thresholds information about the resource monitor.

### XML structure

```

<ResourceMonitor>
  <Resources>
    <Resource>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <Name></Name>
      <Unit></Unit>
      <MinorThreshold></MinorThreshold>
      <SevereThreshold></SevereThreshold>
    </Resource>
  </Resources>
</ResourceMonitor>

```

### Table description

Item	Description
Feature name	ResourceMonitor
Table name	Resources
Table type	Multi-instance table
Row name	Resource
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Position information of the device Node.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Slot</li> <li>CPUID</li> </ul>	
Chassis	Member ID of the member device where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU Identification.	Index	Unsigned integer. Value range: 0 to 7.	N/A
Name	Resource name	Index	String: Size:1~31	N/A
Unit	Unit of resource monitor threshold	N/A	Enumeration: <ul style="list-style-type: none"> <li>absolute</li> <li>percentage</li> </ul>	N/A
MinorThreshold	The free resource threshold for minor condition	N/A	Unsigned integer. When unit is percentage, value range: 1 to 100. When unit is absolute, value range 0 to $2^{32} - 1$	N/A
SevereThreshold	The free resource threshold for severe condition	N/A	Unsigned integer. When unit is percentage, value range: 1 to 100. When unit is absolute, value range 0 to $2^{32} - 1$	N/A

## ResourceMonitor/Monitors

This table contains usage information about the resource monitor.

### XML structure

```

<ResourceMonitor>
  <Monitors>
    <Monitor>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <Name></Name>
      <Unit></Unit>
      <Used></Used>
      <Free></Free>
      <Total></Total>
    </Monitor>
  </Monitors>
</ResourceMonitor>

```



```

    </Monitor>
  </Monitors>
</ResourceMonitor>

```

## Table description

Item	Description
Feature name	ResourceMonitor
Table name	Monitors
Table type	Multi-instance table
Row name	Monitor
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Position information of the device Node.	Data structure	Members include: <ul style="list-style-type: none"> <li>Chassis</li> <li>Slot</li> <li>CPUID</li> </ul>	N/A
Chassis	Member ID of the member device where the entity resides.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot number of the device node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU Identification.	Index	Unsigned integer. Value range: 0 to 7.	N/A
Name	Resource name	Index	String: Size:1~31	N/A
Unit	Unit of resource monitor threshold	N/A	Enumeration: <ul style="list-style-type: none"> <li>absolute</li> <li>percentage</li> </ul>	N/A
Used	Used resource size	N/A	Unsigned integer Value range: 0 to $2^{32} - 1$	N/A
Free	Free resource size	N/A	Unsigned integer Value range: 0 to $2^{32} - 1$	N/A
Total	Total resource size	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$	N/A

# Contents

- ResourceEvent event..... 1
  - XML structure for event subscription..... 1
  - XML structure for event report..... 2

# ResourceEvent event

This event is used to report resource alarm information.

## XML structure for event subscription

```
<ResourceEvent>
  <Resource>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <Name></Name>
  </Resource>
</ResourceEvent>
```

### Example:

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>ResourceMonitor</stream>
    <filter type="subtree">
      <ResourceEvent xmlns="http://www.h3c.com/netconf/event:1.0/ResourceMonitor:1.0">
        <Resource>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
          <Name>acl</Name>
        </Resource>
      </ResourceEvent>
    </filter>
  </create-subscription>
</rpc>
```

### Table description

Item	Description
Event stream name	ResourceMonitor
Event name	ResourceEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/ResourceMonitor:1.0
Support for extended query	No

### Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Chassis	Member ID of the member where the device entity	Unsigned integer. Value range: 0 to 65535.	No

Column name	Column description	Data type and restrictions	Support for extended queries
	resides.		
Slot	Slot number of the device node.	Unsigned integer. Value range: 0 to 65535.	No
CPUID	CPU Identification.	Unsigned integer. Value range: 0 to 7.	No
ResourceName	Resource name	String: Size:1~31	No

## XML structure for event report

```

<ResourceEvent>
  <Resource>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
    <Name></Name>
    <Description></Description>
    <Uint></Uint>
    <Total></Total>
    <Used></Used>
    <Free></Free>
    <MinorThreshold></MinorThreshold>
    <SevereThreshold></SevereThreshold>
    <AdditionalInfo></AdditionalInfo>
  </Resource>
</ResourceEvent>

```

### Example:

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:xs="http://www.h3c.com/netconf/base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>ResourceMonitor</stream>
    <filter type="subtree">
      <ResourceEvent xmlns="http://www.h3c.com/netconf/event:1.0/ResourceMonitor:1.0">
        <Resource>
          <Chassis>0</Chassis>
          <Slot>0</Slot>
          <CPUID>0</CPUID>
          <Name>ACL</Name>
          <Description>RESMON_MINOR</Description>
          <Uint>1</Uint>
          <Total>1000</Total>
          <Used>920</Used>
          <Free>80</Free>
          <MinorThreshold>200</MinorThreshold>

```

```

        <SevereThreshold>100</SevereThreshold>
        <AdditionalInfo>check rip</AdditionalInfo>
    </Resource>
</ResourceEvent>
</filter>
</create-subscription>
</rpc>

```

## Table description

Item	Description
Event stream name	ResourceMonitor
Event name	ResourceEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/ResourceMonitor:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
Chassis	Member ID of the member device where the entity resides.	Unsigned integer. Value range: 0 to 65535.	No
Slot	Slot number of the device node.	Unsigned integer. Value range: 0 to 65535.	No
CPUID	CPU Identification.	Unsigned integer. Value range: 0 to 7.	No
Name	Resource name	String: Size:1~31	No
Description	Resmon event description.	Enumeration: <ul style="list-style-type: none"> <li>• RESMON_MINOR</li> <li>• RESMON_SEVERE</li> <li>• RESMON_USEDUP</li> <li>• RESMON_MINOR_RECOVERY</li> <li>• RESMON_SEVERE_RECOVERY</li> <li>• RESMON_USEDUP_RECOVERY</li> </ul>	No
Unit	Unit of resource	Enumeration: <ul style="list-style-type: none"> <li>• absolute</li> <li>• percentage</li> </ul>	No
Total	Total resource size(absolute)	Unsigned integer. Value range: 0 to $2^{32} - 1$	No
Used	Size of the resource used (absolute)	Unsigned integer. Value range: 0 to $2^{32} - 1$	No
Free	Size of the free resource size	Unsigned integer. Value range: 0 to $2^{32} - 1$	No

Column name	Column description	Data type and restrictions	Support for extended queries
MinorThreshold	The free resource threshold for minor condition	Unsigned integer. Value range: 0 to $2^{32} - 1$	No
SevereThreshold	The free resource threshold for severe condition	Unsigned integer. Value range: 0 to $2^{32} - 1$	No
AdditionalInfo	Additional information for the notification.	String: Size:0~255	No

# Contents

- WLANClient .....1
  - WLANClient/ RfpingInformation.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....2

# WLANClient

## WLANClient/ RfpingInformation

This table contains station 13n information.

### XML structure

```
<WLANClient>
  <RfpingInformation>
    <RfpingTest>
      <MacAddress></MacAddress>
      <ErrCode></ErrCode>
      <StaMode></StaMode>
      <Rfping>
        <McsIdx></McsIdx>
        <Nss></Nss>
        <VhtMcsIdx></VhtMcsIdx>
        <TxRate></TxTate>
        <TxPktCnt></TxPktCnt>
        <RxPktCnt></RxPktCnt>
        <Rssi></Rssi>
        <RetryPktCnt></RetryPktCnt>
        <Rtt></Rtt>
      </Rfping>
    </RfpingTest>
  </RfpingInformation>
</WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	RfpingInformation
Table type	Multi-instance table
Row name	RfpingTest
Group name	Rfping
Restrictions	None



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MAC Address of station	index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
ErrCode	Rfping Result code	column	unsigned int 0 indicates success 1 indicates STA is offline 2 indicates RF ping conflict 3 indicates STA is sleeping 4 indicates Rf ping fail	Flag of the rfping result.
StaMode	Wireless mode	column	unsigned int . 1: 802.11b 2: 802.11a 4: 802.11g 16: 802.11gn 32: 802.11an 64: 802.11ac	N/A
McsIdx	Index of 11n-MCS	column	unsigned int, range: 0-255	This field is available when the station is in 802.11n mode. This field belong to group of Rfping.
Nss	Index of 11ac-NSS	column	unsigned int, range: 0-255	This field is available when the station is in 802.11ac mode. This field belong to group of Rfping.
VhtMcsIdx	Index of 11ac-VHT-MCS	column	unsigned int, range: 0-255	This field is available when the station is in 802.11ac mode. This field belong to group of Rfping.
TxRate	Transmit rate	column	unsigned int, range: 0-65535. Unit: 100Kbps.	This field belong to group of Rfping.
TxPktCnt	Transmit package count	column	unsigned int, 5 is expected.	This field belong to group of Rfping.
RxPktCnt	Received packet count	column	unsigned int, range: 0-5.	This field belong to group of Rfping.
Rssi	Received signal strength indication	column	unsigned int	This field belong to group of Rfping.
RetryPktCnt	Retried packet count	column	unsigned int, range: 0-15	This field belong to group of Rfping.

Rtt	Round trip time	column	unsigned int. Unit: ms.	This field belong to group of Rfping.
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# Contents

RIP .....	1
RIP/Instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
RIP/Networks .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
RIP/Redistributes .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
RIP/Interfaces .....	4
XML structure .....	4
Table description .....	4
Columns .....	4

# RIP

## RIP/Instances

This table contains RIP instances information.

### XML structure

```
<RIP>
  <Instances>
    <Instance>
      <Name></Name>
      <VRF></VRF>
    </Instance>
  </Instances>
</RIP>
```

### Table description

Item	Description
Feature name	RIP
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	Only unsigned integer ranging from 1 to 65535 is supported now.
VRF	Vrf name.	N/A	String. Length: 1 to 31 characters.	After an instance is created, its VRF cannot be modified.

## RIP/Networks

This table contains RIP network lists information.

## XML structure

```
<RIP>
  <Networks>
    <Network>
      <Name></Name>
      <NetworkAddr></NetworkAddr>
      <WildcardMask></WildcardMask>
    </Network>
  </Networks>
</RIP>
```

## Table description

Item	Description
Feature name	RIP
Table name	Networks
Table type	Multi-instance table
Row name	Network
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an Instance first before you merge or create networks for it.  Only unsigned integer ranging from 1 to 65535 is supported now.
NetworkAddr	Network address.	Index	String, dotted decimal notation.	N/A
WildcardMask	Wildcard mask.	N/A	String, dotted decimal notation.	N/A

## RIP/Redistributes

This table contains RIP redistribute lists information.

## XML structure

```
<RIP>
  <Redistributes>
    <Redist>
      <Name></Name>
      <Protocol></Protocol>
      <RedistName></RedistName>
    </Redist>
  </Redistributes>
</RIP>
```

## Table description

Item	Description
Feature name	RIP
Table name	Redistributes
Table type	Multi-instance table
Row name	Redist
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	You must create an instance first before you merge or create redistribute lists for it.  Only unsigned integer ranging from 1 to 65535 is supported now.
Protocol	Redistribute protocol.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Direct</li><li>• 2—Static</li><li>• 3—RIP</li><li>• 4—OSPF</li><li>• 5—ISIS</li><li>• 6—BGP</li></ul>	N/A
RedistName	Redistribute instance name.	Index	String. Length: 1 to 31 characters.	It must be empty when the <b>Protocol</b> column is Direct, Static or BGP.

# RIP/Interfaces

This table contains RIP Interfaces information.

## XML structure

```
<RIP>
  <Interfaces>
    <If>
      <IfIndex></IfIndex>
      <Version></Version>
      <IfEnable>
        <Name></Name>
        <ExcludedSubIp></ExcludedSubIp>
      </IfEnable>
      <Input></Input>
      <Output></Output>
      <Authentication>
        <AuthType></AuthType>
        <PasswordType></PasswordType>
        <Password></Password>
        <KeyId></KeyId>
      </Authentication>
    </If>
  </Interfaces>
</RIP>
```

## Table description

Item	Description
Feature name	RIP
Table name	Interfaces
Table type	Multi-instance table
Row name	If
Restrictions	This table supports only Layer 3 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant

Column name	Column description	Column type	Data type and restrictions	Remarks
				information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Version	Interface version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—RIPV1</li> <li>2—RIPV2</li> <li>3—RIPV2 Broadcast</li> </ul>	N/A
IfEnable	Interface enable messages.	N/A	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>ExcludedSubIp.</li> </ul>	N/A
Name	Instance name.	N/A	String. Length: 1 to 31 characters.	Only unsigned integer ranging from 1 to 65535 is supported now.
ExcludedSubIp	Whether to exclude secondary IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Exclude secondary IP addresses.</li> <li><b>false</b>—<b>Does not</b> exclude secondary IP addresses(default).</li> </ul>	N/A
Input	Whether to receive RIP packets.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Receive RIP packets (default).</li> <li>false—Does not receive RIP packets.</li> </ul>	N/A
Output	Whether to send RIP packets.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Send RIP packets (default).</li> <li>false—Does not send RIP packets.</li> </ul>	N/A
Authentication	Authentication messages.	N/A	Members include: <ul style="list-style-type: none"> <li>AuthType.</li> <li>PasswordType.</li> <li>Password.</li> <li>KeyId.</li> </ul>	The members of AuthType, PasswordType and Password must be specified. If <b>AuthType</b> column is Md5Rfc2082, KeyId must be specified.
AuthType	Authentication type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Simple.</li> <li>2—Md5Rfc2082.</li> <li>3—Md5Rfc2453.</li> </ul>	N/A
PasswordType	Password type.	N/A	Enumeration:	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Ciphertext.</li> <li>2—Plaintext.</li> </ul>	
Password	Password.	N/A	String. Length: <ul style="list-style-type: none"> <li><b>1 to 16 characters for plain password.</b></li> <li><b>33 to 53 characters for cipher password.</b></li> </ul>	N/A
KeyId	Key ID.	N/A	Unsigned integer. Value range: 1 to 255.	This column is available when the <b>AuthType</b> column is Md5Rfc2082. It must be empty when the <b>AuthType</b> column is Simple or Md5Rfc2453.

# Contents

RIP .....	1
RIP/Instances .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
RIP/Networks .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
RIP/Redistributes .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
RIP/Interfaces .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# RIP

## RIP/Instances

This table contains RIP instances information.

### XML structure

```
<RIP>
  <Instances>
    <Instance>
      <Name></Name>
      <VRF></VRF>
    </Instance>
  </Instances>
</RIP>
```

### Table description

Item	Description
Feature name	RIP
Table name	Instances
Table type	Multi-instance table
Row name	Instance
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	N/A
VRF	Vrf name.	N/A	String. Length: 1 to 31 characters.	N/A

## RIP/Networks

This table contains RIP network lists information.

### XML structure

```
<RIP>
```

```

<Networks>
  <Network>
    <Name></Name>
    <NetworkAddr></NetworkAddr>
    <WildcardMask></WildcardMask>
  </Network>
</Networks>
</RIP>

```

## Table description

Item	Description
Feature name	RIP
Table name	Networks
Table type	Multi-instance table
Row name	Network
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	N/A
NetworkAddr	Network IPv4 address.	Index	String, dotted decimal notation.	N/A
WildcardMask	Wildcard mask.	N/A	String, dotted decimal notation.	N/A

## RIP/Redistributes

This table contains RIP redistribute lists information.

## XML structure

```

<RIP>
  <Redistributes>
    <Redist>
      <Name></Name>
      <Protocol></Protocol>
      <RedistName></RedistName>
    </Redist>
  </Redistributes>
</RIP>

```

## Table description

Item	Description
Feature name	RIP
Table name	Redistributes
Table type	Multi-instance table
Row name	Redist
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Instance name.	Index	String. Length: 1 to 31 characters.	N/A
Protocol	Redistribute protocol.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Direct</li><li>• 2—Static</li><li>• 3—RIP</li><li>• 4—OSPF</li><li>• 5—ISIS</li><li>• 6—BGP</li></ul>	N/A
RedistName	Redistribute protocol instance name.	Index	String. Length: 1 to 31 characters.	N/A

## RIP/Interfaces

This table contains RIP Interfaces information.

## XML structure

```
<RIP>
  <Interfaces>
    <If>
      <IfIndex></IfIndex>
      <Version></Version>
      <IfEnable>
        <Name></Name>
        <ExcludedSubIp></ExcludedSubIp>
      </IfEnable>
      <Input></Input>
      <Output></Output>
      <Authentication>
        <AuthType></AuthType>
```

```

    <PasswordType></PasswordType>
    <Password></Password>
    <KeyId></KeyId>
  </Authentication>
</If>
</Interfaces>
</RIP>

```

## Table description

Item	Description
Feature name	RIP
Table name	Interfaces
Table type	Multi-instance table
Row name	If
Restrictions	This table supports only Layer 3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Version	Interface version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—RIPv1</li> <li>2—RIPv2</li> <li>3—RIPv2 Broadcast</li> </ul>	N/A
IfEnable	Interface enable messages.	N/A	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>ExcludedSubIp.</li> </ul>	N/A
Name	Instance name.	N/A	String. Length: 1 to 31 characters.	N/A
ExcludedSubIp	Whether to exclude secondary IP addresses.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Exclude secondary IP addresses.</li> <li><b>false</b>—<b>Does not</b> exclude secondary IP addresses(default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Input	Whether to receive RIP packets.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Receive RIP packets (default).</li> <li>false—Does not receive RIP packets.</li> </ul>	N/A
Output	Whether to send RIP packets.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Send RIP packets (default).</li> <li>false—Does not send RIP packets.</li> </ul>	N/A
Authentication	Authentication messages.	N/A	Members include: <ul style="list-style-type: none"> <li>AuthType.</li> <li>PasswordType.</li> <li>Password.</li> <li>KeyId.</li> </ul>	N/A
AuthType	Authentication type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Simple.</li> <li>2—Md5Rfc2082.</li> <li>3—Md5Rfc2453.</li> </ul>	N/A
PasswordType	Password type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Ciphertext.</li> <li>2—Plaintext.</li> </ul>	N/A
Password	Password.	N/A	String. Length: <ul style="list-style-type: none"> <li><b>1 to 16 characters for plain password.</b></li> <li><b>33 to 53 characters for cipher password.</b></li> </ul>	N/A
KeyId	Key ID.	N/A	Unsigned integer. Value range: 1 to 255.	N/A

# Contents

RIP .....	2
RIP/Instances .....	2
RIP/Networks .....	2
RIP/Redistributes .....	3
RIP/Interfaces .....	3



# RIP

## RIP/Instances

Message	Explanation
RIP isn't configured. 没有配置RIP。	RIP isn't configured. 没有配置RIP。
The specified VRF doesn't exist. 指定的VRF不存在。	The specified VRF doesn't exist. 指定的VRF不存在。
The instance is being deleted. RIP实例正在删除。	The instance is being deleted. RIP实例正在删除。
Number of instances exceeded the limit. 实例数量达到上限。	Number of instances exceeded the limit. 实例数量达到上限。
Can't create the instance because another instance is configured with network 0.0.0.0. 其它实例配置了network 0.0.0.0，不能创建新实例。	Can't create the instance because another instance is configured with network 0.0.0.0. 其它实例配置了network 0.0.0.0，不能创建新实例。
The instance isn't associated with the specified VRF. 实例不属于指定的VRF。	The instance isn't associated with the specified VRF. 实例不属于指定的VRF。
The instance doesn't exist. RIP实例不存在。	The instance doesn't exist. RIP实例不存在。
The instance is being reset. 实例正在清除。	The instance is being reset. 实例正在清除。

## RIP/Networks

Message	Explanation
RIP isn't configured. 没有配置RIP。	RIP isn't configured. 没有配置RIP。
Invalid network address:%s/%s. 网段地址不合法： %s/%s。	Invalid network address:%s/%s. 网段地址不合法： %s/%s。
The network mask doesn't match the network address:%s/%s. 网段地址和子网掩码不匹配： %s/%s。	The network mask doesn't match the network address:%s/%s. 网段地址和子网掩码不匹配： %s/%s。
The network mask isn't contiguous. 网络掩码不连续。	The network mask isn't contiguous. 网络掩码不连续。
The network overlaps with the previously configured network:%s/%s. 与已指定的网段地址重叠： %s/%s。	The network overlaps with the previously configured network:%s/%s. 与已指定的网段地址重叠： %s/%s。
Can't configure network 0.0.0.0 when multiple	Can't configure network 0.0.0.0 when multiple instances exist.

instances exist. 多个RIP实例存在时，不允许配置命令network 0.0.0.0。	多个RIP实例存在时，不允许配置命令network 0.0.0.0。
The network isn't configured. 网段没有配置。	The network isn't configured. 网段没有配置。

## RIP/Redistributes

Message	Explanation
RIP isn't configured. 没有配置RIP。	RIP isn't configured. 没有配置RIP。
Can't be imported to the same instance. 不允许引入RIP协议的当前实例。	Can't be imported to the same instance. 不允许引入RIP协议的当前实例。
The instance doesn't exist. RIP实例不存在。	The instance doesn't exist. RIP实例不存在。
The instance is being reset. 实例正在清除。	The instance is being reset. 实例正在清除。
RedistName attribute column must be empty when the value of Protocol attribute column is 1, 2, or 6. 当Protocol属性值为1、2或者6时，RedistName属性列应该为空。	RedistName attribute column must be empty when the value of Protocol attribute column is 1, 2, or 6. 当Protocol属性值为1、2或者6时，RedistName属性列应该为空。
RedistName attribute column is required when the value of Protocol attribute column is 3, 4, 5, or 7. 当Protocol属性值为3、4、5或7时，RedistName属性列不应该为空。	RedistName attribute column is required when the value of Protocol attribute column is 3, 4, 5, or 7. 当Protocol属性值为3、4、5或7时，RedistName属性列不应该为空。

## RIP/Interfaces

Message	Explanation
RIP isn't configured. 没有配置RIP。	RIP isn't configured. 没有配置RIP。
InstanceName attribute columns are required. 需要补齐InstanceName属性列。	InstanceName attribute columns are required. 需要补齐InstanceName属性列。
The interface have already been associated with another instance:%s. 指定接口已属于其他RIP实例： %s。	The interface have already been associated with another instance:%s. 指定接口已属于其他RIP实例： %s。
Number of instances exceeded the limit. 实例数量达到上限。	Number of instances exceeded the limit. 实例数量达到上限。
Can't create the instance because another instance is configured with network 0.0.0.0. 其它实例配置了network 0.0.0.0，不能创建新实例。	Can't create the instance because another instance is configured with network 0.0.0.0. 其它实例配置了network 0.0.0.0，不能创建新实例。
The interface and the instance must be associated	The interface and the instance must be associated with the same

with the same VRF. 接口和实例所属VRF不同。	VRF. 接口和实例所属VRF不同。
AuthType attribute column is required. 需要补齐AuthType属性列。	AuthType attribute column is required. 需要补齐AuthType属性列。
PasswordType attribute column is required. 需要补齐PasswordType属性列。	PasswordType attribute column is required. 需要补齐PasswordType属性列。
Passward attribute column is required. 需要补齐Password属性列。	Passward attribute column is required. 需要补齐Password属性列。
KeyId attribute column is required. 需要补齐KeyId属性列。	KeyId attribute column is required. 需要补齐KeyId属性列。
KeyId attribute column isn't required. 不需要KeyId属性列。	KeyId attribute column isn't required. 不需要KeyId属性列。
Invalid RIP authentication password. RIP认证密码不合法。	Invalid RIP authentication password. RIP认证密码不合法。
RIP isn't configured. 没有配置RIP。	RIP isn't configured. 没有配置RIP。
InstanceName attribute columns are required. 需要补齐InstanceName属性列。	InstanceName attribute columns are required. 需要补齐InstanceName属性列。
The interface have already been associated with another instance:%s. 指定接口已属于其他RIP实例： %s。	The interface have already been associated with another instance:%s. 指定接口已属于其他RIP实例： %s。
Number of instances exceeded the limit. 实例数量达到上限。	Number of instances exceeded the limit. 实例数量达到上限。
Can't create the instance because another instance is configured with network 0.0.0.0. 其它实例配置了network 0.0.0.0，不能创建新实例。	Can't create the instance because another instance is configured with network 0.0.0.0. 其它实例配置了network 0.0.0.0，不能创建新实例。
The interface and the instance must be associated with the same VRF. 接口和实例所属VRF不同。	The interface and the instance must be associated with the same VRF. 接口和实例所属VRF不同。

# Contents

RMON .....	1
RMON/EtherStats .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
RMON/EtherHistoryControls .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
RMON/Alarms .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
RMON/Events .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
RMON/UsrHistoryControls .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
RMON/ExtAlarms .....	9
XML structure .....	10
Table description .....	10
Columns .....	10

# RMON

## RMON/EtherStats

This table contains ethernet statistics information.

### XML structure

```
<RMON>
  <EtherStats>
    <Statistic>
      <Index></Index>
      <DataSource></DataSource>
      <Owner></Owner>
      <TemporaryStatus></TemporaryStatus>
    </Statistic>
  </EtherStats>
</RMON>
```

### Table description

Item	Description
Feature name	RMON
Table name	EtherStats
Table type	Multi-instance table
Row name	Statistic
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxEtherStats in the data namespace.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
DataSource	The particular ethernet interface to be sampled.	N/A	String, dotted decimal notation.	Only the instance of the ifIndex can be configured, which defined in RFC2836.
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## RMON/EtherHistoryControls

This table contains ethernet history controls information.

### XML structure

```

<RMON>
  <EtherHistoryControls>
    <Control>
      <Index></Index>
      <DataSource></DataSource>
      <BucketsRequested></BucketsRequested>
      <Interval></Interval>
      <Owner></Owner>
      <TemporaryStatus></TemporaryStatus>
    </Control>
  </EtherHistoryControls>
</RMON>

```

### Table description

Item	Description
Feature name	RMON
Table name	EtherHistoryControls
Table type	Multi-instance table
Row name	Control
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxHistoryControls in the data namespace.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DataSource	The source of the data for which historical data was sampled.	N/A	String, dotted decimal notation.	Only the instance of the ifIndex can be configured, which defined in RFC2836.
BucketsRequested	The requested number of records to be saved for each interface.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 50.	The max number depends on RMON/Capabilities/MaxEtherHistorySamples in the data namespace.
Interval	The sample interval. Unit: second.	N/A	Unsigned integer. Value range: 5 to 3600. Default: 1800.	N/A
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## RMON/Alarms

This table contains alarms information.

### XML structure

```

<RMON>
  <Alarms>
    <Alarm>
      <Index></Index>
      <Interval></Interval>
      <Variable></Variable>
      <SampleType></SampleType>
      <StartupAlarm></StartupAlarm>
      <RisingThreshold></RisingThreshold>
      <FallingThreshold></FallingThreshold>
      <RisingEventIndex></RisingEventIndex>
      <FallingEventIndex></FallingEventIndex>
      <Owner></Owner>
      <TemporaryStatus></TemporaryStatus>
    </Alarm>
  </Alarms>
</RMON>

```

## Table description

Item	Description
Feature name	RMON
Table name	Alarms
Table type	Multi-instance table
Row name	Alarm
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxAlarms in the data namespace.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Interval	The interval over which the data is sampled and compared with the rising and falling thresholds. Unit: second.	N/A	Unsigned integer. Value range: 5 to 65535.	N/A
Variable	The object identifier of the particular variable to be sampled.	N/A	String, dotted decimal notation.	Only variables that resolve to an ASN.1 primitive type of INTEGER (INTEGER, Integer32, Counter32, Counter64, Gauge, or TimeTicks) may be sampled.
SampleType	The method of sampling the selected variable and calculating the value to be compared against the thresholds.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AbsoluteValue.</li> <li>2—DeltaValue.</li> </ul>	For AbsoluteValue, the value of the selected variable will be compared directly with the thresholds at the end of the sampling interval.  For DeltaValue, the value of the selected variable at the last sample will be subtracted from the current value, and the difference compared with the thresholds.



Column name	Column description	Column type	Data type and restrictions	Remarks
StartupAlarm	The alarm that may be sent when this entry is first set to valid.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—RisingAlarm.</li> <li>• 2—FallingAlarm.</li> <li>• 3—RisingOrFallingAlarm.</li> </ul>	<p>If the first sample after this entry becomes valid is greater than or equal to the RisingThreshold and StartupAlarm is equal to RisingAlarm or RisingOrFallingAlarm, then a single rising alarm will be generated.</p> <p>If the first sample after this entry becomes valid is less than or equal to the FallingThreshold and StartupAlarm is equal to FallingAlarm or RisingOrFallingAlarm, then a single falling alarm will be generated.</p>
RisingThreshold	A threshold for the sampled statistic.	N/A	Signed integer.	<p>When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single event will be generated.</p> <p>A single event will also be generated if the first sample after this entry becomes valid is greater than or equal to this threshold and the associated StartupAlarm is equal to RisingAlarm or RisingOrFallingAlarm.</p> <p>After a rising event is generated, another such event will not be generated until the sampled value falls below this threshold and reaches the FallingThreshold.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
FallingThreshold	A threshold for the sampled statistic.	N/A	Signed integer.	<p>When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single event will be generated.</p> <p>A single event will also be generated if the first sample after this entry becomes valid is less than or equal to this threshold and the associated StartupAlarm is equal to FallingAlarm or RisingOrFallingAlarm.</p> <p>After a falling event is generated, another such event will not be generated until the sampled value rises above this threshold and reaches the RisingThreshold.</p>
RisingEventIndex	The index in RMON/Events that is used when a rising threshold is crossed.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
FallingEventIndex	The index in RMON/Events that is used when a falling threshold is crossed.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## RMON/Events

This table contains events information.

## XML structure

<RMON>

```

<Events>
  <Event>
    <Index></Index>
    <Description></Description>
    <Type></Type>
    <Community></Community>
    <Owner></Owner>
    <TemporaryStatus></TemporaryStatus>
  </Event>
</Events>
</RMON>

```

## Table description

Item	Description
Feature name	RMON
Table name	Events
Table type	Multi-instance table
Row name	Event
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxEvents in the data namespace.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	A comment describing this event entry.	N/A	String. Length: 1 to 127 characters.	N/A
Type	The type of notification that the probe will make about this event.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—None.</li> <li>2—Log.</li> <li>3—SnmpTrap.</li> <li>4—LogAndTrap.</li> </ul>	N/A
Community	If an SNMP trap is to be sent, it will be sent to the SNMP community specified by this octet string.	N/A	String. Length: 1 to 127 characters.	N/A
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## RMON/UsrHistoryControls

This table contains user history controls information.

### XML structure

```

<RMON>
  <UsrHistoryControls>
    <Control>
      <Index></Index>
      <MaxObjects></MaxObjects>
      <Objects>
        <Variable></Variable>
        <SampleType></SampleType>
      </Objects>
      <BucketsRequested></BucketsRequested>
      <Interval></Interval>
      <Owner></Owner>
      <TemporaryStatus></TemporaryStatus>
    </Control>
  </UsrHistoryControls>
</RMON>

```

### Table description

Item	Description
Feature name	RMON
Table name	UsrHistoryControls
Table type	Multi-instance table
Row name	Control
Restrictions	The max number of entries depends on RMON/Capabilities/MaxUsrHistoryControls in the data namespace.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
MaxObjects	The number of objects to be sampled.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 1.	The max number depends on RMON/Capabilities/MaxUserHistoryObjects in the data namespace.
Objects	The objects to be sampled.	N/A	Members include: <ul style="list-style-type: none"> <li>Variable</li> <li>SampleType</li> </ul>	Multi-instance. Maximum occurrence is MaxObjects.
Variable	The object identifier of the particular variable to be sampled.	N/A	String, dotted decimal notation.	Only variables that resolve to an ASN.1 primitive type of Integer32 (Integer32, Counter, Gauge, or TimeTicks) may be sampled.
SampleType	The method of sampling the selected variables.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AbsoluteValue.</li> <li>2—DeltaValue.</li> </ul>	For AbsoluteValue, the value of the selected variable will be copied directly into the history bucket.  For DeltaValue, the value of the selected variable at the last sample will be subtracted from the current value, and the difference will be stored in the history bucket.
BucketsRequested	The requested number of records to be saved.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 50.	N/A
Interval	The sample interval. Unit: second.	N/A	Unsigned integer. Value range: 1 to $2^{31} - 1$ . Default: 1800.	N/A
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## RMON/ExtAlarms

This table contains extended alarms information.

## XML structure

```
<RMON>
  <ExtAlarms>
    <Alarm>
      <Index></Index>
      <Interval></Interval>
      <Variable></Variable>
      <Description></Description>
      <SampleType></SampleType>
      <StartupAlarm></StartupAlarm>
      <RisingThreshold></RisingThreshold>
      <FallingThreshold></FallingThreshold>
      <RisingEvtIndex></RisingEvtIndex>
      <FallingEvtIndex></FallingEvtIndex>
      <StatCycle></StatCycle>
      <StatType></StatType>
      <Owner></Owner>
      <TemporaryStatus></TemporaryStatus>
    </Alarm>
  </ExtAlarms>
</RMON>
```

## Table description

Item	Description
Feature name	RMON
Table name	ExtAlarms
Table type	Multi-instance table
Row name	Alarm
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxExtAlarms in the data namespace.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Interval	The interval over which the data is sampled and compared with the rising and falling thresholds. Unit: second.	N/A	Unsigned integer. Value range: 10 to 65535. Default: 1800.	N/A
Variable	The object identifier of the particular variable to be sampled.	N/A	String, dotted decimal notation. Length: 1 to 255 characters.	Only variables that resolve to an ASN.1 primitive type of INTEGER (INTEGER, Integer32, Unsigned32, Counter32, Counter64, Gauge, or TimeTicks) may be sampled.
Description	A comment describing this alarm entry.	N/A	String. Length: 1 to 127 characters.	N/A
SampleType	The method of sampling the selected variable and calculating the value to be compared against the thresholds.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AbsoluteValue.</li> <li>2—DeltaValue.</li> </ul>	For AbsoluteValue, the value of the selected variable will be compared directly with the thresholds at the end of the sampling interval.  For DeltaValue, the value of the selected variable at the last sample will be subtracted from the current value, and the difference compared with the thresholds.
StartupAlarm	The alarm that may be sent when this entry is first set to valid.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—RisingAlarm.</li> <li>2—FallingAlarm.</li> <li>3—RisingOrFallingAlarm.</li> </ul>	If the first sample after this entry becomes valid is greater than or equal to the RisingThreshold and StartupAlarm is equal to RisingAlarm or RisingOrFallingAlarm, then a single rising alarm will be generated.  If the first sample after this entry becomes valid is less than or equal to the FallingThreshold and StartupAlarm is equal to FallingAlarm or RisingOrFallingAlarm, then a single falling alarm will be generated.

Column name	Column description	Column type	Data type and restrictions	Remarks
RisingThreshold	A rising threshold for the sampled statistic.	N/A	Signed integer. Default: 1.	<p>When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single event will be generated.</p> <p>A single event will also be generated if the first sample after this entry becomes valid is greater than or equal to this threshold and the associated StartupAlarm is equal to RisingAlarm or RisingOrFallingAlarm.</p> <p>After a rising event is generated, another such event will not be generated until the sampled value falls below this threshold and reaches the FallingThreshold.</p>
FallingThreshold	A falling threshold for the sampled statistic.	N/A	Signed integer. Default: 0.	<p>When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single event will be generated.</p> <p>A single event will also be generated if the first sample after this entry becomes valid is less than or equal to this threshold and the associated StartupAlarm is equal to FallingAlarm or RisingOrFallingAlarm.</p> <p>After a falling event is generated, another such event will not be generated until the sampled value rises above this threshold and reaches the RisingThreshold.</p>



Column name	Column description	Column type	Data type and restrictions	Remarks
RisingEvtIndex	The index in RMON/Events that is used when a rising threshold is crossed.	N/A	Unsigned integer. Value range: 0 to 65535. Default: 0.	If there is no corresponding entry in RMON/Events, then no association exists.  In particular, if this value is zero, no associated event will be generated, as zero is not a valid index of RMON/Events.
FallingEvtIndex	The index in RMON/Events that is used when a falling threshold is crossed.	N/A	Unsigned integer. Value range: 0 to 65535. Default: 0.	If there is no corresponding entry in RMON/Events, then no association exists.  In particular, if this value is zero, no associated event will be generated, as zero is not a valid index of RMON/Events.
StatType	Type of statistic period.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Forever.</li> <li>2—Cycle.</li> </ul> Default: 1.	N/A
StatCycle	The lifetime starts when an alarm entry is set in valid state. Unit: second.	N/A	Unsigned integer. Value range: 0 to 4294967. Default: 0.	It must be zero when StatType is 1-Forever. Otherwise it must be greater than the value of Interval.
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# Contents

RMON .....	1
RMON/Capabilities .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
RMON/EtherStats .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
RMON/EtherHistoryControls .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
RMON/EtherHistorySamples .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
RMON/Alarms .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
RMON/Events .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
RMON/Logs .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
RMON/UsrHistoryControls .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
RMON/UsrHistorySamples .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
RMON/ExtAlarms .....	24
XML structure .....	24
Table description .....	24
Columns .....	25

# RMON

## RMON/Capabilities

This table contains capabilities information.

### XML structure

```
<RMON>
  <Capabilities>
    <MaxEtherStats></MaxEtherStats>
    <MaxHistoryControls></MaxHistoryControls>
    <MaxEtherHistorySamples></MaxEtherHistorySamples>
    <MaxAlarms></MaxAlarms>
    <MaxEvents></MaxEvents>
    <MaxLogs></MaxLogs>
    <MaxUsrHistoryControls></MaxUsrHistoryControls>
    <MaxUsrHistoryObjects></MaxUsrHistoryObjects>
    <MaxUsrHistorySamples></MaxUsrHistorySamples>
    <MaxExtAlarms></MaxExtAlarms>
  </Capabilities>
</RMON>
```

### Table description

Item	Description
Feature name	RMON
Table name	Capabilities
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
MaxEtherStats	Max number of entry in EtherStats	N/A	Unsigned integer. Value range: 1 to 65535.
MaxHistoryControls	Max number of entry in EtherHistoryControls	N/A	Unsigned integer. Value range: 1 to 65535.
MaxEtherHistorySamples	Max number of entry in EtherHistorySamples	N/A	Unsigned integer. Value range: 1 to 65535.

Column name	Column description	Column type	Data type and restrictions
MaxAlarms	Max number of entry in Alarms	N/A	Unsigned integer. Value range: 1 to 65535.
MaxEvents	Max number of entry in Events	N/A	Unsigned integer. Value range: 1 to 65535.
MaxLogs	Max number of entry in Logs	N/A	Unsigned integer. Value range: 1 to 65535.
MaxUsrHistoryControls	Max number of entry in UsrHistoryControls	N/A	Unsigned integer. Value range: 1 to 65535.
MaxUsrHistoryObjects	Max number of Objects group in UsrHistoryControls and UsrHistorySamples	N/A	Unsigned integer. Value range: 1 to 65535.
MaxUsrHistorySamples	Max number of entry in UsrHistorySamples	N/A	Unsigned integer. Value range: 1 to 65535.
MaxExtAlarms	Max number of entry in ExtAlarms	N/A	Unsigned integer. Value range: 1 to 65535.

## RMON/EtherStats

This table contains ethernet statistics information.

### XML structure

```

<RMON>
  <EtherStats>
    <Statistic>
      <Index></Index>
      <DataSource></DataSource>
      <DropEvents></DropEvents>
      <Octets></Octets>
      <Pkts></Pkts>
      <BroadcastPkts></BroadcastPkts>
      <MulticastPkts></MulticastPkts>
      <CRCAAlignErrors></CRCAAlignErrors>
      <UndersizePkts></UndersizePkts>
      <OversizePkts></OversizePkts>
      <Fragments></Fragments>
      <Jabbers></Jabbers>
      <Collisions></Collisions>
      <Pkts64Octets></Pkts64Octets>
      <Pkts65to127Octets></Pkts65to127Octets>
      <Pkts128to255Octets></Pkts128to255Octets>
      <Pkts256to511Octets></Pkts256to511Octets>
      <Pkts512to1023Octets></Pkts512to1023Octets>

```

```

    <Pkts1024to1518Octets></Pkts1024to1518Octets>
    <Owner></Owner>
    <TemporaryStatus></TemporaryStatus>
  </Statistic>
</EtherStats>
</RMON>

```

## Table description

Item	Description
Feature name	RMON
Table name	EtherStats
Table type	Multi-instance table
Row name	Statistic
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxEtherStats.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
DataSource	The particular ethernet interface to be sampled.	N/A	String, dotted decimal notation.	Only the instance of the ifIndex can be configured, which defined in RFC2836.
DropEvents	The total number of events in which packets were dropped by the probe due to lack of resources.	N/A	Unsigned integer.	N/A
Octets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets).	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Pkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.	N/A	Unsigned integer.	N/A
BroadcastPkts	The total number of good packets received that were directed to the broadcast address.	N/A	Unsigned integer.	N/A
MulticastPkts	The total number of good packets received that were directed to a multicast address.	N/A	Unsigned integer.	N/A
CRCAAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).	N/A	Unsigned integer.	N/A
UndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
OversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.	N/A	Unsigned integer.	N/A
Fragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).	N/A	Unsigned integer.	N/A
Jabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).	N/A	Unsigned integer.	N/A
Collisions	The best estimate of the total number of collisions on this ethernet segment.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Pkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).	N/A	Unsigned integer.	N/A
Pkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).	N/A	Unsigned integer.	N/A
Pkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).	N/A	Unsigned integer.	N/A
Pkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).	N/A	Unsigned integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Pkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).	N/A	Unsigned integer.	N/A
Pkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).	N/A	Unsigned integer.	N/A
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## RMON/EtherHistoryControls

This table contains ethernet history controls information.

### XML structure

```

<RMON>
  <EtherHistoryControls>
    <Control>
      <Index></Index>
      <DataSource></DataSource>
      <BucketsRequested></BucketsRequested>
      <Interval></Interval>
      <Owner></Owner>
      <TemporaryStatus></TemporaryStatus>
    </Control>
  </EtherHistoryControls>
</RMON>

```

## Table description

Item	Description
Feature name	RMON
Table name	EtherHistoryControls
Table type	Multi-instance table
Row name	Control
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxHistoryControls.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
DataSource	The source of the data for which historical data was sampled.	N/A	String, dotted decimal notation.	Only the instance of the ifIndex can be configured, which defined in RFC2836.
BucketsRequested	The requested number of records to be saved in RMON/EtherHistorySamples for each interface.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 50.	The max number depends on RMON/Capabilities/MaxEtherHistorySamples.
Interval	The sample interval. Unit: second.	N/A	Unsigned integer. Value range: 5 to 3600. Default: 1800.	N/A
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A

## RMON/EtherHistorySamples

This table contains ethernet historical samples information.

## XML structure

```
<RMON>
  <EtherHistorySamples>
```

```

<Sample>
  <ControlIndex></ControlIndex>
  <SampleIndex></SampleIndex>
  <IntervalStart></IntervalStart>
  <DropEvents></DropEvents>
  <Octets></Octets>
  <Pkts></Pkts>
  <BroadcastPkts></BroadcastPkts>
  <MulticastPkts></MulticastPkts>
  <CRCAlignErrors></CRCAlignErrors>
  <UndersizePkts></UndersizePkts>
  <OversizePkts></OversizePkts>
  <Fragments></Fragments>
  <Jabbers></Jabbers>
  <Collisions></Collisions>
  <Utilization></Utilization>
</Sample>
</EtherHistorySamples>
</RMON>

```

## Table description

Item	Description
Feature name	RMON
Table name	EtherHistorySamples
Table type	Multi-instance table
Row name	Sample
Restrictions	The max number of entrys depends on both RMON/Capabilities/MaxHistoryControls and RMON/Capabilities/MaxEtherHistorySamples.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ControlIndex	The controls index.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
SampleIndex	The samples index.	Index	Unsigned integer. Value range: 1 to $2^{31} - 1$ .	This index starts at 1 and increases by one as each new sample is taken.
IntervalStart	Time at the start of the interval over which this sample was measured. Unit: second.	N/A	Unsigned integer.	It represents the times elapsed after the device started up.

Column name	Column description	Column type	Data type and restrictions	Remarks
DropEvents	The total number of events in which packets were dropped by the probe due to lack of resources during this sampling interval.	N/A	Unsigned integer.	N/A
Octets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets) during this sampling interval.	N/A	Unsigned integer.	N/A
Pkts	The total number of packets (including bad packets) received during this sampling interval.	N/A	Unsigned integer.	N/A
BroadcastPkts	The total number of good packets received during this sampling interval that were directed to the broadcast address.	N/A	Unsigned integer.	N/A
MulticastPkts	The total number of good packets received during this sampling interval that were directed to a multicast address.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CRCAAlignErrors	The number of packets received during this sampling interval that had a length (excluding framing bits but including FCS octets) between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).	N/A	Unsigned integer.	N/A
UndersizePkts	The number of packets received during this sampling interval that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.	N/A	Unsigned integer.	N/A
OversizePkts	The number of packets received during this sampling interval that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Fragments	The total number of packets received during this sampling interval that were less than 64 octets in length (excluding framing bits but including FCS octets) had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).	N/A	Unsigned integer.	N/A
Jabbers	The number of packets received during this sampling interval that were longer than 1518 octets (excluding framing bits but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).	N/A	Unsigned integer.	N/A
Collisions	The best estimate of the total number of collisions on this ethernet segment during this sampling interval.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Utilization	The best estimate of the mean physical layer network utilization on this interface during this sampling interval. Unit: percent.	N/A	Unsigned integer. Value range: 0 to 100.	N/A

## RMON/Alarms

This table contains alarms information.

### XML structure

```

<RMON>
  <Alarms>
    <Alarm>
      <Index></Index>
      <Interval></Interval>
      <Variable></Variable>
      <SampleType></SampleType>
      <Value></Value>
      <StartupAlarm></StartupAlarm>
      <RisingThreshold></RisingThreshold>
      <FallingThreshold></FallingThreshold>
      <RisingEventIndex></RisingEventIndex>
      <FallingEventIndex></FallingEventIndex>
      <Owner></Owner>
      <TemporaryStatus></TemporaryStatus>
    </Alarm>
  </Alarms>
</RMON>

```

### Table description

Item	Description
Feature name	RMON
Table name	Alarms
Table type	Multi-instance table
Row name	Alarm
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxAlarms.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Interval	The interval over which the data is sampled and compared with the rising and falling thresholds. Unit: second.	N/A	Unsigned integer. Value range: 5 to 65535.	N/A
Variable	The object identifier of the particular variable to be sampled.	N/A	String, dotted decimal notation.	Only variables that resolve to an ASN.1 primitive type of INTEGER (INTEGER, Integer32, Counter32, Counter64, Gauge, or TimeTicks) may be sampled.
SampleType	The method of sampling the selected variable and calculating the value to be compared against the thresholds.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AbsoluteValue.</li> <li>2—DeltaValue.</li> </ul>	For AbsoluteValue, the value of the selected variable will be compared directly with the thresholds at the end of the sampling interval.  For DeltaValue, the value of the selected variable at the last sample will be subtracted from the current value, and the difference compared with the thresholds.
Value	The value of the statistic during the last sampling period.	N/A	Signed integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
StartupAlarm	The alarm that may be sent when this entry is first set to valid.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—RisingAlarm.</li> <li>2—FallingAlarm.</li> <li>3—RisingOrFallingAlarm.</li> </ul>	<p>If the first sample after this entry becomes valid is greater than or equal to the RisingThreshold and StartupAlarm is equal to RisingAlarm or RisingOrFallingAlarm, then a single rising alarm will be generated.</p> <p>If the first sample after this entry becomes valid is less than or equal to the FallingThreshold and StartupAlarm is equal to FallingAlarm or RisingOrFallingAlarm, then a single falling alarm will be generated.</p>
RisingThreshold	A threshold for the sampled statistic.	N/A	Signed integer.	<p>When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single event will be generated.</p> <p>A single event will also be generated if the first sample after this entry becomes valid is greater than or equal to this threshold and the associated StartupAlarm is equal to RisingAlarm or RisingOrFallingAlarm.</p> <p>After a rising event is generated, another such event will not be generated until the sampled value falls below this threshold and reaches the FallingThreshold.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
FallingThreshold	A threshold for the sampled statistic.	N/A	Signed integer.	<p>When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single event will be generated.</p> <p>A single event will also be generated if the first sample after this entry becomes valid is less than or equal to this threshold and the associated StartupAlarm is equal to FallingAlarm or RisingOrFallingAlarm.</p> <p>After a falling event is generated, another such event will not be generated until the sampled value rises above this threshold and reaches the RisingThreshold.</p>
RisingEventIndex	The index in RMON/Events that is used when a rising threshold is crossed.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
FallingEventIndex	The index in RMON/Events that is used when a falling threshold is crossed.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## RMON/Events

This table contains events information.

## XML structure

<RMON>

```

<Events>
  <Event>
    <Index></Index>
    <Description></Description>
    <Type></Type>
    <Community></Community>
    <LastTimeSent></LastTimeSent>
    <Owner></Owner>
    <TemporaryStatus></TemporaryStatus>
  </Event>
</Events>
</RMON>

```

## Table description

Item	Description
Feature name	RMON
Table name	Events
Table type	Multi-instance table
Row name	Event
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxEvents.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Description	A comment describing this event entry.	N/A	String. Length: 1 to 127 characters.	N/A
Type	The type of notification that the probe will make about this event.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—None.</li> <li>2—Log.</li> <li>3—SnmpTrap.</li> <li>4—LogAndTrap.</li> </ul>	N/A
Community	If an SNMP trap is to be sent, it will be sent to the SNMP community specified by this octet string.	N/A	String. Length: 1 to 127 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LastTimeSent	Time at the time this event entry last generated an event. Unit: second	N/A	Unsigned integer.	It represents the times elapsed after the device started up.
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## RMON/Logs

This table contains logs information.

### XML structure

```

<RMON>
  <Logs>
    <Log>
      <EventIndex></EventIndex>
      <LogIndex></LogIndex>
      <Time></Time>
      <Description></Description>
    </Log>
  </Logs>
</RMON>

```

### Table description

Item	Description
Feature name	RMON
Table name	Logs
Table type	Multi-instance table
Row name	Log
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxLogs.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EventIndex	The event index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
LogIndex	The log index	Index	Unsigned integer. Value range: 1 to $2^{31} - 1$ .	N/A
Time	Time when this log entry was created.	N/A	Unsigned integer.	It represents the times elapsed after the device started up.
Description	An implementation dependent description of the event that activated this log entry.	N/A	String. Length: 1 to 255 characters.	N/A

## RMON/UsrHistoryControls

This table contains user history controls information.

### XML structure

```
<RMON>
  <UsrHistoryControls>
    <Control>
      <Index></Index>
      <MaxObjects></MaxObjects>
      <Objects>
        <Variable></Variable>
        <SampleType></SampleType>
      </Objects>
      <BucketsRequested></BucketsRequested>
      <Interval></Interval>
      <Owner></Owner>
      <TemporaryStatus></TemporaryStatus>
    </Control>
  </UsrHistoryControls>
</RMON>
```

### Table description

Item	Description
Feature name	RMON

Table name	UsrHistoryControls
Table type	Multi-instance table
Row name	Control
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxUsrHistoryControls.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
MaxObjects	The number of objects to be sampled.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 50.	The max number depends on RMON/Capabilities/MaxUsrHistoryObjects.
Objects	The objects to be sampled.	N/A	Members include: <ul style="list-style-type: none"> <li>Variable</li> <li>SampleType</li> </ul>	Multi-instance. Maximum occurrence is MaxObjects.
Variable	The object identifier of the particular variable to be sampled.	N/A	String, dotted decimal notation.	Only variables that resolve to an ASN.1 primitive type of Integer32 (Integer32, Counter, Gauge, or TimeTicks) may be sampled.
SampleType	The method of sampling the selected variables.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AbsoluteValue.</li> <li>2—DeltaValue.</li> <li>Default: DeltaValue</li> </ul>	For AbsoluteValue, the value of the selected variable will be copied directly into the history bucket. For DeltaValue, the value of the selected variable at the last sample will be subtracted from the current value, and the difference will be stored in the history bucket.
BucketsRequested	The requested number of records to be saved in RMON/UsrHistorySamples.	N/A	Unsigned integer. Value range: 1 to 65535. Default: 50.	N/A
Interval	The sample interval. Unit: second.	N/A	Unsigned integer. Value range: 1 to $2^{31} - 1$ . Default: 1800.	N/A
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## RMON/UsrHistorySamples

This table contains user history samples information.

### XML structure

```

<RMON>
  <UsrHistorySamples>
    <Sample>
      <ControlIndex></ControlIndex>
      <SampleIndex></SampleIndex>
      <IntervalStart></IntervalStart>
      <IntervalEnd></IntervalEnd>
      <Objects>
        <Variable></Variable>
        <SampleType></SampleType>
        <AbsValue></AbsValue>
        <ValStatus></ValStatus>
      </Objects>
    </Sample>
  </UsrHistorySamples>
</RMON>

```

### Table description

Item	Description
Feature name	RMON
Table name	UsrHistorySamples
Table type	Multi-instance table
Row name	Sample
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxUsrHistoryControls, RMON/Capabilities/MaxUsrHistoryObjects and RMON/Capabilities/MaxUsrHistorySamples.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ControlIndex	The controls index.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
SampleIndex	The samples index.	Index	Unsigned integer. Value range: 1 to 2147483647.	This index starts at 1 and increases by one as each new sample is taken.
IntervalStart	Time at the start of the interval over which this sample was measured.	N/A	Unsigned integer.	It represents the times elapsed after the device started up.
IntervalEnd	Time at the end of the interval over which this sample was measured.	N/A	Unsigned integer.	It represents the times elapsed after the device started up.
Objects	The objects which was sampled.	N/A	Members include: <ul style="list-style-type: none"> <li>Variable</li> <li>SampleType</li> <li>Value</li> <li>ValStatus</li> </ul>	Multi-instance. Maximum occurrence is RMON/UsrHistoryControls/Control/MaxObjects.
Variable	The object identifier of the particular variable to be sampled.	N/A	String, dotted decimal notation.	N/A
SampleType	The method of sampling the selected variables.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AbsoluteValue.</li> <li>2—DeltaValue.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
AbsValue	The absolute value (i.e., unsigned value) of the user-specified statistic during the last sampling period.	N/A	Unsigned integer.	<p>The value during the current sampling period is not made available until the period is completed.</p> <p>To obtain the true value for this sampling interval, the associated instance of ValStatus must be checked, and AbsValue adjusted as necessary.</p> <p>If the MIB instance could not be accessed during the sampling interval, then this object will have a value of zero, and the associated instance of ValStatus will be set to NotAvailable.</p> <p>The access control check prescribed in the definition of RMON/UsrHistoryControls/Control/Objects/Variable SHOULD be checked for each sampling interval.</p> <p>If this check determines that access should not be allowed, then this object will have a value of zero, and the associated instance of ValStatus will be set to NotAvailable.</p>
ValStatus	Validity and sign of the data.	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—NotAvailable.</li> <li>2—Positive.</li> <li>3—Negative.</li> </ul>	<p>If the MIB instance could not be accessed during the sampling interval, then NotAvailable will be returned.</p> <p>If the sample is valid and the actual value of the sample is greater than or equal to zero, then Positive is returned.</p> <p>If the sample is valid and the actual value of the sample is less than zero, Negative will be returned. The associated instance of AbsValue should be multiplied by -1 to obtain the true sample value.</p>

# RMON/ExtAlarms

This table contains extended alarms information.

## XML structure

```
<RMON>
  <ExtAlarms>
    <Alarm>
      <Index></Index>
      <Interval></Interval>
      <Variable></Variable>
      <Description></Description>
      <SampleType></SampleType>
      <Value></Value>
      <StartupAlarm></StartupAlarm>
      <RisingThreshold></RisingThreshold>
      <FallingThreshold></FallingThreshold>
      <RisingEvtIndex></RisingEvtIndex>
      <FallingEvtIndex></FallingEvtIndex>
      <StatCycle></StatCycle>
      <StatType></StatType>
      <Owner></Owner>
      <TemporaryStatus></TemporaryStatus>
    </Alarm>
  </ExtAlarms>
</RMON>
```

## Table description

Item	Description
Feature name	RMON
Table name	ExtAlarms
Table type	Multi-instance table
Row name	Alarm
Restrictions	The max number of entrys depends on RMON/Capabilities/MaxExtAlarms.

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Entry index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Interval	The interval over which the data is sampled and compared with the rising and falling thresholds. Unit: second.	N/A	Unsigned integer. Value range: 10 to 65535. Default: 1800.	N/A
Variable	The object identifier of the particular variable to be sampled.	N/A	String, dotted decimal notation. Length: 1 to 255 characters.	Only variables that resolve to an ASN.1 primitive type of INTEGER (INTEGER, Integer32, Unsigned32, Counter32, Counter64, Gauge, or TimeTicks) may be sampled.
Description	A comment describing this alarm entry.	N/A	String. Length: 1 to 127 characters.	N/A
SampleType	The method of sampling the selected variable and calculating the value to be compared against the thresholds.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—AbsoluteValue.</li> <li>2—DeltaValue.</li> </ul>	For AbsoluteValue, the value of the selected variable will be compared directly with the thresholds at the end of the sampling interval.  For DeltaValue, the value of the selected variable at the last sample will be subtracted from the current value, and the difference compared with the thresholds.
Value	The value of the statistic during the last sampling period.	N/A	Signed integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
StartupAlarm	The alarm that may be sent when this entry is first set to valid.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—RisingAlarm.</li> <li>2—FallingAlarm.</li> <li>3—RisingOrFallingAlarm.</li> </ul>	<p>If the first sample after this entry becomes valid is greater than or equal to the RisingThreshold and StartupAlarm is equal to RisingAlarm or RisingOrFallingAlarm, then a single rising alarm will be generated.</p> <p>If the first sample after this entry becomes valid is less than or equal to the FallingThreshold and StartupAlarm is equal to FallingAlarm or RisingOrFallingAlarm, then a single falling alarm will be generated.</p>
RisingThreshold	A rising threshold for the sampled statistic.	N/A	Signed integer. Default: 1.	<p>When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single event will be generated.</p> <p>A single event will also be generated if the first sample after this entry becomes valid is greater than or equal to this threshold and the associated StartupAlarm is equal to RisingAlarm or RisingOrFallingAlarm.</p> <p>After a rising event is generated, another such event will not be generated until the sampled value falls below this threshold and reaches the FallingThreshold.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
FallingThreshold	A falling threshold for the sampled statistic.	N/A	Signed integer. Default: 0.	<p>When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single event will be generated.</p> <p>A single event will also be generated if the first sample after this entry becomes valid is less than or equal to this threshold and the associated StartupAlarm is equal to FallingAlarm or RisingOrFallingAlarm.</p> <p>After a falling event is generated, another such event will not be generated until the sampled value rises above this threshold and reaches the RisingThreshold.</p>
RisingEvtIndex	The index in RMON/Events that is used when a rising threshold is crossed.	N/A	Unsigned integer. Value range: 0 to 65535. Default: 0.	<p>If there is no corresponding entry in RMON/Events, then no association exists.</p> <p>In particular, if this value is zero, no associated event will be generated, as zero is not a valid index of RMON/Events.</p>
FallingEvtIndex	The index in RMON/Events that is used when a falling threshold is crossed.	N/A	Unsigned integer. Value range: 0 to 65535. Default: 0.	<p>If there is no corresponding entry in RMON/Events, then no association exists.</p> <p>In particular, if this value is zero, no associated event will be generated, as zero is not a valid index of RMON/Events.</p>
StatType	Type of statistic period.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Forever.</li> <li>2—Cycle.</li> </ul> Default: 1.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
StatCycle	The lifetime starts when an alarm entry is set in valid state. Unit: second.	N/A	Unsigned integer. Value range: 0 to 4294967. Default: 0.	It must be zero when StatType is 1-Forever. Otherwise it must be greater than the value of Interval.
Owner	The entity that configured this entry.	N/A	String. Length: 1 to 127 characters.	N/A
TemporaryStatus	The status of this entry.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

# Contents

- RMON .....2
  - RMON/EtherStats .....2
  - RMON/EtherHistoryControls.....2
  - RMON/Alarms.....2
  - RMON/UsrHistoryControls .....3
  - RMON/ExtAlarms.....3

# RMON

## RMON/EtherStats

Message	Explanation
When you modify a column,make sure the value of column TemporaryStatus is true. 修改列的值，行状态必须是临时态。	Merge, delete or replace operation failed. 修改列的值，行状态必须是临时态。
When you create a new row,make sure the value of column TemporaryStatus is false. 创建新行，行状态必须是非临时态。	Create operation failed. 创建新行，行状态必须是非临时态。
Please enter a value for the DataSource column to create a new Ethernet statistics entry. 创建新的以太网统计表项，请指定DataSource列的值。	During executing create or replace operation, 'DataSource' must be specified. 采样以太网接口地址，必须指定。

## RMON/EtherHistoryControls

Message	Explanation
The DataSource column can't be removed. DataSource列不能删除。	The DataSource column can't be removed. 采样以太网接口地址列不能删除。
Please enter a value for the DataSource column to create a new Ethernet history control entry. 创建新的以太网历史控制表项，请指定DataSource列的值。	During executing create or replace operation, 'DataSource' must be specified. 采样以太网接口地址，必须指定。
An entry with the same datasource and interval already exists. 同数据源相同采样间隔的表项已经存在。	No need to create a new table. 同数据源相同采样间隔的表项已经存在。
An entry with the same datasource already exists. 同数据源的表项已经存在。	No need to create a new table. 同数据源相同采样间隔的表项已经存在。

## RMON/Alarms

Message	Explanation
When you modify a column,make sure the value of column TemporaryStatus is true. 修改列的值，行状态必须是临时态。	Merge, delete or replace operation failed. 修改列的值，行状态必须是临时态。
When you create a new row,make sure the value of column TemporaryStatus is false. 创建新行，行状态必须是非临时态。	Create operation failed. 创建新行，行状态必须是非临时态。
The Variable column can't be removed.	'Variable' shows the object identifier of the particular variable to be sampled, and it can't be removed.



Variable列不能删除。	采样对象标识符不能被删除。
Please enter a value for the Variable column to create a new alarm. 创建新的告警，请指定Variable列的值。	'Variable' shows the object identifier of the particular variable to be sampled, and it must be specified. 创建新的告警，请指定采样对象标识符。

## RMON/UsrHistoryControls

Message	Explanation
When you modify a column,make sure the value of column TemporaryStatus is true. 修改列的值，行状态必须是临时态。	Merge, delete or replace operation failed. 修改列的值，行状态必须是临时态。
When you create a new row,make sure the value of column TemporaryStatus is false. 创建新行，行状态必须是非临时态。	Create operation failed. 创建新行，行状态必须是非临时态。
Operation failed.The number of objects exceed the value of column Maxobjects. Objects的个数超出Maxobjects的值。	Create new object failed. Objects的个数超出本地可维护最大值，创建失败。

## RMON/ExtAlarms

Message	Explanation
When you modify a column,make sure the value of column TemporaryStatus is true. 修改列的值，行状态必须是临时态。	Merge, delete or replace operation failed. 修改列的值，行状态必须是临时态。
When you create a new row,make sure the value of column TemporaryStatus is false. 创建新行，行状态必须是非临时态。	Create operation failed. 创建新行，行状态必须是非临时态。
Please enter a value for the Variable column to create a new extalarm. 创建新的扩展告警，请指定Variable列的值。	Please specify a dotted decimal notation string. 创建新的扩展告警，请指定采样对象标识符。
Please enter a value for the Description column to create a new extalarm. 创建新的扩展告警，请指定Description列的值。	The 'Description' is a comment describing the alarm entry. 创建新的扩展告警，请指定告警描述。
The Variable column can't be removed. Variable列不能删除。	'Variable' shows the object identifier of the particular variable to be sampled, and it can't be removed. 采样对象标识符不能被删除。
The Description column can't be removed. Description列不能删除。	The 'Description' can't be removed. 告警描述不能删除。

# Contents

Route .....	1
Route/Ipv4BandwidthBasedSharing .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Route/Ipv6BandwidthBasedSharing .....	1
XML structure .....	1
Table description .....	2
Columns .....	2

# Route

## Route/Ipv4BandwidthBasedSharing

This table contains IPv4 bandwidth-based load sharing information.

### XML structure

```
<Route>
  <Ipv4BandwidthBasedSharing>
    <Mode></Mode>
  </Ipv4BandwidthBasedSharing>
</Route>
```

### Table description

Item	Description
Feature name	Route
Table name	Ipv4BandwidthBasedSharing
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	IPv4 bandwidth-based load sharing mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disabled(default).</li><li>1—Enabled.</li></ul>	N/A

## Route/Ipv6BandwidthBasedSharing

This table contains IPv6 bandwidth-based load sharing information.

### XML structure

```
<Route>
  <Ipv6BandwidthBasedSharing>
```

```

    <Mode></Mode>
  </Ipv6BandwidthBasedSharing>
</Route>

```

## Table description

Item	Description
Feature name	Route
Table name	Ipv6BandwidthBasedSharing
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	IPv6 bandwidth-based load sharing mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled(default).</li> <li>1—Enabled.</li> </ul>	N/A

# Contents

Route .....	1
Route/Ipv4Routes .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
Route/Ipv6Routes .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
Route/Ipv4RouteStatistics .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
Route/Ipv6RouteStatistics .....	9
XML structure .....	10
Table description .....	10
Columns .....	10
Route/Ipv4RouteECMPNumbers .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
Route/Ipv6RouteECMPNumbers .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
Route/Ipv4BandwidthBasedSharing .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
Route/Ipv6BandwidthBasedSharing .....	14
XML structure .....	14
Table description .....	14
Columns .....	14

# Route

## Route/Ipv4Routes

This table contains IPv4 route information.

### XML structure

```
<Route>
  <Ipv4Routes>
    <RouteEntry>
      <VRF></VRF>
      <Topology></Topology>
      <Ipv4>
        <Ipv4Address></Ipv4Address>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </Ipv4>
      <NextHop></NextHop>
      <IfIndex></IfIndex>
      <AllVRF></AllVRF>
      <Protocol>
        <ProtocolID></ProtocolID>
        <SubProtocolID></SubProtocolID>
      </Protocol>
      <ProcessID></ProcessID>
      <Age></Age>
      <Preference></Preference>
      <Metric></Metric>
      <Tag></Tag>
      <Neighbor></Neighbor>
      <ASNumber>
        <OriginAS></OriginAS>
        <LastAS></LastAS>
      </ASNumber>
      <BackupPathAttribute>
        <BackupIfIndex></BackupIfIndex>
        <BackupNextHop></BackupNextHop>
      </BackupPathAttribute>
    </RouteEntry>
  </Ipv4Routes>
</Route>
```

## Table description

Item	Description
Feature name	Route
Table name	Ipv4Routes
Table type	Multi-instance table
Row name	RouteEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	Destination VRF.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes public network.
Topology	Destination topology.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes default topology.
Ipv4	Destination IPv4 prefix.	Data structure	Members include: <ul style="list-style-type: none"><li>Ipv4Address.</li><li>Ipv4PrefixLength.</li></ul>	The two members must both be specified. Support filter, for more information, see Table 1
Ipv4Address	Destination IPv4 address.	index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	Length of the destination IPv4 address prefix.	index	Unsigned integer. Value range: 0 to 32.	N/A
NextHop	NextHop IPv4 address.	index	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
IfIndex	Interface index.	index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
AllVRF	All VRF routing tables.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Disable.</li><li>1—Enable.</li></ul>	Get all routes from private network while index "VRF" is Null and "AllVRF" is Enable.
Protocol	Routing protocol.	Data	Members include:	N/A

Column name	Column description	Column type structure	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>ProtocolID.</li> <li>SubProtocolID.</li> </ul>	
ProtocolID	Routing protocol ID.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—DIRECT.</li> <li>2—STATIC.</li> <li>3—RIP.</li> <li>4—OSPF.</li> <li>5—IS-IS.</li> <li>6—BGP.</li> <li>7—LISP.</li> <li>8—EIGRP.</li> <li>9—OpenR.</li> </ul>	N/A
SubProtocolID	Routing sub-protocol ID.	N/A	Unsigned integer.	N/A
ProcessID	Process ID.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Age	Route alive time.	N/A	Unsigned integer. Unit is second.	N/A
Preference	Route preference.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
Metric	Route metric.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Tag	Route tag.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Neighbor	Neighbor.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ASNummer	Autonomy system.	Data structure	Members include: <ul style="list-style-type: none"> <li>OriginAS.</li> <li>LastAS.</li> </ul>	N/A
OriginAS	Original AS.	N/A	Unsigned integer.	N/A
LastAS	Last AS.	N/A	Unsigned integer.	N/A
BackupPathAttribute	Backup path attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>BackupIfIndex.</li> <li>BackupNextHop.</li> </ul>	N/A
BackupIfIndex	Backup interface index.	N/A	<ul style="list-style-type: none"> <li>Unsigned integer.</li> </ul>	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.



Column name	Column description	Column type	Data type and restrictions	Remarks
BackupNexthop	Backup nexthop IPv4 address.	N/A	<ul style="list-style-type: none"> <li>String, dotted decimal notation.</li> </ul>	Example: 1.1.1.1. 0.0.0.0 is an invalid value.

**Table 1 Route filter Type**

Filter	Description	Example
Ip-address	Use ip-address to get matched route entries. Vrf keyword is not specified in the public network.	<pre>&lt;RouteEntry base:filter="IP 1.1.1.1"&gt; &lt;RouteEntry base:filter="vrf vpn1 IP 1.1.1.1"&gt;</pre>
Ip-address longer	Use ip-address to get the route entry with the longest mask. Vrf keyword is not specified in the public network.	<pre>&lt;RouteEntry base:filter="IP 1.1.1.1 longer"&gt; &lt;RouteEntry base:filter="vrf vpn1 IP 1.1.1.1 longer"&gt;</pre>
Ip-address MaskLen	Use ip-address MaskLen to get matched route entries. Vrf keyword is not specified in the public network.	<pre>&lt;RouteEntry base:filter="IP 1.1.1.0 MaskLen 24"&gt; &lt;RouteEntry base:filter="vrf vpn1 IP 1.1.1.0 MaskLen 24"&gt;</pre>
Ip-address MaskLen Longer	Use ip-address MaskLen to get the route entry with the longest mask. Vrf keyword is not specified in the public network.	<pre>&lt;RouteEntry base:filter="IP 1.1.1.0 MaskLen 24 longer"&gt; &lt;RouteEntry base:filter="vrf vpn1 IP 1.1.1.0 MaskLen 24 longer"&gt;</pre>
Ip-address 1 to Ip-address 2	Use ip-address1 to ip-address2 to get information about routes to a range of destination. Vrf keyword is not specified in the public network.	<pre>&lt;RouteEntry base:filter="IP 1.1.1.0 to 10.1.1.1"&gt; &lt;RouteEntry base:filter="vrf vpn1 IP 1.1.1.0 to 10.1.1.1"&gt;</pre>
Prefix-List	Use prefix-list to get Routes permitted by an IP prefix list. Vrf keyword is not specified in the public network.	<pre>&lt;RouteEntry base:filter="Prefix-List aaa"&gt; &lt;RouteEntry base:filter="vrf vpn1 Prefix-List aaa"&gt;</pre>
ACL	Use acl to get routes permitted by a basic ACL. Vrf keyword is not	<pre>&lt;RouteEntry base:filter="ACL 2000"&gt; &lt;RouteEntry base:filter="vrf vpn1 ACL 2000"&gt;</pre>

Filter	Description	Example
	specified in the public network.	

# Route/Ipv6Routes

This table contains IPv6 route information.

## XML structure

```

<Route>
  <Ipv6Routes>
    <RouteEntry>
      <VRF></VRF>
      <Topology></Topology>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
      <Nexthop></Nexthop>
      <IfIndex></IfIndex>
      <AllVRF></AllVRF>
      <Protocol>
        <ProtocolID></ProtocolID>
        <SubProtocolID></SubProtocolID>
      </Protocol>
      <ProcessID></ProcessID>
      <Age></Age>
      <Preference></Preference>
      <Metric></Metric>
      <Tag></Tag>
      <Neighbor></Neighbor>
      <ASNumber>
        <OriginAS></OriginAS>
        <LastAS></LastAS>
      </ASNumber>
      <BackupPathAttribute>
        <BackupIfIndex></BackupIfIndex>
        <BackupNexthop></BackupNexthop>
      </BackupPathAttribute>
    </RouteEntry>
  </Ipv6Routes>
</Route>

```

## Table description

Item	Description
Feature name	Route
Table name	Ipv6Routes
Table type	Multi-instance table
Row name	RouteEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	Destination VRF.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes public network.
Topology	Destination topology.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes default topology.
Ipv6Prefix	Destination IPv6 prefix.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address.</li> <li>Ipv6PrefixLength.</li> </ul>	The two members must both be specified. Support filter, for more information, see Table 2
Ipv6Address	Destination IPv6 address.	index	Hexadecimal string, colon-separated.	Example: 1:2::1.
Ipv6PrefixLength	Length of the destination IPv6 address prefix.	index	Unsigned integer. Value range: 0 to 128.	N/A
Nexthop	Nexthop IPv6 address.	index	Hexadecimal string, colon-separated.	Example: 1:2::1. 0::0 is an invalid value.
IfIndex	Interface index.	index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
AllVRF	All VRF routing tables.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Get all routes from private network while index "VRF" is Null and "AllVRF" is Enable.
Protocol	Routing protocol.	Data	Members include:	N/A

Column name	Column description	Column type structure	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>ProtocolID.</li> <li>SubProtocolID.</li> </ul>	
ProtocolID	Routing protocol ID.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—DIRECT.</li> <li>2—STATIC.</li> <li>3—RIPng.</li> <li>4—OSPFv3.</li> <li>5—IS-ISv6.</li> <li>6—BGP4+.</li> <li>9—OpenR.</li> </ul>	N/A
SubProtocolID	Routing sub-protocol ID.	N/A	Unsigned integer.	N/A
ProcessID	Process ID.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Age	Route alive time.	N/A	Unsigned integer. Unit is second.	N/A
Preference	Route preference.	N/A	Unsigned integer. Value range: 0 to 255.	N/A
Metric	Route metric.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Tag	Route tag.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Neighbor	Neighbor.	N/A	Hexadecimal string, colon-separated.	Example: 1:2::1.
ASNummer	Autonomy system.	Data structure	Members include: <ul style="list-style-type: none"> <li>OriginAS.</li> <li>LastAS.</li> </ul>	N/A
OriginAS	Original AS.	N/A	Unsigned integer.	N/A
LastAS	Last AS.	N/A	Unsigned integer.	N/A
BackupPathAttribute	Backup path attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>BackupIfIndex.</li> <li>BackupNextHop.</li> </ul>	N/A
BackupIfIndex	Backup interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
BackupNextHop	Backup nextHop IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:2::1. 0::0 is an invalid

Column name	Column description	Column type	Data type and restrictions	Remarks
				value.

**Table 2 Route filter Type**

Filter	Description	Example
Ipv6-address	Use ipv6-address to get matched route entries.	<RouteEntry base:filter="IPv6 1::1"> <RouteEntry base:filter="vrf vpn2 IPv6 1::1">
Ipv6-address longer	Use ipv6-address to get the route entry with the longest prefix.	<RouteEntry base:filter="IPv6 1::1 longer"> <RouteEntry base:filter="vrf vpn2 IPv6 1::1 longer">
Ipv6-address PrefixLen	Use ipv6-address PrefixLen to get matched route entries.	<RouteEntry base:filter="IPv6 1:: PrefixLen 64"> <RouteEntry base:filter="vrf vpn2 IPv6 1:: PrefixLen 64">
Ipv6-address PrefixLen Longer	Use ipv6-address PrefixLen to get the route entry with the longest prefix.	<RouteEntry base:filter="IPv6 1:: PrefixLen 64 longer"> <RouteEntry base:filter="vrf vpn2 IPv6 1:: PrefixLen 64 longer">
Ipv6-address 1 to Ipv6-address 2	Use ipv6-address1 to ipv6-address2 to get information about routes to a range of destination.	<RouteEntry base:filter="IPv6 1::1 to 10::1"> <RouteEntry base:filter="vrf vpn2 IPv6 1::1 to 10::1">
Prefix-List	Use prefix-list to get routes permitted by an IPv6 prefix list.	<RouteEntry base:filter="Prefix-List aaa"> <RouteEntry base:filter="vrf vpn2 Prefix-List aaa">
ACL	Use acl to get routes permitted by an IPv6 basic ACL.	<RouteEntry base:filter="ACL 2000"> <RouteEntry base:filter="vrf vpn2 ACL 2000">

## Route/Ipv4RouteStatistics

This table contains IPv4 route statistic information.

### XML structure

```

<Route>
  <Ipv4RouteStatistics>
    <Statistics>
      <VRF></VRF>
      <Topology></Topology>
      <ProtocolID></ProtocolID>
      <TotalRoutes></TotalRoutes>
      <ActiveRoutes></ActiveRoutes>
    
```

```

    <AddedRoutes></AddedRoutes>
    <DeletedRoutes></DeletedRoutes>
  </Statistics>
</Ipv4RouteStatistics>
</Route>

```

## Table description

Item	Description
Feature name	Route
Table name	Ipv4RouteStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	Destination VRF.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes public network.
Topology	Destination topology.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes default topology.
ProtocolID	Route protocol ID.	index	Enumeration: <ul style="list-style-type: none"> <li>1—DIRECT.</li> <li>2—STATIC.</li> <li>3—RIP.</li> <li>4—OSPF.</li> <li>5—IS-IS.</li> <li>6—BGP.</li> <li>7—LISP.</li> <li>8—EIGRP</li> </ul>	N/A
TotalRoutes	Total route number.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
ActiveRoutes	Active route number.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
AddedRoutes	Added routes number.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
DeletedRoutes	Deleted routes number.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A

## Route/Ipv6RouteStatistics

This table contains IPv6 route statistic information.

## XML structure

```
<Route>
  <Ipv6RouteStatistics>
    <Statistics>
      <VRF></VRF>
      <Topology></Topology>
      <ProtocolID></ProtocolID>
      <TotalRoutes></TotalRoutes>
      <ActiveRoutes></ActiveRoutes>
      <AddedRoutes></AddedRoutes>
      <DeletedRoutes></DeletedRoutes>
    </Statistics>
  </Ipv6RouteStatistics>
</Route>
```

## Table description

Item	Description
Feature name	Route
Table name	Ipv6RouteStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	Destination VRF.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes public network.
Topology	Destination topology.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes default topology.
ProtocolID	Route protocol ID.	index	Enumeration: <ul style="list-style-type: none"><li>• 1—DIRECT.</li><li>• 2—STATIC.</li><li>• 3—RIPng.</li><li>• 4—OSPFv3.</li><li>• 5—IS-ISv6.</li><li>• 6—BGP4+.</li><li>• 7—LISP.</li><li>• 8—EIGRPv6.</li></ul>	N/A
TotalRoutes	Total route number.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ActiveRoutes	Active route number.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
AddedRoutes	Added routes number.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
DeletedRoutes	Deleted routes number.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A

## Route/Ipv4RouteECMPNumbers

This table contains IPv4 route ECMP numbers.

### XML structure

```

<Route>
  <Ipv4RouteECMPNumbers>
    <RouteECMPNumber>
      <VRF></VRF>
      <Topology></Topology>
      <Ipv4>
        <Ipv4Address></Ipv4Address>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </Ipv4>
      <ECMPNumber></ECMPNumber>
    </RouteECMPNumber>
  </Ipv4RouteECMPNumbers>
</Route>

```

### Table description

Item	Description
Feature name	Route
Table name	Ipv4RouteECMPNumbers
Table type	Multi-instance table
Row name	RouteECMPNumber
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	Destination VRF.	index	String, case-sensitive.	Null denotes public network.



Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 0 to 31 characters.	
Topology	Destination topology.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes default topology.
Ipv4	Destination IPv4 prefix.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> </ul>	The two members must both be specified.
Ipv4Address	Destination IPv4 address.	index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	Length of the destination IPv4 address prefix.	index	Unsigned integer. Value range: 0 to 32.	N/A
ECMPNumber	Number of ECMP Nexthops.	N/A	Unsigned integer. The value range varies by device model.	N/A

## Route/Ipv6RouteECMPNumbers

This table contains IPv6 route ECMP numbers.

### XML structure

```

<Route>
  <Ipv6RouteECMPNumbers>
    <RouteECMPNumber>
      <VRF></VRF>
      <Topology></Topology>
      <Ipv6Prefix>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </Ipv6Prefix>
      <ECMPNumber></ECMPNumber>
    </RouteECMPNumber>
  </Ipv6RouteECMPNumbers>
</Route>

```

### Table description

Item	Description
Feature name	Route
Table name	Ipv6RouteECMPNumbers
Table type	Multi-instance table
Row name	RouteECMPNumber
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	Destination VRF.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes public network.
Topology	Destination topology.	index	String, case-sensitive. Length: 0 to 31 characters.	Null denotes default topology.
Ipv6Prefix	Destination IPv6 prefix.	Data structure	Members include: <ul style="list-style-type: none"><li>Ipv6Address.</li><li>Ipv6PrefixLength.</li></ul>	The two members must both be specified.
Ipv6Address	Destination IPv6 address.	index	Hexadecimal string, colon-separated.	Example: 1:2::1.
Ipv6PrefixLength	Length of the destination IPv6 address prefix.	index	Unsigned integer. Value range: 0 to 128.	N/A
ECMPNumber	Number of ECMP Nexthops.	N/A	Unsigned integer. The value range varies by device model.	N/A

## Route/Ipv4BandwidthBasedSharing

This table contains IPv4 bandwidth-based load sharing information.

### XML structure

```
<Route>
  <Ipv4BandwidthBasedSharing>
    <Mode></Mode>
  </Ipv4BandwidthBasedSharing>
</Route>
```

### Table description

Item	Description
Feature name	Route
Table name	Ipv4BandwidthBasedSharing
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	IPv4 bandwidth-based load sharing mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Disabled.</li><li>• 1—Enabled.</li></ul>	N/A

## Route/Ipv6BandwidthBasedSharing

This table contains IPv6 bandwidth-based load sharing information.

## XML structure

```
<Route>
  <Ipv6BandwidthBasedSharing>
    <Mode></Mode>
  </Ipv6BandwidthBasedSharing>
</Route>
```

## Table description

Item	Description
Feature name	Route
Table name	Ipv6BandwidthBasedSharing
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	IPv6 bandwidth-based load sharing mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Disabled.</li><li>• 1—Enabled.</li></ul>	N/A

# Contents

Route .....	2
Route/Ipv4Routes .....	2
Route/Ipv6Routes .....	2
Route/Ipv4RouteStatistics.....	3
Route/Ipv6RouteStatistics.....	3
Route/Ipv4RouteECMPNumbers .....	3
Route/Ipv6RouteECMPNumbers .....	3
Route/Ipv4BandwidthBasedSharing .....	3
Route/Ipv6BandwidthBasedSharing .....	3

# Route

## Route/Ipv4Routes

Message	Explanation
The input format is incorrect. 输入的格式不正确。	Invalid configuration, please modify configuration under the guidance.
The length of the prefix list name is incorrect. 前缀列表的名字长度不正确。	Invalid configuration, please modify configuration under the guidance.
Incorrect ACL number. ACL号不正确。	Invalid configuration, please modify configuration under the guidance.
Incorrect address. 地址不正确。	Invalid configuration, please modify configuration under the guidance.
VRF name doesn't exist. VRF名不存在。	Invalid configuration, please modify configuration under the guidance.
Incorrect prefix length. 前缀长度不正确。	Invalid configuration, please modify configuration under the guidance.
Incorrect mask length. 掩码长度不正确。	Invalid configuration, please modify configuration under the guidance.
Invalid character. 存在非法字符。	Invalid configuration, please modify configuration under the guidance.

## Route/Ipv6Routes

Message	Explanation
The input format is incorrect. 输入的格式不正确。	Invalid configuration, please modify configuration under the guidance.
The length of the prefix list name is incorrect. 前缀列表的名字长度不正确。	Invalid configuration, please modify configuration under the guidance.
Incorrect ACL number. ACL号不正确。	Invalid configuration, please modify configuration under the guidance.
Incorrect address. 地址不正确。	Invalid configuration, please modify configuration under the guidance.
VRF name doesn't exist. VRF名不存在。	Invalid configuration, please modify configuration under the guidance.
Incorrect prefix length. 前缀长度不正确。	Invalid configuration, please modify configuration under the guidance.
Incorrect mask length.	Invalid configuration, please modify configuration under the guidance.

掩码长度不正确。	
Invalid character. 存在非法字符。	Invalid configuration, please modify configuration under the guidance.

## Route/Ipv4RouteStatistics

Message	Explanation
NULL	NULL

## Route/Ipv6RouteStatistics

Message	Explanation
NULL	NULL

## Route/Ipv4RouteECMPNumbers

Message	Explanation
NULL	NULL

## Route/Ipv6RouteECMPNumbers

Message	Explanation
NULL	NULL

## Route/Ipv4BandwidthBasedSharing

Message	Explanation
NULL	NULL

## Route/Ipv6BandwidthBasedSharing

Message	Explanation
NULL	NULL

# Contents

RoutePolicy .....	1
RoutePolicy/IPv4Prefix .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
RoutePolicy/IPv6PrefixList .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
RoutePolicy/Policy .....	4
XML structure .....	4
Table description .....	6
Columns .....	6
RoutePolicy/ExtcommunityList .....	14
XML structure .....	15
Table description .....	15
Columns .....	15
RoutePolicy/CommunityList .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
RoutePolicy/TagList .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
RoutePolicy/RdList .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
RoutePolicy/MacList .....	20
XML structure .....	20
Table description .....	20
Columns .....	20

# RoutePolicy

## RoutePolicy/IPv4Prefix

This table contains route policy IPv4 prefix information.

### XML structure

```
<RoutePolicy>
  <IPv4PrefixList>
    <PrefixList>
      <PrefixListName></PrefixListName>
      <Index></Index>
      <Mode></Mode>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <MinPrefixLength></MinPrefixLength>
      <MaxPrefixLength></MaxPrefixLength>
    </PrefixList>
  </IPv4PrefixList>
</RoutePolicy>
```

### Table description

Item	Description
Feature name	RoutePolicy
Table name	IPv4PrefixList
Table type	Multi-instance table
Row name	PrefixList
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PrefixListName	Name of prefix list.	Index	String, case-sensitive. Length: 1 to 63 characters.	N/A
Index	Node.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Mode	Operation type of prefix list.		Enumeration: • 0—permit.	To perform create or replace operation,



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—deny.</li> </ul>	Mode can't be empty. To perform Merge operation to create a row, Mode can't be empty. Delete or remove operation is not supported.
Ipv4Address	IPv4 address.		IPv4: String, dotted decimal notation.	IPv4 example: 1.1.1.1 To perform create or replace operation, Ipv4Address can't be empty. To perform Merge operation to create a row, Ipv4Address can't be empty. Delete or remove operation is not supported.
Ipv4PrefixLength	Mask length of IP address.		Unsigned integer. Value range: 0 to 32.	To perform create or replace operation, Ipv4PrefixLength can't be empty. To perform Merge operation to create a row, Ipv4PrefixLength can't be empty. Delete or remove operation is not supported.
MinPrefixLength	Greater than or equal to this value.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 0 to 32.</li> </ul>	$\text{Ipv4PrefixLength} \leq \text{MinPrefixLength} \leq \text{MaxPrefixLength}$
MaxPrefixLength	Less than or equal to this value.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 0 to 32.</li> </ul>	$\text{Ipv4PrefixLength} \leq \text{MinPrefixLength} \leq \text{MaxPrefixLength}$

## RoutePolicy/IPv6PrefixList

This table contains route policy IPv6 prefix information.

### XML structure

```

<RoutePolicy>
  <IPv6PrefixList>
    <PrefixList>
      <PrefixListName></PrefixListName>
      <Index></Index>
      <Mode></Mode>
      <Ipv6Address></Ipv6Address>
    
```

```

    <Ipv6PrefixLength></Ipv6PrefixLength>
    <MinPrefixLength></MinPrefixLength>
    <MaxPrefixLength></MaxPrefixLength>
  </PrefixList>
</IPv6PrefixList>
</RoutePolicy>

```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	IPv6PrefixList
Table type	Multi-instance table
Row name	PrefixList
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PrefixListName	Name of prefix list.	Index	String, case-sensitive. Length: 1 to 63 characters.	N/A
Index	Node.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Mode	Operation type of prefix list.		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	<p>To perform create or replace operation, Mode can't be empty.</p> <p>To perform Merge operation to create a row, Mode can't be empty.</p> <p>Delete or remove operation is not supported.</p>
Ipv6Address	IPv6 address.		IPv6: String, hexadecimal notation.	<p>IPv6 example: 1:1::1:1</p> <p>To perform create or replace operation, Ipv6Address can't be empty.</p> <p>To perform Merge operation to create a row, Ipv6Address can't be empty.</p> <p>Delete or remove operation is not supported.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv6PrefixLength	Prefix length of IPv6 address.		Unsigned integer. Value range: 0 to 128.	To perform create or replace operation, Ipv4PrefixLength can't be empty. To perform Merge operation to create a row, Ipv4PrefixLength can't be empty. Delete or remove operation is not supported.
MinPrefixLength	Greater than or equal to this value.	N/A	Unsigned integer. • Value range: 0 to 128.	$\text{Ipv6PrefixLength} \leq \text{MinPrefixLength} \leq \text{MaxPrefixLength}$
MaxPrefixLength	Less than or equal to this value.	N/A	Unsigned integer. • Value range: 0 to 128.	$\text{Ipv6PrefixLength} \leq \text{MinPrefixLength} \leq \text{MaxPrefixLength}$

## RoutePolicy/Policy

This table contains route policy information.

### XML structure

```

<RoutePolicy>
  <Policy>
    <Entry>
      <PolicyName></PolicyName>
      <Index></Index>
      <Mode></Mode>
      <Description></Description>
      <Match>
        <IPv4AddressPrefixList></IPv4AddressPrefixList>
        <IPv6AddressPrefixList></IPv6AddressPrefixList>
        <ExtcommunityList></ExtcommunityList>
        <Tag></Tag>
        <Interface></Interface>
        <L3vni></L3vni>
        <RouteType></RouteType>
        <TagList></TagList>
        <RdList></RdList>
        <Cost></Cost>
        <IPv4AddressAcl></IPv4AddressAcl>
        <IPv4NextHopAcl></IPv4NextHopAcl>
        <IPv4NextHopPrefixList></IPv4NextHopPrefixList>
        <IPv4RouteSourceAcl></IPv4RouteSourceAcl>
        <IPv4RouteSourcePrefixList></IPv4RouteSourcePrefixList>
        <IPv6AddressAcl></IPv6AddressAcl>

```

```

    <IPv6NextHopAcl></IPv6NextHopAcl>
    <IPv6NextHopPrefixList></IPv6NextHopPrefixList>
    <IPv6RouteSourceAcl></IPv6RouteSourceAcl>
    <IPv6RouteSourcePrefixList></IPv6RouteSourcePrefixList>
    <LocalPreference></LocalPreference>
    <MacList></MacList>
    <MplsLabel></MplsLabel>
    <Rpki></Rpki>
</Match>
<MatchCommunityList>
    <List></List>
    <WholeMatch></WholeMatch>
</MatchCommunityList>
<MatchVlan>
    <VlanId></VlanId>
    <VlanIdRangeStart></VlanIdRangeStart>
    <VlanIdRangeEnd></VlanIdRangeEnd>
</MatchVlan>
<Apply>
    <ExtCommunityRtValue></ExtCommunityRtValue>
    <ExtCommunityRtType></ExtCommunityRtType>
    <VpnPeerId></VpnPeerId>
    <CostValue></CostValue>
    <CostMode></CostMode>
    <LocalPreference></LocalPreference>
    <L3vni></L3vni>
    <ASPath></ASPath>
    <ASPathType></ASPathType>
    <CommunityNumber></CommunityNumber>
    <CommunityAttr></CommunityAttr>
    <CommunityType></CommunityType>
    <Exp></Exp>
    <CommListDelete></CommListDelete>
    <CostType></CostType>
    <IPv6NextHop></IPv6NextHop>
    <ISIS></ISIS>
    <MplsLabel></MplsLabel>
    <Preference></Preference>
    <PreferredValue></PreferredValue>
    <PrefixPriority></PrefixPriority>
    <Tag></Tag>
</Apply>
<ApplyIpv4NextHop>
    <NextHopAddr></NextHopAddr>
    <Public></Public>
    <VrfName></VrfName>
</ApplyIpv4NextHop>
<ApplyFastReroute>

```

```

    <InterfaceName></InterfaceName>
    <IpAddress></IpAddress>
</ApplyFastReroute>
<ApplyIPv6FastReroute>
    <IPv6InterfaceName></IPv6InterfaceName>
    <IPv6Address></IPv6Address>
</ApplyIPv6FastReroute>
<ApplyOrigin>
    <Origin></Origin>
    <OriginAsNum></OriginAsNum>
</ApplyOrigin>
<ApplyIpPrecedence>
    <IpPrecValue></IpPrecValue>
    <IpPrecClear></IpPrecClear>
</ApplyIpPrecedence>
<ApplyQosLocId>
    <QosLocIdValue></QosLocIdValue>
    <QosLocIdClear></QosLocIdClear>
</ApplyQosLocId>
<ApplyTrafIndex>
    <TrafIndexValue></TrafIndexValue>
    <TrafIndexClear></TrafIndexClear>
</ApplyTrafIndex>
    <Continue></Continue>
</Entry>
</Policy>
</RoutePolicy>

```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	Policy
Table type	Multi-instance table
Row name	Entry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of route policy.	Index	String, case-sensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Index	Node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Mode	Operation type of Route Policy.		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	To perform create or replace operation, Mode can't be empty. To perform Merge operation to create a row, Mode can't be empty. Delete or remove operation is not supported.
Description	Description of route policy.		String, case-sensitive. Length: 1 to 80 characters.	N/A
Match	If match condition.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4AddressPrefixList.</li> <li>IPv6AddressPrefixList.</li> <li></li> <li>ExtcommunityList</li> <li>Tag</li> <li>Interface</li> <li>L3vni</li> <li>RouteType</li> <li>TagList</li> <li>RdList</li> <li>Cost</li> <li>IPv4AddressAcl</li> <li>IPv4NextHopAcl</li> <li>IPv4NextHopPrefixList</li> <li>IPv4RouteSourceAcl</li> <li>IPv4RouteSourcePrefixList</li> <li>IPv6AddressAcl</li> <li>IPv6NextHopAcl</li> <li>IPv6NextHopPrefixList</li> <li>IPv6RouteSourceAcl</li> <li>IPv6RouteSourcePrefixList</li> <li>LocalPreference</li> <li>MacList</li> <li>MplsLabel</li> <li>Rpki</li> </ul>	N/A
IPv4AddressPrefixList	Match IPv4 address using prefix list.		String, case-sensitive. Length: 1 to 63 characters.	N/A
IPv6AddressPrefixList	Match IPv6 address using prefix list.		String, case-sensitive. Length: 1 to 63 characters.	N/A
Extcommunit	Match BGP routes whose		Unsigned integer.	Repeat supported for

Column name	Column description	Column type	Data type and restrictions	Remarks
CommunityList	extended community attribute matches a specified extended community list		Value range: 1 to 65535.	32 times.
Tag	Match IGP routes with specified tag		Unsigned integer. Value range: 0 to 4294967295	N/A
Interface	Match routes with specified Interface.		Interface name: String, interface type and interface number. Interface index: Unsigned integer. Length: 32 bits.	Support interface name or interface index. Repeat supported for 16 times.
L3vni	Match the L3 VXLAN ID of BGP routes.		Unsigned integer. Value range: 0 to 16777215	N/A
RouteType	Match route type.		Enumeration: <ul style="list-style-type: none"> <li>1—internal.</li> <li>2—external-type1or2.</li> <li>3—external-type1.</li> <li>4—external-type2.</li> <li>5—nssa-external-type1or2.</li> <li>6—nssa-external-type1.</li> <li>7—nssa-external-type2.</li> <li>8—is-is-level-1.</li> <li>9—is-is-level-2.</li> <li>10—bgp-evpn-mac-ip.</li> <li>11—bgp-evpn-imet.</li> <li>12—bgp-evpn-ip-prefix.</li> <li>13—eigrp-internal.</li> <li>14—eigrp-external.</li> </ul>	Repeat supported for 14 times. One route type cannot be configured twice in one command.
TagList	Match IGP routes with the specified tag list.		Unsigned integer. Value range: 1 to 65535.	N/A
RdList	Match VPN routes with the specified RD list.		Unsigned integer. Value range: 1 to 65535.	N/A
Cost	Match routes with the specified cost.		Unsigned integer. Value range: 0 to 4294967295.	
IPv4AddressAcl	Match the destination address of IPv4 routes using an		Unsigned integer. Value range: 2000 to 3999.	

Column name	Column description	Column type	Data type and restrictions	Remarks
	ACL.			
IPv4NextHopAcl	Match the next hop of IPv4 routes using an ACL.		Unsigned integer. Value range: 2000 to 2999.	
IPv4NextHopPrefixList	Match the next hop of IPv4 routes using a prefix list.		String, case-sensitive. Length: 1 to 63 characters.	
IPv4RouteSourceAcl	Match the source address of IPv4 routes using an ACL.		Unsigned integer. Value range: 2000 to 2999.	
IPv4RouteSourcePrefixList	Match the source address of IPv4 routes using an IP prefix list.		String, case-sensitive. Length: 1 to 63 characters.	
IPv6AddressAcl	Match the destination address of IPv6 routes using an ACL.		Unsigned integer. Value range: 2000 to 3999.	
IPv6NextHopAcl	Match the next hop of IPv6 routes using an ACL.		Unsigned integer. Value range: 2000 to 2999.	
IPv6NextHopPrefixList	Match the next hop of IPv6 routes using an IPv6 prefix list.		String, case-sensitive. Length: 1 to 63 characters.	
IPv6RouteSourceAcl	Match the source address of IPv6 routes using an ACL.		Unsigned integer. Value range: 2000 to 2999.	
IPv6RouteSourcePrefixList	Match the source address of IPv6 routes using an IPv6 prefix list.		String, case-sensitive. Length: 1 to 63 characters.	
LocalPreference	Match BGP routes that have the specified local preference.		Unsigned integer. Value range: 0 to 4294967295.	
MacList	Match MAC addresses that are contained in EVI IS-IS packets.		String, case-sensitive. Length: 1 to 63 characters.	
MplsLabel	Match routes with the specified MPLS labels.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured.</li> </ul>	
Rpki	Match routes with the specified		Enumeration: <ul style="list-style-type: none"> <li>0—invalid</li> </ul>	



Column name	Column description	Column type	Data type and restrictions	Remarks
	RPKI validation state.		<ul style="list-style-type: none"> <li>1—not-found</li> <li>2—valid</li> </ul>	
MatchCommunityList	If match communitylist condition.	Data structure	Members include: <ul style="list-style-type: none"> <li>List.</li> <li>WholeMatch</li> </ul>	Repeat supported for 32 times.
List	Match BGP routes whose community attribute matches a specified community list.		Basic community list number: Unsigned integer. Value range:1 to 99. Advanced community list number: Unsigned integer. Value range:100 to 199. Community list name: String, case-sensitive. Length: 1 to 63 characters.	List name cannot be all made up of numbers.
WholeMatch	Match all communities exactly.		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Not supported when specifying an advanced community list number.
MatchVlan	Match routes that contain the specified VLANs.	Data structure	Members include: <ul style="list-style-type: none"> <li>VlanId</li> <li>VlanIdRangStart</li> <li>VlanIdRangeEnd.</li> </ul>	A maximum of 16 VLAN ID items can be specified.
VlanId	Specify a VLAN ID.		Unsigned integer. Value range: 1 to 4094.	N/A
VlanIdRangeStart	Specify the start VLAN ID of a VLAN ID range.		Unsigned integer. Value range: 1 to 4094.	You must set both VlanIdRangeStart and VlanIdRangeEnd, or set neither of them.
VlanIdRangeEnd	Specify the end VLAN ID of a VLAN ID range.		Unsigned integer. Value range: 1 to 4094.	You must set both of VlanIdRangeStart and VlanIdRangeEnd, or set neither of them.
Apply	Apply action.	Data structure	Members include: <ul style="list-style-type: none"> <li>ExtCommunityRtValue.</li> <li>ExtCommunityRtType.</li> <li>VpnPeerId</li> <li>CostValue.</li> <li>CostMode.</li> <li>LocalPreference.</li> <li>L3vni.</li> <li>ASPath.</li> <li>ASPathType.</li> <li>CommunityNumber.</li> <li>CommunityAttr.</li> <li>CommunityType.</li> <li>Exp.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>CommListDelete.</li> <li>CostType.</li> <li>IPv6NextHop.</li> <li>ISIS.</li> <li>MplsLabel.</li> <li>Preference.</li> <li>PreferredValue.</li> <li>PrefixPriority.</li> <li>Tag.</li> </ul>	
ExtCommunityRtValue	The value of Ext Community Route Target (RT).		String. Length: 3 to 21 characters. <ul style="list-style-type: none"> <li>The format is IP&lt;X.X.X.X&gt;:NN&lt;0-65535&gt; or AS&lt;0-65535&gt;:NN&lt;0-4294967295&gt; or AS&lt;65536-4294967295&gt;:NN&lt;0-65535&gt;.</li> </ul>	Example: 101:3 or 192.168.122.15:1 or 70000:3. Repeat supported for Get and Get-Bulk action.
ExtCommunityRtType	The Ext Community RT additive type.		Enumeration: <ul style="list-style-type: none"> <li>1—Additive.</li> <li>2—Replace.</li> </ul>	N/A
VpnPeerId	Set vpn-peer-id		Unsigned integer. Value range: 1 to 134217727	N/A
CostValue	Route cost value		Unsigned integer. Value range: 0 to 4294967295	N/A
CostMode	Route cost change mode.		Enumeration: <ul style="list-style-type: none"> <li>0—Update.</li> <li>1—Increase.</li> <li>2—Decrease.</li> </ul>	N/A
LocalPreference	BGP route local preference		Unsigned integer. Value range: 0 to 4294967295	N/A
L3vni	Specify an L3 VXLAN ID for BGP routes.		Unsigned integer. Value range: 0 to 16777215	N/A
ASPath	AS_PATH attribute value.		Unsigned integer. Value range: 1 to 4294967295	Repeat supported for 32 times.
ASPathType	AS_PATH attribute additive type.		Enumeration: <ul style="list-style-type: none"> <li>1—Additive.</li> <li>2—Replace.</li> </ul>	N/A
CommunityNumber	Community number.		Unsigned integer. Value range: 1 to 4294967295.	Example: 10 or 1:65535 Repeat supported for 32 times along with

Column name	Column description	Column type	Data type and restrictions	Remarks
			String. Length: 3 to 11 characters. Format: AA<0-65535>:NN<0-65535>.	CommunityAttr.
CommunityAttr	Community attribute.		Enumeration: <ul style="list-style-type: none"> <li>1—Internet.</li> <li>2—No-advertise.</li> <li>3—no-export.</li> <li>4—no-export-subconfed.</li> </ul>	Repeat supported for 32 times along with CommunityNumber.
CommunityType	Community additive type.		Enumeration: <ul style="list-style-type: none"> <li>0—Replace.</li> <li>1—Additive.</li> <li>2—None.</li> </ul>	N/A
Exp	Specify an MPLS EXP value		Unsigned integer. Value range: 0 to 7	N/A
CommListDelete	Delete the COMMUNITY attributes from BGP routes.		Basic community list number: Unsigned integer. Value range:1 to 99. Advanced community list number: Unsigned integer. Value range:100 to 199. Community list name: String, case-sensitive. Length: 1 to 63 characters.	N/A
CostType	Specify a cost type.		Enumeration: <ul style="list-style-type: none"> <li>1—external.</li> <li>2—internal.</li> <li>3—type-1</li> <li>4—type-2</li> </ul>	N/A
IPv6NextHop	Specify a next hop for IPv6 routes.		Hexadecimal string, colon-separated.	N/A
ISIS	Specify an IS-IS level.		Enumeration: <ul style="list-style-type: none"> <li>1—level-1.</li> <li>2—level-1-2.</li> <li>3—level-2.</li> </ul>	N/A
MplsLabel	Specify whether to configure an MPLS label or not.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured.</li> </ul>	N/A
Preference	Specify a preference for a routing protocol.		Unsigned integer. Value range: 1 to 255.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PreferredValue	Specify a preferred value for BGP routes.		Unsigned integer. Value range: 0 to 65535.	N/A
PrefixPriority	Specify a prefix priority.		Enumeration: <ul style="list-style-type: none"> <li>1—critical.</li> <li>2—high.</li> <li>3—medium.</li> </ul>	N/A
Tag	Specify a tag for IGP routes.		Unsigned integer. Value range: 0 to 4294967295.	N/A
ApplyIpv4NextHop	Specify next hop.	Data structure	Members include: <ul style="list-style-type: none"> <li>NextHopAddr.</li> <li>Public.</li> <li>VrfName.</li> </ul>	N/A
NextHopAddr	Specify next hop address, x.x.x.x Ip-address.		IPv4: String, dotted decimal notation.	N/A
Public	Public network.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured.</li> </ul>	N/A
VrfName	VPN instance name.		String. Length: 0 to 31 characters.	An empty string indicates the public network.
ApplyFastReroute	Set a backup link for IPv4 fast reroute.	Data structure	Members include: <ul style="list-style-type: none"> <li>InterfaceName.</li> <li>IpAddress.</li> </ul>	N/A
InterfaceName	Specify a backup output interface by its Name.		String. Length: 0 to 47 characters.	Example: <ul style="list-style-type: none"> <li>NULL0.</li> </ul> M-GigabitEthernet0/0/0
IpAddress	Specify a backup next hop.		IPv4: String, dotted decimal notation.	N/A
ApplyIPv6FastReroute	Set a backup link for IPv6 fast reroute.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6InterfaceName.</li> <li>Ipv6Address.</li> </ul>	N/A
Ipv6InterfaceName	Specify a backup output interface by its Name.		String. Length: 0 to 47 characters.	Example: <ul style="list-style-type: none"> <li>NULL0.</li> </ul> M-GigabitEthernet0/0/0
Ipv6Address	Specify a backup next hop.		Hexadecimal string, colon-separated.	N/A
ApplyOrigin	Set the ORIGIN attribute for BGP routes.	Data structure	Members include: <ul style="list-style-type: none"> <li>Origin</li> <li>OriginAsNum</li> </ul>	N/A
Origin	Specify an ORIGIN		Enumeration: <ul style="list-style-type: none"> <li>1—egp.</li> </ul>	N/A

Column name	Column description attribute.	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—igp.</li> <li>3—incomplete.</li> </ul>	
OriginAsNum	Specify the AS number for EGP routes.		Unsigned integer. Value range: 1 to 4294967295.	The AsNumber can be set only when the Origin is set to egp.
ApplyIpPrecedence	Set an IP precedence.	Data structure	Members include: <ul style="list-style-type: none"> <li>IpPrecValue</li> <li>IpPrecClear</li> </ul>	N/A
IpPrecValue	Specify an IP precedence.		Unsigned integer. Value range: 0 to 7.	You cannot set IpPrecValue and IpPrecClear at the same time.
IpPrecClear	Clear the IP precedence of matching routes.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured..</li> </ul>	You cannot set IpPrecValue and IpPrecClear at the same time.
ApplyQoSLocId	Set a local QoS ID.	Data structure	Members include: <ul style="list-style-type: none"> <li>QoSLocIdValue</li> <li>QoSLocIdClear</li> </ul>	N/A
QoSLocIdValue	Specify a local QoS ID.		Unsigned integer. Value range: 1 to 4095.	You can not set QoSLocIdValue and QoSLocIdClear at the same time.
QoSLocIdClear	Clear the local QoS ID of matching routes.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured..</li> </ul>	You cannot set QoSLocIdValue and QoSLocIdClear at the same time.
ApplyTraffIndex	Set a traffic index.	Data structure	Members include: <ul style="list-style-type: none"> <li>TraffIndexValue</li> <li>TraffIndexClear</li> </ul>	N/A
TraffIndexValue	Specify a traffic index.		Unsigned integer. Value range: 1 to 64.	You cannot set TraffIndexValue and TraffIndexClear at the same time.
TraffIndexClear	Clear the traffic index of BGP routes.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured..</li> </ul>	You cannot set TraffIndexValue and TraffIndexClear at the same time.
Continue	Set the next node to be matched.		Unsigned integer. Value range: 0 to 65535.	N/A

## RoutePolicy/ExtcommunityList

This table contains route policy extcommunity list information.

## XML structure

```
<RoutePolicy>
  <ExtcommunityList>
    <List>
      <ListNum></ListNum>
      <Index></Index>
      <Mode></Mode>
      <Rt></Rt>
      <SoO></SoO>
    </List>
  </ExtcommunityList>
</RoutePolicy>
```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	ExtcommunityList
Table type	Multi-instance table
Row name	List
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ListNum	ListNum	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Index	Node	Index	Unsigned integer. Value range: 1 to 4294967295	N/A
Mode	Operation type of extcommunity list.		Enumeration: <ul style="list-style-type: none"><li>0—permit.</li><li>1—deny.</li></ul>	N/A
Rt	Route-target		String. Length: 3 to 21 characters. Format: IP<X.X.X.X>:NN<0-65535> or AS<0-65535>:NN<0-4294967295> or AS<65536-4294967295>:NN<0-65535>.	Example: 101:3 or 192.168.122.15:1 or 70000:3.  Repeat supported for 32 times along with SoO configuration.

Column name	Column description	Column type	Data type and restrictions	Remarks
SoO	Site-of-Origin		String. Length: 3 to 21 characters. Format: IP<X.X.X.X>:NN<0-65535> or AS<0-65535>:NN<0-4294967 295> or AS<65536-4294967295>:NN< 0-65535>.	Example: 101:3 or 192.168.122.15:1 or 70000:3.  Repeat supported for 32 times along with Rt configuration.

## RoutePolicy/CommunityList

This table contains route policy community list information.

### XML structure

```

<RoutePolicy>
  <CommunityList>
    <List>
      <ListName></ListName>
      <Level></Level>
      <Index></Index>
      <Mode></Mode>
      <CommunityNumber></CommunityNumber>
      <CommunityAttr></CommunityAttr>
      <RegularExpression></RegularExpression>
    </List>
  </CommunityList>
</RoutePolicy>

```

### Table description

Item	Description
Feature name	RoutePolicy
Table name	CommunityList
Table type	Multi-instance table
Row name	List
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ListName	List name	Index	Community list number: Unsigned integer. Value range: Basic:1 to 99. Advanced:100 to 199. Community list name: String, case-sensitive. Length: 1 to 63 characters.	Community list name cannot be all made up of numbers.
Level	List level.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Basic.</li> <li>2—Advanced.</li> </ul>	N/A
Index	Node	Index	Unsigned integer. Value range: 1 to 4294967295	N/A
Mode	Operation type of community list.		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	N/A
CommunityNumber	Community number.		Unsigned integer. Value range: 1 to 4294967295. String. Length: 3 to 11 characters. Format: AA<0-65535>:NN<0-65535>	Example: 10 or 1:65535  Repeat supported for 32 times along with CommunityAttr.  Only supported for basic community list.
CommunityAttr	Community attribute.		Enumeration: <ul style="list-style-type: none"> <li>1—Internet.</li> <li>2—No-advertise.</li> <li>3—no-export.</li> <li>4—no-export-subconfed.</li> </ul>	Repeat supported for 32 times along with CommunityNumber. Only supported for basic community list.
RegularExpression	Regular expression.		String. Length: 1 to 63 characters.	Example: ^10 Only supported for advanced community list.

## RoutePolicy/TagList

This table contains route policy tag list information.

### XML structure

```
<RoutePolicy>
  <TagList>
```



```

<List>
  <ListNum></ListNum>
  <Index></Index>
  <Mode></Mode>
  <TagValue></TagValue>
</List>
</TagList>
</RoutePolicy>

```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	TagList
Table type	Multi-instance table
Row name	List
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ListNum	List number	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Index	Node	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
Mode	Operation type of tag list		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	N/A
TagValue	Tag value		Unsigned integer. Value range: 0 to 4294967295.	Repeat supported for 32 times.

## RoutePolicy/RdList

This table contains route policy Rd list information.

## XML structure

```

<RoutePolicy>
  <RdList>

```

```

<List>
  <ListNum></ListNum>
  <Index></Index>
  <Mode></Mode>
  <RdValue></RdValue>
</List>
</RdList>
</RoutePolicy>

```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	RdList
Table type	Multi-instance table
Row name	List
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ListNum	List number	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Index	Node	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
Mode	Operation type of RD list		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	N/A
RdValue	Rd value		String. Length: 3 to 21 characters. Format: IP<X.X.X.X>:NN<0-65535> or IP<X.X.X.X>:* or AS<0-65535>:NN<0-4294967295> or AS<0-65535>:* or AS<65536-4294967295>:NN<0-65535> or AS<65536-4294967295>:*	Repeat supported for 10 times.

# RoutePolicy/MacList

This table contains route policy MAC list information.

## XML structure

```
<RoutePolicy>
  <MacList>
    <List>
      <MaclistName></MaclistName>
      <Index></Index>
      <Mode></Mode>
      <MacAddress></MacAddress>
      <MaskLength></MaskLength>
    </List>
  </MacList>
</RoutePolicy>
```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	MacList
Table type	Multi-instance table
Row name	List
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaclistName	Name of the MAC list.	Index	String. Length: 1 to 63 characters.	N/A
Index	MAC list item index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Mode	Operation type of MAC list.		Enumeration: <ul style="list-style-type: none"><li>• 0—permit.</li><li>• 1—deny.</li></ul>	N/A
MacAddress	MAC address		Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
MaskLength	Mask length		Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 0 to 48.	

# Contents

RoutePolicy .....	1
RoutePolicy/IPv4Prefix .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
RoutePolicy/IPv6PrefixList .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
RoutePolicy/Policy .....	3
XML structure .....	3
Table description .....	5
Columns .....	6
RoutePolicy/ExtcommunityList .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
RoutePolicy/CommunityList .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
RoutePolicy/TagList .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
RoutePolicy/RdList .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
RoutePolicy/MacList .....	19
XML structure .....	19
Table description .....	19
Columns .....	19

# RoutePolicy

## RoutePolicy/IPv4Prefix

This table contains route policy IPv4 prefix information.

### XML structure

```
<RoutePolicy>
  <IPv4PrefixList>
    <PrefixList>
      <PrefixListName></PrefixListName>
      <Index></Index>
      <Mode></Mode>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <MinPrefixLength></MinPrefixLength>
      <MaxPrefixLength></MaxPrefixLength>
    </PrefixList>
  </IPv4PrefixList>
</RoutePolicy>
```

### Table description

Item	Description
Feature name	RoutePolicy
Table name	IPv4PrefixList
Table type	Multi-instance table
Row name	PrefixList
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PrefixListName	Name of prefix list.	Index	String, case-sensitive. Length: 1 to 63 characters.	N/A
Index	Node.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Mode	Operation type of prefix list.		Enumeration: <ul style="list-style-type: none"><li>0—permit.</li><li>1—deny.</li></ul>	N/A
Ipv4Address	IPv4 address.		IPv4: String, dotted decimal	IPv4 example: 1.1.1.1

Column name	Column description	Column type	Data type and restrictions	Remarks
			notation.	
Ipv4PrefixLength	Mask length of IP address.		Unsigned integer. Value range: 0 to 32.	N/A
MinPrefixLength	Greater than or equal to this value.	N/A	Unsigned integer. • Value range: 0 to 32.	Ipv4PrefixLength ≤ MinPrefixLength ≤ MaxPrefixLength.
MaxPrefixLength	Less than or equal to this value.	N/A	Unsigned integer. • Value range: 0 to 32.	Ipv4PrefixLength ≤ MinPrefixLength ≤ MaxPrefixLength.

## RoutePolicy/IPv6PrefixList

This table contains route policy IPv6 prefix information.

### XML structure

```

<RoutePolicy>
  <IPv6PrefixList>
    <PrefixList>
      <PrefixListName></PrefixListName>
      <Index></Index>
      <Mode></Mode>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <MinPrefixLength></MinPrefixLength>
      <MaxPrefixLength></MaxPrefixLength>
    </PrefixList>
  </IPv6PrefixList>
</RoutePolicy>

```

### Table description

Item	Description
Feature name	RoutePolicy
Table name	IPv6PrefixList
Table type	Multi-instance table
Row name	PrefixList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PrefixListName	Name of prefix list.	Index	String, case-sensitive. Length: 1 to 63 characters.	N/A
Index	Node.	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Mode	Operation type of prefix list.		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	N/A
Ipv6Address	IPv6 address.		IPv6: String, hexadecimal notation.	IPv6 example: 1:1::1:1
Ipv6PrefixLength	Prefix length of IP address.		Unsigned integer. Value range: 0 to 128.	N/A
MinPrefixLength	Greater than or equal to this value.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 0 to 128</li> </ul>	Ipv6PrefixLength ≤ MinPrefixLength ≤ MaxPrefixLength.
MaxPrefixLength	Less than or equal to this value.	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 0 to 128.</li> </ul>	Ipv6PrefixLength ≤ MinPrefixLength ≤ MaxPrefixLength.

## RoutePolicy/Policy

This table contains route policy information.

## XML structure

```

<RoutePolicy>
  <Policy>
    <Entry>
      <PolicyName></PolicyName>
      <Index></Index>
      <Mode></Mode>
      <Description></Description>
      <Match>
        <IPv4AddressPrefixList></IPv4AddressPrefixList>
        <IPv6AddressPrefixList></IPv6AddressPrefixList>
        <ExtcommunityList></ExtcommunityList>
      </Match>
      <Tag></Tag>
      <Interface></Interface>
      <L3vni></L3vni>
      <RouteType></RouteType>
      <TagList></TagList>
      <RdList></RdList>
      <Cost></Cost>
      <IPv4AddressAcl></IPv4AddressAcl>
    </Entry>
  </Policy>
</RoutePolicy>

```



```

    <IPv4NextHopAcl></IPv4NextHopAcl>
    <IPv4NextHopPrefixList></IPv4NextHopPrefixList>
    <IPv4RouteSourceAcl></IPv4RouteSourceAcl>
    <IPv4RouteSourcePrefixList></IPv4RouteSourcePrefixList>
    <IPv6AddressAcl></IPv6AddressAcl>
    <IPv6NextHopAcl></IPv6NextHopAcl>
    <IPv6NextHopPrefixList></IPv6NextHopPrefixList>
    <IPv6RouteSourceAcl></IPv6RouteSourceAcl>
    <IPv6RouteSourcePrefixList></IPv6RouteSourcePrefixList>
    <LocalPreference></LocalPreference>
    <MacList></MacList>
    <MplsLabel></MplsLabel>
    <Rpki></Rpki>
</Match>
<MatchCommunityList>
    <List></List>
    <WholeMatch></WholeMatch>
</MatchCommunityList>
<MatchVlan>
    <VlanId></VlanId>
    <VlanIdRangeStart></VlanIdRangeStart>
    <VlanIdRangeEnd></VlanIdRangeEnd>
</MatchVlan>
<Apply>
    <ExtCommunityRtValue></ExtCommunityRtValue>
    <ExtCommunityRtType></ExtCommunityRtType>
    <VpnPeerId></VpnPeerId>
    <CostValue></CostValue>
    <CostMode></CostMode>
    <LocalPreference></LocalPreference>
    <L3vni></L3vni>
    <ASPath></ASPath>
    <ASPathType></ASPathType>
    <CommunityNumber></CommunityNumber>
    <CommunityAttr></CommunityAttr>
    <CommunityType></CommunityType>
    <Exp></Exp>
    <CommListDelete></CommListDelete>
    <CostType></CostType>
    <IPv6NextHop></IPv6NextHop>
    <ISIS></ISIS>
    <MplsLabel></MplsLabel>
    <Preference></Preference>
    <PreferredValue></PreferredValue>
    <PrefixPriority></PrefixPriority>
    <Tag></Tag>
</Apply>
<ApplyIpv4NextHop>

```

```

    <NextHopAddr></NextHopAddr>
    <Public></Public>
    <VrfName></VrfName>
  </ApplyIpv4NextHop>
  <ApplyFastReroute>
    <InterfaceName></InterfaceName>
    <IpAddress></IpAddress>
  </ApplyFastReroute>
  <ApplyIPv6FastReroute>
    <Ipv6InterfaceName></Ipv6InterfaceName>
    <Ipv6Address></Ipv6Address>
  </ApplyIPv6FastReroute>
  <ApplyOrigin>
    <Origin></Origin>
    <OriginAsNum></OriginAsNum>
  </ApplyOrigin>
  <ApplyIpPrecedence>
    <IpPrecValue></IpPrecValue>
    <IpPrecClear></IpPrecClear>
  </ApplyIpPrecedence>
  <ApplyQosLocId>
    <QosLocIdValue></QosLocIdValue>
    <QosLocIdClear></QosLocIdClear>
  </ApplyQosLocId>
  <ApplyTrafIndex>
    <TrafIndexValue></TrafIndexValue>
    <TrafIndexClear></TrafIndexClear>
  </ApplyTrafIndex>
  <Continue></Continue>
</Entry>
</Policy>
</RoutePolicy>

```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	Policy
Table type	Multi-instance table
Row name	Entry
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of route policy.	Index	String, case-sensitive. Length: 1 to 63 characters.	N/A
Index	Node.	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Mode	Operation type of Route Policy.		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	N/A
Description	Description of route policy.		String, case-sensitive. Length: 1 to 80 characters.	N/A
Match	If match condition.	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4AddressPrefixList.</li> <li>IPv6AddressPrefixList</li> <li>ExtcommunityList</li> <li>Tag</li> <li>Interface</li> <li>L3vni</li> <li>RouteType</li> <li>TagList</li> <li>RdList</li> <li>Cost</li> <li>IPv4AddressAcl</li> <li>IPv4NextHopAcl</li> <li>IPv4NextHopPrefixList</li> <li>IPv4RouteSourceAcl</li> <li>IPv4RouteSourcePrefixList</li> <li>IPv6AddressAcl</li> <li>IPv6NextHopAcl</li> <li>IPv6NextHopPrefixList</li> <li>IPv6RouteSourceAcl</li> <li>IPv6RouteSourcePrefixList</li> <li>LocalPreference</li> <li>MacList</li> <li>MplsLabel</li> <li>Rpki</li> </ul>	N/A
IPv4AddressPrefixList	Match IPv4 address using prefix list.		String, case-sensitive. Length: 1 to 63 characters.	N/A
IPv6AddressPrefixList	Match IPv6 address using prefix list.		String, case-sensitive. Length: 1 to 63 characters.	N/A
ExtcommunityList	Match BGP routes whose extended community		Unsigned integer. Value range: 1 to 65535.	Repeat supported for 32 times.

Column name	Column description	Column type	Data type and restrictions	Remarks
	attribute matches a specified extended community list			
Tag	Match IGP routes with specified tag		Unsigned integer. Value range: 0 to 4294967295	N/A
Interface	Match routes with specified Interface.		Interface name: String, interface type and interface number. Interface index: Unsigned integer. Length: 32 bits.	Support interface name or interface index. Repeat supported for 16 times.
L3vni	Match the L3 VXLAN ID of BGP routes.		Unsigned integer. Value range: 0 to 16777215	N/A
RouteType	Match route type.		Enumeration: <ul style="list-style-type: none"> <li>1—internal.</li> <li>2—external-type1or2.</li> <li>3—external-type1.</li> <li>4—external-type2.</li> <li>5—nssa-external-type1or2.</li> <li>6—nssa-external- type1.</li> <li>7—nssa-external- type2.</li> <li>8—is-is-level-1.</li> <li>9—is-is-level-2.</li> <li>10—bgp-evpn-mac-ip.</li> <li>11—bgp-evpn-imet.</li> <li>12—bgp-evpn-ip-prefix.</li> <li>13—eigrp-internal.</li> <li>14—eigrp-external.</li> </ul>	Repeat supported for 14 times. One route type cannot be configured twice in one command.
TagList	Match IGP routes with the specified tag list.		Unsigned integer. Value range: 1 to 65535.	N/A
RdList	Match VPN routes with the specified RD list.		Unsigned integer. Value range: 1 to 65535.	N/A
Cost	Match routes with the specified cost.		Unsigned integer. Value range: 0 to 4294967295.	N/A
IPv4Address Acl	Match the desination address of IPv4 routes using an ACL.		Unsigned integer. Value range: 2000 to 3999.	N/A
IPv4NextHop	Match the next		Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Acl	hop of IPv4 routes using an ACL.		Value range: 2000 to 2999.	
IPv4NextHopPrefixList	Match the next hop of IPv4 routes using a prefix list.		String, case-sensitive. Length: 1 to 63 characters.	N/A
IPv4RouteSourceAcl	Match the source address of IPv4 routes using an ACL.		Unsigned integer. Value range: 2000 to 2999.	N/A
IPv4RouteSourcePrefixList	Match the source address of IPv4 routes using an IP prefix list.		String, case-sensitive. Length: 1 to 63 characters.	N/A
IPv6AddressAcl	Match the destination address of IPv6 routes using an ACL.		Unsigned integer. Value range: 2000 to 3999.	N/A
IPv6NextHopAcl	Match the next hop of IPv6 routes using an ACL.		Unsigned integer. Value range: 2000 to 2999.	N/A
IPv6NextHopPrefixList	Match the next hop of IPv6 routes using an IPv6 prefix list.		String, case-sensitive. Length: 1 to 63 characters.	N/A
IPv6RouteSourceAcl	Match the source address of IPv6 routes using an ACL.		Unsigned integer. Value range: 2000 to 2999.	N/A
IPv6RouteSourcePrefixList	Match the source address of IPv6 routes using an IPv6 prefix list.		String, case-sensitive. Length: 1 to 63 characters.	N/A
LocalPreference	Match BGP routes that have the specified local preference.		Unsigned integer. Value range: 0 to 4294967295.	N/A
MacList	Match MAC addresses that are contained in EVI IS-IS packets.		String, case-sensitive. Length: 1 to 63 characters.	N/A
MplsLabel	Match routes with the specified MPLS labels.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured.</li> </ul>	N/A
Rpki	Match routes with the specified RPKI validation state.		Enumeration: <ul style="list-style-type: none"> <li>0—invalid</li> <li>1—not-found</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—valid</li> </ul>	
MatchCommunityList	If match communitylist condition.	Data structure	Members include: <ul style="list-style-type: none"> <li>List.</li> <li>WholeMatch</li> </ul>	Repeat supported for 32 times.
List	Match BGP routes whose community attribute matches a specified community list.		Basic community list number: Unsigned integer. Value range:1 to 99. Advanced community list number: Unsigned integer. Value range:100 to 199. Community list name: String, case-sensitive. Length: 1 to 63 characters.	List name cannot be all made up of numbers.
WholeMatch	Match all communities exactly.		Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	Not supported when specifying an advanced community list number.
MatchVlan	Match routes that contain the specified VLANs.	Data structure	Members include: <ul style="list-style-type: none"> <li>VlanId</li> <li>VlanIdRangeStart</li> <li>VlanIdRangeEnd.</li> </ul>	A maximum of 16 VLAN ID items can be specified.
VlanId	Specify a VLAN ID.		Unsigned integer. Value range: 1 to 4094.	N/A
VlanIdRangeStart	Specify the start VLAN ID of a VLAN ID range.		Unsigned integer. Value range: 1 to 4094.	You must set both VlanIdRangeStart and VlanIdRangeEnd, or set neither of them.
VlanIdRangeEnd	Specify the end VLAN ID of a VLAN ID range.		Unsigned integer. Value range: 1 to 4094.	You must set both of VlanIdRangeStart and VlanIdRangeEnd, or set neither of them.
Apply	Apply action.	Data structure	Members include: <ul style="list-style-type: none"> <li>ExtCommunityRtValue.</li> <li>ExtCommunityRtType.</li> <li>VpnPeerId</li> <li>CostValue.</li> <li>CostMode.</li> <li>LocalPreference.</li> <li>L3vni.</li> <li>ASPath.</li> <li>ASPathType.</li> <li>CommunityNumber.</li> <li>CommunityAttr.</li> <li>CommunityType.</li> <li>Exp.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>CommListDelete.</li> <li>CostType.</li> <li>IPv6NextHop.</li> <li>ISIS.</li> <li>MplsLabel.</li> <li>Preference.</li> <li>PreferredValue.</li> <li>PrefixPriority.</li> <li>Tag.</li> </ul>	
ExtCommunityRtValue	The value of Ext Community Route Target (RT).		String. Length: 3 to 21 characters. <ul style="list-style-type: none"> <li>The format is IP&lt;X.X.X.X&gt;:NN&lt;0-65535&gt; or AS&lt;0-65535&gt;:NN&lt;0-4294967295&gt; or AS&lt;65536-4294967295&gt;:NN&lt;0-65535&gt;.</li> </ul>	Example: 101:3 or 192.168.122.15:1 or 70000:3. Repeat supported for Get and Get-Bulk action.
ExtCommunityRtType	The Ext Community RT additive type.		Enumeration: <ul style="list-style-type: none"> <li>1—Additive.</li> <li>2—Replace.</li> </ul>	N/A
VpnPeerId	Set vpn-peer-id		Unsigned integer. Value range: 1 to 134217727	N/A
CostValue	Route cost value.		Unsigned integer. Value range: 0 to 4294967295	N/A
CostMode	Route cost change mode.		Enumeration: <ul style="list-style-type: none"> <li>0—Update.</li> <li>1—Increase.</li> <li>2—Decrease.</li> </ul>	N/A
LocalPreference	BGP route local preference.		Unsigned integer. Value range: 0 to 4294967295	N/A
L3vni	Specify an L3 VXLAN ID for BGP routes.		Unsigned integer. Value range: 0 to 16777215	N/A
ASPath	AS_PATH attribute value.		Unsigned integer. Value range: 1 to 4294967295	Repeat supported for 32 times.
ASPathType	AS_PATH attribute additive type.		Enumeration: <ul style="list-style-type: none"> <li>1—Additive.</li> <li>2—Replace.</li> </ul>	N/A
CommunityNumber	Community number.		Unsigned integer. Value range:	Example: 10 or 1:65535 Repeat supported for

Column name	Column description	Column type	Data type and restrictions	Remarks
			1 to 4294967295. String. Length: 3 to 11 characters. Format: AA<0-65535>:NN<0-65535>.	32 times along with CommunityAttr.
CommunityAttr	Community attribute.		Enumeration: <ul style="list-style-type: none"> <li>1—Internet.</li> <li>2—No-advertise.</li> <li>3—no-export.</li> <li>4—no-export-subconfed.</li> </ul>	Repeat supported for 32 times along with CommunityNumber.
CommunityType	Community additive type.		Enumeration: <ul style="list-style-type: none"> <li>0—Replace.</li> <li>1—Additive.</li> <li>2—None.</li> </ul>	N/A
Exp	Specify an MPLS EXP value		Unsigned integer. Value range: 0 to 7	N/A
CommListDelete	Delete the COMMUNITY attributes from BGP routes.		Basic community list number: Unsigned integer. Value range:1 to 99. Advanced community list number: Unsigned integer. Value range:100 to 199. Community list name: String, case-sensitive. Length: 1 to 63 characters.	N/A
CostType	Specify a cost type.		Enumeration: <ul style="list-style-type: none"> <li>1—external.</li> <li>2—internal.</li> <li>3—type-1</li> <li>4—type-2</li> </ul>	N/A
IPv6NextHop	Specify a next hop for IPv6 routes.		Hexadecimal string, colon-separated.	N/A
ISIS	Specify an IS-IS level.		Enumeration: <ul style="list-style-type: none"> <li>1—level-1.</li> <li>2—level-1-2.</li> <li>3—level-2.</li> </ul>	N/A
MplsLabel	Specify whether to configure an MPLS label or not.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured.</li> </ul>	N/A
Preference	Specify a preference		Unsigned integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	for a routing protocol.		Value range: 1 to 255.	
PreferredValue	Specify a preferred value for BGP routes.		Unsigned integer. Value range: 0 to 65535.	N/A
PrefixPriority	Specify a prefix priority.		Enumeration: <ul style="list-style-type: none"> <li>1—critical.</li> <li>2—high.</li> <li>3—medium.</li> </ul>	N/A
Tag	Specify a tag for IGP routes.		Unsigned integer. Value range: 0 to 4294967295.	N/A
ApplyIpv4NextHop	Specify next hop.	Data structure	Members include: <ul style="list-style-type: none"> <li>NextHopAddr.</li> <li>Public.</li> <li>VrfName.</li> </ul>	N/A
NextHopAddr	Specify next hop address, x.x.x.x Ip-address.		IPv4: String, dotted decimal notation.	N/A
Public	Public network.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured.</li> </ul>	N/A
VrfName	VPN instance name.		String. Length: 0 to 31 characters.	An empty string indicates the public network.
ApplyFastReroute	Set a backup link for IPv4 fast reroute.	Data structure	Members include: <ul style="list-style-type: none"> <li>InterfaceName.</li> <li>IpAddress..</li> </ul>	N/A
InterfaceName	Specify a backup output interface by itsname.		String. Length: 0 to 47 characters.	Example: <ul style="list-style-type: none"> <li>NULL0.</li> <li>M-GigabitEthernet0/0/0</li> </ul>
IpAddress	Specify a backup next hop.		IPv4: String, dotted decimal notation.	N/A
ApplyIPv6FastReroute	Set a backup link for IPv6 fast reroute.	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6InterfaceName.</li> <li>Ipv6Address.</li> </ul>	N/A
Ipv6InterfaceName	Specify a backup output interface by itsname.		String. Length: 0 to 47 characters.	Example: <ul style="list-style-type: none"> <li>NULL0.</li> <li>M-GigabitEthernet0/0/0</li> </ul>
Ipv6Address	Specify a backup next hop.		Hexadecimal string, colon-separated.	N/A
ApplyOrigin	Set the ORIGIN attribute for BGP	Data structure	Members include: <ul style="list-style-type: none"> <li>Origin</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	routes.		<ul style="list-style-type: none"> <li>OriginAsNum</li> </ul>	
Origin	Specify an ORIGIN attribute.		Enumeration: <ul style="list-style-type: none"> <li>1—egp.</li> <li>2—igp.</li> <li>3—incomplete.</li> </ul>	N/A
OriginAsNum	Specify the AS number for EGP routes.		Unsigned integer. Value range: 1 to 4294967295.	The AsNumber can be set only when Origin is set to egp.
ApplyIpPrecedence	Set an IP precedence.	Data structure	Members include: <ul style="list-style-type: none"> <li>IpPrecValue</li> <li>IpPrecClear</li> </ul>	N/A
IpPrecValue	Specify an IP precedence.		Unsigned integer. Value range: 0 to 7.	You cannot set IpPrecValue and IpPrecClear at the same time.
IpPrecClear	Clear the IP precedence off matching routes.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured..</li> </ul>	You cannot set IpPrecValue and IpPrecClear at the same time.
ApplyQosLocId	Set a local QoS ID.	Data structure	Members include: <ul style="list-style-type: none"> <li>QosLocIdValue</li> <li>QosLocIdClear</li> </ul>	N/A
QosLocIdValue	Specify a local QoS ID.		Unsigned integer. Value range: 1 to 4095.	You cannot set QosLocIdValue and QosLocIdClear at the same time.
QosLocIdClear	Clear the local QoS ID of matching routes.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured..</li> </ul>	You cannot set QosLocIdValue and QosLocIdClear at the same time.
ApplyTraffIndex	Set a traffic index.	Data structure	Members include: <ul style="list-style-type: none"> <li>TraffIndexValue</li> <li>TraffIndexClear</li> </ul>	N/A
TraffIndexValue	Specify a traffic index.		Unsigned integer. Value range: 1 to 64.	You cannot set TraffIndexValue and TraffIndexClear at the same time.
TraffIndexClear	Clear the traffic index of BGP routes.		Enumeration: <ul style="list-style-type: none"> <li>0—Not configured.</li> <li>1—Configured.</li> </ul>	You cannot set TraffIndexValue and TraffIndexClear at the same time.
Continue	Set the next node to be matched.		Unsigned integer. Value range: 0 to 65535.	N/A

# RoutePolicy/ExtcommunityList

This table contains route policy extcommunity list information.

## XML structure

```
<RoutePolicy>
  <ExtcommunityList>
    <List>
      <ListNum></ListNum>
      <Index></Index>
      <Mode></Mode>
      <Rt></Rt>
      <SoO></SoO>
    </List>
  </ExtcommunityList>
</RoutePolicy>
```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	ExtcommunityList
Table type	Multi-instance table
Row name	List
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ListNum	ListNum	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Index	Node	Index	Unsigned integer. Value range: 1 to 4294967295	N/A
Mode	Operation type of extcommunity list.		Enumeration: <ul style="list-style-type: none"><li>• 0—permit.</li><li>• 1—deny.</li></ul>	N/A
Rt	Route-target		String. Length: 3 to 21 characters.  Format: IP<X.X.X.X>:NN<0-65535> or AS<0-65535>:NN<0-4294967	Example: 101:3 or 192.168.122.15:1 or 70000:3.  Repeat supported for 32 times along with SoO configuration.

Column name	Column description	Column type	Data type and restrictions	Remarks
			295> or AS<65536-4294967295>:NN<0-65535>.	
SoO	Site-of-Origin		String. Length: 3 to 21 characters. Format: IP<X.X.X.X>:NN<0-65535> or AS<0-65535>:NN<0-4294967295> or AS<65536-4294967295>:NN<0-65535>.	Example: 101:3 or 192.168.122.15:1 or 70000:3. Repeat supported for 32 times along with Rt configuration.

## RoutePolicy/CommunityList

This table contains route policy community list information.

### XML structure

```

<RoutePolicy>
  <CommunityList>
    <List>
      <ListName></ListName>
      <Level></Level>
      <Index></Index>
      <Mode></Mode>
      <CommunityNumber></CommunityNumber>
      <CommunityAttr></CommunityAttr>
      <RegularExpression></RegularExpression>
    </List>
  </CommunityList>
</RoutePolicy>

```

### Table description

Item	Description
Feature name	RoutePolicy
Table name	CommunityList
Table type	Multi-instance table
Row name	List
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ListName	List name	Index	Community list number: Unsigned integer. Value range: Basic:1 to 99. Advanced:100 to 199. Community list name: String, case-sensitive. Length: 1 to 63 characters.	Community list name cannot be all made up of numbers.
Level	List level.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Basic.</li> <li>2—Advanced.</li> </ul>	N/A
Index	Node	Index	Unsigned integer. Value range: 1 to 4294967295	N/A
Mode	Operation type of community list.		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	N/A
CommunityNumber	Community number.		Unsigned integer. Value range: 1 to 4294967295. String. Length: 3 to 11 characters. Format: AA<0-65535>:NN<0-65535>	Example: 10 or 1:65535  Repeat supported for 32 times along with CommunityAttr.  Only supported for basic community list.
CommunityAttr	Community attribute.		Enumeration: <ul style="list-style-type: none"> <li>1—Internet.</li> <li>2—No-advertise.</li> <li>3—no-export.</li> <li>4—no-export-subconfed.</li> </ul>	Repeat supported for 32 times along with CommunityNumber.  Only supported for basic community list.
RegularExpression	Regular expression.		String. Length: 1 to 63 characters.	Example: ^10  Only supported for advanced community list.

## RoutePolicy/TagList

This table contains route policy tag list information.

## XML structure

```
<RoutePolicy>
```

```

<TagList>
  <List>
    <ListNum></ListNum>
    <Index></Index>
    <Mode></Mode>
    <TagValue></TagValue>
  </List>
</TagList>
</RoutePolicy>

```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	TagList
Table type	Multi-instance table
Row name	List
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ListNum	List number	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Index	Node	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
Mode	Operation type of tag list		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	N/A
TagValue	Tag value		Unsigned integer. Value range: 0 to 4294967295.	Repeat supported for 32 times.

## RoutePolicy/RdList

This table contains route policy Rd list information.

## XML structure

```

<RoutePolicy>
  <RdList>

```

```

<List>
  <ListNum></ListNum>
  <Index></Index>
  <Mode></Mode>
  <RdValue></RdValue>
</List>
</RdList>
</RoutePolicy>

```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	RdList
Table type	Multi-instance table
Row name	List
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ListNum	List number	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Index	Node	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
Mode	Operation type of RD list		Enumeration: <ul style="list-style-type: none"> <li>0—permit.</li> <li>1—deny.</li> </ul>	N/A
RdValue	Rd value		String. Length: 3 to 21 characters.  Format: IP<X.X.X.X>:NN<0-65535> or IP<X.X.X.X>:*  or AS<0-65535>:NN<0-4294967295> or AS<0-65535>:* or AS<65536-4294967295>:NN<0-65535> or AS<65536-4294967295>:*	Repeat supported for 10 times.

# RoutePolicy/MacList

This table contains route policy MAC list information.

## XML structure

```
<RoutePolicy>
  <MacList>
    <List>
      <MaclistName></MaclistName>
      <Index></Index>
      <Mode></Mode>
      <MacAddress></MacAddress>
      <MaskLength></MaskLength>
    </List>
  </MacList>
</RoutePolicy>
```

## Table description

Item	Description
Feature name	RoutePolicy
Table name	MacList
Table type	Multi-instance table
Row name	List
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaclistName	Name of the MAC list.	Index	String. Length: 1 to 63 characters.	N/A
Index	MAC list item index	Index	Unsigned integer. Value range: 1 to 65535.	N/A
Mode	Operation type of MAC list.		Enumeration: <ul style="list-style-type: none"><li>0—permit.</li><li>1—deny.</li></ul>	N/A
MacAddress	MAC address		Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
MaskLength	Mask length		Unsigned integer. Value range: 0 to 48.	N/A





# Contents

RoutePolicy .....	2
RoutePolicy/IPv4Prefix.....	2
RoutePolicy/Policy .....	2
RoutePolicy/ExtcommunityList.....	3
RoutePolicy/CommunityList.....	3
RoutePolicy/TagList.....	3
RoutePolicy/RdList.....	4
RoutePolicy/MacList .....	4

# RoutePolicy

## RoutePolicy/IPv4Prefix

Message	Explanation
Invalid MinPrefixLength value. Note: Prefix length <= MinPrefixLength <= MaxPrefixLength. 最小前缀长度的值非法 注意：前缀长度<= 最小前缀长度<= 最大前缀长度。	Invalid configuration, please modify configuration under the guidance.
Invalid MaxPrefixLength value. Note: Prefix length <= MinPrefixLength <= MaxPrefixLength. 最大前缀长度的值非法 注意：前缀长度<= 最小前缀长度<= 最大前缀长度。	Invalid configuration, please modify configuration under the guidance.
Invalid combination of mask length, MaxPrefixLength value and MinPrefixLength value. Note: Prefix length <= MinPrefixLength <= MaxPrefixLength. 前缀长度、最小前缀长度和最大前缀长度之间的大小关系非法 注意：前缀长度<= 最小前缀长度<= 最大前缀长度。	Invalid configuration, please modify configuration under the guidance.
Invalid MaxPrefixLength value or MinPrefixLength value. Note: Prefix length <= MinPrefixLength <= MaxPrefixLength. 最小前缀长度或最大前缀长度之间的值非法 注意：前缀长度<= 最小前缀长度<= 最大前缀长度。	Invalid configuration, please modify configuration under the guidance.

## RoutePolicy/Policy

Message	Explanation
ExtCommunityRtValue and ExtCommunityRtType must be configured together. 扩展团体属性值和类型必须同时配置。	Invalid configuration, please modify configuration under the guidance.
Invalid or unusable interfaces. 无效的或不可下刷的接口索引。	Invalid configuration, please modify configuration under the guidance.
Configuration number has exceeded the limit. 配置数目超限。	Invalid configuration, please modify configuration under the guidance.
Existed configuration. 已有相同配置，此配置不能下刷。	Same configuration has existed when creating a new configuration.
Vpnpeer is not customized on this device. 设备没有定制vpnpeer特性。	Configuration is not supported.

Same value of List is not supported in current repeat-group. 当前可重复组中不支持配置相同的团体属性。	Invalid configuration, please modify configuration under the guidance.
The CostValue and CostMode column must be configured at the same time. 必须同时配置路由开销值和模式。	Invalid configuration, please modify configuration under the guidance.
The ASPath and ASPathType column must be configured together. AS路径访问列表和类型必须同时配置。	Invalid configuration, please modify configuration under the guidance.

## RoutePolicy/ExtcommunityList

Message	Explanation
Existed configuration. 已有相同配置，此配置不能下刷。	Same configuration has existed when creating a new configuration.

## RoutePolicy/CommunityList

Message	Explanation
Configuration number has exceeded the limit. 配置数目超限。	Invalid configuration, please modify configuration under the guidance.
Existed configuration. 已有相同配置，此配置不能下刷。	Same configuration has existed when creating a new configuration.
Configuration is not supported in current community-list level. 当前团体属性列表级别下不支持此配置。	Invalid configuration, check community-list level.
Invalid index of community-list. 团体属性列表索引列配置错误。	Invalid configuration, please modify configuration under the guidance.
Wrong format in current operation mode. 带非索引列删除时，必须同时下刷匹配模式及对应配置。	Invalid configuration, please modify configuration under the guidance.

## RoutePolicy/TagList

Message	Explanation
Existed configuration. 已有相同配置，此配置不能下刷。	Same configuration has existed when creating a new configuration.

## RoutePolicy/RdList

Message	Explanation
Existed configuration. 已有相同配置，此配置不能下刷。	Same configuration has existed when creating a new configuration.

## RoutePolicy/MacList

Message	Explanation
Operation failed. The configuration already exists. 已有相同配置，此配置不能下刷。	Operation failed. The configuration already exists.

# Contents

ietf-routing .....	1
ietf-routing/routing .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ietf-routing/routing/control-plane-protocols .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
Example .....	2

# ietf-routing

The namespace of flexbng-device-info is "urn:ietf:params:xml:ns:yang:ietf-routing".

The Example on the end of the module sets an instance that the module can't be under top node.

## ietf-routing/routing

This table contains routing information.

### XML structure

```
<routing>
  <control-plane-protocols>
    <control-plane-protocol>
      <type></type>
      <name></name>
    </control-plane-protocol>
  </control-plane-protocols>
</routing>
```

### Table description

Item	Description
Feature name	ietf-routing
Table name	routing
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
control-plane-protocols	Information of the control-plane-protocols	Sublist	The details of the sublist refer to control-plane-protocols table.	N/A

# ietf-routing/routing/control-plane-protocols

This table contains control-plane-protocol information.

## XML structure

Please refer to the XML Structure of ietf-routing/touting.

## Table description

Item	Description
Feature name	ietf-routing
Table name	control-plane-protocols
Table type	Multi-instance table
Row name	control-plane-protocol
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
type	Routing protocol type	Index	String: case-sensitive <ul style="list-style-type: none"><li>ospfv3.</li></ul>	N/A
name	Instance name	Index	String. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.

## Example

配置一个 vpn 为 a 的 ospfv3 实例，并在该实例下创建一个 area

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target>
      <running/>
    </target>
    <config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0">
      <v:network-instances
xmlns:v="urn:ietf:params:xml:ns:yang:ietf-network-instance">
        <v:network-instance xc:operation="merge">
          <v:name>a</v:name>
          <v:vrf-root>
            <v:routing>
```



```

    <v:control-plane-protocols>
      <v:control-plane-protocol>
        <v:type>ospfv3</v:type>
        <v:name>l2</v:name>
        <b:ospfv3 xmlns:b="urn:ietf:params:xml:ns:yang:ietf-ospfv3">
          <b:instance>
            <b:af>ipv6</b:af>
            <b:areas>
              <b:area>
                <b:area-id>255.255.255.255</b:area-id>
              </b:area>
            </b:areas>
          </b:instance>
        </b:ospfv3>
      </v:control-plane-protocol>
    </v:control-plane-protocols>
  </v:routing>
</v:vrf-root>
</v:network-instance>
</v:network-instances>
</config>
</edit-config>
</rpc>

```

# Contents

ietf-routing .....	1
ietf-routing/routing .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ietf-routing/routing/control-plane-protocols .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
Example .....	2

# ietf-routing

The namespace of flexbng-device-info is "urn:ietf:params:xml:ns:yang:ietf-routing".

The Example on the end of the module sets an instance that the module can't be under top node.

## ietf-routing/routing

This table contains routing information.

### XML structure

```
<routing>
  <control-plane-protocols>
    <control-plane-protocol>
      <type></type>
      <name></name>
    </control-plane-protocol>
  </control-plane-protocols>
</routing>
```

### Table description

Item	Description
Feature name	ietf-routing
Table name	routing
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
control-plane-protocols	Information of the control-plane-protocols	Sublist	The details of the sublist refer to control-plane-protocols table.	N/A

## ietf-routing/routing/control-plane-protocols

This table contains control-plane-protocol information.

# XML structure

Please refer to the XML Structure of ietf-routing/routing.

## Table description

Item	Description
Feature name	ietf-routing
Table name	control-plane-protocols
Table type	Multi-instance table
Row name	control-plane-protocol
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
type	Routing protocol type	Index	String: case-sensitive <ul style="list-style-type: none"><li>ospfv3.</li></ul>	N/A
name	Instance name	Index	String. Length: 1 to 31 characters.	It must be an unsigned integer in the range of 1 to 65535.

## Example

配置一个 vpn 为 a 的 ospfv3 实例，并在该实例下创建一个 area

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target>
      <running/>
    </target>
    <config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0">
      <v:network-instances
xmlns:v="urn:ietf:params:xml:ns:yang:ietf-network-instance">
        <v:network-instance xc:operation="merge">
          <v:name>a</v:name>
          <v:vrf-root>
            <v:routing>
              <v:control-plane-protocols>
                <v:control-plane-protocol>
                  <v:type>ospfv3</v:type>
                  <v:name>12</v:name>
                  <b:ospfv3 xmlns:b="urn:ietf:params:xml:ns:yang:ietf-ospfv3">
                    <b:instance>
```

```
<b:af>ipv6</b:af>
<b:areas>
  <b:area>
    <b:area-id>255.255.255.255</b:area-id>
  </b:area>
</b:areas>
</b:instance>
</b:ospfv3>
</v:control-plane-protocol>
</v:control-plane-protocols>
</v:routing>
</v:vrf-root>
</v:network-instance>
</v:network-instances>
</config>
</edit-config>
</rpc>
```

# Contents

RRM.....	1
RRM/ChIProntoAll.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
RRM/PwrProntoAll.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
RRM/ApChIPronto.....	2
XML structure.....	2
Table description.....	2
Columns.....	3
RRM/ApGroupChIPronto.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
RRM/ApBaselineSave.....	4
XML structure.....	4
Table description.....	4
Columns.....	4
RRM/ApGroupBaselineSave.....	5
XML structure.....	5
Table description.....	5
Columns.....	5
RRM/GlobalBaselineSave.....	6
XML structure.....	6
Table description.....	6
Columns.....	6
RRM/BaselineRemove.....	6
XML structure.....	7
Table description.....	7
Columns.....	7
RRM/BaselineApply.....	7
XML structure.....	7
Table description.....	8
Columns.....	8

# RRM

## RRM/ChlProntoAll

This table contains the operation to make all the radios trigger channel change at next calibration cycle.

### XML structure

```
<RRM>
  <ChlProntoAll>
    <Pronto></Pronto>
  </ChlProntoAll>
</RRM>
```

### Table description

Item	Description
Feature name	RRM
Table name	ChlProntoAll
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Pronto	Trigger change channel at next calibration cycle	N/A	This column must be empty.	Required.

## RRM/PwrProntoAll

This table contains the operation to make all the radios trigger power change at next calibration cycle.

### XML structure

```
<RRM>
  <PwrProntoAll>
    <Pronto></Pronto>
  </PwrProntoAll>
```

</RRM>

## Table description

Item	Description
Feature name	RRM
Table name	PwrProntoAll
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Pronto	Trigger power change at next calibration cycle	N/A	This column must be empty.	Required.

## RRM/ApChlPronto

This table contains radio channel adjustment information.

## XML structure

```
<RRM>
  <ChlPronto>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <Pronto></Pronto>
    </Radio>
  </ChlPronto>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ChlPronto
Table type	Multi-instance table
Row name	Radio



Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
Pronto	Channel adjustment triggering	N/A	This column must be empty.	Required.

## RRM/ApGroupChlPronto

This table contains AP group channel adjustment information.

## XML structure

```

<RRM>
  <ApGroupChlPronto>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <Pronto></Pronto>
    </Radio>
  </ApGroupChlPronto>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupChlPronto
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
Pronto	Channel adjustment triggering	N/A	This column must be empty.	Required.

## RRM/ApBaselineSave

This table contains radio baseline saving information.

## XML structure

```
<RRM>
  <BaselineSave>
    <BaselineName></BaselineName>
    <ApName></ApName>
    <RadioID></RadioID>
    <Save></Save>
  </BaselineSave>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	BaselineSave
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BaselineName	Baseline name	Index	String: case-insensitive. Length: 1 to 32 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
Save	Save baseline	N/A	This column must be empty.	Required.

## RRM/APGroupBaselineSave

This table contains AP group baseline saving information.

### XML structure

```

<RRM>
  <ApGroupBaselineSave>
    <BaselineName></BaselineName>
    <ApGroupName></ApGroupName>
    <ApModel></ApModel>
    <RadioID></RadioID>
    <Save></Save>
  </ApGroupBaselineSave>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ApGroupBaselineSave
Table type	Multi-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BaselineName	Baseline name	Index	String: case-insensitive. Length: 1 to 32 characters.	N/A
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RadiolD	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
Save	Save baseline	N/A	This column must be empty.	Required.

## RRM/GlobalBaselineSave

This table contains global baseline saving information.

### XML structure

```

<RRM>
  <GlobalBaselineSave>
    <BaselineName></BaselineName>
    <Save></Save>
  </GlobalBaselineSave>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	GlobalBaselineSave
Table type	Multi-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BaselineName	Baseline name	Index	String: case-insensitive. Length: 1 to 32 characters.	N/A
Save	Save baseline	N/A	This column must be empty.	Required.

## RRM/BaselineRemove

This table contains baseline deleting information.

## XML structure

```
<RRM>
  <BaselineRemove>
    <BaselineName></BaselineName>
    <Remove></Remove>
  </BaselineRemove>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	BaselineRemove
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BaselineName	Baseline name	Index	String: case-insensitive. Length: 1 to 32 characters.	N/A
Remove	Remove baseline	N/A	This column must be empty.	Required.

## RRM/BaselineApply

This table contains baseline application information.

## XML structure

```
<RRM>
  <BaselineApply>
    <BaselineName></BaselineName>
    <Apply></Apply>
  </BaselineApply>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	BaselineApply
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BaselineName	Baseline name	Index	String: case-insensitive. Length: 1 to 32 characters.	N/A
Apply	Apply baseline	N/A	This column must be empty.	Required.

# Comware V7 RRM NETCONF XML API Configuration Reference

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# Contents

RRM	1
RRM/ClbInterval	1
XML structure	1
Table description	1
Columns	1
RRM/PwrClbInterval	1
XML structure	1
Table description	2
Columns	2
RRM/ApPowerCfg	2
XML structure	2
Table description	3
Columns	3
RRM/ApGroupPowerCfg	3
XML structure	3
Table description	4
Columns	4
RRM/ApChannelCfg	5
XML structure	5
Table description	5
Columns	5
RRM/ApGroupChannelCfg	6
XML structure	6
Table description	6
Columns	7
RRM/ApWsaCfg	7
XML structure	7
Table description	8
Columns	8
RRM/ApGroupWsaCfg	8
XML structure	8
Table description	9
Columns	9
RRM/ClbGroupCfg	9
XML structure	9
Table description	10
Columns	10
RRM/ClbGroupMemberCfg	10
XML structure	10
Table description	11
Columns	11
RRM/ClbGroupCreate	11
XML structure	11
Table description	11
Columns	12
RRM/ClbGroupDelete	12
XML structure	12
Table description	12
Columns	12



RRM/ClbGroupMerge	13
XML structure	13
Table description	13
Columns	13
RRM/ApPwrClbModeCfg	14
XML structure	14
Table description	14
Columns	14
RRM/ApGroupPwrClbModeCfg	15
XML structure	15
Table description	15
Columns	15
RRM/ApChlClbModeCfg	16
XML structure	16
Table description	16
Columns	16
RRM/ApGroupChlClbModeCfg	17
XML structure	17
Table description	17
Columns	17
RRM/ApTimeRangeNameCfg	18
XML structure	18
Table description	18
Columns	18
RRM/ApGroupTimeRangeNameCfg	19
XML structure	19
Table description	19
Columns	19
RRM/ApScanOnlyCfg	20
XML structure	20
Table description	20
Columns	20
RRM/ApGroupScanOnlyCfg	21
XML structure	21
Table description	21
Columns	21
RRM/HierarchyClbMode	22
XML structure	22
Table description	22
Columns	22
RRM/ApChlClbSntCfg	23
XML structure	23
Table description	23
Columns	23
RRM/ApGroupChlClbSntCfg	24
XML structure	24
Table description	24
Columns	24
RRM/ApRadioSelectionCfg	25
XML structure	25
Table description	25
Columns	25
RRM/ApGroupRadioSelectionCfg	25
XML structure	26

Table description .....	26
Columns .....	26
RRM/ApSuppressionStatusCfg .....	26
XML structure .....	27
Table description .....	27
Columns .....	27
RRM/ApGroupSuppressionStatusCfg .....	27
XML structure .....	28
Table description .....	28
Columns .....	28

# RRM

## RRM/ClbInterval

This table contains channel calibration interval information.

### XML structure

```
<RRM>
  <ClbInterval>
    <Interval></Interval>
  </ClbInterval>
</RRM>
```

### Table description

Item	Description
Feature name	RRM
Table name	ClbInterval
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Channel calibration interval in minutes	N/A	Unsigned integer. Value range: 3 to 1440. Default: 8.

## RRM/PwrClbInterval

This table contains power calibration interval information.

### XML structure

```
<RRM>
```

```

    <PwrClbInterval>
      <Interval></Interval>
    </PwrClbInterval>
  </RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	PwrClbInterval
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Power calibration interval in minutes	N/A	Unsigned integer. Value range: 3 to 180. Default: 8.

## RRM/ApPowerCfg

This table contains the operation to set Ap radio's adjacency factor and the least transmit power and the threshold of calibrating power and a switch to enable radio calibrate power automatically.

## XML structure

```

<RRM>
  <PowerCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <AdjacencyFactor></AdjacencyFactor>
      <PwrMin></PwrMin>
      <PwrThreshold></PwrThreshold>
      <PwrClbMode></PwrClbMode>
    </Radio>
  </PowerCfg>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	PowerCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
AdjacencyFactor	The adjacency factor of radio	N/A	Unsigned integer. Value range: 1 to 16.	Optional
PwrMin	The least transmit power of radio	N/A	Unsigned integer. Value range: 1 to 20.	Optional
PwrThreshold	The threshold of calibrating radio's power	N/A	Unsigned integer. Value range: 50 to 90.	Optional
PwrClbMode	Enable/Disable auto power selection of radio	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable auto power selection.</li><li>• <b>1</b>—Enable auto power selection.</li></ul>	Optional

## RRM/ApGroupPowerCfg

This table contains the operation to set ApGroup radios' adjacency factor and the least transmit power and the threshold of calibrating power and a switch to enable radio calibrate power automatically.

## XML structure

```
<RRM>
  <ApGroupPowerCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
```

```

    <RadioID></RadioID>
    <AdjacencyFactor></AdjacencyFactor>
    <PwrMin></PwrMin>
    <PwrThreshold></PwrThreshold>
    <PwrClbMode></PwrClbMode>
  </Radio>
</ApGroupPowerCfg>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupPowerCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP Group name	Index	String: case-insensitive Length: 1 to 31 characters	N/A
ApModel	AP Model name	Index	String: case-insensitive Length: 1 to 63 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
AdjacencyFactor	The adjacency factor of radio	N/A	Unsigned integer. Value range: 1 to 16. Default value: 3.	Optional
PwrMin	The least transmit power of radio	N/A	Unsigned integer. Value range: 1 to 20. Default value: 1.	Optional
PwrThreshold	The threshold of calibrating radio's power	N/A	Unsigned integer. Value range: 50 to 90. Default value: 65.	Optional
PwrClbMode	Enable/Disable auto power selection of radio	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable auto power selection(default).</li> <li>1—Enable auto power selection.</li> </ul>	Optional

# RRM/ApChannelCfg

This table contains information about CRC-error threshold and Interference threshold to determine one radio's current channel is good or bad, and tolerance level that determines if the radio switch current channel, and a switch to enable one radio calibrate channel automatically.

## XML structure

```
<RRM>
  <ChannelCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <CrcErrThreshold></CrcErrThreshold>
      <InterferenceThreshold></InterferenceThreshold>
      <ToleranceLevel></ToleranceLevel>
      <ChlClbMode></ChlClbMode>
    </Radio>
  </ChannelCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ChannelCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
CrcErrThreshoId	The CRC-error threshold of radio	N/A	Unsigned integer. Value range: 10 to 100.	Optional
InterferenceThreshold	The Interference threshold of radio	N/A	Unsigned integer. Value range: 10 to 100.	Optional

Column name	Column description	Column type	Data type and restrictions	Remarks
ToleranceLevel	The tolerance level of radio to determine if the radio switch current channel	N/A	Unsigned integer. Value range: 15 to 45.	Optional
ChlClbMode	Enable/Disable auto channel selection of radio	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Disable auto channel selection.</li> <li>• <b>1</b>—Enable auto channel selection.</li> </ul>	Optional

## RRM/ApGroupChannelCfg

This table contains information about CRC-error threshold and Interference threshold to determine one ApGroup radios' current channel is good or bad, and tolerance level that determines if the radio switch current channel, and a switch to enable one radio calibrate channel automatically.

### XML structure

```

<RRM>
  <ApGroupChannelCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <CrcErrThreshold></CrcErrThreshold>
      <InterferenceThreshold></InterferenceThreshold>
      <ToleranceLevel></ToleranceLevel>
      <ChlClbMode></ChlClbMode>
    </Radio>
  </ApGroupChannelCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ApGroupChannelCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP Group name	Index	String: case-insensitive Length: 1 to 31 characters	N/A
ApModel	AP Model name	Index	String: case-insensitive Length: 1 to 63 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
CrcErrThreshold	The CRC-error threshold of radio	N/A	Unsigned integer. Value range: 10 to 100. Default value: 20.	Optional
InterferenceThreshold	The Interference threshold of radio	N/A	Unsigned integer. Value range: 10 to 100. Default value: 50.	Optional
ToleranceLevel	The tolerance level of radio to determine if the radio switch current channel	N/A	Unsigned integer. Value range: 15 to 45. Default value: 20.	Optional
ChlClbMode	Enable/Disable auto channel selection of radio	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable auto channel selection(default).</li><li>• <b>1</b>—Enable auto channel selection.</li></ul>	Optional

## RRM/ApWsaCfg

This table contains the operation to set a switch to enable radio responds to the event reported by WLAN Spectrum Analysis.

## XML structure

```
<RRM>
  <ApWsaCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <Mode></Mode>
    </Radio>
  </ApWsaCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApWsaCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
Mode	Enable/Disable WSA collaboration of radio	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable WSA collaboration .</li><li>• <b>1</b>—Enable WSA collaboration.</li></ul>	Optional

## RRM/ApGroupWsaCfg

This table contains information about a switch to enable one ApGroup radio collaborates with WSA automatically.

## XML structure

```
<RRM>
  <ApGroupWsaCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <Mode></Mode>
    </Radio>
  </ApGroupWsaCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupWsaCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup name	Index	String: case-insensitive Length: 1 to 31 characters	N/A
APModel	AP Model name	Index	String: case-insensitive Length: 1 to 63 characters	N/A
RadiolD	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
Mode	Enable/Disable WSA collaboration of radio	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable WSA collaboration (default).</li><li>• <b>1</b>—Enable WSA collaboration.</li></ul>	Optional

## RRM/ClbGroupCfg

This table contains calibration group

## XML structure

```
<RRM>
  <ClbGroupCfg>
    <ClbGroup>
      <ClbGroupId></ClbGroupId>
      <ClbGroupDescription></ClbGroupDescription>
      <ChlHolddownTime></ChlHolddownTime>
      <PwrHolddownTime></PwrHolddownTime>
      <LocationName></LocationName>
    </ClbGroup>
  </ClbGroupCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ClbGroupCfg
Table type	Multi-instance table
Row name	ClbGroup
Restrictions	Not support creation/merge/deletion/remove

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClbGroupId	Calibration group id	Index	Unsigned integer.	N/A
ClbGroupDescription	Calibration group description	N/A	String: case-insensitive Length: 1 to 64 characters	N/A
ChlHolddownTime	Channel holddown time	N/A	Unsigned integer. Value range: 10 to 1440. Default value: 720.	N/A
PwrHolddownTime	Power holddown time	N/A	Unsigned integer. Value range: 10 to 1440. Default value: 60	N/A
LocationName	Location name	N/A	String: case-insensitive Length: 1 to 31 characters	N/A

## RRM/ClbGroupMemberCfg

This table contains calibration group member

## XML structure

```
<RRM>
  <ClbGroupMemberCfg>
    <ClbGroupMember>
      <ApName></ApName>
      <RadioID></RadioID>
      <ClbGroupId></ClbGroupId>
    </ClbGroupMember>
  </ClbGroupMemberCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ClbGroupMemberCfg
Table type	Multi-instance table
Row name	ClbGroupMember
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	Ap name	Index	String, lowercase. Length: 1 to 64 characters.	N/A
Radioid	Radioid	Index	Unsigned short. Value range: 1 to 4.	N/A
ClbGroupId	Calibration group id	N/A	Unsigned integer.	N/A

## RRM/ClbGroupCreate

This table contains the operation to create a calibration group.

## XML structure

```
<RRM>
  <ClbGroupCreate>
    <ClbGroupId></ClbGroupId>
  </ClbGroupCreate>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ClbGroupCreate
Table type	Single-instance table
Row name	None

Restrictions	None
Support for row creation and deletion	Just support for creation

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClbGroupId	Calibration group id	N/A	Unsigned integer. Value range: 1 to 128	NA

## RRM/ClbGroupDelete

This table contains the operation to delete a calibration group.

## XML structure

```

<RRM>
  <ClbGroupDelete>
    <ClbGroup>
      <ClbGroupIdIndex></ClbGroupIdIndex>
      <ClbGroupIdColumn></ClbGroupIdColumn>
    </ClbGroup>
  </ClbGroupDelete>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	ClbGroupDelete
Table type	Multi-instance table
Row name	ClbGroup
Restrictions	Just support for deletion/removing

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClbGroupIdIndex	Calibration group id	Index	Unsigned integer.	N/A
ClbGroupId	Calibration	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
dColumn	group id		Value range: 1 to 128	

## RRM/ClbGroupMerge

This table contains the operation to merge a calibration group.

### XML structure

```

<RRM>
  <ClbGroupMerge>
    <ClbGroup>
      <ClbGroupId></ClbGroupId>
      <ClbGroupDescription></ClbGroupDescription>
      <ChlHolddownTime></ChlHolddownTime>
      <PwrHolddownTime></PwrHolddownTime>
      <LocationName></LocationName>
    </ClbGroup>
  </ClbGroupMerge>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ClbGroupMerge
Table type	Multi-instance table
Row name	ClbGroup
Restrictions	Just support for merging

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClbGroupId	Calibration group id	Index	Unsigned integer.	N/A
ClbGroupDescription	Calibration group description	N/A	String: case-insensitive Length: 1 to 64 characters	N/A
ChlHolddownTime	Channel holddown time	N/A	Unsigned integer. Value range: 10 to 1440. Default value: 720.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PwrHolddownTime	Power holddown time	N/A	Unsigned integer. Value range: 10 to 1440. Default value: 60	N/A
LocationName	Location name	N/A	String: case-insensitive Length: 1 to 31 characters	N/A

## RRM/ApPwrClbModeCfg

This table contains radio power calibration mode information.

### XML structure

```

<RRM>
  <PwrClbModeCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <ClbMode></ClbMode>
    </Radio>
  </PwrClbModeCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	PwrClbModeCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
ClbMode	Calibration mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Custom calibration mode.</li> <li>• <b>1</b>—Coverage calibration mode.</li> <li>• <b>2</b>—Density calibration mode.</li> </ul>	Optional

## RRM/ApGroupPwrClbModeCfg

This table contains AP group power calibration mode information.

### XML structure

```

<RRM>
  <ApGroupPwrClbModeCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <ClbMode></ClbMode>
    </Radio>
  </ApGroupPwrClbModeCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ApGroupPwrClbModeCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RadioID	Radio ID	Index	Length: 1 to 63 characters. Unsigned integer. Value range: 1 to 4.	N/A
ClbMode	Calibration mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Custom calibration mode (default).</li> <li>• <b>1</b>—Coverage calibration mode.</li> <li>• <b>2</b>—Density calibration mode.</li> </ul>	Optional

## RRM/ApChlClbModeCfg

This table contains radio channel calibration mode information.

### XML structure

```

<RRM>
  <ChlClbModeCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <ClbMode></ClbMode>
    </Radio>
  </ChlClbModeCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ChlClbModeCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 64 characters.	
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ClbMode	Calibration mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Period calibration mode.</li> <li>• <b>1</b>—Scheduled calibration mode.</li> </ul>	Optional

## RRM/ApGroupChlClbModeCfg

This table contains AP group channel calibration mode information.

### XML structure

```

<RRM>
  <ApGroupChlClbModeCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <ClbMode></ClbMode>
    </Radio>
  </ApGroupChlClbModeCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ApGroupChlClbModeCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ClbMode	Calibration mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Periodic calibration mode (default).</li> <li>1—Scheduled calibration mode.</li> </ul>	Optional

## RRM/ApTimeRangeNameCfg

This table contains radio time range information.

### XML structure

```

<RRM>
  <TimeRangeNameCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <TimeRangeName></TimeRangeName>
    </Radio>
  </TimeRangeNameCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	TimeRangeNameCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 64 characters.	
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
TimeRangeName	Time range name	N/A	String: case-sensitive. Length: 1 to 32 characters.	The date must be in the range of the year 1970 to the year 2100.

## RRM/ApGroupTimeRangeNameCfg

This table contains AP group time range information.

### XML structure

```

<RRM>
  <ApGroupTimeRangeNameCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <TimeRangeName></TimeRangeName>
    </Radio>
  </ApGroupTimeRangeNameCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ApGroupTimeRangeNameCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 63 characters.	
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
TimeRangeName	Time range name	N/A	String: case-sensitive. Length: 1 to 32 characters.	The date must be in the range of the year 1970 to the year 2100.

## RRM/ApScanOnlyCfg

This table contains radio channel scanning information.

### XML structure

```

<RRM>
  <ScanOnlyCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <ScanMode></ScanMode>
    </Radio>
  </ScanOnlyCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ScanOnlyCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 64 characters.	
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ScanMode	Channel scanning status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable scan only</li> <li>1—Enable scan only</li> </ul>	Optional

## RRM/ApGroupScanOnlyCfg

This table contains AP group channel scanning information.

### XML structure

```

<RRM>
  <ApGroupScanOnlyCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <ScanMode></ScanMode>
    </Radio>
  </ApGroupScanOnlyCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ApGroupScanOnlyCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RadiolD	Radio ID	Index	Length: 1 to 63 characters. Unsigned integer. Value range: 1 to 4.	N/A
ScanMode	Channel scanning status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable scan only (default).</li> <li>1—Enable scan only.</li> </ul>	Optional

## RRM/HierarchyClbMode

This table contains hierarchy calibration mode information.

### XML structure

```
<RRM>
  <HierarchyClbMode>
    <Mode>
    </Mode>
  </HierarchyClbMode>
</RRM>
```

### Table description

Item	Description
Feature name	RRM
Table name	HierarchyClbMode
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	Hierarchy-calibration mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Local(default).</li> <li>1—Central.</li> </ul>	N/A



# RRM/ApChlClbSntCfg

This table contains channel calibration sensitivity configuration information for radios of an AP.

## XML structure

```
<RRM>
  <ChlClbSntCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <ChlClbSnt></ChlClbSnt>
    </Radio>
  </ChlClbSntCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ChlClbSntCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ChlClbSnt	Channel calibration sensitivity mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Custom(default).</li><li>• 1—Low.</li><li>• 2—Medium.</li><li>• 3—High.</li></ul>	Optional

# RRM/ApGroupChlClbSntCfg

This table contains channel calibration sensitivity configuration information for radios of APs in an AP group.

## XML structure

```
<RRM>
  <ApGroupChlClbSntCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <ChlClbSnt></ChlClbSnt>
    </Radio>
  </ApGroupChlClbSntCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupChlClbSntCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ChlClbSnt	Channel calibration sensitivity mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Custom(default).</li><li>• <b>1</b>—Low.</li><li>• <b>2</b>—Medium.</li><li>• <b>3</b>—High.</li></ul>	Optional

# RRM/ApRadioSelectionCfg

This table contains adjacency-factor radio-selection mode configuration information for radios of an AP.

## XML structure

```
<RRM>
  <RadioSelectionCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <RadioSelection></RadioSelection>
    </Radio>
  </RadioSelectionCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	RadioSelectionCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
RadioSelection	Adjacency-factor radio-selection mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—All channels(default).</li><li>• 1—Overlapping channels.</li></ul>	Optional

# RRM/ApGroupRadioSelectionCfg

This table contains adjacency-factor radio-selection mode configuration information for radios of APs in an AP group.

## XML structure

```
<RRM>
  <ApGroupRadioSelectionCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <RadioSelection></RadioSelection>
    </Radio>
  </ApGroupRadioSelectionCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupRadioSelectionCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
RadioSelection	Adjacency-factor radio-selection mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—All channels(default).</li><li>• <b>1</b>—Overlapping channels.</li></ul>	Optional

## RRM/ApSuppressionStatusCfg

This table contains Channel calibration suppression configuration information for radios of an AP.

## XML structure

```
<RRM>
  <SuppressionStatusCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <SuppressionStatus></SuppressionStatus>
      <ClientThres></ClientThres>
    </Radio>
  </SuppressionStatusCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	SuppressionStatusCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
SuppressionStatus	Channel calibration suppression status	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable(default).</li><li>• <b>1</b>—Enable.</li></ul>	Optional
ClientThres	Client number	N/A	Unsigned integer. Value range: 1 to 124. Default:124	Optional

## RRM/ApGroupSuppressionStatusCfg

This table contains Channel calibration suppression configuration information for radios of APs in an AP group.

## XML structure

```
<RRM>
  <ApGroupSuppressionStatusCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <SuppressionStatus></SuppressionStatus>
      <ClientThres></ClientThres>
    </Radio>
  </ApGroupSuppressionStatusCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupSuppressionStatusCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
SuppressionStatus	Channel calibration suppression status	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable(default).</li><li>• <b>1</b>—Enable.</li></ul>	Optional
ClientThres	Client number	N/A	Unsigned integer. Value range: 1 to 124. Default:124.	Optional

# Comware V7 RRM NETCONF XML API Configuration Reference

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# Contents

RRM	1
RRM/ClbInterval	1
XML structure	1
Table description	1
Columns	1
RRM/PwrClbInterval	1
XML structure	1
Table description	2
Columns	2
RRM/ApPowerCfg	2
XML structure	2
Table description	3
Columns	3
RRM/ApGroupPowerCfg	3
XML structure	3
Table description	4
Columns	4
RRM/ApChannelCfg	5
XML structure	5
Table description	5
Columns	5
RRM/ApGroupChannelCfg	6
XML structure	6
Table description	6
Columns	7
RRM/ApWsaCfg	7
XML structure	7
Table description	8
Columns	8
RRM/ApGroupWsaCfg	8
XML structure	8
Table description	9
Columns	9
RRM/History	9
XML structure	9
Table description	10
Columns	10
RRM/ClbGroupCfg	12
XML structure	12
Table description	12
Columns	13
RRM/ClbGroupMemberCfg	13
XML structure	13
Table description	13
Columns	14
RRM/ConfigureSpec	14
XML structure	14
Table description	15
Columns	15



RRM/ClbGroupCreate .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
RRM/ClbGroupDelete .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
RRM/ClbGroupMerge .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
RRM/ApPwrClbModeCfg .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
RRM/ApGroupPwrClbModeCfg .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
RRM/ApChlClbModeCfg .....	23
XML structure .....	23
Table description .....	23
Columns .....	24
RRM/ApGroupChlClbModeCfg .....	24
XML structure .....	24
Table description .....	24
Columns .....	25
RRM/ApTimeRangeNameCfg .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
RRM/ApGroupTimeRangeNameCfg .....	26
XML structure .....	26
Table description .....	26
Columns .....	27
RRM/ApScanOnlyCfg .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
RRM/ApGroupScanOnlyCfg .....	28
XML structure .....	28
Table description .....	28
Columns .....	29
RRM/BaselineInfoHead .....	29
XML structure .....	29
Table description .....	29
Columns .....	30
RRM/BaselineInfoBody .....	30
XML structure .....	30
Table description .....	30
Columns .....	31
RRM/BaselineApplyResult .....	31
XML structure .....	31

Table description .....	32
Columns .....	32
RRM/ApRunningData .....	33
XML structure .....	34
Table description .....	34
Columns .....	35
RRM/EnvQuality .....	36
XML structure .....	36
Table description .....	37
Columns .....	37
RRM/RadioDetail .....	37
XML structure .....	37
Table description .....	38
Columns .....	38
RRM/LastHistoryRecord .....	38
XML structure .....	38
Table description .....	39
Columns .....	39
RRM/HierarchyClbMode .....	41
XML structure .....	41
Table description .....	41
Columns .....	41
RRM/ApChlClbSntCfg .....	42
XML structure .....	42
Table description .....	42
Columns .....	42
RRM/ApGroupChlClbSntCfg .....	43
XML structure .....	43
Table description .....	43
Columns .....	43
RRM/ApRadioSelectionCfg .....	44
XML structure .....	44
Table description .....	44
Columns .....	44
RRM/ApGroupRadioSelectionCfg .....	44
XML structure .....	45
Table description .....	45
Columns .....	45
RRM/ApSuppressionStatusCfg .....	45
XML structure .....	46
Table description .....	46
Columns .....	46
RRM/ApGroupSuppressionStatusCfg .....	46
XML structure .....	47
Table description .....	47
Columns .....	47

# RRM

## RRM/ClbInterval

This table contains channel calibration interval information.

### XML structure

```
<RRM>
  <ClbInterval>
    <Interval></Interval>
  </ClbInterval>
</RRM>
```

### Table description

Item	Description
Feature name	RRM
Table name	ClbInterval
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Channel calibration interval in minutes	N/A	Unsigned integer. Value range: 3 to 1440. Default: 8.

## RRM/PwrClbInterval

This table contains power calibration interval information.

### XML structure

```
<RRM>
  <PwrClbInterval>
    <Interval></Interval>
  </PwrClbInterval>
</RRM>
```

```

    </PwrClbInterval>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	PwrClbInterval
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Interval	Power calibration interval in minutes	N/A	Unsigned integer. Value range: 3 to 180. Default: 8.

## RRM/ApPowerCfg

This table contains information about adjacency factor and the least transmit power and threshold of calibrating power and a switch to enable radio calibrate power automatically.

## XML structure

```

<RRM>
  <PowerCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <AdjacencyFactor></AdjacencyFactor>
      <PwrMin></PwrMin>
      <PwrThreshold></PwrThreshold>
      <PwrClbMode></PwrClbMode>
    </Radio>
  </PowerCfg>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	PowerCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	Name of specify ap	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
Adjacency Factor	The adjacency factor of radio	N/A	Unsigned integer. Value range: 1 to 16.	N/A
PwrMin	The least transmit power of radio	N/A	Unsigned integer. Value range: 1 to 20.	N/A
PwrThresh old	The threshold of calibrating radio's power	N/A	Unsigned integer. Value range: 50 to 90.	N/A
PwrClbMode	Enable/Disable auto power selection of radio	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable auto power selection.</li><li>• <b>1</b>—Enable auto power selection.</li></ul>	N/A

## RRM/ApGroupPowerCfg

This table contains the operation to set ApGroup radio's adjacency factor and the least transmit power and the threshold of calibrating power and a switch to enable radio calibrate power automatically.

## XML structure

```
<RRM>
  <ApGroupPowerCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
```

```

    <RadioID></RadioID>
    <AdjacencyFactor></AdjacencyFactor>
    <PwrMin></PwrMin>
    <PwrThreshold></PwrThreshold>
    <PwrClbMode></PwrClbMode>
  </Radio>
</ApGroupPowerCfg>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupPowerCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP Group name	Index	String: case-insensitive Length: 1 to 31 characters	N/A
APModel	AP Model name	Index	String: case-insensitive Length: 1 to 63 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
AdjacencyFactor	The adjacency factor of radio	N/A	Unsigned integer. Value range: 1 to 16 Default value: 3.	Optional
PwrMin	The least transmit power of radio	N/A	Unsigned integer. Value range: 1 to 20 Default value: 1.	Optional
PwrThreshold	The threshold of calibrating radio's power	N/A	Unsigned integer. Value range: 50 to 90 Default value: 65.	Optional
PwrClbMode	Enable/Disable auto power selection of radio	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable auto power selection(default).</li> <li>1—Enable auto power selection.</li> </ul>	Optional

# RRM/ApChannelCfg

This table contains information about CRC-error threshold and Interference threshold to determine one radio's current channel is good or bad, and tolerance level that determines if the radio switch current channel, and a switch to enable one radio calibrate channel automatically.

## XML structure

```
<RRM>
  <ChannelCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <CrcErrThreshold></CrcErrThreshold>
      <InterferenceThreshold></InterferenceThreshold>
      <ToleranceLevel></ToleranceLevel>
      <ChlClbMode></ChlClbMode>
    </Radio>
  </ChannelCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ChannelCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	Name of specify ap	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
CrcErrThreshold	The CRC-error threshold of radio	N/A	Unsigned integer. Value range: 10 to 100.	N/A
InterferenceThreshold	The Interference threshold of	N/A	Unsigned integer. Value range: 10 to 100.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	radio			
ToleranceLevel	The tolerance level of radio to determine if the radio switch current channel	N/A	Unsigned integer. Value range: 15 to 45.	N/A
ChlClbMode	Enable/Disable auto channel selection of radio	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Disable auto channel selection.</li> <li>• <b>1</b>—Enable auto channel selection.</li> </ul>	N/A

## RRM/ApGroupChannelCfg

This table contains information about CRC-error threshold and Interference threshold to determine one APGroup radio's current channel is good or bad, and tolerance level that determines if the radio switch current channel, and a switch to enable one radio calibrate channel automatically.

## XML structure

```

<RRM>
  <ApGroupChannelCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <CrcErrThreshold></CrcErrThreshold>
      <InterferenceThreshold></InterferenceThreshold>
      <ToleranceLevel></ToleranceLevel>
      <ChlClbMode></ChlClbMode>
    </Radio>
  </ApGroupChannelCfg>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupChannelCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP Group name	Index	String: case-insensitive Length: 1 to 31 characters	N/A
APModel	AP Model name	Index	String: case-insensitive Length: 1 to 63 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
CrcErrThreshold	The CRC-error threshold of radio	N/A	Unsigned integer. Value range: 10 to 100 Default value: 20.	Optional
InterferenceThreshold	The Interference threshold of radio	N/A	Unsigned integer. Value range: 10 to 100 Default value: 50.	Optional
ToleranceLevel	The tolerance level of radio to determine if the radio switch current channel	N/A	Unsigned integer. Value range: 15 to 45 Default value: 20.	Optional
ChlClbMode	Enable/Disable auto channel selection of radio	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable auto channel selection(default).</li> <li>1—Enable auto channel selection.</li> </ul>	Optional

## RRM/ApWsaCfg

This table contains the operation to set a switch to enable radio responds to the event reported by WLAN Spectrum Analysis.

## XML structure

```

<RRM>
  <ApWsaCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <Mode></Mode>
    </Radio>
  </ApWsaCfg>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	ApWsaCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
Mode	Enable/Disable WSA collaboration of radio	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable WSA collaboration .</li><li>• <b>1</b>—Enable WSA collaboration.</li></ul>	Optional

## RRM/ApGroupWsaCfg

This table contains information about a switch to enable one ApGroup radio collaborates with WSA automatically.

## XML structure

```
<RRM>
  <ApGroupWsaCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <Mode></Mode>
    </Radio>
  </ApGroupWsaCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupWsaCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup name	Index	String: case-insensitive Length: 1 to 31 characters	N/A
APModel	AP Model name	Index	String: case-insensitive Length: 1 to 63 characters	N/A
RadiolD	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
Mode	Enable/Disable WSA collaboration of radio	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable WSA collaboration (default).</li><li>• <b>1</b>—Enable WSA collaboration.</li></ul>	Optional

## RRM/History

This table contains the fields which carry history information.

## XML structure

```
<RRM>
  <History>
    <RadioCount>
      <ApName></ApName>
      <RadioID></RadioID>
      <HistoryCnt></HistoryCnt>
      <BasicBSSID></BasicBSSID>
      <ChangeTime></ChangeTime>
      <ReasonBitMap></ReasonBitMap>
      <UtilBef></UtilBef>
      <UtilAft></UtilAft>
```

```

    <LoadBef></LoadBef>
    <LoadBef></LoadBef>
    <TotalIntrfBef></TotalIntrfBef>
    <TotalIntrfAft></TotalIntrfAft>
    <PacketErrBef></PacketErrBef>
    <PacketErrAft></PacketErrAft>
    <ChlNumBef></ChlNumBef>
    <ChlNumAft></ChlNumAft>
    <PwrLvlBef></PwrLvlBef>
    <PwrLvlAft></PwrLvlAft>
    <RetryBef></RetryBef>
    <RetryAft></RetryAft>
  </RadioCount>
</History>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	History
Table type	Muti-instance table
Row name	RadioCount
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadiolD	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
HistoryCnt	The Nth history information	Index	Unsigned integer. Value range: 1 to 3.	N/A
BasicBSSID	Field of Radio Information	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
ChangeTime	Date and time when change occurs.	N/A	String	Example: 2014-05-07T09:35:07.
ReasonBitMap	Field of History Information	N/A	Unsigned integer. Rewrite the unsigned integer to binary number. The Reason can be	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<p>judged by whether the bits of this binary number is 1.</p> <p>the last bit is RadioDown;</p> <p>the second last bit is Interference;</p> <p>the third last bit is Noise;</p> <p>the forth last bit is PachetDisCard;</p> <p>the fifth last bit is Retransmission;</p> <p>the sixth last bit is Radar;</p> <p>the seventh last bit is Other;</p> <p>the Reason can be the combination of 2 or more reasons.</p>	
UtilBef	Utilization before calibration	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 100.</p> <p>Unit: %.</p>	N/A
UtilAft	Utilization after calibration	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 100.</p> <p>Unit: %.</p>	N/A
LoadBef	Load before calibration	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 100.</p> <p>Unit: %.</p>	N/A
LoadAft	Load after calibration	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 100.</p> <p>Unit: %.</p>	N/A
TotalIntrfBef	Total Interference before calibration	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 100.</p> <p>Unit: %.</p>	N/A
TotalIntrfAft	Total Interference after calibration	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 100.</p> <p>Unit: %.</p>	N/A
PacketErrBef	Packet error rate before calibration	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 100.</p> <p>Unit: %.</p>	N/A
PacketErrAft	Packet error rate after calibration	N/A	<p>Unsigned integer.</p> <p>Value range: 0 to 100.</p> <p>Unit: %.</p>	N/A
ChlNumBef	Channel number before calibration	N/A	<p>Unsigned integer.</p>	N/A
ChlNumAft	Channel number after	N/A	<p>Unsigned integer.</p>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	calibration			
PwrLvlBef	Power level before calibration	N/A	Unsigned integer.	N/A
PwrLvlAft	Power level after calibration	N/A	Unsigned integer.	N/A
RetryBef	Retransmission rate before calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
RetryAft	Retransmission rate after calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A

## RRM/ClbGroupCfg

This table contains calibration group

### XML structure

```

<RRM>
  <ClbGroupCfg>
    <ClbGroup>
      <ClbGroupId></ClbGroupId>
      <ClbGroupDescription></ClbGroupDescription>
      <ChlHolddownTime></ChlHolddownTime>
      <PwrHolddownTime></PwrHolddownTime>
      <LocationName></LocationName>
    </ClbGroup>
  </ClbGroupCfg>
</RRM>

```

### Table description

Item	Description
Feature name	RRM
Table name	ClbGroupCfg
Table type	Multi-instance table
Row name	ClbGroup
Restrictions	Not support creation/deletion

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClbGroupId	Calibration group id	Index	Unsigned integer.	N/A
ClbGroupDescription	Calibration group description	N/A	String: case-insensitive Length: 1 to 64 characters	N/A
ChlHolddownTime	Channel holddown time	N/A	Unsigned integer. Value range: 10 to 1440 Default value: 720.	N/A
PwrHolddownTime	Power holddown time	N/A	Unsigned integer. Value range: 10 to 1440 Default value: 60	N/A
LocationName	Location name	N/A	String: case-insensitive Length: 1 to 31 characters	N/A

## RRM/ClbGroupMemberCfg

This table contains calibration group member

## XML structure

```
<RRM>
  <ClbGroupMemberCfg>
    <ClbGroupMember>
      <ApName></ApName>
      <RadioID></RadioID>
      <ClbGroupId></ClbGroupId>
    </ClbGroupMember>
  </ClbGroupMemberCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ClbGroupMemberCfg
Table type	Multi-instance table
Row name	ClbGroupMember
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	Ap name	Index	String, lowercase. Length: 1 to 64 characters.	N/A
RadioNum	Radio number	Index	Unsigned short. Value range: 1 to 4.	N/A
ClbGroupId	Calibration group id	N/A	Unsigned integer.	N/A

## RRM/ConfigureSpec

This table contains RRM's configure specification values.

## XML structure

```
<RRM>
  <ConfigureSpec>
    <Interval_Min></Interval_Min>
    <Interval_Max></Interval_Max>
    <Interval_Def></Interval_Def>
    <PwrClbInterval_Min></PwrClbInterval_Min>
    <PwrClbInterval_Max></PwrClbInterval_Max>
    <PwrClbInterval_Def></PwrClbInterval_Def>
    <AdjacencyFactor_Min></AdjacencyFactor_Min>
    <AdjacencyFactor_Max></AdjacencyFactor_Max>
    <AdjacencyFactor_Def></AdjacencyFactor_Def>
    <PwrMin_Min></PwrMin_Min>
    <PwrMin_Max></PwrMin_Max>
    <PwrMin_Def></PwrMin_Def>
    <PwrThreshold_Min></PwrThreshold_Min>
    <PwrThreshold_Max></PwrThreshold_Max>
    <PwrThreshold_Def></PwrThreshold_Def>
    <CrcErrThreshold_Min></CrcErrThreshold_Min>
    <CrcErrThreshold_Max></CrcErrThreshold_Max>
    <CrcErrThreshold_Def></CrcErrThreshold_Def>
    <InterferenceThreshold_Min></InterferenceThreshold_Min>
    <InterferenceThreshold_Max></InterferenceThreshold_Max>
    <InterferenceThreshold_Def></InterferenceThreshold_Def>
    <ToleranceLevel_Min></ToleranceLevel_Min>
    <ToleranceLevel_Max></ToleranceLevel_Max>
    <ToleranceLevel_Def></ToleranceLevel_Def>
```



```

<ClbGroupDescription_MinLen></ClbGroupDescription_MinLen>
<ClbGroupDescription_MaxLen></ClbGroupDescription_MaxLen>
<ChlHolddownTime_Min></ChlHolddownTime_Min>
<ChlHolddownTime_Max></ChlHolddownTime_Max>
<ChlHolddownTime_Def></ChlHolddownTime_Def>
<PwrHolddownTime_Min></PwrHolddownTime_Min>
<PwrHolddownTime_Max></PwrHolddownTime_Max>
<PwrHolddownTime_Def></PwrHolddownTime_Def>
<ClbGroupId_Min></ClbGroupId_Min>
<ClbGroupId_Max></ClbGroupId_Max>
<Coverage_AdjacencyFactor></Coverage_AdjacencyFactor>
<Coverage_PwrThreshold></Coverage_PwrThreshold>
<Coverage_PwrMin></Coverage_PwrMin>
<Density_AdjacencyFactor></Density_AdjacencyFactor>
<Density_PwrThreshold></Density_PwrThreshold>
<Density_PwrMin></Density_PwrMin>
</ConfigureSpec>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	ConfigureSpec
Table type	Multi-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Interval_Min	Smallest channel calibration interval	N/A	Unsigned integer. Value is 3.
Interval_Max	Largest channel calibration interval	N/A	Unsigned integer. Value is 1440.
Interval_Def	Default channel calibration interval	N/A	Unsigned integer. Value is 8.
PwrClbInterval_Min	Smallest power calibration interval	N/A	Unsigned integer. Value is 3.
PwrClbInterval_Max	Largest power calibration interval	N/A	Unsigned integer. Value is 180.

Column name	Column description	Column type	Data type and restrictions
PwrClblInterval_Def	Default power calibration interval	N/A	Unsigned integer. Value is 8.
AdjacencyFactor_Min	The minimum adjacency factor of radio	N/A	Unsigned integer. Value is 1
AdjacencyFactor_Max	The maximum adjacency factor of radio	N/A	Unsigned integer. Value is 16
AdjacencyFactor_Def	The default adjacency factor of radio	N/A	Unsigned integer. Value is 3
PwrMin_Min	The minimum least transmit power of radio	N/A	Unsigned integer. Value is 1
PwrMin_Max	The maximum least transmit power of radio	N/A	Unsigned integer. Value is 20
PwrMin_Def	The default least transmit power of radio	N/A	Unsigned integer. Value is 1
PwrThreshold_Min	The minimum threshold of calibrating radio's power	N/A	Unsigned integer. Value is 50
PwrThreshold_Max	The maximum threshold of calibrating radio's power	N/A	Unsigned integer. Value is 90
PwrThreshold_Def	The default threshold of calibrating radio's power	N/A	Unsigned integer. Value is 65
CrcErrThreshold_Min	The minimum CRC-error threshold of radio	N/A	Unsigned integer. Value is 10
CrcErrThreshold_Max	The maximum CRC-error threshold of radio	N/A	Unsigned integer. Value is 100
CrcErrThreshold_Def	The default CRC-error threshold of radio	N/A	Unsigned integer. Value is 20
InterferenceThreshold_Min	The minimum Interference threshold	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
	of radio		Value is 10
InterferenceThreshold_Max	The maximum Interference threshold of radio	N/A	Unsigned integer. Value is 100
InterferenceThreshold_Def	The default Interference threshold of radio	N/A	Unsigned integer. Value is 50
ToleranceLevel_Min	The minimum tolerance level of radio to determine if the radio switch current channel	N/A	Unsigned integer. Value is 15
ToleranceLevel_Max	The maximum tolerance level of radio to determine if the radio switch current channel	N/A	Unsigned integer. Value is 45
ToleranceLevel_Def	The default tolerance level of radio to determine if the radio switch current channel	N/A	Unsigned integer. Value is 20
ClbGroupDescription_MinLen	Minimum length of calibration group description	N/A	Unsigned integer. Value is 1
ClbGroupDescription_MaxLen	Maximum length of calibration group description	N/A	Unsigned integer. Value is 64
ChlHolddownTime_Min	The minimum channel holddown time	N/A	Unsigned integer. Value is 10
ChlHolddownTime_Max	The maximum channel holddown time	N/A	Unsigned integer. Value is 1440
ChlHolddownTime_Def	The default channel holddown time	N/A	Unsigned integer. Value is 720
PwrHolddownTime_Min	The minimum power holddown time	N/A	Unsigned integer. Value is 10
PwrHolddownTime_Max	The maximum power holddown time	N/A	Unsigned integer. Value is 1440
PwrHolddownTime	The default power	N/A	Unsigned integer.

Column name	Column description	Column type	Data type and restrictions
e_Def	holddown time		Value is 60
ClbGroupId_Min	The minimum Calibration group id	N/A	Unsigned integer. Value is 1
ClbGroupId_Max	The maximum Calibration group id	N/A	Unsigned integer. Value is 128
Coverage_AdjacencyFactor	The default adjacency factor of power coverage calibration mode	N/A	Unsigned integer. Value is 6
Coverage_PwrThreshold	The default power threshold of power coverage calibration mode	N/A	Unsigned integer. Value is 65
Coverage_PwrMin	The default minimum least transmit power of power coverage calibration mode	N/A	Unsigned integer. Value is 1
Density_AdjacencyFactor	The default adjacency factor of power density calibration mode	N/A	Unsigned integer. Value is 1
Density_PwrThreshold	The default power threshold of power density calibration mode	N/A	Unsigned integer. Value is 80
Density_PwrMin	The default minimum least transmit power of power density calibration mode	N/A	Unsigned integer. Value is 1

## RRM/ClbGroupCreate

This table contains the operation to create a calibration group.

### XML structure

```

<RRM>
  <ClbGroupCreate>
    <ClbGroupId></ClbGroupId>
  </ClbGroupCreate>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	ClbGroupCreate
Table type	Single-instance table
Row name	None
Restrictions	Just support for creation

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClbGroupId	Calibration group id	N/A	Unsigned integer. Value range: 1 to 128.	N/A

## RRM/ClbGroupDelete

This table contains the operation to delete a calibration group.

## XML structure

```
<RRM>
  <ClbGroupDelete>
    <ClbGroup>
      <ClbGroupIdIndex></ClbGroupIdIndex>
      <ClbGroupIdColumn></ClbGroupIdColumn>
    </ClbGroup>
  </ClbGroupDelete>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ClbGroupDelete
Table type	Multi-instance table
Row name	ClbGroup
Restrictions	Just support for deletion/removing

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClbGroupIdIndex	Calibration group id	Index	Unsigned integer.	N/A
ClbGroupIdColumn	Calibration group id	N/A	Unsigned integer. Value range: 1 to 128	N/A

## RRM/ClbGroupMerge

This table contains the operation to merge a calibration group.

## XML structure

```
<RRM>
  <ClbGroupMerge>
    <ClbGroup>
      <ClbGroupId></ClbGroupId>
      <ClbGroupDescription></ClbGroupDescription>
      <ChlHolddownTime></ChlHolddownTime>
      <PwrHolddownTime></PwrHolddownTime>
      <LocationName></LocationName>
    </ClbGroup>
  </ClbGroupMerge>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ClbGroupMerge
Table type	Multi-instance table
Row name	ClbGroup
Restrictions	Just support for merging

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClbGroupId	Calibration group id	Index	Unsigned integer.	N/A
ClbGroupDescription	Calibration group description	N/A	String: case-insensitive Length: 1 to 64 characters	N/A
ChlHolddownTime	Channel holddown time	N/A	Unsigned integer. Value range: 10 to 1440 Default value: 720.	N/A
PwrHolddownTime	Power holddown time	N/A	Unsigned integer. Value range: 10 to 1440 Default value: 60	N/A
LocationName	Location name	N/A	String: case-insensitive Length: 1 to 31 characters	N/A

## RRM/ApPwrClbModeCfg

This table contains radio power calibration mode information.

## XML structure

```
<RRM>
  <PwrClbModeCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <ClbMode></ClbMode>
    </Radio>
  </PwrClbModeCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	PwrClbModeCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ClbMode	Calibration mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Custom calibration mode.</li><li>• <b>1</b>—Coverage calibration mode.</li><li>• <b>2</b>—Density calibration mode.</li></ul>	Optional

## RRM/ApGroupPwrClbModeCfg

This table contains AP group power calibration mode information.

## XML structure

```
<RRM>
  <ApGroupPwrClbModeCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <ClbMode></ClbMode>
    </Radio>
  </ApGroupPwrClbModeCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupPwrClbModeCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ClbMode	Calibration mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Custom calibration mode (default).</li><li>• <b>1</b>—Coverage calibration mode.</li><li>• <b>2</b>—Density calibration mode.</li></ul>	Optional

## RRM/ApChlClbModeCfg

This table contains radio channel calibration mode information.

## XML structure

```
<RRM>
  <ChlClbModeCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <ClbMode></ClbMode>
    </Radio>
  </ChlClbModeCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ChlClbModeCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ClbMode	Calibration mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Period calibration mode.</li><li>• <b>1</b>—Scheduled calibration mode.</li></ul>	Optional

## RRM/ApGroupChlClbModeCfg

This table contains AP group channel calibration mode information.

## XML structure

```
<RRM>
  <ApGroupChlClbModeCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <ClbMode></ClbMode>
    </Radio>
  </ApGroupChlClbModeCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupChlClbModeCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ClbMode	Calibration mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Periodic calibration mode.</li><li>• <b>1</b>—Scheduled calibration mode.</li></ul>	Optional

## RRM/ApTimeRangeNameCfg

This table contains radio time range information.

## XML structure

```
<RRM>
  <TimeRangeNameCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <TimeRangeName></TimeRangeName>
    </Radio>
  </TimeRangeNameCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	TimeRangeNameCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
TimeRangeName	Time range name	N/A	String: case-sensitive. Length: 1 to 32 characters.	The date must be in the range of the year 1970 to the year 2100.

## RRM/ApGroupTimeRangeNameCfg

This table contains AP group time range information.

## XML structure

```
<RRM>
  <ApGroupTimeRangeNameCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <TimeRangeName></TimeRangeName>
    </Radio>
  </ApGroupTimeRangeNameCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupTimeRangeNameCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
TimeRangeName	Time range name	N/A	String: case-sensitive. Length: 1 to 32 characters.	The date must be in the range of the year 1970 to the year 2100.

## RRM/ApScanOnlyCfg

This table contains radio channel scanning information.

## XML structure

```
<RRM>
  <ScanOnlyCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <ScanMode></ScanMode>
    </Radio>
  </ScanOnlyCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ScanOnlyCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ScanMode	Channel scanning status	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable scan only</li><li>• <b>1</b>—Enable scan only</li></ul>	Optional

## RRM/ApGroupScanOnlyCfg

This table contains AP group channel scanning information.

## XML structure

```
<RRM>
  <ApGroupScanOnlyCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <ScanMode></ScanMode>
    </Radio>
  </ApGroupScanOnlyCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupScanOnlyCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ScanMode	Channel scanning status	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable scan only (default).</li><li>• <b>1</b>—Enable scan only.</li></ul>	Optional

## RRM/BaselineInfoHead

This table contains baseline table information.

## XML structure

```
<RRM>
  <BaselineInfoHead>
    <Radio>
      <BaselineName></BaselineName>
      <Count></Count>
      <Description></Description>
      <CreateTime></CreateTime>
      <BaselineType></BaselineType>
      <BaselineRange></BaselineRange>
    </Radio>
  </BaselineInfoHead>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	BaselineInfoHead
Table type	Muti-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BaselineName	Baseline name	Index	String: case-insensitive. Length: 1 to 32 characters.	Uppercase characters will be converted to lowercase forms automatically.
Count	Radio quantity	N/A	Unsigned integer.	N/A
Description	Baseline description	N/A	String. Length: 1 to 63 characters.	N/A
CreateTime	Creation time	N/A	String. Length: 1 to 19 characters.	N/A
BaselineType	Baseline type	N/A	String. Length: 1 to 9 characters.	N/A
BaselineRange	Baseline range	N/A	String. Length: 1 to 9 characters.	N/A

## RRM/BaselineInfoBody

This table contains baseline information.

## XML structure

```
<RRM>
  <BaselineInfoBody>
    <Radio>
      <BaselineName></BaselineName>
      <ApName></ApName>
      <RadioID></RadioID>
      <RadioType></RadioType>
      <PrimaryChannel></PrimaryChannel>
      <Power></Power>
      <BandWidth></BandWidth>
      <RegionCode></RegionCode>
    </Radio>
  </BaselineInfoBody>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	BaselineInfoBody



Table type	Multi-instance table
Row name	Radio
Restrictions	You can only get the table information in bulk, and the first index 'BaselineName' can't be empty.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BaselineName	Baseline name	Index	String: case-insensitive. Length: 1 to 32 characters.	Uppercase characters will be converted to lowercase forms automatically.
ApName	AP name	Index	String: case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
RadioType	Radio type	N/A	Unsigned integer.	N/A
PrimaryChannel	Current working channel	N/A	Unsigned short.	N/A
Power	Current power	N/A	Unsigned short.	N/A
BandWidth	Current band width	N/A	Unsigned char.	N/A
RegionCode	Region code	N/A	Unsigned integer.	N/A

## RRM/BaselineApplyResult

This table contains baseline application result information.

## XML structure

```

<RRM>
  <BaselineApplyResult>
    <ApplyHistory>
      <TimeIdxSec></TimeIdxSec>
      <TimeIdxNanoSec></TimeIdxNanoSec>
      <BaselineName></BaselineName>
      <ApplyTime></ApplyTime>
      <BaselineRange></BaselineRange>
      <Total></Total>
      <Success></Success>
      <Failed></Failed>
      <RadioNotExist></RadioNotExist>
    
```

```

<RadioDown></RadioDown>
<RadioTypeMismatch></RadioTypeMismatch>
<RegionCodeMismatch></RegionCodeMismatch>
<AccSrvDisable ></AccSrvDisable>
<ChlIllegal></ChlIllegal>
<BandwidthMismatch></BandwidthMismatch>
<ChlLocked></ChlLocked>
<ChlFixed></ChlFixed>
<ChlHold></ChlHold>
<ChlGapPolicy></ChlGapPolicy>
<PwrLocked></PwrLocked>
<PwrHold></PwrHold>
<MinPwrIllegal></MinPwrIllegal>
<MaxPwrIllegal></MaxPwrIllegal>
</ApplyHistory>
</BaselineApplyResult>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	BaselineApplyResult
Table type	Muti-instance table
Row name	ApplyHistory
Restrictions	You can only get the table information.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeldxSec	Current time in second	Index	Unsigned integer 64	N/A
TimeldxNanoSec	Current time in nano second	Index	Unsigned integer 64	N/A
BaselineName	Baseline name	N/A	String:case-insensitive. Length: 1 to 32 characters.	Uppercase characters will be converted to lowercase forms automatically.
ApplyTime	Apply time	N/A	String. Length: 1 to 19 characters.	N/A
BaselineRange	Baseline range	N/A	String. Length: 1 to 9 characters.	N/A
Total	Total records	N/A	Unsigned integer.	N/A
Success	Successful	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	records			
Failed	Failed records	N/A	Unsigned integer.	N/A
RadioNotExist	Radio does not exist	N/A	Unsigned integer.	Failure reason
RadioDown	Radio is down	N/A	Unsigned integer.	Failure reason
RadioTypeMismatch	Mismatched radio type	N/A	Unsigned integer.	Failure reason
RegionCodeMismatch	Mismatched region code	N/A	Unsigned integer.	Failure reason
AccSrvDisable	Access service disabled	N/A	Unsigned integer.	Failure reason
ChlIllegal	Illegal channel	N/A	Unsigned integer.	Failure reason
BandwidthMismatch	Mismatched bandwidth	N/A	Unsigned integer.	Failure reason
ChlLocked	Channel is locked	N/A	Unsigned integer.	Failure reason
ChlFixed	Channel is fixed	N/A	Unsigned integer.	Failure reason
ChlHold	Channel is within the holddown time	N/A	Unsigned integer.	Failure reason
ChlGapPolicy	Mismatched channel gap policy	N/A	Unsigned integer.	Failure reason
PwrLocked	Power is locked	N/A	Unsigned integer.	Failure reason
PwrHold	Power is within the holddown time	N/A	Unsigned integer.	Failure reason
MinPwrIllegal	Power is lower than the min. power	N/A	Unsigned integer.	Failure reason
MaxPwrIllegal	Power is higher than the max. power	N/A	Unsigned integer.	Failure reason

## RRM/ApRunningData

This table contains RRM's running-data information.

## XML structure

```
<RRM>
  <RunningData>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <AdjacencyFactor></AdjacencyFactor>
      <PwrMin></PwrMin>
      <PwrThreshold></PwrThreshold>
      <PwrClbMode></PwrClbMode>
      <PwrClbScen></PwrClbScen>
      <AdjFacRdSel></AdjFacRdSel>
      <CrcErrThreshold></CrcErrThreshold>
      <InterferenceThreshold></InterferenceThreshold>
      <ToleranceLevel></ToleranceLevel>
      <ChlClbMode></ChlClbMode>
      <ChlClbOption></ChlClbOption>
      <SuppressionStatus></SuppressionStatus>
      <ChlClbClientThres></ChlClbClientThres>
      <ChlClbSnt></ChlClbSnt>
      <ClbGroupId></ClbGroupId>
      <WsaFlag></WsaFlag>
      <TimeRangeName></TimeRangeName>
      <ScanMode></ScanMode>
      <ServiceType></ServiceType>
      <IsChlPronto></IsChlPronto>
      <IsPwrPronto></IsPwrPronto>
      <IsRdScan></IsRdScan>
    </Radio>
  </RunningData>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	RunningData
Table type	Multi-instance table
Row name	Radio
Restrictions	You can only get the table information.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	Name of specify ap	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadiolD	Radio Id	Index	Unsigned integer. Value range: 1 to 4.	N/A
AdjacencyFactor	The adjacency factor of radio	N/A	Unsigned integer.	N/A
PwrMin	The least transmit power of radio	N/A	Unsigned integer.	N/A
PwrThreshold	The threshold of calibrating radio's power	N/A	Unsigned integer.	N/A
PwrClbMode	Enable/Disable auto power selection of radio	N/A	Unsigned integer.	N/A
PwrClbScen	Power calibration mode	N/A	Unsigned integer.	N/A
AdjFacRdSel	Adjacency-factor or radio-selection	N/A	Unsigned integer	N/A
CrcErrThreshold	The CRC-error threshold of radio	N/A	Unsigned integer.	N/A
InterferenceThreshold	The Interference threshold of radio	N/A	Unsigned integer.	N/A
ToleranceLevel	The tolerance level of radio to determine if the radio switch current channel	N/A	Unsigned integer.	N/A
ChlClbMode	Enable/Disable auto channel selection of radio	N/A	Unsigned integer.	N/A
ChlClbOption	Channel calibration mode	N/A	Unsigned integer.	N/A
SuppressionStatus	Channel calibration suppression	N/A	Enumeration: • 0—Disable.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	status		<ul style="list-style-type: none"> <li>1—Enable.</li> </ul>	
ChlClbClientThres	Client number	N/A	Unsigned integer. Value range: 1 to 124. Default: 124.	N/A
ChlClbSnt	Channel calibration sensitivity mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Custom.</li> <li>1—Low.</li> <li>2—Medium.</li> <li>3—High.</li> </ul>	N/A
ClbGroupId	Calibration group index	N/A	Unsigned integer.	N/A
WsaFlag	WSA collaboration of radio	N/A	Unsigned integer.	N/A
TimeRangeName	Time range name	N/A	String: case-sensitive.	N/A
ScanMode	Channel scanning status	N/A	Unsigned integer.	N/A
ServiceType	Radio service type	N/A	Unsigned integer.	N/A
IsChlPronto	Channel pronto calibration flag	N/A	Boolean: true—Support. false—Not support.	N/A
IsPwrPronto	Power pronto calibration flag	N/A	Boolean: true—Support. false—Not support.	N/A
IsRdScan	Whether a radio is set to scan	N/A	Boolean: true—Support. false—Not support.	N/A

## RRM/EnvQuality

This table contains information about environmental quality scores.

### XML structure

```

<RRM>
  <EnvQuality>
    <EnvQualityScore>
      <RadioType></RadioType>
      <Score></Score>
    </EnvQualityScore>
  </EnvQuality>
</RRM>

```

```

    </EnvQuality>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	EnvQuality
Table type	Muti-instance table
Row name	EnvQualityScore
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RadioType	Radio type	Index	Enumeration: <ul style="list-style-type: none"> <li>1 —Radio type is 2.4G.</li> <li>2 — Radio type is 5G.</li> </ul>	N/A
Score	Environmental quality score	N/A	Unsigned integer.	N/A

## RRM/RadioDetail

This table contains details about bad environmental quality radio.

## XML structure

```

<RRM>
  <RadioDetail>
    <Radio>
      <RadioType></RadioType>
      <ApName></ApName>
      <RadioID></RadioID>
      <Reason></Reason>
    </Radio>
  </RadioDetail>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	RadioDetail
Table type	Muti-instance table
Row name	Radio
Restrictions	You can only get the table information in bulk, and the first index can't be empty.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RadioType	Radio type	Index	Enumeration: <ul style="list-style-type: none"><li>1—Radio type is 2.4G.</li><li>2— Radio type is 5G.</li></ul>	N/A
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
Reason	Detail about environmental quality	N/A	Unsigned integer.	N/A

## RRM/LastHistoryRecord

This table contains the fields that carry the most recent history record information.

## XML structure

```
<RRM>
  <LastHistoryRecord>
    <RadioCount>
      <ApName></ApName>
      <RadioID></RadioID>
      <BasicBSSID></BasicBSSID>
      <ChangeTime></ChangeTime>
      <ReasonBitMap></ReasonBitMap>
      <UtilBef></UtilBef>
      <UtilAft></UtilAft>
      <LoadBef></LoadBef>
      <LoadBef></LoadBef>
```



```

    <TotalIntrfBef></TotalIntrfBef>
    <TotalIntrfAft></TotalIntrfAft>
    <PacketErrBef></PacketErrBef>
    <PacketErrAft></PacketErrAft>
    <ChlNumBef></ChlNumBef>
    <ChlNumAft></ChlNumAft>
    <PwrLvlBef></PwrLvlBef>
    <PwrLvlAft></PwrLvlAft>
    <RetryBef></RetryBef>
    <RetryAft></RetryAft>
  </RadioCount>
</LastHistoryRecord>
</RRM>

```

## Table description

Item	Description
Feature name	RRM
Table name	LastHistoryRecord
Table type	Muti-instance table
Row name	RadioCount
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadiolD	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
BasicBSSID	Basic SSID	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
ChangeTime	Date and time when change occurs	N/A	String	Example: 2014-05-07T09:35:07.
ReasonBitMap	Field of history information	N/A	Unsigned integer. Each bit in the string represents a reason. The changes were caused by reasons which bits are set to 1. Meaning of each bit: The last bit represents RadioDown; The second last bit represents Interference;	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			The third last bit represents Noise; The forth last bit represents PacketDisCard; The fifth last bit represents Retransmission; The sixth last bit represents Radar; The seventh last bit represents Other;	
UtilBef	Utilization before calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
UtilAft	Utilization after calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
LoadBef	Load before calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
LoadAft	Load after calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
TotalIntrfBef	Total interference before calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
TotalIntrfAft	Total interference after calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
PacketErrBef	Packet error rate before calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
PacketErrAft	Packet error rate after calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
ChlNumBef	Channel number before calibration	N/A	Unsigned integer.	N/A
ChlNumAft	Channel number after calibration	N/A	Unsigned integer.	N/A
PwrLvlBef	Power level before calibration	N/A	Unsigned integer.	N/A
PwrLvlAft	Power level	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	after calibration			
RetryBef	Retransmission rate before calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A
RetryAft	Retransmission rate after calibration	N/A	Unsigned integer. Value range: 0 to 100. Unit: %.	N/A

## RRM/HierarchyClbMode

This table contains hierarchy calibration mode information.

### XML structure

```
<RRM>
  <HierarchyClbMode>
    <Mode></Mode>
  </HierarchyClbMode>
</RRM>
```

### Table description

Item	Description
Feature name	RRM
Table name	HierarchyClbMode
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	Hierarchy-calibration mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Local.</li> <li>1—Central.</li> </ul>	N/A

# RRM/ApChlClbSntCfg

This table contains channel calibration sensitivity configuration information for radios of an AP.

## XML structure

```
<RRM>
  <ChlClbSntCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <ChlClbSnt></ChlClbSnt>
    </Radio>
  </ChlClbSntCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ChlClbSntCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ChlClbSnt	Channel calibration sensitivity mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Custom.</li><li>• <b>1</b>—Low.</li><li>• <b>2</b>—Medium.</li><li>• <b>3</b>—High.</li></ul>	N/A

# RRM/ApGroupChlClbSntCfg

This table contains channel calibration sensitivity configuration information for radios of APs in an AP group.

## XML structure

```
<RRM>
  <ApGroupChlClbSntCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <ChlClbSnt></ChlClbSnt>
    </Radio>
  </ApGroupChlClbSntCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupChlClbSntCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
ChlClbSnt	Channel calibration sensitivity mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Custom.</li><li>• <b>1</b>—Low.</li><li>• <b>2</b>—Medium.</li><li>• <b>3</b>—High.</li></ul>	N/A

# RRM/ApRadioSelectionCfg

This table contains adjacency-factor radio-selection mode configuration information for radios of an AP.

## XML structure

```
<RRM>
  <RadioSelectionCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <RadioSelection></RadioSelection>
    </Radio>
  </RadioSelectionCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	RadioSelectionCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
RadioSelection	Adjacency-factor radio-selection mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—All channels.</li><li>• <b>1</b>—Overlapping channels.</li></ul>	N/A

# RRM/ApGroupRadioSelectionCfg

This table contains adjacency-factor radio-selection mode configuration information for radios of APs in an AP group.

## XML structure

```
<RRM>
  <ApGroupRadioSelectionCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <RadioSelection></RadioSelection>
    </Radio>
  </ApGroupRadioSelectionCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupRadioSelectionCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
RadioSelection	Adjacency-factor radio-selection mode	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—All channels.</li><li>• <b>1</b>—Overlapping channels.</li></ul>	N/A

## RRM/ApSuppressionStatusCfg

This table contains channel calibration suppression configuration information for radios of an AP.

## XML structure

```
<RRM>
  <SuppressionStatusCfg>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <SuppressionStatus></SuppressionStatus>
      <ClientThres></ClientThres>
    </Radio>
  </SuppressionStatusCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	SuppressionStatusCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String: case-insensitive Length: 1 to 64 characters	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
SuppressionStatus	Channel calibration suppression status	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable.</li><li>• <b>1</b>—Enable.</li></ul>	N/A
ClientThres	Client number	N/A	Unsigned integer. Value range: 1 to 124. Default:124.	N/A

## RRM/ApGroupSuppressionStatusCfg

This table contains channel calibration suppression configuration information for radios of APs in an AP group.



## XML structure

```
<RRM>
  <ApGroupSuppressionStatusCfg>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModel></ApModel>
      <RadioID></RadioID>
      <SuppressionStatus></SuppressionStatus>
      <ClientThres></ClientThres>
    </Radio>
  </ApGroupSuppressionStatusCfg>
</RRM>
```

## Table description

Item	Description
Feature name	RRM
Table name	ApGroupSuppressionStatusCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
ApModel	AP model name	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
SuppressionStatus	Channel calibration suppression status	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Disable.</li><li>• <b>1</b>—Enable.</li></ul>	N/A
ClientThres	Client number	N/A	Unsigned integer. Value range: 1 to 124. Default: 124.	N/A

# Contents

- SAMPLER .....1
  - SAMPLER/Sampler .....1
  - XML structure .....1
  - Table description .....1
  - Columns .....1

# SAMPLER

## SAMPLER/Sampler

This table contains Sampler configuration information.

### XML structure

```
<SAMPLER>
  <Sampler>
    <SamplerEntry>
      <SamplerName></SamplerName>
      <Mode></Mode>
      <PacketInterval></PacketInterval>
    </SamplerEntry>
  </Sampler>
</SAMPLER>
```

### Table description

Item	Description
Feature name	SAMPLER
Table name	Sampler
Table type	Multi-instance table
Row name	SamplerEntry
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SamplerName	Sampler Name	Index	String, case sensitive. Length: 1 to 31 characters.	N/A
Mode	Sampler Mode	N/A	Enumeration: 1—fixed 2—random	The value of Mode depends on the device model.
PacketInterval	PacketInterval Rate	N/A	Unsigned integer. Value range: 1 to PacketIntervalMaxNum	The value of PacketIntervalMaxNum depends on the device model.

# Contents

SAMPLER .....	1
SAMPLER/Sampler .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
SAMPLER/SamplerSpecification .....	2
XML structure .....	2
Table description .....	2
Columns .....	2

# SAMPLER

## SAMPLER/Sampler

This table contains Sampler information.

### XML structure

```
<SAMPLER>
  <Sampler>
    <SamplerEntry>
      <SamplerName></SamplerName>
      <Mode></Mode>
      <PacketInterval></PacketInterval>
    </SamplerEntry>
  </Sampler>
</SAMPLER>
```

### Table description

Item	Description
Feature name	SAMPLER
Table name	Sampler
Table type	Multi-instance table
Row name	SamplerEntry
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SamplerName	Sampler Name	Index	String, case sensitive. Length: 1 to 31 characters.	N/A
Mode	Sampler Mode	N/A	Enumeration: 1—fixed 2—random	N/A
PacketInterval	PacketInterval Rate	N/A	Unsigned integer. Value range: 1 to PacketIntervalMaxNum	The value of PacketIntervalMaxNum depends on the device model.

# SAMPLER/SamplerSpecification

This table contains Sampler specification information.

## XML structure

```
<SAMPLER>
  <SamplerSpecification>
    <SupportFixedMode></SupportFixedMode>
    <SupportRandomMode></SupportRandomMode>
    <MaxPacketInterval></MaxPacketInterval>
    <MaxSamplerProfileNumber></MaxSamplerProfileNumber>
  </SamplerSpecification>
</SAMPLER>
```

## Table description

Item	Description
Feature name	SAMPLER
Table name	SamplerSpecification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportFixedMode	Whether the fixed mode is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A
SupportRandomMode	Whether the random mode is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A
MaxPacketInterval	Maximum sampling rate.	N/A	Unsigned integer.	The value of MaxPacketInterval varies by device model.
MaxSamplerProfileNumber	Maximum number of samplers supported.	N/A	Unsigned integer.	N/A

# Contents

SecDiag .....	1
SecDiag/ExportLogfile .....	1
XML structure .....	1
Response XML structure .....	1
Table description .....	1
Columns .....	1
Response columns .....	2
SecDiag/ExportConfiguration .....	2
XML structure .....	2
Response XML structure .....	3
Table description .....	3
Columns .....	3
Response columns .....	3
SecDiag/ExportDiagnosis .....	4
XML structure .....	4
Response XML structure .....	4
Table description .....	4
Columns .....	5
Response columns .....	5

# SecDiag

## SecDiag/ExportLogfile

This table is used to export log files of contexts.

### XML structure

```
<SecDiag>
  <ExportLogfile>
    <ContextList>
      <ContextID></ContextID>
    </ContextList>
    <FileName></FileName>
    <IsOverwrite></IsOverwrite>
  </ExportLogfile>
</SecDiag>
```

### Response XML structure

```
<SecDiag>
  <ExportLogfile>
    <Result></Result>
    <ErrorInfo></ErrorInfo>
  </ExportLogfile>
</SecDiag>
```

### Table description

Item	Description
Feature name	SecDiag
Table name	ExportLogfile
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextList	List of contexts selected on the Web.	Data structure	Members include: <ul style="list-style-type: none"><li>ContextID</li></ul>	If no context is selected, information about all contexts is exported.



Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	ID of the context.	N/A	Unsigned integer. Value range: 1 to 65535	N/A
FileName	Name for the export file.	N/A	String. Length: 1 to 255 characters. Format: <b>logfile</b> <i>date</i> <b>.tar.gz</b> Date format: YYYYMMDDhhmmss	Example: logfile20170424000000.tar.gz.  The filename cannot be <b>..tar.gz</b> or <b>...tar.gz</b> , or contain any of the following characters: " / : \ ? * < >
IsOverwrite	Whether to overwrite the file if it already exists.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Overwrites the file.</li> <li><b>false</b>—Does not overwrite the file.</li> </ul>	By default, the value of this column is <b>false</b> .

## Response columns

Column name	Column description	Data type and restrictions	Remarks
Result	Export result.	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Succeeded.</li> <li><b>1</b>—File already exists.</li> </ul>	N/A
ErrorInfo	Description for the export result.	String. Length: 1 to 255 characters.	This column carries the description for the enumeration value that represents the export result.

## SecDiag/ExportConfiguration

This table is used to export configuration files of contexts.

## XML structure

```

<SecDiag>
  <ExportConfiguration>
    <ContextList>
      <ContextID></ContextID>
    </ContextList>
    <FileName></FileName>
    <IsOverwrite></IsOverwrite>
  </ExportConfiguration>
</SecDiag>

```

## Response XML structure

```
<SecDiag>
  <ExportConfiguration>
    <Result></Result>
    <ErrorInfo></ErrorInfo>
  </ExportConfiguration>
</SecDiag>
```

## Table description

Item	Description
Feature name	SecDiag
Table name	ExportConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextList	List of contexts selected on the Web.	Data structure	Members include: <ul style="list-style-type: none"><li>ContextID</li></ul>	If no context is selected, information about all contexts is exported.
ContextID	ID of the context.	N/A	Unsigned integer. Value range: 1 to 65535	N/A
FileName	Name for the export file.	N/A	String. Length: 1 to 255 characters. Format: <b>configdate.tar.gz</b> Date format: YYYYMMDDhhmmss	Example: config20170424000000.tar.gz. The filename cannot be <b>..tar.gz</b> or <b>...tar.gz</b> , or contain any of the following characters: " / : \ ? \ \ < >   *
IsOverwrite	Whether to overwrite the file if it already exists.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Overwrites the file.</li><li><b>false</b>—Does not overwrite the file.</li></ul>	By default, the value of this column is <b>false</b> .

## Response columns

Column name	Column description	Data type and restrictions	Remarks
Result	Export result.	Enumeration:	N/A

Column name	Column description	Data type and restrictions	Remarks
		<ul style="list-style-type: none"> <li>0—Succeeded.</li> <li>1—File already exists.</li> </ul>	
ErrorInfo	Description for the export result.	String. Length: 1 to 255 characters.	This column carries the description for the enumeration value that represents the export result.

## SecDiag/ExportDiagnosis

This table is used to export diagnosis files of contexts.

### XML structure

```
<SecDiag>
  <ExportDiagnosis>
    <ContextList>
      <ContextID></ContextID>
    </ContextList>
    <FileName></FileName>
    <IsOverwrite></IsOverwrite>
  </ExportDiagnosis>
</SecDiag>
```

### Response XML structure

```
<SecDiag>
  <ExportDiagnosis>
    <Result></Result>
    <ErrorInfo></ErrorInfo>
  </ExportDiagnosis>
</SecDiag>
```

### Table description

Item	Description
Feature name	SecDiag
Table name	ExportDiagnosis
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextList	List of contexts selected on the Web.	Data structure	Members include: <ul style="list-style-type: none"> <li>ContextID</li> </ul>	If no context is selected, information about all contexts is exported.
ContextID	ID of the context.	N/A	Unsigned integer. Value range: 1 to 65535	N/A
FileName	Name for the export file.	N/A	String. Length: 1 to 255 characters. Format: <b>diagdate.tar.gz</b> Date format: YYYYMMDDhhmmss	Example: diag20170424000000.tar.gz.  The filename cannot be <b>..tar.gz</b> or <b>...tar.gz</b> , or contain any of the following characters: " / : \ ? \ \ < >   *
IsOverwrite	Whether to overwrite the file if it already exists.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Overwrites the file.</li> <li><b>false</b>—Does not overwrite the file.</li> </ul>	By default, the value of this column is <b>false</b> .

## Response columns

Column name	Column description	Data type and restrictions	Remarks
Result	Export result.	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Succeeded.</li> <li><b>1</b>—File already exists.</li> </ul>	N/A
ErrorInfo	Description for the export result.	String. Length: 1 to 255 characters.	This column carries the description for the enumeration value that represents the export result.

# Contents

- SecDiag .....1
  - SecDiag/BandwidthGlobal .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1

# SecDiag

## SecDiag/BandwidthGlobal

This table contains bandwidthalert global configuration information.

### XML structure

```
<SecDiag>
  <BandwidthGlobal>
    <BandwidthLimit></BandwidthLimit>
    <TimeInterval></TimeInterval>
    <Logging></Logging>
  </BandwidthGlobal>
</SecDiag>
```

### Table description

Item	Description
Feature name	SecDiag
Table name	BandwidthGlobal
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BandwidthLimit	Threshold of the inbound flow around the whole device.	N/A	Unsigned integer. Value range: 0 to 4294967295 in Mbps. Default: 0.	N/A
TimeInterval	The interval time to check the inbound flow forward.	N/A	Unsigned integer. Value range: 5 to 300 in seconds. Default: 300.	The interval value should be multiple of five.
Logging	Switch of the threshold logging.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable.</li><li><b>false</b>—Disable(default).</li></ul>	N/A

# Contents

SecDiag .....	1
SecDiag/BandwidthGlobal .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
SecDiag/ExportRatio .....	1
XML structure .....	2
Table description .....	2
Columns .....	2

# SecDiag

## SecDiag/BandwidthGlobal

This table contains bandwidthalert global information.

### XML structure

```
<SecDiag>
  <BandwidthGlobal>
    <BandwidthLimit></BandwidthLimit>
    <TimeInterval></TimeInterval>
    <Logging></Logging>
  </BandwidthGlobal>
</SecDiag>
```

### Table description

Item	Description
Feature name	SecDiag
Table name	BandwidthGlobal
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BandwidthLimit	Threshold of the inbound flow around the whole device.	N/A	Unsigned integer. Value range: 0 to 4294967295 in Mbps.	N/A
TimeInterval	The interval time to check the inbound flow forward.	N/A	Unsigned integer. Value range: 5 to 300 in seconds.	The interval value should be multiple of five.
Logging	Switch of the threshold logging..	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable.</li><li><b>false</b>—Disable.</li></ul>	N/A

## SecDiag/ExportRatio

This table is used to obtain the export progress.



## XML structure

```
<SecDiag>
  <ExportRatio>
    <Ratio></Ratio>
    <ExportType></ExportType>
  </ExportRatio>
</SecDiag>
```

## Table description

Item	Description
Feature name	SecDiag
Table name	ExportRatio
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Data type and restrictions	Remarks
Ratio	Export progress.	Unsigned integer. Value range: 0 to100.	Exporting : 0 to 100
ExportType	Type of data is being exported.	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—No data is being exported.</li><li>• <b>1</b>—Log file.</li><li>• <b>2</b>—Diagnosis information.</li><li>• <b>3</b>—Configuration information.</li></ul>	Only one type is supported at a time.

# Contents

- SecDiag .....2
  - SecDiag/ExportLogfile.....2
  - SecDiag/ExportConfiguration.....2
  - SecDiag/ExportDiagnosis .....3

# SecDiag

## SecDiag/ExportLogfile

Message	Explanation
Invalid file name or directory. 文件名或路径错误，请输入正确的文件名和路径。	The filename or directory is wrong. 文件名或路径错误。
The storage space or memory is not enough. 设备的存储或内存空间不足，无法进行信息收集。	The device storage is not sufficient. 设备的存储或内存空间不足。
Only one user can export data at a time. 已有用户正在收集信息，请稍候。	Only one user is allowed to collect information at one time. 已有用户正在收集统计信息，不支持多用户同时收集信息。
File already exists. 文件已存在。	The file already exists on the device. 文件已存在。
Sorry, you are not authorized to perform the operation. 用户权限不足。	The user is not authorized to perform the operation. 用户权限不足。
One or more of the contexts don't exist or are unavailable. 虚拟设备不存在或连接异常。	One or more of the contexts do not exist or are unavailable for collecting information. 要收集信息的context不存在或连接异常。
The extension of the file name must be .tar.gz. 文件名后缀错误，请输入以“.tar.gz”结尾的文件名。	The extension of the file name must be .tar.gz. 文件名后缀错误，请输入以“.tar.gz”结尾的文件名。
No information to export. 不存在日志文件，无法收集信息。	No log files exist to collect information. 不存在日志文件，无法收集信息。
Others error. 其他错误。	Other errors. 其他错误。

## SecDiag/ExportConfiguration

Message	Explanation
Invalid file name or directory. 文件名或路径错误，请输入正确的文件名和路径。	The filename or directory is wrong. 文件名或路径错误。
The storage space or memory is not enough. 设备的存储或内存空间不足，无法进行信息收集。	The device storage is not sufficient. 设备的存储或内存空间不足。
Only one user can export data at a time. 已有用户正在收集统计信息，请稍候。	Only one user is allowed to collect information at one time. 已有用户正在收集统计信息，不支持多用户同时收集信息。
File already exists. 文件已存在。	The file already exists on the device. 文件已存在。
Sorry, you are not authorized to perform the operation. 用户权限不足。	The user is not authorized to perform the operation. 用户权限不足。

One or more of the contexts don't exist or are unavailable. 虚拟设备不存在或连接异常。	One or more of the contexts do not exist or are unavailable for collecting information. 要收集信息的context不存在或连接异常。
The extension of the file name must be .tar.gz. 文件名后缀错误, 请输入以“.tar.gz”结尾的文件名。	The extension of the file name must be .tar.gz. 文件名后缀错误, 请输入以“.tar.gz”结尾的文件名。
Other error. 其他错误。	Other errors. 其他错误。

## SecDiag/ExportDiagnosis

Message	Explanation
Invalid file name or directory. 文件名或路径错误, 请输入正确的文件名和路径。	The filename or directory is wrong. 文件名或路径错误。
The storage space or memory is not enough. 设备的存储或内存空间不足, 无法进行信息收集。	The device storage is not sufficient. 设备的存储或内存空间不足。
Only one user can export data at a time. 已有用户正在收集信息, 请稍候。	Only one user is allowed to collect information at one time. 已有用户正在收集统计信息, 不支持多用户同时收集信息。
File already exists. 文件已存在。	The file already exists on the device. 文件已存在。
Sorry, you are not authorized to perform the operation. 用户权限不足。	The user is not authorized to perform the operation. 用户权限不足。
One or more of the contexts don't exist or are unavailable. 虚拟设备不存在或连接异常。	One or more of the contexts do not exist or are unavailable for collecting information. 要收集信息的context不存在或连接异常。
The extension of the file name must be .tar.gz. 文件名后缀错误, 请输入以“.tar.gz”结尾的文件名。	The extension of the file name must be .tar.gz. 文件名后缀错误, 请输入以“.tar.gz”结尾的文件名。
Failed to read the configuration file. 配置文件读取失败。	Failed to read the configuration file. 配置文件读取失败。
Other error. 其他错误。	Other errors. 其他错误。

# Contents

SecurityPolicies .....	1
SecurityPolicies/ClearRuleStatistic .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
SecurityPolicies/CommitCfgChange .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
SecurityPolicies/MoveIPv4Rule .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
SecurityPolicies/MoveIPv6Rule .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
SecurityPolicies/RedundancyRulesCheck .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
SecurityPolicies/SingleOptimized .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
SecurityPolicies/BatchOptimized .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
SecurityPolicies/MoveIPv4RuleGroup .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
SecurityPolicies/MoveIPv6RuleGroup .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
SecurityPolicies/RenameIPv4RuleGrp .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
SecurityPolicies/RenameIPv6RuleGrp .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
SecurityPolicies/ExportSecurityPolicies .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
SecurityPolicies/ImportSecurityPolicies .....	12
XML structure .....	13
Table description .....	13
Columns .....	13

# SecurityPolicies

## SecurityPolicies/ClearRuleStatistic

This table contains the operation information for a security policy rule.

### XML structure

```
<SecurityPolicies>
  <ClearRuleStatistic>
    <Rule>
      <RuleID></RuleID>
      <ClearType></ClearType>
      <Clear></Clear>
    </Rule>
  </ClearRuleStatistic>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	ClearRuleStatistic
Table type	Multi-instance table
Row name	Rule
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.	N/A
ClearType	Type of statistics to be cleared.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—IPv4 statistics.</li><li>2—IPv6 statistics.</li></ul>	N/A
Clear	Clears security policy rule statistics.	N/A	This column must be empty.	Required.

# SecurityPolicies/CommitCfgChange

This table contains the commit operation for configuration changes.

## XML structure

```
<SecurityPolicies>
  <CommitCfgChange>
    <Commit></Commit>
  </CommitCfgChange>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	CommitCfgChange
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Commit	Commits configuration changes.	N/A	This column must be empty.	Required.

# SecurityPolicies/MoveIPv4Rule

This table contains information about moving an IPv4 security policy rule within an IPv4 security policy.

## XML structure

```
<SecurityPolicies>
  <MoveIPv4Rule>
    <Rule>
      <ID></ID>
      <MoveType></MoveType>
      <DestID></DestID>
    </Rule>
  </MoveIPv4Rule>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	MoveIPv4Rule
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.	N/A
MoveType	Type of rule to be moved.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Head.</li><li>• 2—Before.</li><li>• 3—After.</li><li>• 4—Tail.</li></ul>	N/A
DestID	Destination rule ID.	N/A	Unassigned integer. Value range: 0 to 65534.	N/A

## SecurityPolicies/MoveIPv6Rule

This table contains information about moving an IPv6 security policy rule within an IPv6 security policy.

## XML structure

```
<SecurityPolicies>
  <MoveIPv6Rule>
    <Rule>
      <ID></ID>
      <MoveType></MoveType>
      <DestID></DestID>
    </Rule>
  </MoveIPv6Rule>
</SecurityPolicies>
```



## Table description

Item	Description
Feature name	SecurityPolicies
Table name	MoveIPv6Rule
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.	N/A
MoveType	Type of rule to be moved.	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Head.</li><li>• 2—Before.</li><li>• 3—After.</li><li>• 4—Tail.</li></ul>	N/A
DestID	Destination rule ID.	N/A	Unassigned integer. Value range: 0 to 65534.	N/A

## SecurityPolicies/RedundancyRulesCheck

This table contains information about checking redundant security policy rules.

## XML structure

```
<SecurityPolicies>  
  <RedundancyRulesCheck>  
    <Action></Action>  
  </RedundancyRulesCheck>  
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	RedundancyRulesCheck
Table type	Single-instance table

Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Action	Action of checking redundant rules.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Start.</li> <li>2—Stop.</li> </ul>	N/A

## SecurityPolicies/SingleOptimized

This table contains the optimization operation for single risky security policy rule.

## XML structure

```

<SecurityPolicies>
  <SingleOptimized>
    <PolicyType></PolicyType>
    <RuleID></RuleID>
    <RuleName></RuleName>
    <Profile></Profile>
    <ParentID></ParentID>
    <ParentName></ParentName>
    <IsAppTicked></IsAppTicked>
  </SingleOptimized>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	SingleOptimized
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyType	Rule type.	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>	Required.
RuleID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.	Required.
RuleName	Rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.	Required.
Profile	Profile name.	N/A	String. Length: 1 to 63 characters.	Required.
ParentID	Parent rule ID.	N/A	Unassigned integer. Value range: 0 to 65534.	Required.
ParentName	Parent rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.	Required.
IsAppTicked	Whether the application being ticked.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>	Required.

## SecurityPolicies/BatchOptimized

This table contains the optimization operation for some risky security policy rules.

### XML structure

```
<SecurityPolicies>
  <BatchOptimized>
    <OptimizeType></OptimizeType>
    <Commit></Commit>
  </BatchOptimized>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	BatchOptimized
Table type	Single-instance table
Row name	N/A

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
OptimizeType	The time range of optimization.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Today.</li> <li>1—Last Three Days.</li> <li>2—Last Week.</li> <li>3—Last Month.</li> </ul>	Required
Commit	Commit batch optimization operation.	N/A	This column must be empty.	Required.

## SecurityPolicies/MoveIPv4RuleGroup

This table contains information about moving a rule group within an IPv4 security policy.

## XML structure

```

<SecurityPolicies>
  <MoveIPv4RuleGroup>
    <RuleGroup>
      <RuleGroupName></RuleGroupName>
      <Direction></Direction>
      <DestinationType></DestinationType>
      <DestinationName></DestinationName>
    </RuleGroup>
  </MoveIPv4RuleGroup>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	MoveIPv4RuleGroup
Table type	Multi-instance table
Row name	RuleGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleGroupName	Rule group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Direction	Moving direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Before.</li> <li>2—After.</li> </ul>	N/A
DestinationType	Type of destination	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Rule group.</li> <li>2—Rule.</li> </ul>	N/A
DestinationName	Target rule group name or rule name	Index	String, case-insensitive. Length: 1 to 127 characters.	N/A

## SecurityPolicies/MoveIPv6RuleGroup

This table contains information about moving a rule group within an IPv6 security policy.

## XML structure

```

<SecurityPolicies>
  <MoveIPv6RuleGroup>
    <RuleGroup>
      <RuleGroupName></RuleGroupName>
      <Direction></Direction>
      <DestinationType></DestinationType>
      <DestinationName></DestinationName>
    </RuleGroup>
  </MoveIPv6RuleGroup>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	MoveIPv6RuleGroup
Table type	Multi-instance table
Row name	RuleGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleGroupName	Rule group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Direction	Moving direction	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Before.</li> <li>2—After.</li> </ul>	N/A
DestinationType	Type of destination	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Rule group.</li> <li>2—Rule.</li> </ul>	N/A
DestinationName	Target rule group name or rule name	Index	String, case-insensitive. Length: 1 to 127 characters.	N/A

## SecurityPolicies/RenameIPv4RuleGrp

This table contains information about renaming a rule group within an IPv4 security policy.

## XML structure

```

<SecurityPolicies>
  <RenameIPv4RuleGrp>
    <RuleGroup>
      <RuleGroupName></RuleGroupName>
      <NewRuleGroupName></NewRuleGroupName>
    </RuleGroup>
  </RenameIPv4RuleGrp>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	RenameIPv4RuleGrp
Table type	Multi-instance table
Row name	RuleGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleGroupName	Rule group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
NewRuleGroupName	New rule group name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

## SecurityPolicies/RenameIPv6RuleGrp

This table contains information about renaming a rule group within an IPv6 security policy.

## XML structure

```
<SecurityPolicies>
  <RenameIPv6RuleGrp>
    <RuleGroup>
      <RuleGroupName></RuleGroupName>
      <NewRuleGroupName></NewRuleGroupName>
    </RuleGroup>
  </RenameIPv6RuleGrp>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	RenameIPv6RuleGrp
Table type	Multi-instance table
Row name	RuleGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleGroupName	Rule group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

NewRuleGroup Name	New rule group name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
-------------------	---------------------	-------	--	-----

## SecurityPolicies/ExportSecurityPolicies

This table contains information about exporting security policy rules.

### XML structure

```

<SecurityPolicies>
  <ExportSecurityPolicies>
    <FileName></FileName>
    <SecZone></SecZone>
    <AddrOMS></AddrOMS>
    <SrvOMS></SrvOMS>
    <App></App>
    <TimeRange></TimeRange>
    <VRF></VRF>
    <Profile></Profile>
    <Policy></Policy>
    <User></User>
    <Mac></Mac>
  </ExportSecurityPolicies>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	ExportSecurityPolicies
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the export file	N/A	String: Length: 1 to 255 characters.	N/A
SecZone	Whether the configuration of security zones	N/A	Boolean: • true	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	needs to be exported		<ul style="list-style-type: none"> <li>false</li> </ul>	
AddrOMS	Whether the configuration of address object groups needs to be exported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SrvOMS	Whether the configuration of service object groups needs to be exported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
App	Whether the configuration of applications and application groups needs to be exported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
TimeRange	Whether the configuration of time ranges needs to be exported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
VRF	Whether the configuration of VRT need be export or not	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Profile	Whether the configuration of VPN instances needs to be exported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Policy	Whether the configuration of profiles needs to be exported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
User	Whether the configuration of security policies needs to be exported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Mac	Whether the configuration of users and user groups needs to be exported	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## SecurityPolicies/ImportSecurityPolicies

This table contains information about importing security policy rules.

## XML structure

```
<SecurityPolicies>
  <ImportSecurityPolicies>
    <FileName></FileName>
  </ImportSecurityPolicies>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	ImportSecurityPolicies
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the import file	N/A	String: Length: 1 to 255 characters.	N/A

# Contents

SecurityPolicies .....	1
SecurityPolicies/IPv4Rules .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
SecurityPolicies/IPv6Rules .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
SecurityPolicies/IPv4SrcSecZone .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
SecurityPolicies/IPv6SrcSecZone .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
SecurityPolicies/IPv4DestSecZone .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
SecurityPolicies/IPv6DestSecZone .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
SecurityPolicies/IPv4SrcAddr .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
SecurityPolicies/IPv6SrcAddr .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
SecurityPolicies/IPv4DestAddr .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
SecurityPolicies/IPv6DestAddr .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
SecurityPolicies/IPv4SrcMacAddr .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
SecurityPolicies/IPv4ServGrp .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
SecurityPolicies/IPv6ServGrp .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
SecurityPolicies/IPv4App .....	18
XML structure .....	18
Table description .....	18
Columns .....	18

SecurityPolicies/IPv6App .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
SecurityPolicies/IPv4AppGrp .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
SecurityPolicies/IPv6AppGrp .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
SecurityPolicies/IPv4User .....	22
XML structure .....	22
Table description .....	23
Columns .....	23
SecurityPolicies/IPv6User .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
SecurityPolicies/IPv4UserGrp .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
SecurityPolicies/IPv6UserGrp .....	26
XML structure .....	27
Table description .....	27
Columns .....	27
SecurityPolicies/Accelerate .....	28
XML structure .....	28
Table description .....	28
Columns .....	28
SecurityPolicies/RulesCounting .....	29
XML structure .....	29
Table description .....	29
Columns .....	29
SecurityPolicies/IPv4RuleGroup .....	29
XML structure .....	29
Table description .....	30
Columns .....	30
SecurityPolicies/IPv6RuleGroup .....	30
XML structure .....	31
Table description .....	31
Columns .....	31

# SecurityPolicies

## SecurityPolicies/IPv4Rules

This table contains IPv4 rule information.

### XML structure

```
<SecurityPolicies>
  <IPv4Rules>
    <Rule>
      <ID></ID>
      <RuleName></RuleName>
      <Action></Action>
      <VRF></VRF>
      <TimeRange></TimeRange>
      <Enable></Enable>
      <Log></Log>
      <Counting></Counting>
      <Comment></Comment>
      <Profile></Profile>
      <SessAgingTimeSw></SessAgingTimeSw>
      <SessAgingTime></SessAgingTime>
      <SessPersistAgingTimeSw></SessPersistAgingTimeSw>
      <SessPersistAgingTime></SessPersistAgingTime>
    <RuleGroupName></RuleGroupName>    </Rule>
  </IPv4Rules>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65535.	If you set this column to 65535, the device automatically assigns the rule an ID.
RuleName	Rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.	The value cannot be the word default.
Action	Action for the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	Required when you create a rule or modify a rule through the <b>replace</b> operation.
VRF	VRF name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	Optional.
TimeRange	Name of the time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
Enable	Whether to enable the rule.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable (default).</li> <li>false—Disable.</li> </ul>	Optional.
Log	Whether to enable logging.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable (default).</li> </ul>	Optional.
Counting	Whether to enable counting.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable (default).</li> </ul>	Optional.
Comment	Description.	N/A	String. Length: 1 to 127 characters.	Optional.
Profile	Profile name	N/A	String. Length: 1 to 63 characters.	Optional
SessAgingTimeSw	Whether to enable the session aging timer.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable (default).</li> </ul>	Optional.
SessAgingTime	Session aging time period.	N/A	Unsigned integer. Value range: 0 to 2000000 seconds.	Optional.
SessPersistAgingTimeSw	Whether to enable the persistent session aging timer.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable (default).</li> </ul>	Optional.
SessPersistAgingTime	Persistent session aging time	N/A	Unsigned integer. Value range: 0 to 24000 hours.	Optional.

	period.		0 indicates that the timer never ages out.	
RuleGroupName	Rule group name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Optional.

## SecurityPolicies/IPv6Rules

This table contains IPv6 rule information.

### XML structure

```

<SecurityPolicies>
  <IPv6Rules>
    <Rule>
      <ID></ID>
      <RuleName></RuleName>
      <Action></Action>
      <VRF></VRF>
      <TimeRange></TimeRange>
      <Enable></Enable>
      <Log></Log>
      <Counting></Counting>
      <Comment></Comment>
      <Profile></Profile>
      <SessAgingTimeSw></SessAgingTimeSw>
      <SessAgingTime></SessAgingTime>
      <SessPersistAgingTimeSw></SessPersistAgingTimeSw>
      <SessPersistAgingTime></SessPersistAgingTime>
      <RuleGroupName></RuleGroupName>
    </Rule>
  </IPv6Rules>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID.	Rule ID	Index	Unassigned integer. Value range: 0 to 65535.	If you set this column to 65535, the device automatically assigns the rule an ID.
RuleName.	Rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.	The value cannot be the word <b>default</b> .
Action.	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>	Required when you create a rule or modify a rule through the <b>replace</b> operation.
VRF.	VRF name	N/A	String, case-sensitive. Length: 1 to 31 characters.	Optional.
TimeRange.	Name of the time range	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	It cannot be the word <b>all</b> .
Enable.	Whether to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable (default).</li> <li>false—Disable.</li> </ul>	Optional.
Log.	Whether to enable logging	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable (default).</li> </ul>	Optional.
Counting.	Whether to enable counting	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable (default).</li> </ul>	Optional.
Comment.	Description	N/A	String. Length: 1 to 127 characters.	Optional.
Profile	Profile name	N/A	String. Length: 1 to 63 characters.	Optional
SessAgingTimeSw.	Whether to enable the session aging timer	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable (default).</li> </ul>	Optional.
SessAgingTime.	Session aging time period	N/A	Unsigned integer. Value range: 0 to 2000000 seconds.	Optional.
SessPersistAgingTimeSw.	Whether to enable the persistent session aging timer.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable (default).</li> </ul>	Optional.
SessPersistAgingTime.	Persistent session aging time period.	N/A	Unsigned integer. Value range: 0 to 24000	Optional.



			hours. 0 indicates that the timer never ages out.	
RuleGroupName	Rule group name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Optional

## SecurityPolicies/IPv4SrcSecZone

This table contains source security zone information for an existing IPv4 security policy rule.

### XML structure

```
<SecurityPolicies>
  <IPv4SrcSecZone>
    <SrcSecZone>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcSecZone>
  </IPv4SrcSecZone>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4SrcSecZone
Table type	Multi-instance table
Row name	SrcSecZone
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence	Index	Unassigned integer.	This column is insignificant.

	number		Value range: 1 to 16.	Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the source security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the source security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.	A source security zone list can contain a maximum of 16 source security zones.

## SecurityPolicies/IPv6SrcSecZone

This table contains source security zone information for an existing IPv6 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv6SrcSecZone>
    <SrcSecZone>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcSecZone>
  </IPv6SrcSecZone>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6SrcSecZone
Table type	Multi-instance table
Row name	SrcSecZone
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 16.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the source security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the source security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.	A source security zone list can contain a maximum of 16 source security zones.

## SecurityPolicies/IPv4DestSecZone

This table contains destination security zone information for an existing IPv4 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv4DestSecZone>
    <DestSecZone>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestSecZone>
  </IPv4DestSecZone>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies

Table name	IPv4DestSecZone
Table type	Multi-instance table
Row name	DestSecZone
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 16.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the destination security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the destination security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.	A destination security zone list can contain a maximum of 16 destination security zones.

## SecurityPolicies/IPv6DestSecZone

This table contains destination security zone information for an existing IPv6 security policy rule.

## XML structure

```

<SecurityPolicies>
  <IPv6DestSecZone>
    <DestSecZone>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestSecZone>
  </IPv6DestSecZone>
</SecurityPolicies>

```

```

    </IPv6DestSecZone>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6DestSecZone
Table type	Multi-instance table
Row name	DestSecZone
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 16.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the destination security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the destination security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.	A destination security zone list can contain a maximum of 16 destination security zones.

## SecurityPolicies/IPv4SrcAddr

This table contains source address object group information for an existing IPv4 security policy rule.

## XML structure

```

<SecurityPolicies>
  <IPv4SrcAddr>

```

```

<SrcAddr>
  <ID></ID>
  <SeqNum></SeqNum>
  <IsIncrement></IsIncrement>
  <NameList>
    <NameItem></NameItem>
  </NameList>
</SrcAddr>
</IPv4SrcAddr>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4SrcAddr
Table type	Multi-instance table
Row name	SrcAddr
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the source IPv4 address list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the source IPv4 address	N/A	String, case-insensitive. Length: 1 to 31 characters.	A maximum of 1024 source address names are supported in a user list. The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and it cannot contain any of the following characters: \   / : * ? < > @

# SecurityPolicies/IPv6SrcAddr

This table contains source address object group information for an existing IPv6 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv6SrcAddr>
    <SrcAddr>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcAddr>
  </IPv6SrcAddr>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6SrcAddr
Table type	Multi-instance table
Row name	SrcAddr
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li>true—Yes.</li><li>false—No (default).</li></ul>	N/A

NameList	Name of the source IPv6 address list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the source IPv6 address	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## SecurityPolicies/IPv4DestAddr

This table contains destination address object group information for an existing IPv4 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv4DestAddr>
    <DestAddr>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestAddr>
  </IPv4DestAddr>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4DestAddr
Table type	Multi-instance table
Row name	DestAddr
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer.	N/A



			Value range: 0 to 65534.	
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the destination IPv4 address list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the destination IPv4 address	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## SecurityPolicies/IPv6DestAddr

This table contains destination address object group information for an existing IPv6 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv6DestAddr>
    <DestAddr>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestAddr>
  </IPv6DestAddr>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6DestAddr
Table type	Multi-instance table
Row name	DestAddr
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the destination IPv6 address list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the destination IPv6 address	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## SecurityPolicies/IPv4SrcMacAddr

This table contains source MAC address object group information for an existing IPv4 security policy rule.

## XML structure

```

<SecurityPolicies>
  <IPv4SrcMacAddr>
    <SrcMacAddr>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcMacAddr>
  </IPv4SrcMacAddr>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4SrcMacAddr
Table type	Multi-instance table
Row name	SrcMacAddr
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li>true—Yes.</li><li>false—No (default).</li></ul>	N/A
NameList	Name of the source IPv4 MAC address list	Data structure	Members include: <ul style="list-style-type: none"><li>NameItem</li></ul>	N/A
NameItem	Name of the source IPv4 MAC address	N/A	String, case-insensitive. Length: 1 to 31 characters.	A maximum of 1024 source IPv4 MAC address names are supported in a user list. The name cannot be <b>any</b> , and it cannot contain any of the following characters: ?

## SecurityPolicies/IPv4ServGrp

This table contains service object group information for an existing IPv4 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv4ServGrp>
    <ServGrp>
```

```

<ID></ID>
<SeqNum></SeqNum>
<IsIncrement></IsIncrement>
<NameList>
  <NameItem></NameItem>
</NameList>
</ServGrp>
</IPv4ServGrp>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4ServGrp
Table type	Multi-instance table
Row name	ServGrp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the service object group list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the service object group	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

# SecurityPolicies/IPv6ServGrp

This table contains service object group information for an existing IPv6 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv6ServGrp>
    <ServGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </ServGrp>
  </IPv6ServGrp>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6ServGrp
Table type	Multi-instance table
Row name	ServGrp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li>true—Yes.</li><li>false—No (default).</li></ul>	N/A

NameList	Name of the service object group list	Data structure	Members include: <ul style="list-style-type: none"> <li>NamelItem</li> </ul>	N/A
NamelItem	Name of the service object group	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## SecurityPolicies/IPv4App

This table contains application information for an existing IPv4 security policy rule.

### XML structure

```
<SecurityPolicies>
  <IPv4App>
    <App>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </App>
  </IPv4App>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4App
Table type	Multi-instance table
Row name	App
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer.	N/A

			Value range: 0 to 65534.	
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## SecurityPolicies/IPv6App

This table contains application information for an existing IPv6 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv6App>
    <App>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </App>
  </IPv6App>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6App
Table type	Multi-instance table
Row name	App
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## SecurityPolicies/IPv4AppGrp

This table contains application group information for an existing IPv4 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv4AppGrp>
    <AppGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </AppGrp>
  </IPv4AppGrp>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies



Table name	IPv4AppGrp
Table type	Multi-instance table
Row name	AppGrp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the application group list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## SecurityPolicies/IPv6AppGrp

This table contains application group information for an existing IPv6 security policy rule.

## XML structure

```

<SecurityPolicies>
  <IPv6AppGrp>
    <AppGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </AppGrp>
  </IPv6AppGrp>

```

</SecurityPolicies>

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6AppGrp
Table type	Multi-instance table
Row name	AppGrp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li>true—Yes.</li><li>false—No (default).</li></ul>	N/A
NameList	Name of the application group list	Data structure	Members include: <ul style="list-style-type: none"><li>NameItem</li></ul>	N/A
NameItem	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## SecurityPolicies/IPv4User

This table contains user information for an existing IPv4 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv4User>
    <User>
      <ID></ID>
```

```

    <SeqNum></SeqNum>
    <IsIncrement></IsIncrement>
    <NameList>
        <NameItem></NameItem>
    </NameList>
</User>
</IPv4User>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4User
Table type	Multi-instance table
Row name	User
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the user list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of user	N/A	String, case-sensitive. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.	Form: user-name, user-name@domain-name. The user name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and it cannot contain any of the following characters: \   / : * ? < > @. The domain name cannot contain any of the following characters: \   / : * ? < > @.

				For versions B64D025 and B64D026, the domain name cannot be <b>d</b> , <b>de</b> , <b>def</b> , <b>defa</b> , <b>defau</b> , <b>default</b> , <b>default</b> , <b>i</b> , <b>if</b> , <b>if-</b> , <b>if-u</b> , <b>if-un</b> , <b>if-unk</b> , <b>if-unkn</b> , <b>if-unkno</b> , <b>if-unknow</b> , or <b>if-unknown</b> .
--	--	--	--	--

## SecurityPolicies/IPv6User

This table contains user information for an existing IPv6 security policy rule.

### XML structure

```
<SecurityPolicies>
  <IPv6User>
    <User>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </User>
  </IPv6User>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6User
Table type	Multi-instance table
Row name	User
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence	Index	Unassigned integer.	This column is insignificant.

	number		Value range: 1 to 1024.	Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the user list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the user	N/A	String, case-sensitive. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.	Form: user-name, user-name@domain-name. The user name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and it cannot contain any of the following characters: \   / : * ? < > @. The domain name cannot contain any of the following characters: \   / : * ? < > @. For versions B64D025 and B64D026, the domain name cannot be <b>d</b> , <b>de</b> , <b>def</b> , <b>defa</b> , <b>defau</b> , <b>defaul</b> , <b>default</b> , <b>i</b> , <b>if</b> , <b>if-</b> , <b>if-u</b> , <b>if-un</b> , <b>if-unkn</b> , <b>if-unkn</b> , <b>if-unkn</b> , <b>if-unkn</b> , <b>if-unkn</b> , or <b>if-unknown</b> .

## SecurityPolicies/IPv4UserGrp

This table contains user group information for an existing IPv4 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv4UserGrp>
    <UserGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </UserGrp>
  </IPv4UserGrp>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4UserGrp

Table type	Multi-instance table
Row name	UserGrp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes.</li> <li>false—No (default).</li> </ul>	N/A
NameList	Name of the user group list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>	N/A
NameItem	Name of the user group	N/A	String, case-insensitive. Group name length: 1 to 32 characters. Domain name length: 1 to 255 characters.	Form: user-group-name, user-group-name@domain-name.  The domain name cannot contain any of the following characters: \   / : * ? < > @. For versions B64D025 and B64D026, the domain name cannot be <b>d</b> , <b>de</b> , <b>def</b> , <b>defa</b> , <b>defau</b> , <b>default</b> , <b>i</b> , <b>if</b> , <b>if-</b> , <b>if-u</b> , <b>if-un</b> , <b>if-unk</b> , <b>if-unkn</b> , <b>if-unkno</b> , <b>if-unknow</b> , or <b>if-unknown</b> .  If you want to contain a backslash (\) or an at sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).

## SecurityPolicies/IPv6UserGrp

This table contains user group information for an existing IPv6 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv6UserGrp>
    <UserGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </UserGrp>
  </IPv6UserGrp>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6UserGrp
Table type	Multi-instance table
Row name	UserGrp
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.	N/A
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.	This column is insignificant. Ignore the value in this column.
IsIncrement	Whether to increment the data	N/A	Boolean: <ul style="list-style-type: none"><li>true—Yes.</li><li>false—No (default).</li></ul>	N/A
NameList	Name of the user group list	Data structure	Members include: <ul style="list-style-type: none"><li>NameItem</li></ul>	N/A
NameItem	Name of the user group	N/A	String, case-insensitive. Group name length: 1 to 32	Form: user-group-name, user-group-name@domain-n

			characters. Domain name length: 1 to 255 characters.	ame. The domain name cannot contain any of the following characters: \   / : * ? < > @ . For versions B64D025 and B64D026, the domain name cannot be <b>d</b> , <b>de</b> , <b>def</b> , <b>defa</b> , <b>defau</b> , <b>defaul</b> , <b>default</b> , <b>i</b> , <b>if</b> , <b>if-</b> , <b>if-u</b> , <b>if-un</b> , <b>if-unk</b> , <b>if-unkn</b> , <b>if-unkno</b> , <b>if-unknow</b> , or <b>if-unknown</b> . If you want to contain a backslash (\) or an at sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).
--	--	--	---	---

## SecurityPolicies/Accelerate

This table contains rule matching acceleration information for security policies.

### XML structure

```

<SecurityPolicies>
  <Accelerate>
    <Enable></Enable>
  </Accelerate>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	Accelerate
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable rule matching acceleration for the	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable (default).</li> <li>false—Disable.</li> </ul>	Optional.



	security policy.			
--	------------------	--	--	--

## SecurityPolicies/RulesCounting

This table contains rules counting information for security policies.

### XML structure

```
<SecurityPolicies>
  <RulesCounting>
    <Enable></Enable>
  </RulesCounting>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	RulesCounting
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable rule counting for the security policy.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable (default).</li> </ul>	Optional.

## SecurityPolicies/IPv4RuleGroup

This table contains information about an IPv4 security policy rule group.

### XML structure

```
<SecurityPolicies>
  <IPv4RuleGroup>
    <RuleGroup>
      <RuleGroupName></RuleGroupName>
    </RuleGroup>
  </IPv4RuleGroup>
</SecurityPolicies>
```

```

<Description></Description>
<FromRuleName></FromRuleName>
<ToRuleName></ToRuleName><Enable></Enable>
<IncludeMember></IncludeMember>
</RuleGroup>
</IPv4RuleGroup>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4RuleGroup
Table type	Multi-instance table
Row name	RuleGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleGroupName	Rule group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description.	Description	N/A	String. Length: 1 to 127 characters.	Optional.
FromRuleName	The begin rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.	Optional.
ToRuleName	The end rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.	Optional.
IncludeMember	Delete all the rules under the rule group.	N/A	This column is used when a rule group is deleted. If this column is specified, the rules under the rule group will also be deleted.	Optional.
Enable	Enable the rule group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>	Optional.

## SecurityPolicies/IPv6RuleGroup

This table contains information about an IPv6 security policy rule group.

## XML structure

```
<SecurityPolicies>
  <IPv6RuleGroup>
    <RuleGroup>
      <RuleGroupName></RuleGroupName>
      <Description></Description>
      <FromRuleName></FromRuleName>
      <ToRuleName></ToRuleName>
      <Enable></Enable>
      <IncludeMember></IncludeMember>
    </RuleGroup>
  </IPv6RuleGroup>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6RuleGroup
Table type	Multi-instance table
Row name	RuleGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleGroupName	Rule group name.	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Description.	Description	N/A	String. Length: 1 to 127 characters.	Optional
FromRuleName	The begin rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.	Optional
ToRuleName	The end rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.	Optional
IncludeMember	Delete all the rules under the rule group.	N/A	This column is used when a rule group is deleted. If this column is specified, the rules under the rule group will also be deleted.	Optional.
Enable	Enable the	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li></ul>	Optional

	rule group.		<ul style="list-style-type: none"><li>• false—Disable.</li></ul>	
--	-------------	--	--	--

# Contents

SecurityPolicies .....	1
SecurityPolicies/IPv4Rules .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
SecurityPolicies/IPv6Rules .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
SecurityPolicies/GetRules .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
SecurityPolicies/QueryRules .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
SecurityPolicies/IPv4SrcSecZone .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
SecurityPolicies/IPv6SrcSecZone .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
SecurityPolicies/IPv4DestSecZone .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
SecurityPolicies/IPv6DestSecZone .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
SecurityPolicies/IPv4SrcAddr .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
SecurityPolicies/IPv6SrcAddr .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
SecurityPolicies/IPv4DestAddr .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
SecurityPolicies/IPv6DestAddr .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
SecurityPolicies/IPv4SrcMacAddr .....	21
XML structure .....	22
Table description .....	22
Columns .....	22
SecurityPolicies/IPv4ServGrp .....	23
XML structure .....	23
Table description .....	23
Columns .....	23

SecurityPolicies/IPv6ServGrp .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
SecurityPolicies/IPv4App .....	25
XML structure .....	25
Table description .....	25
Columns .....	25
SecurityPolicies/IPv6App .....	26
XML structure .....	26
Table description .....	26
Columns .....	26
SecurityPolicies/IPv4AppGrp .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
SecurityPolicies/IPv6AppGrp .....	28
XML structure .....	28
Table description .....	28
Columns .....	29
SecurityPolicies/IPv4User .....	29
XML structure .....	29
Table description .....	29
Columns .....	30
SecurityPolicies/IPv6User .....	30
XML structure .....	30
Table description .....	31
Columns .....	31
SecurityPolicies/IPv4UserGrp .....	31
XML structure .....	31
Table description .....	32
Columns .....	32
SecurityPolicies/IPv6UserGrp .....	32
XML structure .....	32
Table description .....	33
Columns .....	33
SecurityPolicies/AllocRuleID .....	34
XML structure .....	34
Table description .....	34
Columns .....	34
SecurityPolicies/Accelerate .....	34
XML structure .....	34
Table description .....	35
Columns .....	35
SecurityPolicies/GetAccelerateCommitStatus .....	35
XML structure .....	35
Table description .....	35
Columns .....	36
SecurityPolicies/BaseProtocols .....	36
XML structure .....	36
Table description .....	36
Columns .....	37
SecurityPolicies/RedundancyCheckStatus .....	37
XML structure .....	37
Table description .....	37
Columns .....	38
SecurityPolicies/ContainRedundancyRules .....	38
XML structure .....	38
Table description .....	39
Columns .....	39
SecurityPolicies/ConfirmedRedundancyRules .....	42
XML structure .....	42

Table description .....	43
Columns .....	44
SecurityPolicies/IPv4SrcSecZoneInfo .....	46
XML structure .....	46
Table description .....	47
Columns .....	47
SecurityPolicies/IPv6SrcSecZoneInfo .....	47
XML structure .....	47
Table description .....	48
Columns .....	48
SecurityPolicies/IPv4DestSecZoneInfo .....	48
XML structure .....	48
Table description .....	49
Columns .....	49
SecurityPolicies/IPv6DestSecZoneInfo .....	49
XML structure .....	50
Table description .....	50
Columns .....	50
SecurityPolicies/IPv4SrcMacAddrGrpInfo .....	51
XML structure .....	51
Table description .....	51
Columns .....	51
SecurityPolicies/IPv4SrcAddrGrpInfo .....	52
XML structure .....	52
Table description .....	52
Columns .....	52
SecurityPolicies/IPv6SrcAddrGrpInfo .....	53
XML structure .....	53
Table description .....	53
Columns .....	53
SecurityPolicies/IPv4DestAddrGrpInfo .....	54
XML structure .....	54
Table description .....	54
Columns .....	55
SecurityPolicies/IPv6DestAddrGrpInfo .....	55
XML structure .....	55
Table description .....	55
Columns .....	56
SecurityPolicies/IPv4ServGrpInfo .....	56
XML structure .....	56
Table description .....	57
Columns .....	57
SecurityPolicies/IPv6ServGrpInfo .....	57
XML structure .....	57
Table description .....	58
Columns .....	58
SecurityPolicies/IPv4AppInfo .....	58
XML structure .....	58
Table description .....	59
Columns .....	59
SecurityPolicies/IPv6AppInfo .....	59
XML structure .....	59
Table description .....	60
Columns .....	60
SecurityPolicies/IPv4AppGrpInfo .....	61
XML structure .....	61
Table description .....	61
Columns .....	61
SecurityPolicies/IPv6AppGrpInfo .....	62
XML structure .....	62
Table description .....	62
Columns .....	62

SecurityPolicies/IPv4UserInfo .....	63
XML structure .....	63
Table description .....	63
Columns .....	63
SecurityPolicies/IPv6UserInfo .....	64
XML structure .....	64
Table description .....	64
Columns .....	65
SecurityPolicies/IPv4UserGrpInfo .....	65
XML structure .....	65
Table description .....	65
Columns .....	66
SecurityPolicies/IPv6UserGrpInfo .....	66
XML structure .....	66
Table description .....	67
Columns .....	67
SecurityPolicies/RulesCounting .....	67
XML structure .....	68
Table description .....	68
Columns .....	68
SecurityPolicies/AppOptimized .....	68
XML structure .....	68
Table description .....	69
Columns .....	69
SecurityPolicies/RuleFlux .....	70
XML structure .....	70
Table description .....	70
Columns .....	70
SecurityPolicies/AppOptimizedStatus .....	71
XML structure .....	71
Table description .....	72
Columns .....	72
SecurityPolicies/AppOptimizedAdvice .....	72
XML structure .....	72
Table description .....	73
Columns .....	73
SecurityPolicies/IPv4RuleGroup .....	74
XML structure .....	74
Table description .....	74
Columns .....	74
SecurityPolicies/IPv6RuleGroup .....	75
XML structure .....	75
Table description .....	75
Columns .....	75
SecurityPolicies/ImportPercent .....	76
XML structure .....	76
Table description .....	76
Columns .....	77



# SecurityPolicies

## SecurityPolicies/IPv4Rules

This table contains IPv4 rule information.

### XML structure

```
<SecurityPolicies>
  <IPv4Rules>
    <Rule>
      <ID></ID>
      <RuleName></RuleName>
      <Action></Action>
      <VRF></VRF>
      <TimeRange></TimeRange>
      <TimeRangeState></TimeRangeState>
      <Enable></Enable>
      <Log></Log>
      <Counting></Counting>
      <Comment></Comment>
      <Count></Count>
      <Byte></Byte>
      <Profile></Profile>
      <SessAgingTimeSw></SessAgingTimeSw>
      <SessAgingTime></SessAgingTime>
      <SessPersistAgingTimeSw></SessPersistAgingTimeSw>
      <SessPersistAgingTime></SessPersistAgingTime>
      <RuleGroupName></RuleGroupName>
    </Rule>
  </IPv4Rules>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.
RuleName	Rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.
Action	Action for the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>
VRF	VRF name.	N/A	String, case-sensitive. Length: 1 to 31 characters.
TimeRange	Name of the time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.
TimeRangeState	Status of the time range.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
Enable	Whether to enable the rule.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Log	Whether to enable logging.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Counting	Whether to enable counting.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Comment	Description.	N/A	String. Length: 1 to 127 characters.
Count	Count of matches.	N/A	Unassigned integer. Value range: 0 to $2^{64}-1$ .
Byte	Bytes of packets	N/A	N/A
Profile	Profile name	N/A	String. Length: 1 to 63 characters.
SessAgingTimeSw	Whether to enable the session aging timer.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
SessAgingTime	Session aging time period.	N/A	Unsigned integer. Value range: 0 to 2000000 seconds.
SessPersistAgingTimeSw	Whether to enable the persistent session aging timer.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>

SessPersistAgingTime	Persistent session aging time period.	N/A	Unsigned integer. Value range: 0 to 24000 hours. 0 indicates that the timer never ages out.
RuleGroupName	Rule group name	N/A	String, case-insensitive. Length: 1 to 63 characters.

## SecurityPolicies/IPv6Rules

This table contains IPv6 rule information.

### XML structure

```

<SecurityPolicies>
  <IPv6Rules>
    <Rule>
      <ID></ID>
      <RuleName></RuleName>
      <Action></Action>
      <VRF></VRF>
      <TimeRange></TimeRange>
      <TimeRangeState></TimeRangeState>
      <Enable></Enable>
      <Log></Log>
      <Counting></Counting>
      <Comment></Comment>
      <Count></Count>
      <Byte></Byte>
      <Profile></Profile>
      <SessAgingTimeSw></SessAgingTimeSw>
      <SessAgingTime></SessAgingTime>
      <SessPersistAgingTimeSw></SessPersistAgingTimeSw>
      <SessPersistAgingTime></SessPersistAgingTime>
      <RuleGroupName></RuleGroupName>
    </Rule>
  </IPv6Rules>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions
ID.	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
RuleName.	Rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.
Action.	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>
VRF.	VRF name	N/A	String, case-sensitive. Length: 1 to 31 characters.
TimeRange.	Name of the time range	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.
TimeRangeState	Status of the time range.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
Enable.	Whether to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Log.	Whether to enable logging	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Counting.	Whether to enable counting	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Comment.	Description	N/A	String. Length: 1 to 127 characters.
Count	Count of matches.	N/A	Unassigned integer. Value range: 0 to $2^{64}-1$ .
Byte	Bytes of packets	N/A	N/A
Profile	Profile name	N/A	String. Length: 1 to 63 characters.
SessAgingTimeSw.	Whether to enable the session aging timer	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
SessAgingTime.	Session aging time period	N/A	Unsigned integer. Value range: 0 to 2000000 seconds.
SessPersistAgingTimeSw.	Whether to enable the persistent session aging timer.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>

SessPersistAgingTime.	Persistent session aging time period.	N/A	Unsigned integer. Value range: 0 to 24000 hours. 0 indicates that the timer never ages out.
RuleGroupName	Rule group name	N/A	String, case-insensitive. Length: 1 to 63 characters.

## SecurityPolicies/GetRules

This table contains rule information.

### XML structure

```

<SecurityPolicies>
  <GetRules>
    <Rule>
      <Type></Type>
      <ID></ID>
      <Name></Name>
      <Action></Action>
      <SrcZoneList>
        <SrcZoneItem></SrcZoneItem>
      </SrcZoneList>
      <DestZoneList>
        <DestZoneItem></DestZoneItem>
      </DestZoneList>
      <SrcAddrList>
        <SrcAddrItem></SrcAddrItem>
      </SrcAddrList>
      <DestAddrList>
        <DestAddrItem></DestAddrItem>
      </DestAddrList>
      <SrcMacAddrList>
        <SrcMacAddrItem></SrcMacAddrItem>
      </SrcMacAddrList>
      <ServGrpList>
        <ServGrpItem></ServGrpItem>
      </ServGrpList>
      <AppList>
        <AppItem></AppItem>
      </AppList>
      <AppGrpList>
        <AppGrpItem></AppGrpItem>
      </AppGrpList>
      <UserList>
        <UserItem></UserItem>
      </UserList>
      <UserGrpList>

```

```

        <UserGrpItem></UserGrpItem>
    </UserGrpList>
    <TimeRange></TimeRange>
    <VRF></VRF>
    <Profile></Profile>
    <Enable></Enable>
    <Log></Log>
    <Counting></Counting>
    <Count></Count>
    <Byte></Byte>
    <SessAgingTimeSw></SessAgingTimeSw>
    <SessAgingTime></SessAgingTime>
    <SessPersistAgingTimeSw></SessPersistAgingTimeSw>
    <SessPersistAgingTime></SessPersistAgingTime>
    <AllRulesCount></AllRulesCount>
    <Comment></Comment>
    <RuleGroupName></RuleGroupName>
    <Valid></Valid>
</Rule>
</GetRules>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	GetRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	Rule Type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>
ID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.
Name	Rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.
Action	Action for the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> </ul>

			<ul style="list-style-type: none"> <li>2—Permit.</li> </ul>
SrcZoneList	Name of the source zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcZoneItem</li> </ul>
SrcZoneItem	Name of the source zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
DestZoneList	Name of the destination zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>DestZoneItem</li> </ul>
DestZoneItem	Name of the destination zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcAddrList	Name of the source address list.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcAddrItem</li> </ul>
SrcAddrItem	Name of the source address	N/A	String, case-insensitive. Length: 1 to 31 characters.
DestAddrList	Name of the destination address list.	Data structure	Members include: <ul style="list-style-type: none"> <li>DestAddrItem</li> </ul>
DestAddrItem	Name of the destination address	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcMacAddrList	Name of the source IPv4 MAC address list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcMacAddrItem</li> </ul>
SrcMacAddrItem	Name of the source MAC address	N/A	String, case-insensitive. Length: 1 to 31 characters.
ServGrpList	Name of the service group list.	Data structure	Members include: <ul style="list-style-type: none"> <li>ServGrpItem</li> </ul>
ServGrpItem	Name of the service group	N/A	String, case-insensitive. Length: 1 to 31 characters.
AppList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"> <li>AppItem</li> </ul>
AppItem	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.
AppGrpList	Name of the application group list	Data structure	Members include: <ul style="list-style-type: none"> <li>AppGrpItem</li> </ul>
AppGrpItem	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.
UserList	Name of the user list	Data structure	Members include: <ul style="list-style-type: none"> <li>UserItem</li> </ul>
UserItem	Name of the user	N/A	String, case-insensitive. Form: user-name, user-name@domain-name. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.
UserGrpList	Name of the user group list	Data structure	Members include: <ul style="list-style-type: none"> <li>UserGrpItem</li> </ul>

UserGrpItem	Name of the user group	N/A	String, case-insensitive. Form: user-group-name, user-group-name@domain-name. Group name length: 1 to 32 characters. Domain name length: 1 to 255 characters. If you want to contain a backslash (\) or an at sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).
TimeRange	Name of the time range.	N/A	String. Length: 1 to 32 characters.
VRF	VRF name.	N/A	String. Length: 1 to 31 characters.
Profile	Profile name	N/A	String. Length: 1 to 63 characters.
Enable	Whether the rule is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Log	Whether logging is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Counting	Whether counting is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Count	Count of matches.	N/A	Unassigned integer. Value range: 0 to $2^{64}-1$ .
Byte	Bytes of packets	N/A	N/A
SessAgingTimeSw	Whether the session aging timer is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
SessAgingTime	Session aging time period.	N/A	Unsigned integer. Value range: 0 to 2000000 seconds.
SessPersistAgingTimeSw	Whether the persistent session aging timer is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
SessPersistAgingTime	Persistent session aging time period.	N/A	Unsigned integer. Value range: 0 to 24000 hours. 0 indicates that the timer never ages out.
AllRulesCount	The number of all security policy rules	N/A	N/A
Comment	Description.	N/A	String. Length: 1 to 127 characters.
RuleGroupName	Rule group name	N/A	String, case-insensitive.



e			Length: 1 to 63 characters.
Valid	Whether the rule is valid.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Valid.</li> <li>• false—Invalid</li> </ul>

# SecurityPolicies/QueryRules

This table queries rule information.

## XML structure

```

<SecurityPolicies>
  <QueryRules>
    <Rule>
      <Type></Type>
      <ID></ID>
      <Name></Name>
      <Action></Action>
      <SrcZoneList>
        <SrcZoneItem></SrcZoneItem>
      </SrcZoneList>
      <DestZoneList>
        <DestZoneItem></DestZoneItem>
      </DestZoneList>
      <SrcAddrList>
        <SrcAddrItem></SrcAddrItem>
      </SrcAddrList>
      <DestAddrList>
        <DestAddrItem></DestAddrItem>
      </DestAddrList>
      <SrcMacAddrList>
        <SrcMacAddrItem></SrcMacAddrItem>
      </SrcMacAddrList>
      <ServGrpList>
        <ServGrpItem></ServGrpItem>
      </ServGrpList>
      <AppList>
        <AppItem></AppItem>
      </AppList>
      <AppGrpList>
        <AppGrpItem></AppGrpItem>
      </AppGrpList>
      <UserList>
        <UserItem></UserItem>
      </UserList>
      <UserGrpList>
        <UserGrpItem></UserGrpItem>
      </UserGrpList>
    </Rule>
  </QueryRules>
</SecurityPolicies>

```

```

</UserGrpList>
<TimeRange></TimeRange>
<VRF></VRF>
<Profile></Profile>
<Enable></Enable>
<Log></Log>
<Counting></Counting>
<Count></Count>
<Byte></Byte>
<SessAgingTimeSw></SessAgingTimeSw>
<SessAgingTime></SessAgingTime>
<SessPersistAgingTimeSw></SessPersistAgingTimeSw>
<SessPersistAgingTime></SessPersistAgingTime>
<AllRulesCount></AllRulesCount>
<Comment></Comment>
<RuleGroupName></RuleGroupName>
<Valid></Valid>
</Rule>
</QueryRules>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	QueryIPv4Rules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	Rule Type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>
ID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.
Name	Rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.
Action	Action for the rule.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>

SrcZoneList	Name of the source zone list	Data structure	Members include: • SrcZoneItem
SrcZoneItem	Name of the source zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
DestZoneList	Name of the destination zone list	Data structure	Members include: • DestZoneItem
DestZoneItem	Name of the destination zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcAddrList	Name of the source address list.	Data structure	Members include: • SrcAddrItem
SrcAddrItem	Name of the source address	N/A	String, case-insensitive. Length: 1 to 31 characters.
DestAddrList	Name of the destination address list.	Data structure	Members include: • DestAddrItem
DestAddrItem	Name of the destination address	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcMacAddrList	Name of the source IPv4 MAC address list.	Data structure	Members include: • SrcMacAddrItem
SrcMacAddrItem	Name of the source IPv4 MAC address	N/A	String, case-insensitive. Length: 1 to 31 characters.
ServGrpList	Name of the service group list.	Data structure	Members include: • ServGrpItem
ServGrpItem	Name of the service group	N/A	String, case-insensitive. Length: 1 to 31 characters.
AppList	Name of the application list	Data structure	Members include: • AppItem
AppItem	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.
AppGrpList	Name of the application group list	Data structure	Members include: • AppGrpItem
AppGrpItem	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.
UserList	Name of the user list	Data structure	Members include: • UserItem
UserItem	Name of the user	N/A	String, case-insensitive. Form: user-name, user-name@domain-name. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.
UserGrpList	Name of the user group list	Data structure	Members include: • UserGrpItem

UserGrpItem	Name of the user group	N/A	String, case-insensitive. Form: user-group-name, user-group-name@domain-name. Group name length: 1 to 32 characters. Domain name length: 1 to 255 characters. If you want to contain a backslash (\) or an at sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).
TimeRange	Name of the time range.	N/A	String. Length: 1 to 32 characters.
VRF	VRF name.	N/A	String. Length: 1 to 31 characters.
Profile	Profile name	N/A	String. Length: 1 to 63 characters.
Enable	Whether the rule is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Log	Whether logging is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Counting	Whether counting is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Count	Count of matches.	N/A	Unassigned integer. Value range: 0 to $2^{64}-1$ .
Byte	Bytes of packets	N/A	N/A
SessAgingTimeSw	Whether the session aging timer is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
SessAgingTime	Session aging time period.	N/A	Unsigned integer. Value range: 0 to 2000000 seconds.
SessPersistAgingTimeSw	Whether the persistent session aging timer is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
SessPersistAgingTime	Persistent session aging time period.	N/A	Unsigned integer. Value range: 0 to 24000 hours. 0 indicates that the timer never ages out.
AllRulesCount	The number of all security policy rules	N/A	N/A
Comment	Description.	N/A	String. Length: 1 to 127 characters.
RuleGroupName	Rule group name	N/A	String, case-insensitive.

e			Length: 1 to 63 characters.
Valid	Whether the rule is valid.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Valid.</li> <li>false—Invalid.</li> </ul>

## SecurityPolicies/IPv4SrcSecZone

This table contains source security zone information for an existing security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv4SrcSecZone>
    <SrcSecZone>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcSecZone>
  </IPv4SrcSecZone>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4SrcSecZone
Table type	Multi-instance table
Row name	SrcSecZone
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer.

			Value range: 1 to 16.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the source security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>• NameItem</li> </ul>
NameItem	Name of the source security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.

## SecurityPolicies/IPv6SrcSecZone

This table contains source security zone information for an existing IPv6 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv6SrcSecZone>
    <SrcSecZone>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcSecZone>
  </IPv6SrcSecZone>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6SrcSecZone
Table type	Multi-instance table
Row name	SrcSecZone
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.

SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 16.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the source security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>• NameItem</li> </ul>
NameItem	Name of the source security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.

## SecurityPolicies/IPv4DestSecZone

This table contains destination security zone information for an existing IPv4 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv4DestSecZone>
    <DestSecZone>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestSecZone>
  </IPv4DestSecZone>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4DestSecZone
Table type	Multi-instance table
Row name	DestSecZone
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 16.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the destination security zone list	Data structure	Members include: <ul style="list-style-type: none"><li>• NameItem</li></ul>
NameItem	Name of the destination security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.

## SecurityPolicies/IPv6DestSecZone

This table contains destination security zone information for an existing IPv6 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv6DestSecZone>
    <DestSecZone>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </DestSecZone>
  </IPv6DestSecZone>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6DestSecZone
Table type	Multi-instance table
Row name	DestSecZone



Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 16.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the destination security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>
NameItem	Name of the destination security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.

## SecurityPolicies/IPv4SrcAddr

This table contains source address object group information for an existing IPv4 security policy rule.

## XML structure

```

<SecurityPolicies>
  <IPv4SrcAddr>
    <SrcAddr>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcAddr>
  </IPv4SrcAddr>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies

Table name	IPv4SrcAddr
Table type	Multi-instance table
Row name	SrcAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the source IPv4 address list	Data structure	Members include: <ul style="list-style-type: none"> <li>• NameItem</li> </ul>
NameItem	Name of the source IPv4 address	N/A	String, case-insensitive. Length: 1 to 31 characters.

## SecurityPolicies/IPv6SrcAddr

This table contains source address object group information for an existing IPv6 security policy rule.

## XML structure

```

<SecurityPolicies>
  <IPv6SrcAddr>
    <SrcAddr>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcAddr>
  </IPv6SrcAddr>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6SrcAddr
Table type	Multi-instance table
Row name	SrcAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the source IPv6 address list	Data structure	Members include: <ul style="list-style-type: none"><li>• NameItem</li></ul>
NameItem	Name of the source IPv6 address	N/A	String, case-insensitive. Length: 1 to 31 characters.

## SecurityPolicies/IPv4DestAddr

This table contains destination address object group information for an existing IPv4 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv4DestAddr>
    <DestAddr>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
```

```

        </NameList>
    </DestAddr>
</IPv4DestAddr>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4DestAddr
Table type	Multi-instance table
Row name	DestAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the destination IPv4 address list	Data structure	Members include: <ul style="list-style-type: none"> <li>Nameltem</li> </ul>
Nameltem	Name of the destination IPv4 address	N/A	String, case-insensitive. Length: 1 to 31 characters.

## SecurityPolicies/IPv6DestAddr

This table contains destination address object group information for an existing IPv6 security policy rule.

## XML structure

```

<SecurityPolicies>
  <IPv6DestAddr>
    <DestAddr>
      <ID></ID>
    </DestAddr>
  </IPv6DestAddr>
</SecurityPolicies>

```

```

    <SeqNum></SeqNum>
    <IsIncrement></IsIncrement>
    <NameList>
      <NameItem></NameItem>
    </NameList>
  </DestAddr>
</IPv6DestAddr>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6DestAddr
Table type	Multi-instance table
Row name	DestAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the destination IPv6 address list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>
NameItem	Name of the destination IPv6 address	N/A	String, case-insensitive. Length: 1 to 31 characters.

## SecurityPolicies/IPv4SrcMacAddr

This table contains source MAC address object group information for an existing IPv4 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv4SrcMacAddr>
    <SrcMacAddr>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </SrcMacAddr>
  </IPv4SrcMacAddr>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4SrcMacAddr
Table type	Multi-instance table
Row name	SrcMacAddr
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the source IPv4 MAC address list	Data structure	Members include: <ul style="list-style-type: none"><li>• NameItem</li></ul>
NameItem	Name of the source IPv4 MAC address	N/A	String, case-insensitive. Length: 1 to 31 characters.

# SecurityPolicies/IPv4ServGrp

This table contains service object group information for an existing IPv4 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv4ServGrp>
    <ServGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </ServGrp>
  </IPv4ServGrp>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4ServGrp
Table type	Multi-instance table
Row name	ServGrp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the service object group list	Data structure	Members include: <ul style="list-style-type: none"><li>• NameItem</li></ul>

NameItem	Name of the service object group	N/A	String, case-insensitive. Length: 1 to 31 characters.
----------	----------------------------------	-----	--

## SecurityPolicies/IPv6ServGrp

This table contains service object group information for an existing IPv6 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv6ServGrp>
    <ServGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </ServGrp>
  </IPv6ServGrp>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6ServGrp
Table type	Multi-instance table
Row name	ServGrp
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.



NameList	Name of the service object group list	Data structure	Members include: <ul style="list-style-type: none"> <li>Nameltem</li> </ul>
Nameltem	Name of the service object group	N/A	String, case-insensitive. Length: 1 to 31 characters.

## SecurityPolicies/IPv4App

This table contains application information for an existing IPv4 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv4App>
    <App>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </App>
  </IPv4App>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4App
Table type	Multi-instance table
Row name	App
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.

IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>
NameItem	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.

## SecurityPolicies/IPv6App

This table contains application information for an existing IPv6 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv6App>
    <App>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </App>
  </IPv6App>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6App
Table type	Multi-instance table
Row name	App
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.

SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"> <li>• NameItem</li> </ul>
NameItem	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.

## SecurityPolicies/IPv4AppGrp

This table contains application group information for an existing IPv4 security policy rule.

### XML structure

```

<SecurityPolicies>
  <IPv4AppGrp>
    <AppGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </AppGrp>
  </IPv4AppGrp>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4AppGrp
Table type	Multi-instance table
Row name	AppGrp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the application group list	Data structure	Members include: <ul style="list-style-type: none"><li>• NameItem</li></ul>
NameItem	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.

## SecurityPolicies/IPv6AppGrp

This table contains application group information for an existing IPv6 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv6AppGrp>
    <AppGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </AppGrp>
  </IPv6AppGrp>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6AppGrp
Table type	Multi-instance table
Row name	AppGrp

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the application group list	Data structure	Members include: <ul style="list-style-type: none"> <li>Nameltem</li> </ul>
Nameltem	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.

## SecurityPolicies/IPv4User

This table contains user information for an existing IPv4 security policy rule.

## XML structure

```

<SecurityPolicies>
  <IPv4User>
    <User>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </User>
  </IPv4User>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4User

Table type	Multi-instance table
Row name	User
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the user list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem.</li> </ul>
NameItem	Name of the user	N/A	String, case-sensitive. Form: user-name, user-name@domain-name. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.

## SecurityPolicies/IPv6User

This table contains user information for an existing IPv6 security policy rule.

## XML structure

```

<SecurityPolicies>
  <IPv6User>
    <User>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </User>
  </IPv6User>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6User
Table type	Multi-instance table
Row name	User
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the user list	Data structure	Members include: <ul style="list-style-type: none"><li>• NameItem</li></ul>
NameItem	Name of the user	N/A	String, case-sensitive. Form: user-name, user-name@domain-name. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.

## SecurityPolicies/IPv4UserGrp

This table contains user group information for an existing IPv4 security policy rule.

## XML structure

```
<SecurityPolicies>
  <IPv4UserGrp>
    <UserGrp>
      <ID></ID>
      <SeqNum></SeqNum>
      <IsIncrement></IsIncrement>
      <NameList>
        <NameItem></NameItem>
      </NameList>
    </UserGrp>
  </IPv4UserGrp>
</SecurityPolicies>
```

```

    </UserGrp>
  </IPv4UserGrp>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4UserGrp
Table type	Multi-instance table
Row name	UserGrp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the user group list	Data structure	Members include: <ul style="list-style-type: none"> <li>Nameltem</li> </ul>
Nameltem	Name of the user group	N/A	String, case-insensitive. Form: user-group-name, user-group-name@domain-name. Group name length: 1 to 32 characters. Domain name length: 1 to 255 characters. If you want to contain a backslash (\) or an at sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).

## SecurityPolicies/IPv6UserGrp

This table contains user group information for an existing IPv6 security policy rule.

## XML structure

```
<SecurityPolicies>
```



```

<IPv6UserGrp>
  <UserGrp>
    <ID></ID>
    <SeqNum></SeqNum>
    <IsIncrement></IsIncrement>
    <NameList>
      <NameItem></NameItem>
    </NameList>
  </UserGrp>
</IPv6UserGrp>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6UserGrp
Table type	Multi-instance table
Row name	UserGrp
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence Number	Index	Unassigned integer. Value range: 1 to 1024.
IsIncrement	Whether to increment the data	N/A	This column is insignificant. Ignore the value in this column.
NameList	Name of the user group list	Data structure	Members include: <ul style="list-style-type: none"> <li>NameItem</li> </ul>
NameItem	Name of the user group	N/A	String, case-insensitive. Form: user-group-name, user-group-name@domain-name. Group name length: 1 to 32 characters. Domain name length: 1 to 255 characters. If you want to contain a backslash (\) or an at sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).

# SecurityPolicies/AllocRuleID

This table contains an available rule ID.

## XML structure

```
<SecurityPolicies>
  <AllocRuleID>
    <Rule>
      <Type></Type>
      <ID></ID>
    </Rule>
  </AllocRuleID>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	AllocRuleID
Table type	Single-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	Rule Type	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>
ID	Rule ID.	N/A	Unassigned integer. Value range: 0 to 65534.

# SecurityPolicies/Accelerate

This table contains security policy rule matching acceleration information for security policies.

## XML structure

```
<SecurityPolicies>
  <Accelerate>
    <Enable></Enable>
```

```

    </Accelerate>
  </SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	Accelerate
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Whether to enable rule matching acceleration for the security policy.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>

# SecurityPolicies/GetAccelerateCommitStatus

This table contains acceleration commit status information for the security policy.

## XML structure

```

<SecurityPolicies>
  <GetAccelerateCommitStatus>
    <Status></Status>
  </GetAccelerateCommitStatus>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	Accelerate
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Whether to enable rule acceleration for the security policy.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>	Optional.

## SecurityPolicies/BaseProtocols

This table contains base protocol informations for the existing applications and application-groups within a security policy rule.

## XML structure

```
<SecurityPolicies>
  <BaseProtocols>
    <Protocol>
      <Type></Type>
      <ID></ID>
      <ProtoNum></ProtoNum>
      <AppNum></AppNum>
      <ProtocolItem></ProtocolItem>
      <NameList>
        <AppItem></AppItem>
      </NameList>
    </Protocol>
  </BaseProtocols>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	BaseProtocols
Table type	Multi-instance table
Row name	Protocol
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	Rule Type	Index	Enumeration: <ul style="list-style-type: none"><li>1—IPv4.</li><li>2—IPv6.</li></ul>
ID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.
ProtoNum	Protocol Number	Index	Unassigned integer. Value range: 1 to 1024.
AppNum	Application Number	Index	Unassigned integer. Value range: 1 to 1024.
ProtocolItem	Name of the protocol	N/A	String, case-insensitive. Length: 1 to 63 characters.
NameList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"><li>ApplItem</li></ul>
ApplItem	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.

## SecurityPolicies/RedundancyCheckStatus

This table contains status information for checking the redundant security policy rules.

### XML structure

```
<SecurityPolicies>
  <RedundancyCheckStatus>
    <Status></Status>
    <Proportion></Proportion>
  </RedundancyCheckStatus>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	RedundancyCheckStatus
Table type	Single-instance table
Row name	Status

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions
Status	The status for checking redundancy security policy rules	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—init.</li> <li>1—finished.</li> <li>2—checking.</li> </ul>
Proportion	Percentage of progress	N/A	Unassigned integer. Value range: 0 to 100.

## SecurityPolicies/ContainRedundancyRules

This table shows security policy rules that have redundant rules.

## XML structure

```

<SecurityPolicies>
  <ContainRedundancyRules>
    <Rule>
      <Type></Type>
      <RuleID></RuleID>
      <RuleName></RuleName>
      <Action></Action>
      <SrcZoneList>
        <SrcZoneItem></SrcZoneItem>
        <SrcZoneStatus></SrcZoneStatus>
      </SrcZoneList>
      <DestZoneList>
        <DestZoneItem></DestZoneItem>
        <DestZoneStatus></DestZoneStatus>
      </DestZoneList>
      <SrcMacAddrList>
        <SrcMacAddrItem></SrcMacAddrItem>
        <SrcMacAddrStatus></SrcMacAddrStatus>
      </SrcMacAddrList>
      <SrcAddrList>
        <SrcAddrItem></SrcAddrItem>
        <SrcAddrStatus></SrcAddrStatus>
      </SrcAddrList>
      <DestAddrList>
        <DestAddrItem></DestAddrItem>
        <DestAddrStatus></DestAddrStatus>
      </DestAddrList>
    </Rule>
  </ContainRedundancyRules>
</SecurityPolicies>

```

```

<ServGrpList>
  <ServGrpItem></ServGrpItem>
  <ServGrpStatus></ServGrpStatus>
</ServGrpList>
<AppList>
  <AppItem></AppItem>
  <AppStatus></AppStatus>
</AppList>
<AppGrpList>
  <AppGrpItem></AppGrpItem>
  <AppGrpStatus></AppGrpStatus>
</AppGrpList>
<UserList>
  <UserItem></UserItem>
  <UserStatus></UserStatus>
</UserList>
<UserGrpList>
  <UserGrpItem></UserGrpItem>
  <UserGrpStatus></UserGrpStatus>
</UserGrpList>
<TimeRange></TimeRange>
<VRF></VRF>
<Enable></Enable>
<Comment></Comment>
<Profile></Profile>
</Rule>
</ContainRedundancyRules>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	ContainRedundancyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Type	Rule type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>

RuleID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.
Action.	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>
SrcZoneList	Name of the source zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcZoneItem.</li> <li>SrcZoneStatus.</li> </ul>
SrcZoneItem	Name of the source zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcZoneStatus	Status of the source zone	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
DestZoneList	Name of the destination zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>DestZoneItem.</li> <li>DestZoneStatus.</li> </ul>
DestZoneItem	Name of the destination zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
DestZoneStatus	Status of the destination zone	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
SrcMacAddrList	Name of the source IPv4 MAC address list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcMacAddrItem.</li> <li>SrcMacAddrStatus.</li> </ul>
SrcMacAddrItem	Name of the source MAC address	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcMacAddrStatus	Status of the source MAC address	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
SrcAddrList	Name of the source address list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcAddrItem.</li> <li>SrcAddrStatus.</li> </ul>
SrcAddrItem	Name of the source address	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcAddrStatus	Status of the source address	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
DestAddrList	Name of the destination address list	Data structure	Members include: <ul style="list-style-type: none"> <li>DestAddrItem.</li> <li>DestAddrStatus.</li> </ul>
DestAddrItem	Name of the destination address	N/A	String, case-insensitive. Length: 1 to 31 characters.
DestAddrStatus	Status of the	N/A	Boolean:



	destination address		<ul style="list-style-type: none"> <li>• true—Effective.</li> <li>• false—Not effective.</li> </ul>
ServGrpList	Name of the service group list	Data structure	Members include: <ul style="list-style-type: none"> <li>• ServGrpItem.</li> <li>• ServGrpStatus.</li> </ul>
ServGrpItem	Name of the service group	N/A	String, case-insensitive. Length: 1 to 31 characters.
ServGrpStatus	Status of the service group	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Effective.</li> <li>• false—Not effective.</li> </ul>
AppList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"> <li>• AppItem.</li> <li>• AppStatus</li> </ul>
AppItem	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.
AppStatus	Status of the application	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Effective.</li> <li>• false—Not effective.</li> </ul>
AppGrpList	Name of the application group list	Data structure	Members include: <ul style="list-style-type: none"> <li>• AppGrpItem.</li> <li>• AppGrpStatus</li> </ul>
AppGrpItem	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.
AppGrpStatus	Status of the application group	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Effective.</li> <li>• false—Not effective.</li> </ul>
UserList	Name of the user list	Data structure	Members include: <ul style="list-style-type: none"> <li>• UserItem.</li> <li>• UserStatus</li> </ul>
UserItem	Name of the user	N/A	String, case-insensitive. Form: user-name, user-name@domain-name. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.
UserStatus	Status of the user	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Effective.</li> <li>• false—Not effective.</li> </ul>
UserGrpList	Name of the user group list	Data structure	Members include: <ul style="list-style-type: none"> <li>• UserGrpItem.</li> <li>• UserGrpStatus</li> </ul>
UserGrpItem	Name of the user group	N/A	String, case-insensitive. Form: user-group-name, user-group-name@domain-name. Group name length: 1 to 32 characters. Domain name length: 1 to 255 characters. If you want to contain a backslash (\) or an at

			sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).
UserGrpStatus	Status of the user group	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
TimeRange	Name of the time range	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.
VRF	VRF name	N/A	String, case-insensitive. Length: 1 to 31 characters.
Enable	Whether to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Comment	Description	N/A	String. Length: 1 to 127 characters.
Profile	Profile name	N/A	String. Length: 1 to 63 characters.

## SecurityPolicies/ConfirmedRedundancyRules

This table shows redundant security policy rules.

### XML structure

```

<SecurityPolicies>
  <ConfirmedRedundancyRules>
    <Rule>
      <Type></Type>
      <RuleID></RuleID>
      <RuleName></RuleName>
      <ContainRedundancyRuleID></ContainRedundancyRuleID>
      <Action></Action>
      <SrcZoneList>
        <SrcZoneItem></SrcZoneItem>
        <SrcZoneStatus></SrcZoneStatus>
      </SrcZoneList>
      <DestZoneList>
        <DestZoneItem></DestZoneItem>
        <DestZoneStatus></DestZoneStatus>
      </DestZoneList>
      <SrcMacAddrList>
        <SrcMacAddrItem></SrcMacAddrItem>
        <SrcMacAddrStatus></SrcMacAddrStatus>
      </SrcMacAddrList>
      <SrcAddrList>
        <SrcAddrItem></SrcAddrItem>

```

```

        <SrcAddrStatus></SrcAddrStatus>
    </SrcAddrList>
    <DestAddrList>
        <DestAddrItem></DestAddrItem>
        <DestAddrStatus></DestAddrStatus>
    </DestAddrList>
    <ServGrpList>
        <ServGrpItem></ServGrpItem>
        <ServGrpStatus></ServGrpStatus>
    </ServGrpList>
    <AppList>
        <AppItem></AppItem>
        <AppStatus></AppStatus>
    </AppList>
    <AppGrpList>
        <AppGrpItem></AppGrpItem>
        <AppGrpStatus></AppGrpStatus>
    </AppGrpList>
    <UserList>
        <UserItem></UserItem>
        <UserStatus></UserStatus>
    </UserList>
    <UserGrpList>
        <UserGrpItem></UserGrpItem>
        <UserGrpStatus></UserGrpStatus>
    </UserGrpList>
    <TimeRange></TimeRange>
    <VRF></VRF>
    <Enable></Enable>
    <Comment></Comment>
    <Profile></Profile>
</Rule>
</ConfirmedRedundancyRules>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	ConfirmedRedundancyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions
Type	Rule type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>
RuleID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.
ContainRedundancyRuleID	ID of the rule that contains this redundant rule	N/A	Unassigned integer. Value range: 0 to 65534.
Action.	Action for the rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Deny.</li> <li>2—Permit.</li> </ul>
SrcZoneList	Name of the source zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcZoneItem.</li> <li>SrcZoneStatus.</li> </ul>
SrcZoneItem	Name of the source zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcZoneStatus	Status of the source zone	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
DestZoneList	Name of the destination zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>DestZoneItem.</li> <li>DestZoneStatus.</li> </ul>
DestZoneItem	Name of the destination zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
DestZoneStatus	Status of the destination zone	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
SrcMacAddrList	Name of the source IPv4 MAC address list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcMacAddrItem.</li> <li>SrcMacAddrStatus.</li> </ul>
SrcMacAddrItem	Name of the source MAC address	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcMacAddrStatus	Status of the source MAC address	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
SrcAddrList	Name of the source address list	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcAddrItem.</li> <li>SrcAddrStatus.</li> </ul>

SrcAddrItem	Name of the source address	N/A	String, case-insensitive. Length: 1 to 31 characters.
SrcAddrStatus	Status of the source address	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
DestAddrList	Name of the destination address list.	Data structure	Members include: <ul style="list-style-type: none"> <li>DestAddrItem.</li> <li>DestAddrStatus.</li> </ul>
DestAddrItem	Name of the destination address	N/A	String, case-insensitive. Length: 1 to 31 characters.
DestAddrStatus	Status of the destination address	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
ServGrpList	Name of the service group list	Data structure	Members include: <ul style="list-style-type: none"> <li>ServGrpItem.</li> <li>ServGrpStatus.</li> </ul>
ServGrpItem	Name of the service group	N/A	String, case-insensitive. Length: 1 to 31 characters.
ServGrpStatus	Status of the service group	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
AppList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"> <li>AppItem.</li> <li>AppStatus</li> </ul>
AppItem	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.
AppStatus	Status of the application	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
AppGrpList	Name of the application group list	Data structure	Members include: <ul style="list-style-type: none"> <li>AppGrpItem.</li> <li>AppGrpStatus</li> </ul>
AppGrpItem	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.
AppGrpStatus	Status of the application group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
UserList	Name of the user list	Data structure	Members include: <ul style="list-style-type: none"> <li>UserItem.</li> <li>UserStatus</li> </ul>
UserItem	Name of the user	N/A	String, case-insensitive. Form: user-name, user-name@domain-name. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.

UserStatus	Status of the user.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
UserGrpList	Name of the user group list	Data structure	Members include: <ul style="list-style-type: none"> <li>UserGrpItem.</li> <li>UserGrpStatus</li> </ul>
UserGrpItem	Name of the user group	N/A	String, case-insensitive. Form: user-group-name, user-group-name@domain-name. Group name length: 1 to 32 characters. Domain name length: 1 to 255 characters. If you want to contain a backslash (\) or an at sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).
UserGrpStatus	Status of the user group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
TimeRange	Name of the time range.	N/A	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.
VRF	VRF name.	N/A	String, case-insensitive. Length: 1 to 31 characters.
Enable	Whether to enable the rule.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
Comment	Description.	N/A	String. Length: 1 to 127 characters.
Profile	Profile name	N/A	String. Length: 1 to 63 characters.

## SecurityPolicies/IPv4SrcSecZoneInfo

This table contains source security zone information for an IPv4 security policy rule that is redundant or has a redundant rule.

### XML structure

```

<SecurityPolicies>
  <IPv4SrcSecZoneInfo>
    <SrcSecZoneInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </SrcSecZoneInfo>
  </IPv4SrcSecZoneInfo>
</SecurityPolicies>

```

```

    </SrcSecZoneInfo>
  </IPv4SrcSecZoneInfo>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4SrcSecZoneInfo
Table type	Multi-instance table
Row name	SrcSecZoneInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 16.
NameList	Name of the source security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Status.</li> </ul>
Name	Name of the source security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
Status	Status of the source security zone.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv6SrcSecZoneInfo

This table contains source security zone information for an IPv6 security policy rule that is redundant or has a redundant rule.

## XML structure

```

<SecurityPolicies>
  <IPv6SrcSecZoneInfo>
    <SrcSecZoneInfo>
      <ID></ID>
      <SeqNum></SeqNum>
    </SrcSecZoneInfo>
  </IPv6SrcSecZoneInfo>
</SecurityPolicies>

```

```

    <NameList>
      <Name></Name>
      <Status></Status>
    </NameList>
  </SrcSecZoneInfo>
</IPv6SrcSecZoneInfo>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6SrcSecZoneInfo
Table type	Multi-instance table
Row name	SrcSecZoneInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 16.
NameList	Name of the source security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Status.</li> </ul>
Name	Name of the source security zone	N/A	String, case-insensitive. Length: 1 to 31 characters.
Status	Status of the source security zone	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv4DestSecZoneInfo

This table contains destination security zone information for an IPv4 security policy rule that is redundant or has a redundant rule.

## XML structure

```
<SecurityPolicies>
```



```

<IPv4DestSecZoneInfo>
  <DestSecZoneInfo>
    <ID></ID>
    <SeqNum></SeqNum>
    <NameList>
      <Name></Name>
      <Status></Status>
    </NameList>
  </DestSecZoneInfo>
</IPv4DestSecZoneInfo>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4DestSecZoneInfo
Table type	Multi-instance table
Row name	DestSecZoneInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 16.
NameList	Name of the destination security zone list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Status.</li> </ul>
Name	Name of the destination security zone	N/A	String, case-insensitive. <ul style="list-style-type: none"> <li>Length: 1 to 31 characters.</li> </ul>
Status	Status of the destination security zone.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv6DestSecZoneInfo

This table contains destination security zone information for an IPv6 security policy rule that is redundant or has a redundant rule.

## XML structure

```
<SecurityPolicies>
  <IPv6DestSecZoneInfo>
    <DestSecZoneInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </DestSecZoneInfo>
  </IPv6DestSecZoneInfo>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6DestSecZoneInfo
Table type	Multi-instance table
Row name	DestSecZoneInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 16.
NameList	Name of the destination security zone list	Data structure	Members include: <ul style="list-style-type: none"><li>Name.</li><li>Status</li></ul>
Name	Name of the destination security zone	N/A	String, case-insensitive. <ul style="list-style-type: none"><li>Length: 1 to 31 characters.</li></ul>
Status	Status of the destination security zone	N/A	Boolean: <ul style="list-style-type: none"><li>true—Effective.</li><li>false—Not effective.</li></ul>

# SecurityPolicies/IPv4SrcMacAddrGrpInfo

This table contains source MAC address object group information for an IPv4 security policy rule that is redundant or has a redundant rule.

## XML structure

```
<SecurityPolicies>
  <IPv4SrcMacAddrGrpInfo>
    <SrcMacAddrGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </SrcMacAddrGrpInfo>
  </IPv4SrcMacAddrGrpInfo>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4SrcMacAddrGrpInfo
Table type	Multi-instance table
Row name	SrcMacAddrGrpInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the source MAC address group list	Data structure	Members include: <ul style="list-style-type: none"><li>Name.</li><li>Status.</li></ul>
Name	Name of the source MAC address group	N/A	String, case-insensitive. Length: 1 to 31 characters.

Status	Status of the source MAC address group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
--------	---	-----	--

## SecurityPolicies/IPv4SrcAddrGrpInfo

This table contains source address object group information for an IPv4 security policy rule that is redundant or has a redundant rule.

### XML structure

```

<SecurityPolicies>
  <IPv4SrcAddrGrpInfo>
    <SrcAddrGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </SrcAddrGrpInfo>
  </IPv4SrcAddrGrpInfo>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4SrcAddrGrpInfo
Table type	Multi-instance table
Row name	SrcAddrGrpInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the source	Data structure	Members include:

	address group list		<ul style="list-style-type: none"> <li>Name.</li> <li>Status.</li> </ul>
Name	Name of the source address group	N/A	String, case-insensitive. Length: 1 to 31 characters.
Status	Status of the source address group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv6SrcAddrGrpInfo

This table contains source address object group information for an IPv6 security policy rule that is redundant or has a redundant rule.

### XML structure

```

<SecurityPolicies>
  <IPv6SrcAddrGrpInfo>
    <SrcAddrGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </SrcAddrGrpInfo>
  </IPv6SrcAddrGrpInfo>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6SrcAddrGrpInfo
Table type	Multi-instance table
Row name	SrcAddrGrpInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.

SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the source address group list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Status</li> </ul>
Name	Name of the source address group	N/A	String, case-insensitive. Length: 1 to 31 characters.
Status	Status of the source address group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv4DestAddrGrpInfo

This table contains destination address object group information for an IPv4 security policy rule that is redundant or has a redundant rule.

### XML structure

```

<SecurityPolicies>
  <IPv4DestAddrGrpInfo>
    <DestAddrGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </DestAddrGrpInfo>
  </IPv4DestAddrGrpInfo>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4DestAddrGrpInfo
Table type	Multi-instance table
Row name	DestAddrGrpInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the destination address group list	Data structure	Members include: <ul style="list-style-type: none"><li>Name.</li><li>Status</li></ul>
Name	Name of the destination address group	N/A	String, case-insensitive. Length: 1 to 31 characters.
Status	Status of the destination address group.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Effective.</li><li>false—Not effective.</li></ul>

## SecurityPolicies/IPv6DestAddrGrpInfo

This table contains destination address object group information for an IPv6 security policy rule that is redundant or has a redundant rule.

## XML structure

```
<SecurityPolicies>
  <IPv6DestAddrGrpInfo>
    <DestAddrGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </DestAddrGrpInfo>
  </IPv6DestAddrGrpInfo>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6DestAddrGrpInfo
Table type	Multi-instance table

Row name	DestAddrGrpInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the destination address group list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Status</li> </ul>
Name	Name of the destination address group	N/A	String, case-insensitive. Length: 1 to 31 characters.
Status	Status of the destination address group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv4ServGrpInfo

This table contains service object group information for an IPv4 security policy rule that is redundant or has a redundant rule.

## XML structure

```

<SecurityPolicies>
  <IPv4ServGrpInfo>
    <ServGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </ServGrpInfo>
  </IPv4ServGrpInfo>
</SecurityPolicies>

```



## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4ServGrpInfo
Table type	Multi-instance table
Row name	ServGrpInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the service object group list	Data structure	Members include: <ul style="list-style-type: none"><li>Name</li><li>Status</li></ul>
Name	Name of the service object group	N/A	String, case-insensitive. Length: 1 to 31 characters.
Status	Status of the service object group	N/A	Boolean: <ul style="list-style-type: none"><li>true—Effective.</li><li>false—Not effective.</li></ul>

## SecurityPolicies/IPv6ServGrpInfo

This table contains service object group information for an IPv6 security policy rule that is redundant or has a redundant rule.

## XML structure

```
<SecurityPolicies>
  <IPv6ServGrpInfo>
    <ServGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
```

```

    </ServGrpInfo>
  </IPv6ServGrpInfo>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6ServGrpInfo
Table type	Multi-instance table
Row name	ServGrpInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the service object group list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Status</li> </ul>
Name	Name of the service object group	N/A	String, case-insensitive. Length: 1 to 31 characters.
Status	Status of the service object group	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv4AppInfo

This table contains application information for an IPv4 security policy rule that is redundant or has a redundant rule.

## XML structure

```

<SecurityPolicies>
  <IPv4AppInfo>
    <AppInfo>
      <ID></ID>
      <SeqNum></SeqNum>
    </AppInfo>
  </IPv4AppInfo>
</SecurityPolicies>

```

```

    <NameList>
      <Name></Name>
      <Status></Status>
    </NameList>
  </AppInfo>
</IPv4AppInfo>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4AppInfo
Table type	Multi-instance table
Row name	AppInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Status</li> </ul>
Name	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.
Status	Status of the application	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv6AppInfo

This table contains application information for an IPv6 security policy rule that is redundant or has a redundant rule.

## XML structure

```

<SecurityPolicies>

```

```

<IPv6AppInfo>
  <AppInfo>
    <ID></ID>
    <SeqNum></SeqNum>
    <NameList>
      <Name></Name>
      <Status></Status>
    </NameList>
  </AppInfo>
</IPv6AppInfo>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6AppInfo
Table type	Multi-instance table
Row name	AppInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the application list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Status</li> </ul>
Name	Name of the application	N/A	String, case-insensitive. Length: 1 to 63 characters.
Status	Status of the application.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

# SecurityPolicies/IPv4AppGrpInfo

This table contains application group information for an IPv4 security policy rule that is redundant or has a redundant rule.

## XML structure

```
<SecurityPolicies>
  <IPv4AppGrpInfo>
    <AppGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </AppGrpInfo>
  </IPv4AppGrpInfo>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4AppGrpInfo
Table type	Multi-instance table
Row name	AppGrpInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the application group list	Data structure	Members include: <ul style="list-style-type: none"><li>Name</li><li>Status</li></ul>
Name	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.

Status	Status of the application group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>
--------	----------------------------------	-----	--

## SecurityPolicies/IPv6AppGrpInfo

This table contains application group information for an IPv6 security policy rule that is redundant or has a redundant rule.

### XML structure

```

<SecurityPolicies>
  <IPv6AppGrpInfo>
    <AppGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </AppGrpInfo>
  </IPv6AppGrpInfo>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6AppGrpInfo
Table type	Multi-instance table
Row name	AppGrpInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 0 to 1024.
NameList	Name of the	Data structure	Members include:

	application group list		<ul style="list-style-type: none"> <li>Name</li> <li>Status</li> </ul>
Name	Name of the application group	N/A	String, case-insensitive. Length: 1 to 63 characters.
Status	Status of the application group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv4UserInfo

This table contains user information for an IPv4 security policy rule that is redundant or has a redundant rule.

### XML structure

```

<SecurityPolicies>
  <IPv4UserInfo>
    <UserInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </UserInfo>
  </IPv4UserInfo>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4UserInfo
Table type	Multi-instance table
Row name	UserInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.

SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.
NameList	Name of the user list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name</li> <li>Status</li> </ul>
Name	Name of the user.	N/A	String, case-sensitive. Form: user-name, user-name@domain-name. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.
Status	Status of the user.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv6UserInfo

This table contains user information for an IPv6 security policy rule that is redundant or has a redundant rule.

### XML structure

```

<SecurityPolicies>
  <IPv6UserInfo>
    <UserInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <NameList>
        <Name></Name>
        <Status></Status>
      </NameList>
    </UserInfo>
  </IPv6UserInfo>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6UserInfo
Table type	Multi-instance table
Row name	UserInfo
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.
NameList	Name of the user list	Data structure	Members include: <ul style="list-style-type: none"><li>Name.</li><li>Status.</li></ul>
Name	Name of the user	N/A	String, case-sensitive. Form: user-name, user-name@domain-name. User name length: 1 to 55 characters. Domain name length: 1 to 255 characters.
Status	Status of the user	N/A	Boolean: <ul style="list-style-type: none"><li>true—Effective.</li><li>false—Not effective.</li></ul>

## SecurityPolicies/IPv4UserGrpInfo

This table shows user group information for an IPv4 security policy rule that is redundant or has a redundant rule.

## XML structure

```
<SecurityPolicies>
  <IPv4UserGrpInfo>
    <UserGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <UserGrpList>
        <Name></Name>
        <Status></Status>
      </UserGrpList>
    </UserGrpInfo>
  </IPv4UserGrpInfo>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4UserGrpInfo

Table type	Multi-instance table
Row name	UserGrpInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.
UserGrpList	Name of the user group list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Status</li> </ul>
Name	Name of the user group	N/A	String, case-insensitive. Form: user-group-name, user-group-name@domain-name. Group name length: 1 to 32 characters. Domain name length: 1 to 255 characters. If you want to contain a backslash (\) or an at sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).
Status	Status of the user group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/IPv6UserGrpInfo

This table shows user group information for an IPv6 security policy rule that is redundant or has a redundant rule.

## XML structure

```

<SecurityPolicies>
  <IPv6UserGrpInfo>
    <UserGrpInfo>
      <ID></ID>
      <SeqNum></SeqNum>
      <UserGrpList>
        <Name></Name>
        <Status></Status>
      </UserGrpList>
    </UserGrpInfo>
  </IPv6UserGrpInfo>
</SecurityPolicies>

```

```

    </UserGrpInfo>
  </IPv6UserGrpInfo>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6UserGrpInfo
Table type	Multi-instance table
Row name	UserGrpInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ID	Rule ID	Index	Unassigned integer. Value range: 0 to 65534.
SeqNum	Sequence number	Index	Unassigned integer. Value range: 1 to 1024.
UserGrpList	Name of the user group list	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Status</li> </ul>
Name	Name of the user group	N/A	String, case-insensitive. Form: user-group-name, user-group-name@domain-name. Group name length: 1 to 32 characters. Domain name length: 1 to 255 characters. If you want to contain a backslash (\) or an at sign (@) in the user group name, you must enter the escape character (\) before the backslash (\) or at sign (@).
Status	Status of the user group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Effective.</li> <li>false—Not effective.</li> </ul>

## SecurityPolicies/RulesCounting

This table contains rules counting information for security policies.

## XML structure

```
<SecurityPolicies>
  <RulesCounting>
    <Enable></Enable>
  </RulesCounting>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	RulesCounting
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Whether to enable rule counting for the security policy.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>

## SecurityPolicies/AppOptimized

This table contains application statistics for security policy rules.

## XML structure

```
<SecurityPolicies>
  <AppOptimized>
    <AppFlux>
      <PolicyType></PolicyType>
      <RuleID></RuleID>
      <RuleName></RuleName>
      <TotalFlux></TotalFlux>
      <Grade></Grade>
      <Count></Count>
      <IsOptimized></IsOptimized>
    </AppFlux>
    <AppList>
      <AppInfo></AppInfo>
    </AppList>
  </AppOptimized>
</SecurityPolicies>
```

```

    <RiskLevel></RiskLevel>
  <SecurityRisks></SecurityRisks>
</AppFlux>
</AppOptimized>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	AppOptimized
Table type	Multi-instance table
Row name	AppFlux
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PolicyType	Rule type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>
RuleID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.
RuleName	Rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.
TotalFlux	Flux of statistics.	N/A	N/A
Grade	Security grade.	N/A	Unassigned integer. Value range: 0 to 100.
Count	The number of risky rules.	N/A	Unassigned integer. Value range: 0 to 65534.
IsOptimized	Whether to optimize.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
AppList	Flux statistics of the application list.	Data structure	Members include: <ul style="list-style-type: none"> <li>AppInfo</li> </ul>
AppInfo	Information of the application.	N/A	String, case-insensitive. Length: 1 to 255 characters.
RiskLevel	Risk level of the rule.	N/A	Unassigned integer. Value range: 1 to 5.

SecurityRisks	Security risks of the rule.	N/A	N/A
---------------	-----------------------------	-----	-----

## SecurityPolicies/RuleFlux

This table contains application statistics for security policy rule.

### XML structure

```
<SecurityPolicies>
  <RuleFlux>
    <AppFlux>
      <PolicyType></PolicyType>
      <RuleID></RuleID>
      <QueryType></QueryType>
      <SeqNum></SeqNum>
      <AppCount></AppCount>
      <RuleName></RuleName>
      <ChildRuleID></ChildRuleID>
      <ChildRuleName></ChildRuleName>
      <TotalFlux></TotalFlux>
      <Profile></Profile>
      <AppList>
        <AppInfo></AppInfo>
      </AppList>
    </AppFlux>
  </RuleFlux>
</SecurityPolicies>
```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	RuleFlux
Table type	Multi-instance table
Row name	AppFlux
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
PolicyType	Rule type.	Index	Enumeration:

			<ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>
RuleID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.
QueryType	The time range.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Today.</li> <li>1—Last Three Days.</li> <li>2—Last Week.</li> <li>3—Last Month.</li> </ul>
SeqNum	Sequence number.	Index	Unassigned integer. Value range: 0 to 65535.
AppCount	The count of applications.	N/A	Unassigned integer. Value range: 0 to 65535.
RuleName	Rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.
ChildRuleID	Child rule ID.	N/A	Unassigned integer. Value range: 0 to 65534.
ChildRuleName	Child rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.
TotalFlux	Flux of statistics.	N/A	N/A
Profile	Profile name.	N/A	String. Length: 1 to 63 characters.
AppList	Flux statistics of the application list.	Data structure	Members include: <ul style="list-style-type: none"> <li>AppInfo</li> </ul>
AppInfo	Information of the application.	N/A	String, case-insensitive. Length: 1 to 255 characters.

## SecurityPolicies/AppOptimizedStatus

This table contains the progress of batch application optimization.

### XML structure

```

<SecurityPolicies>
  <AppOptimizedStatus>
    <Result></Result>
    <Description></Description>
    <Percent></Percent>
  </AppOptimizedStatus>
</SecurityPolicies>

```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	AppOptimizedStatus
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Result	Optimization result.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Successful.</li><li>false—Failed.</li></ul>
Description	The case of failure.	N/A	String, case-insensitive. Length: 1 to 127 characters.
Percent	Progress in percentage.	N/A	Unassigned integer. Value range: 0 to 100.

## SecurityPolicies/AppOptimizedAdvice

This table contains the advice of application optimization.

## XML structure

```
<SecurityPolicies>
  <AppOptimizedAdvice>
    <PolicyType></PolicyType>
    <OptimizeType></OptimizeType>
    <RuleID></RuleID>
    <RuleName></RuleName>
    <NewRuleID></NewRuleID>
    <NewRuleName></NewRuleName>
    <AvAction></AvAction>
    <IpsAction></IpsAction>
    <UrlAction></UrlAction>
    <DFilterAction></DFilterAction>
    <FFilterAction></FFilterAction>
  </AppOptimizedAdvice>
</SecurityPolicies>
```



## Table description

Item	Description
Feature name	SecurityPolicies
Table name	AppOptimizedAdvice
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PolicyType	Rule type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>
OptimizeType	The time range of optimization.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Today.</li> <li>1—Last Three Days.</li> <li>2—Last Week.</li> <li>3—Last Month.</li> </ul>
RuleID	Rule ID.	Index	Unassigned integer. Value range: 0 to 65534.
RuleName	Rule name.	Index	String, case-insensitive. Length: 1 to 127 characters.
NewRuleID	New rule ID.	N/A	Unassigned integer. Value range: 0 to 65534.
NewRuleName	New rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.
AvAction	AV action.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
IpsAction	IPS action.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
UrlAction	URL action.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
DFilterAction	Data filter action.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable.</li> </ul>
FFilterAction	File filter action.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> </ul>

			• false—Disable.
--	--	--	------------------

# SecurityPolicies/IPv4RuleGroup

This table contains information about an IPv4 security policy rule group.

## XML structure

```
<SecurityPolicies>
  <IPv4RuleGroup>
    <RuleGroup>
      <RuleGroupName></RuleGroupName>
      <Description></Description>
      <FromRuleName></FromRuleName>
      <ToRuleName></ToRuleName>
      <Enable></Enable>
      <IncludeMember></IncludeMember>
    </RuleGroup>
  </IPv4RuleGroup>
</SecurityPolicies>
```

## Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv4RuleGroup
Table type	Multi-instance table
Row name	RuleGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
RuleGroupName	Rule group name.	Index	String, case-insensitive. Length: 1 to 63 characters.
Description.	Description	N/A	String. Length: 1 to 127 characters.
FromRuleName	The begin rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.
ToRuleName	The end rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.

IncludeMember	Delete all the rules under the rule group.	N/A	This column is used when a rule group is deleted. If this column is specified, the rules under the rule group will also be deleted.
Enable	Enable the rule group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable</li> </ul>

## SecurityPolicies/IPv6RuleGroup

This table contains information about an IPv6 security policy rule group.

### XML structure

```

<SecurityPolicies>
  <IPv6RuleGroup>
    <RuleGroup>
      <RuleGroupName></RuleGroupName>
      <Description></Description>
      <FromRuleName></FromRuleName>
      <ToRuleName></ToRuleName>
      <Enable></Enable>
      <IncludeMember></IncludeMember>
    </RuleGroup>
  </IPv6RuleGroup>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	IPv6RuleGroup
Table type	Multi-instance table
Row name	RuleGroup
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
RuleGroupName	Rule group name.	Index	String, case-insensitive. Length: 1 to 63 characters.

Description.	Description	N/A	String. Length: 1 to 127 characters.
FromRuleName	The begin rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.
ToRuleName	The end rule name	N/A	String, case-insensitive. Length: 1 to 127 characters.
IncludeMember	Delete all the rules under the rule group.	N/A	This column is used when a rule group is deleted. If this column is specified, the rules under the rule group will also be deleted.
Enable	Enable the rule group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable</li> </ul>

## SecurityPolicies/ImportPercent

This table contains loading progress information of the security policy.

### XML structure

```

<SecurityPolicies>
  <ImportStatus>
    <Result></Result>
    <LineID></LineID>
    <ConfigType></ConfigType>
    <Information></Information>
    <Percent></Percent>
  </ImportStatus>
</SecurityPolicies>

```

### Table description

Item	Description
Feature name	SecurityPolicies
Table name	ImportStatus
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Result	The result of importing security policy	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Success.</li> <li>1—Abnormal,command execution failed.</li> <li>2—Abnormal,out of spec.</li> <li>3—Unknown error.</li> <li>4—Illegal file.</li> <li>5—Illegal command.</li> </ul>	N/A
LineID	The line number of import file	N/A	Unsigned integer Value range: 0 to $2^{64}-1$ .	N/A
ConfigType	The type of configuration	N/A	String. Length: 0 to 1024 characters.	N/A
Information	The information of importing security policy	N/A	String. Length: 0 to 1024 characters.	The configuration file may have blank lines
Percent	Loading progress of the security policy	N/A	Unsigned integer. Value range: 0 to 100.	N/A

# Contents

SecurityPolicies .....	2
SecurityPolicies/IPv4Rules .....	2
SecurityPolicies/IPv6Rules .....	3
SecurityPolicies/IPv4SrcSecZone .....	4
SecurityPolicies/IPv6SrcSecZone .....	5
SecurityPolicies/IPv4DestSecZone .....	5
SecurityPolicies/IPv6DestSecZone .....	5
SecurityPolicies/IPv4SrcAddr .....	6
SecurityPolicies/IPv6SrcAddr .....	6
SecurityPolicies/IPv4DestAddr .....	6
SecurityPolicies/IPv6DestAddr .....	7
SecurityPolicies/IPv4SrcMacAddr .....	7
SecurityPolicies/IPv4ServGrp .....	7
SecurityPolicies/IPv6ServGrp .....	8
SecurityPolicies/IPv4App .....	8
SecurityPolicies/IPv6App .....	8
SecurityPolicies/IPv4AppGrp .....	9
SecurityPolicies/IPv6AppGrp .....	9
SecurityPolicies/IPv4User .....	9
SecurityPolicies/IPv6User .....	9
SecurityPolicies/IPv4UserGrp .....	10
SecurityPolicies/IPv6UserGrp .....	10
SecurityPolicies/AppOptimizedStatus .....	10
SecurityPolicies/CommitCfgChange .....	10
SecurityPolicies/MoveIPv4Rule .....	10
SecurityPolicies/MoveIPv6Rule .....	11
SecurityPolicies/SingleOptimized .....	11

# SecurityPolicies

## SecurityPolicies/IPv4Rules

Message	Explanation
Failed to create the rule because the rule number exceeds the upper limit. 由于已经达到规则数上限，创建规则失败。	During executing create operation, the current number of the rule must under the limit. 当执行create操作时，规则数必须在限制内。
The time range does not exist and the rule will be set to inactive. 由于指定的时间段不存在，该规则不会生效。	During executing create、merge、replace operation, the time range must exist. 当执行create、merge、replace操作时，指定的时间段必须存在。
Failed to create the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则编号和目标规则编号相同，移动规则失败。	During executing create operation, the ID of the rule to be moved can't be equal to the target one. 当执行create操作时，指定规则编号不能和目标规则相同。
Failed to merge the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则编号和目标规则编号相同，移动规则失败。	During executing merge operation, the ID of the rule to be moved can't be equal to the target one. 当执行merge操作时，指定规则编号不能和目标规则相同。
Failed to replace the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则编号和目标规则编号相同，移动规则失败。	During executing replace operation, the ID of the rule to be moved can't be equal to the target one. 当执行replace操作时，指定规则编号不能和目标规则相同。
Failed to move the rule because the specified rule does not exist. 由于指定规则或目标规则不存在，移动规则失败。	During executing create、merge、replace operation, the specified rule must exist. 当执行create、merge、replace操作时，指定规则或目标规则必须存在。
Failed to create the rule because the action of the rule is not specified. 由于未指定规则动作，创建规则失败。	During executing create operation, the action of the rule must be specified. 当执行create操作时，必须指定规则动作。
Failed to merge the rule because the action of the rule is not specified. 由于未指定规则动作，创建规则失败。	During executing merge operation, the action of the rule must be specified. 当执行merge操作时，必须指定规则动作。
The maximum number of rules has been reached. 由于已经达到规则数上限，创建规则失败。	During executing create operation, the current number of the rule must under the maximum. 当执行create操作时，规则数不能达到上限值。
The app group does not exist. 指定的应用组不存在。	During executing create、merge、replace operation, the app group must exist. 当执行create、merge、replace操作时，指定的应用组必须存在。
The application does not exist. 指定的应用不存在。	During executing create、merge、replace operation, the application must exist. 当执行create、merge、replace操作时，指定的应用必须存在。
The app group and the application does not exist, the rule does not match packets. 指定的应用组和应用都不存在，该规则不会匹配报	During executing create、merge、replace operation, the app group and the application must exist.

文。	当执行create、merge、replace操作时，指定的应用或应用组必须存在。
The application does not exist, the rule does not match packets. 指定的应用不存在，该规则不会匹配报文。	During executing create、merge、replace operation, the application must exist. 当执行create、merge、replace操作时，指定的应用必须存在。
The app group does not exist, the rule does not match packets. 指定的应用组不存在，该规则不会匹配报文。	During executing create、merge、replace operation, the app group must exist. 当执行create、merge、replace操作时，指定的应用组必须存在。
The name is already used by another security policy rule. 规则名称已存在。	During executing create、merge、replace operation, the name of the new rule can't be exist. 当执行create、merge、replace操作时，新规则名称必须不存在。
Invalid rule name. 无效的规则名称。	During executing create、merge、replace operation, the name of the new rule must be valid. 当执行create、merge、replace操作时，规则名称必须有效。

## SecurityPolicies/IPv6Rules

Message	Explanation
Failed to create the rule because the rule number exceeds the upper limit. 由于已经达到规则数上限，创建规则失败。	During executing create operation, the current number of the rule must under the limit. 当执行create操作时，规则数必须在限制内。
The time range does not exist and the rule will be set to inactive. 由于指定的时间段不存在，该规则不会生效。	During executing create、merge、replace operation, the time range must exist. 当执行create、merge、replace操作时，指定的时间段必须存在。
Failed to create the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则编号和目标规则编号相同，移动规则失败。	During executing create operation, the ID of the rule to be moved can't be equal to the target one. 当执行create操作时，指定规则编号不能和目标规则相同。
Failed to merge the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则编号和目标规则编号相同，移动规则失败。	During executing merge operation, the ID of the rule to be moved can't be equal to the target one. 当执行merge操作时，指定规则编号不能和目标规则相同。
Failed to replace the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则编号和目标规则编号相同，移动规则失败。	During executing replace operation, the ID of the rule to be moved can't be equal to the target one. 当执行replace操作时，指定规则编号不能和目标规则相同。
Failed to move the rule because the specified rule does not exist. 由于指定规则或目标规则不存在，移动规则失败。	During executing create、merge、replace operation, the specified rule must exist. 当执行create、merge、replace操作时，指定规则或目标规则必须存在。
Failed to create the rule because the action of the rule is not specified. 由于未指定规则动作，创建规则失败。	During executing create operation, the action of the rule must be specified. 当执行create操作时，必须指定规则动作。
Failed to merge the rule because the action of the rule is not specified.	During executing merge operation, the action of the rule must be specified.



由于未指定规则动作，创建规则失败。	当执行merge操作时，必须指定规则动作。
The maximum number of rules has been reached. 由于已经达到规则数上限，创建规则失败。	During executing create operation, the current number of the rule must under the maximum. 当执行create操作时，规则数不能达到上限值。
The app group does not exist. 指定的应用组不存在。	During executing create、merge、replace operation, the app group must exist. 当执行create、merge、replace操作时，指定的应用组必须存在。
The application does not exist. 指定的应用不存在。	During executing create、merge、replace operation, the application must exist. 当执行create、merge、replace操作时，指定的应用必须存在。
The app group and the application does not exist, the rule does not match packets. 指定的应用组和应用都不存在，该规则不会匹配报文。	During executing create、merge、replace operation, the app group and the application must exist. 当执行create、merge、replace操作时，指定的应用或应用组必须存在。
The application does not exist, the rule does not match packets. 指定的应用不存在，该规则不会匹配报文。	During executing create、merge、replace operation, the application must exist. 当执行create、merge、replace操作时，指定的应用必须存在。
The app group does not exist, the rule does not match packets. 指定的应用组不存在，该规则不会匹配报文。	During executing create、merge、replace operation, the app group must exist. 当执行create、merge、replace操作时，指定的应用组必须存在。
The name is already used by another security policy rule. 规则名称已存在。	During executing create、merge、replace operation, the name of the new rule can't be exist. 当执行create、merge、replace操作时，新规则名称必须不存在。
Invalid rule name. 无效的规则名称。	During executing create、merge、replace operation, the name of the new rule must be valid. 当执行create、merge、replace操作时，规则名称必须有效。

## SecurityPolicies/IPv4SrcSecZone

Message	Explanation
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of source seczone already reached. 源安全域个数超过上限。	During executing create、merge、replace operation, the number of source seczone must be under the maximum. 当执行create、merge、replace操作时，源安全域个数必须在限制内。
The source seczone is already existed in the rule. 源安全域已存在。	During executing create、merge、replace operation, the new source zone can't be existed. 当执行create、merge、replace操作时，源安全域不能存在。

## SecurityPolicies/IPv6SrcSecZone

Message	Explanation
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of source seczone already reached. 源安全域个数超过上限。	During executing create、merge、replace operation, the number of source seczone must be under the maximum. 当执行create、merge、replace操作时，源安全域个数必须在限制内。
The source seczone is already existed in the rule. 源安全域已存在。	During executing create、merge、replace operation, the new source zone can't be existed. 当执行create、merge、replace操作时，源安全域不能存在。

## SecurityPolicies/IPv4DestSecZone

Message	Explanation
Invalid name. 无效名称。	During executing create、merge、replace operation, the name of must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of destination seczone already reached. 目的安全域个数超过上限。	During executing create、merge、replace operation, the number of destination seczone must be under the maximum. 当执行create、merge、replace操作时，目的安全域个数必须在限制内。
The destination seczone is already existed in the rule. 目的安全域已存在。	During executing create、merge、replace operation, the new destination zone can't be existed. 当执行create、merge、replace操作时，目的安全域不能存在。

## SecurityPolicies/IPv6DestSecZone

Message	Explanation
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of destination seczone already reached. 目的安全域个数超过上限。	During executing create、merge、replace operation, the number of destination seczone must be under the maximum. 当执行create、merge、replace操作时，目的安全域个数必须在限制内。
The destination seczone is already existed in the rule. 目的安全域已存在。	During executing create、merge、replace operation, the new destination zone can't be existed. 当执行create、merge、replace操作时，目的安全域不能存在。

## SecurityPolicies/IPv4SrcAddr

Message	Explanation
Illegal source IP address object group type. 指定的源IP地址对象组类型不正确。	During executing create、merge、replace operation, the source IP address object group type must be legal. 当执行create、merge、replace操作时，指定的源IP地址对象组类型必须正确。
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of source ip already reached. 源地址个数超过上限。	During executing create、merge、replace operation, the number of source ip address must be under the maximum. 当执行create、merge、replace操作时，源地址个数必须在限制内。

## SecurityPolicies/IPv6SrcAddr

Message	Explanation
Illegal source IP address object group type. 指定的源IP地址对象组类型不正确。	During executing create、merge、replace operation, the source IP address object group type must be legal. 当执行create、merge、replace操作时，指定的源IP地址对象组类型必须正确。
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of source ip already reached. 源地址个数超过上限。	During executing create、merge、replace operation, the number of source ip address must be under the maximum. 当执行create、merge、replace操作时，源地址个数必须在限制内。

## SecurityPolicies/IPv4DestAddr

Message	Explanation
Illegal destination IP address object group type. 指定的目的IP地址对象组类型不正确。	During executing create、merge、replace operation, the destination IP address object group type must be legal. 当执行create、merge、replace操作时，指定的目的IP地址对象组类型必须正确。
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of destination ip already reached. 目的地址个数超过上限。	During executing create、merge、replace operation, the number of destination ip address must be under the maximum. 当执行create、merge、replace操作时，目的地址个数必须在限制内。

## SecurityPolicies/IPv6DestAddr

Message	Explanation
Illegal destination IP address object group type. 指定的目的IP地址对象组类型不正确。	During executing create、merge、replace operation, the destination IP address object group type must be legal. 当执行create、merge、replace操作时，指定的目的IP地址对象组类型必须正确。
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of destination ip already reached. 目的地址个数超过上限。	During executing create、merge、replace operation, the number of destination ip address must be under the maximum. 当执行create、merge、replace操作时，目的地址个数必须在限制内。

## SecurityPolicies/IPv4SrcMacAddr

Message	Explanation
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of source MAC already reached. 源MAC地址组个数超过上限。	During executing create、merge、replace operation, the number of source MAC address must be under the maximum. 当执行create、merge、replace操作时，源MAC地址组个数必须在限制内。
Illegal source MAC address object group type. 指定的源MAC地址对象组类型不正确。	During executing create、merge、replace operation, the source MAC address object group type must be legal. 当执行create、merge、replace操作时，指定的源MAC地址对象组类型必须正确。

## SecurityPolicies/IPv4ServGrp

Message	Explanation
Illegal service object group type. 指定的服务对象组类型不正确。	During executing create、merge、replace operation, the service object object group type must be legal. 当执行create、merge、replace操作时，指定的服务对象组类型必须正确。
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of service group already reached. 服务组个数超过上限。	During executing create、merge、replace operation, the number of service group must be under the maximum. 当执行create、merge、replace操作时，服务组个数必须在限制内。

# SecurityPolicies/IPv6ServGrp

Message	Explanation
Illegal service object group type. 指定的服务对象组类型不正确。	During executing create、merge、replace operation, the service object object group type must be legal. 当执行create、merge、replace操作时，指定的服务对象组类型必须正确。
Invalid name. 无效名称。	During executing create、merge、replace operation, the name must be valid. 当执行create、merge、replace操作时，名称必须有效。
Maximum number of service group already reached. 服务组个数超过上限。	During executing create、merge、replace operation, the number of service group must be under the maximum. 当执行create、merge、replace操作时，服务组个数必须在限制内。

# SecurityPolicies/IPv4App

Message	Explanation
Can not use 'invalid' or 'other' as app-group or application name. 应用组或应用名称不能为'invalid'或'other'。	During executing create、merge、replace operation, the app-group or application name can't be 'invalid' or 'other'. 当执行create、merge、replace操作时，应用组或应用名称不能为'invalid'或'other'。
Maximum number of service group already reached. 服务组个数超过上限。	During executing create、merge、replace operation, the number of service group must be under the maximum. 当执行create、merge、replace操作时，服务组个数必须在限制内。
Maximum number of application already reached. 应用个数超过上限。	During executing create、merge、replace operation, the number of application must be under the maximum. 当执行create、merge、replace操作时，应用个数必须在限制内。

# SecurityPolicies/IPv6App

Message	Explanation
Can not use 'invalid' or 'other' as app-group or application name. 应用组或应用名称不能为'invalid'或'other'。	During executing create、merge、replace operation, the app-group or application name can't be 'invalid' or 'other'. 当执行create、merge、replace操作时，应用组或应用名称不能为'invalid'或'other'。
Maximum number of service group already reached. 服务组个数超过上限。	During executing create、merge、replace operation, the number of service group must be under the maximum. 当执行create、merge、replace操作时，服务组个数必须在限制内。
Maximum number of application already reached. 应用个数超过上限。	During executing create、merge、replace operation, the number of application must be under the maximum. 当执行create、merge、replace操作时，应用个数必须在限制内。

## SecurityPolicies/IPv4AppGrp

Message	Explanation
Can not use 'invalid' or 'other' as app-group or application name. 应用组或应用名称不能为'invalid'或'other'。	During executing create、merge、replace operation, the app-group or application name can't be 'invalid' or 'other'. 当执行create、merge、replace操作时，应用组或应用名称不能为'invalid'或'other'。
Maximum number of application group already reached. 应用组个数超过上限。	During executing create、merge、replace operation, the number of application group must be under the maximum. 当执行create、merge、replace操作时，应用组个数必须在限制内。

## SecurityPolicies/IPv6AppGrp

Message	Explanation
Can not use 'invalid' or 'other' as app-group or application name. 应用组或应用名称不能为'invalid'或'other'。	During executing create、merge、replace operation, the app-group or application name can't be 'invalid' or 'other'. 当执行create、merge、replace操作时，应用组或应用名称不能为'invalid'或'other'。
Maximum number of application group already reached. 应用组个数超过上限。	During executing create、merge、replace operation, the number of application group must be under the maximum. 当执行create、merge、replace操作时，应用组个数必须在限制内。

## SecurityPolicies/IPv4User

Message	Explanation
Invalid username. 无效的用户名。	During executing create、merge、replace operation, the username must be valid. 当执行create、merge、replace操作时，用户名必须有效。
Maximum number of user already reached. 用户个数超过上限。	During executing create、merge、replace operation, the number of user must be under the maximum. 当执行create、merge、replace操作时，用户个数必须在限制内。

## SecurityPolicies/IPv6User

Message	Explanation
Invalid username. 无效的用户名。	During executing create、merge、replace operation, the username must be valid. 当执行create、merge、replace操作时，用户名必须有效。
Maximum number of user already reached. 用户个数超过上限。	During executing create、merge、replace operation, the number of user must be under the maximum. 当执行create、merge、replace操作时，用户个数必须在限制内。

## SecurityPolicies/IPv4UserGrp

Message	Explanation
Maximum number of user-group already reached. 用户组个数超过上限。	During executing create、merge、replace operation, the number of user-group must be under the maximum. 当执行create、merge、replace操作时，用户组个数必须在限制内。

## SecurityPolicies/IPv6UserGrp

Message	Explanation
Maximum number of user-group already reached. 用户组个数超过上限。	During executing create、merge、replace operation, the number of user-group must be under the maximum. 当执行create、merge、replace操作时，用户组个数必须在限制内。

## SecurityPolicies/AppOptimizedStatus

Message	Explanation
Failed to create the rule because the rule number exceeds the upper limit. 由于已经达到规则数上限，创建规则失败。	The number of rule must be under the maximum when create rules. 当创建规则时，规则个数必须在限制内。
The maximum number of rules has been reached. 由于已经达到规则数上限，创建规则失败。	The number of rule must be under the maximum when create rules. 当创建规则时，规则个数必须在限制内。
Failed to reference the protection action during the auto batch optimization operation. 策略批量调优过程中引用策略防护动作失败。	During the auto batch optimization operation, the protection action must be referenced successfully. 策略批量调优过程中，引用策略防护动作必须成功。
Auto batch optimization failed. 策略批量调优失败。	Auto batch optimization failed. 策略批量调优失败。

## SecurityPolicies/CommitCfgChange

Message	Explanation
The accelerate state of IPv4 or IPv6 is disable. IPv4或者IPv6的加速状态为不加速。	The accelerate state of IPv4 or IPv6 is disable. IPv4或者IPv6的加速状态为不加速。

## SecurityPolicies/MoveIPv4Rule

Message	Explanation
Failed to move the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则和目标规则的编号相同，移动规则失败。	During the operation, the ID of the rule to be moved can't be equal to the target one. 当执行该操作时，指定规则编号不能和目标规则相同。

Failed to move the rule because the specified rule does not exist. 由于指定规则或目标规则不存在，移动规则失败。	During the operation, the specified rule must exist. 当执行该操作时，指定规则或目标规则必须存在。
--	--

## SecurityPolicies/MoveIPv6Rule

Message	Explanation
Failed to move the rule because the ID of the rule to be moved is equal to the target one. 由于指定规则和目标规则的编号相同，移动规则失败。	During the operation, the ID of the rule to be moved can't be equal to the target one. 当执行该操作时，指定规则编号不能和目标规则相同。
Failed to move the rule because the specified rule does not exist. 由于指定规则或目标规则不存在，移动规则失败。	During the operation, the specified rule must exist. 当执行该操作时，指定规则或目标规则必须存在。

## SecurityPolicies/SingleOptimized

Message	Explanation
Failed to create the rule because the rule number exceeds the upper limit. 由于已经达到规则数上限，创建规则失败。	During the operation, the current number of the rule must under the limit. 当执行该操作时，规则数必须在限制内。
The maximum number of rules has been reached. 由于已经达到规则数上限，创建规则失败。	During the operation, the current number of the rule must under the maximum. 当执行该操作时，规则数必须在限制内。
The name is already used by another security policy rule. 规则名称已存在。	During the operation, the name of the new rule can't be exist. 当执行该操作时，新规则名称必须不存在。
The policy has been optimized. 调优失败，此策略规则已调优，请刷新。	During the operation, the policy can't have been optimized already. 当执行该操作时，规则必须还未调优过。



# Contents

SecurityZone.....	1
SecurityZone/Zones .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
SecurityZone/ZonePairs .....	1
XML structure.....	1
Table description.....	2
Columns.....	2
SecurityZone/Interfaces.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
SecurityZone/VLANs .....	3
XML structure.....	4
Table description.....	4
Columns.....	4
SecurityZone/ServicePaths .....	5
XML structure.....	5
Table description.....	5
Columns.....	5
SecurityZone/VsipFilterSwitch .....	6
XML structure.....	6
Table description.....	6
Columns.....	6

# SecurityZone

## SecurityZone/Zones

This table contains the information about the security zone.

### XML structure

```
<SecurityZone>
  <Zones>
    <Zone>
      <Name></Name>
    </Zone>
  </Zones>
</SecurityZone>
```

### Table description

Item	Description
Feature name	SecurityZone
Table name	Zones
Table type	Multi-instance table
Row name	Zone
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remark
Name	Security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).

## SecurityZone/ZonePairs

This table contains the information about the security zone pair.

### XML structure

```
<SecurityZone>
  <ZonePairs>
    <ZonePair>
```

```

        <SrcZone></SrcZone>
        <DestZone></DestZone>
    </ZonePair>
</ZonePairs>
</SecurityZone>

```

## Table description

Item	Description
Feature name	SecurityZone
Table name	ZonePairs
Table type	Multi-instance table
Row name	ZonePair
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
SrcZone	Source security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).
DestZone	Destination security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).

## SecurityZone/Interfaces

The table contains the interface member information of security zone.

## XML structure

```

<SecurityZone>
  <Interfaces>
    <Interface>
      <ZoneName></ZoneName>
      <IfIndex></IfIndex>
      <VlanList></VlanList>
    </Interface>
  </Interfaces>
</SecurityZone>

```

## Table description

Item	Description
Feature name	SecurityZone
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
ZoneName	Security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).
IfIndex	Interface index	Index	Unsigned integer.	Applicable to only layer 2 and layer 3 interface.
VlanList	The VLANs that the interface belongs	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string must not end with a comma or hyphen, or include any whitespace characters.	N/A

## SecurityZone/VLANs

The table contains the VLAN interface information of the security zone.

## XML structure

```
<SecurityZone>
  <VLANs>
    <VLAN>
      <ZoneName></ZoneName>
      <VlanList></VlanList>
    </VLAN>
  </VLANs>
</SecurityZone>
```

## Table description

Item	Description
Feature name	SecurityZone
Table name	VLANs
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
ZoneName	Security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).
VlanList	List of VLAN	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string must not end with a comma or hyphen, or include any whitespace characters.	N/A

# SecurityZone/ServicePaths

The table contains the service path member information of security zone.

## XML structure

```
<SecurityZone>
  <ServicePaths>
    <ServicePath>
      <ZoneName></ZoneName>
      <ServicePathID></ServicePathID>
      <Reverse></Reverse>
    </ServicePath>
  </ServicePaths>
</SecurityZone>
```

## Table description

Item	Description
Feature name	SecurityZone
Table name	ServicePaths
Table type	Multi-instance table
Row name	ServicePath
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
ZoneName	Security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).
ServicePathID	Service path ID	Index	Unsigned integer.	N/A
Reverse	Reverse tag	Index	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A

# SecurityZone/VsipFilterSwitch

This table contains information about filtering traffic based on virtual service IP address.

## XML structure

```
<SecurityZone>
  <VsipFilterSwitch>
    <EnableVsipFilter></EnableVsipFilter>
  </VsipFilterSwitch>
</SecurityZone>
```

## Table description

Item	Description
Feature name	SecurityZone
Table name	VsipFilterSwitch
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
EnableVsipFilter	Whether to enable filtering based on virtual service IP address.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable the filtering feature.</li><li><b>false</b>—Disable the filtering feature (default).</li></ul>

# Contents

SecurityZone.....	1
SecurityZone/Capabilities .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
SecurityZone/Zones .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
SecurityZone/ZonePairs .....	3
XML structure.....	3
Table description.....	3
Columns.....	3
SecurityZone/Interfaces.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
SecurityZone/VLANs .....	5
XML structure.....	5
Table description.....	5
Columns.....	5
SecurityZone/ServicePaths .....	6
XML structure.....	6
Table description.....	6
Columns.....	6
SecurityZone/VsipFilterSwitch .....	6
XML structure.....	7
Table description.....	7
Columns.....	7



# SecurityZone

## SecurityZone/Capabilities

This table contains the capabilities information of the security zone.

### XML structure

```
<SecurityZone>
  <Capabilities>
    <L3Interface></L3Interface>
    <L2Interface></L2Interface>
    <VLAN></VLAN>
    <IP></IP>
    <ServicePath></ServicePath>
  </Capabilities>
</SecurityZone>
```

### Table description

Item	Description
Feature name	SecurityZone
Table name	Capabilities
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remark
L3Interface	Whether layer 3 interface member is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A
L2Interface	Whether layer 2 interface member is supported.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A
VLAN	Whether VLAN member is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remark
IP	Whether IP member is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
ServicePath	Whether service path member is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## SecurityZone/Zones

This table contains security zone information.

### XML structure

```

<SecurityZone>
  <Zones>
    <Zone>
      <Name></Name>
      <ID></ID>
    </Zone>
  </Zones>
</SecurityZone>

```

### Table description

Item	Description
Feature name	SecurityZone
Table name	Zones
Table type	Multi-instance table
Row name	Zone
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remark
Name	Security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).
ID	Security zone ID	N/A	Unsigned integer. Value range: 0 to 10100	N/A

# SecurityZone/ZonePairs

This table contains security zone pair information.

## XML structure

```
<SecurityZone>
  <ZonePairs>
    <ZonePair>
      <SrcZone></SrcZone>
      <DestZone></DestZone>
    </ZonePair>
  </ZonePairs>
</SecurityZone>
```

## Table description

Item	Description
Feature name	SecurityZone
Table name	ZonePairs
Table type	Multi-instance table
Row name	ZonePair
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
SrcZone	Source security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).
DestZone	Destination security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).

# SecurityZone/Interfaces

The table contains the interface member information of security zone.

## XML structure

```
<SecurityZone>
```

```

<Interfaces>
  <Interface>
    <ZoneName></ZoneName>
    <IfIndex></IfIndex>
    <VlanList></VlanList>
  </Interface>
</Interfaces>
</SecurityZone>

```

## Table description

Item	Description
Feature name	SecurityZone
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
ZoneName	Security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).
IfIndex	Interface index	Index	Unsigned integer.	Applicable to only layer 2 and layer 3 interface.
VlanList	The VLANs that the interface belongs	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string must not end with a comma or hyphen, or include any whitespace characters.	N/A

# SecurityZone/VLANs

The table contains the VLAN member information of the security zone.

## XML structure

```
<SecurityZone>
  <VLANs>
    <VLAN>
      <ZoneName></ZoneName>
      <VlanList></VlanList>
    </VLAN>
  </VLANs>
</SecurityZone>
```

## Table description

Item	Description
Feature name	SecurityZone
Table name	VLANs
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
ZoneName	Security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).
VlanList	List of VLANs	Index	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string must not end with a comma or hyphen, or include any whitespace characters.	N/A

# SecurityZone/ServicePaths

The table contains the service path member information of security zone.

## XML structure

```
<SecurityZone>
  <ServicePaths>
    <ServicePath>
      <ZoneName></ZoneName>
      <ServicePathID></ServicePathID>
      <Reverse></Reverse>
    </ServicePath>
  </ServicePaths>
</SecurityZone>
```

## Table description

Item	Description
Feature name	SecurityZone
Table name	ServicePaths
Table type	Multi-instance table
Row name	ServicePath
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
ZoneName	Security zone name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains no midline( - ).
ServicePathID	Service path ID	Index	Unsigned integer.	N/A
Reverse	Reverse tag	Index	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	N/A

# SecurityZone/VsipFilterSwitch

This table contains information about filtering traffic based on virtual service IP address.

## XML structure

```
<SecurityZone>
  <VsipFilterSwitch>
    <EnableVsipFilter></EnableVsipFilter>
  </VsipFilterSwitch>
</SecurityZone>
```

## Table description

Item	Description
Feature name	SecurityZone
Table name	VsipFilterSwitch
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
EnableVsipFilter	Whether filtering based on virtual service IP address is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>

# Contents

SRVCHN.....	1
SRVCHN/Paths .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
SRVCHN/IfMatches .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
SRVCHN/Funcs.....	3
XML structure .....	3
Table description .....	4
Columns .....	4



# SRVCHN

## SRVCHN/Paths

This table contains service chain information.

### XML structure

```
<SRVCHN>
  <Paths>
    <Path>
      <PathID></PathID>
      <ACLNumber></ACLNumber>
      <ACLName></ACLName>
      <NextHop></NextHop>
      <PrevHop></PrevHop>
    </Path>
  </Paths>
</SRVCHN>
```

### Table description

Item	Description
Feature name	SRVCHN
Table name	Paths
Table type	Multi-instance table
Row name	Path
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PathID	Path ID of the service chain	Index	Unsigned integer. Value range: 1 to 8388606.	N/A
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	Choose the ACLNumber or ACLName column to specify an ACL to match locally generated packets. The two columns

Column name	Column description	Column type	Data type and restrictions	Remarks
				cannot be set together. Support for this column depends on the device model.
ACLName	ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Choose the ACLNumber or ACLName column to specify an ACL to match locally generated packets. The two columns cannot be set together. Support for this column depends on the device model.
NextHop	IP address of the next service node	N/A	String, dotted decimal notation.	Default: 0.0.0.0. Example: 1.1.1.1.
PrevHop	IP address of the previous service node	N/A	String, dotted decimal notation.	Default: 0.0.0.0. Example: 1.1.1.1.

## SRVCHN/IfMatches

This table contains service chain policy information. Support for this table depends on the device model.

## XML structure

```

<SRVCHN>
  <IfMatches>
    <IfMatch>
      <PathID></PathID>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>
      <ACLName></ACLName>
    </IfMatch>
  </IfMatches>
</SRVCHN>

```

## Table description

Item	Description
Feature name	SRVCHN

Table name	IfMatches
Table type	Multi-instance table
Row name	IfMatch
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PathID	Path ID of the service chain	Index	Unsigned integer. Value range: 1 to 8388606.	The specified service chain must exist before you configure this table.
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
ACLNumber	ACL number	N/A	Unsigned integer Value range:2000 to 3999	Choose the ACLNumber or ACLName column to specify an ACL to match received IP packets. The two columns cannot be set together.
ACLName	ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Choose the ACLNumber or ACLName column to specify an ACL to match received IP packets. The two columns cannot be set together.

## SRVCHN/Funcs

This table contains service chain service function information.

## XML structure

```

<SRVCHN>
  <Funcs>
    <Func>
      <PathID></PathID>
      <FuncID></FuncID>
      <LBTeamName></LBTeamName>
      <SrvList></SrvList>
    </Func>
  </Funcs>
</SRVCHN>

```

## Table description

Item	Description
Feature name	SRVCHN
Table name	Funcs
Table type	Multi-instance table
Row name	Func
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PathID	Path ID of the service chain	Index	Unsigned integer. Value range: 1 to 8388606.	The specified service chain must exist before you configure this table.
FuncID	Service node ID	Index	Unsigned integer. Value range: 1 to 255.	If the device does not support load sharing teams, the value for this column can only be 1.
LBTeamName	Load sharing team name	N/A	String, case-sensitive. Length: 1 to 63 characters.	Support for this column depends on the device model.
SrvList	List of services	N/A	String, case-insensitive. Length: 1 to 255 characters.	Different service combinations are separated by spaces. The combinations are matched by the configuration order defined in the SrvList column for inter-device packets.  For example: ACG DPI FW IPS IPsec LB NAT.

# Contents

SRVCHN .....	1
SRVCHN/Paths .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
SRVCHN/IfMatches .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
SRVCHN/Funcs .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
SRVCHN/Specification .....	4
XML structure .....	4
Table description .....	5
Columns .....	5

# SRVCHN

## SRVCHN/Paths

This table contains service chain service path information.

### XML structure

```
<SRVCHN>
  <Paths>
    <Path>
      <PathID></PathID>
      <ACLNumber></ACLNumber>
      <ACLName></ACLName>
      <NextHop></NextHop>
      <PrevHop></PrevHop>
    </Path>
  </Paths>
</SRVCHN>
```

### Table description

Item	Description
Feature name	SRVCHN
Table name	Paths
Table type	Multi-instance table
Row name	Path
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PathID	Path ID of the service chain	Index	Unsigned integer. Value range: 1 to 8388606.	N/A
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	Choose the ACLNumber or ACLName column to specify an ACL to match locally generated packets. The two columns cannot be set together.

Column name	Column description	Column type	Data type and restrictions	Remarks
				Support for this column depends on the device model.
ACLName	ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Choose the ACLNumber or ACLName column to specify an ACL to match locally generated packets. The two columns cannot be set together. Support for this column depends on the device model.
NextHop	IP address of the next service node	N/A	String, dotted decimal notation.	Default: 0.0.0.0 Example: 1.1.1.1
PrevHop	IP address of the previous service node	N/A	String, dotted decimal notation.	Default: 0.0.0.0 Example: 1.1.1.1

## SRVCHN/IfMatches

This table contains service chain policy information. Support for this table depends on the device model.

### XML structure

```

<SRVCHN>
  <IfMatches>
    <IfMatch>
      <PathID></PathID>
      <IfIndex></IfIndex>
      <ACLNumber></ACLNumber>
      <ACLName></ACLName>
    </IfMatch>
  </IfMatches>
</SRVCHN>

```

### Table description

Item	Description
Feature name	SRVCHN
Table name	IfMatches
Table type	Multi-instance table
Row name	IfMatch

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PathID	Path ID of the service chain	Index	Unsigned integer. Value range: 1 to 8388606.	The specified service chain must exist before you configure this table.
IfIndex	Interface index	Index	Unsigned integer.	Only Layer 3 interfaces are supported.
ACLNumber	ACL number	N/A	Unsigned integer Value range:2000 to 3999	Choose the ACLNumber or ACLName column to specify an ACL to match received IP packets. The two columns cannot be set together.
ACLName	ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Choose the ACLNumber or ACLName column to specify an ACL to match received IP packets. The two columns cannot be set together.

## SRVCHN/Funcs

This table contains service chain service function information.

## XML structure

```

<SRVCHN>
  <Funcs>
    <Func>
      <PathID></PathID>
      <FuncID></FuncID>
      <LBTeamName></LBTeamName>
      <SrvList></SrvList>
    </Func>
  </Funcs>
</SRVCHN>

```



## Table description

Item	Description
Feature name	SRVCHN
Table name	Funcs
Table type	Multi-instance table
Row name	Func
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PathID	Path ID of the service chain	Index	Unsigned integer. Value range: 1 to 8388606.	The specified service chain must exist before you configure this table.
FuncID	Service node ID	Index	Unsigned integer. Value range: 1 to 255.	If the device does not support load sharing teams, the value for this column can only be 1.
LBTeamName	Load sharing team name	N/A	String, case-sensitive. Length: 1 to 63 characters.	Support for this column depends on the device model.
SrvList	List of services	N/A	String, case-insensitive. Length: 1 to 255 characters.	Different service combinations are separated by spaces. The combinations are matched by the configuration order defined in the SrvList column for inter-device packets.  For example: ACG DPI FW IPS IPsec LB NAT.

## SRVCHN/Specification

This table contains service chain specifications.

## XML structure

```
<SRVCHN>
  <Specification>
    <SupportLBGroup></SupportLBGroup>
  </Specification>
</SRVCHN>
```

## Table description

Item	Description
Feature name	SRVCHN
Table name	Specification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SupportLBGroup	Whether to support load sharing teams	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>

# Contents

SRVCHN .....	1
SRVCHN/Paths .....	1
SRVCHN/IfMatches .....	1
SRVCHN/Funcs .....	2
SRVCHN/Specification .....	2

# SRVCHN

## SRVCHN/Paths

Message	Explanation
Acl name and acl number can't be set at the same time. acl name和acl number不能同时配置	Acl name and acl number can't be set at the same time, please modify configuration under guidance. acl name和acl number不能同时配置, 请按照配置指导进行配置。
Invalid address IP地址无效	Invalid address, please modify configuration under guidance. IP地址无效, 请按照配置指导进行配置。
This device doesn't support internal service-chain configurations. 当前设备不支持设备内业务链相关配置	This device doesn't support internal service-chain configurations, please modify configuration under guidance. 当前设备不支持设备内业务链相关配置, 请按照配置指导进行配置。
This device doesn't support external service-chain configurations. 当前设备不支持设备间业务链相关配置	This device doesn't support external service-chain configurations, please modify configuration under guidance. 当前设备不支持设备间业务链相关配置, 请按照配置指导进行配置。

## SRVCHN/IfMatches

Message	Explanation
Path does not exist. 目标Path未创建	Path does not exist, please modify configuration under guidance. 目标Path未创建, 请按照配置指导进行配置。
Process srvchn is not started. 服务链进程尚未启动	Process srvchn is not started, please modify configuration under guidance. 服务链进程尚未启动, 请按照配置指导进行配置。
Acl name and acl number can't be set at the same time. acl name和acl number不能同时配置	Acl name and acl number can't be set at the same time, please modify configuration under guidance. acl name和acl number不能同时配置, 请按照配置指导进行配置。
This table doesn't support delete or remove column separately. 本表不支持单独删除列	This table doesn't support delete or remove column separately, please modify configuration under guidance. 本表不支持单独删除列, 请按照配置指导进行配置。
Acl name or number is necessary here. 此处必须配置acl name或acl number	Acl name or number is necessary here, please modify configuration under guidance. 此处必须配置acl name或acl number, 请按照配置指导进行配置。

	配置。
The operation conflicts with some existing configurations. 当前配置与已有配置存在冲突	The operation conflicts with some existing configurations, please modify configuration under guidance. 当前配置与已有配置存在冲突，请按照配置指导进行配置。
This device doesn't support internal service-chain configurations. 当前设备不支持设备内业务链相关配置	This device doesn't support internal service-chain configurations, please modify configuration under guidance. 当前设备不支持设备内业务链相关配置，请按照配置指导进行配置。

## SRVCHN/Funcs

Message	Explanation
Path does not exist. 目标Path未创建	Path does not exist, please modify configuration under guidance. 目标Path未创建，请按照配置指导进行配置。
A service appeared more than once. 某个业务重复出现	A service appeared more than once, please modify configuration under guidance. 某个业务重复出现，请按照配置指导进行配置。
Process srvchn is not started. 服务链进程尚未启动	Process srvchn is not started, please modify configuration under guidance. 服务链进程尚未启动，请按照配置指导进行配置。
This device does not support blade load balance team configurations. 当前设备不支持负载分担组配置	This device does not support blade load balance team configurations, please modify configuration under guidance. 当前设备不支持负载分担组配置，请按照配置指导进行配置。
FunctionID can only be 1 when the device does not support load balancing team configurations. 当前设备不支持负载分担组配置时，functionID只能为1	FunctionID can only be 1 when the device does not support load balancing team configurations, please modify configuration under guidance. 当前设备不支持负载分担组配置时，functionID只能为1，请按照配置指导进行配置。

## SRVCHN/Specification

Message	Explanation

# Contents

Session.....	1
Session/SessionStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Session/ClearAllSessionStatistics .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
Session/ExportIpv4Table .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
Session/ExportIpv6Table .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
Session/ClearIpv4Sessions .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
Session/ClearIpv6Sessions .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
Session/ConnectionLimit/GlobalStatistics .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
Session/ConnectionLimit/ClearAllGlobalStatistics .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
Session/ConnectionLimit/InterfaceStatistics .....	15
XML structure .....	15
Table description .....	16
Columns .....	16
Session/ConnectionLimit/ClearAllInterfaceStatistics .....	17
XML structure .....	17
Table description .....	17
Columns .....	17

# Session

## Session/SessionStatistics

This table contains statistics of sessions.

### XML structure

```
<Session>
  <SessionStatistics>
    <SessionStatistic>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Clear></Clear>
    </SessionStatistic>
  </SessionStatistics>
</Session>
```

### Table description

Item	Description
Feature name	Session
Table name	SessionStatistics
Table type	Multi-instance table
Row name	SessionStatistic
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Clear	Resets counters.	N/A	This column must be empty.	N/A

# Session/ClearAllSessionStatistics

Clear all statistics of sessions.

## XML structure

```
<Session>
  <ClearAllSessionStatistics>
    <Clear></Clear>
  </ClearAllSessionStatistics>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	ClearAllSessionStatistics
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Resets counters.	N/A	This column must be empty.	N/A

# Session/ExportIpv4Table

This table exports ipv4 session information to a file according to the specified conditions.

## XML structure

```
<Session>
  <ExportIpv4Table>
    <Session_Export>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <InitVRF></InitVRF>
      <IP4SourceIp></IP4SourceIp>
      <IP4SourcePort></IP4SourcePort>
      <IP4DestinationIp></IP4DestinationIp>
    </Session_Export>
  </ExportIpv4Table>
</Session>
```



```

    <IP4DestinationPort></IP4DestinationPort>
    <ProtocolType></ProtocolType>
    <FileName></FileName>
  </Session_Export>
</ExportIpv4Table>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	ExportIpv4Table
Table type	Multi-instance table
Row name	Session_Export
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
InitVRF	VRF of the initiator.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
IP4SourceIp	Source Ip	Index	Ipv4Address.	N/A
IP4SourcePort	Source Port	Index	Unsigned integer. Value range: 0 to 65535.	N/A
IP4DestinationIp	Destination Ip	Index	Ipv4 Address.	N/A
IP4DestinationPort	Destination Port	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ProtocolType	Transport layer protocol id of the packet from the initiator to the responder.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—TCP.</li> <li>1—UDP.</li> <li>2—ICMP.</li> <li>3—ICMPv6.</li> <li>4—UDP-Lite.</li> <li>5—SCTP.</li> <li>6—DCCP.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>7—RAWIP.</li> <li>8—ALL.</li> </ul>	
FileName	File Name	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## Session/ExportIpv6Table

This table exports ipv6 session information to a file according to the specified conditions.

### XML structure

```

<Session>
  <ExportIpv6Table>
    <Session_Export>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <InitVRF></InitVRF>
      <IP6SourceIp></IP6SourceIp>
      <IP6SourcePort></IP6SourcePort>
      <IP6DestinationIp></IP6DestinationIp>
      <IP6DestinationPort></IP6DestinationPort>
      <ProtocolType></ProtocolType>
      <FileName></FileName>
    </Session_Export>
  </ExportIpv6Table>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	ExportIpv6Table
Table type	Multi-instance table
Row name	Session_Export
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
InitVRF	VRF of the initiator.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
IP6SourceIp	Source Ip	Index	Ipv6 Address.	N/A
IP6SourcePort	Source Port	Index	Unsigned integer. Value range: 0 to 65535.	N/A
IP6DestinationIp	Destination Ip	Index	Ipv6 Address.	N/A
IP6DestinationPort	Destination Port	Index	Unsigned integer. Value range: 0 to 65535.	N/A
ProtocolType	Transport layer protocol id of the packet from the initiator to the responder.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—TCP.</li> <li>1—UDP.</li> <li>2—ICMP.</li> <li>3—ICMPv6.</li> <li>4—UDP-Lite.</li> <li>5—SCTP.</li> <li>6—DCCP.</li> <li>7—RAWIP.</li> <li>8—ALL.</li> </ul>	N/A
FileName	File Name	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## Session/ClearIpv4Sessions

Clear IPv4 sessions which meet the conditions.

### XML structure

```

<Session>
  <ClearIpv4Sessions>
    <Session>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
    </Session>
  </ClearIpv4Sessions>
</Session>

```

```

<Type></Type>
<SessionFwdType></SessionFwdType>
<InitVRF></InitVRF>
<InitSourceIp></InitSourceIp>
<InitSourcePort></InitSourcePort>
<InitDestinationIp></InitDestinationIp>
<InitDestinationPort></InitDestinationPort>
<InitDSLiteTunnelPeer></InitDSLiteTunnelPeer>
<InitProtocol></InitProtocol>
<InitEnProtocol></InitEnProtocol>
<Clear></Clear>
<StopTime></StopTime>
<TimeRangeStart></TimeRangeStart>
<TimeRangeEnd></TimeRangeEnd>
<Application></Application>
<Interface></Interface>
<SrcZone></SrcZone>
<DstZone></DstZone>
<EnState></EnState>
<RuleName></RuleName>
<SessionDir></SessionDir>
</Session>
</ClearIpv4Sessions>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	ClearIpv4Sessions
Table type	Multi-instance table
Row name	Session
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Moudle	Type of the module which created the session.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—NAT.</li> <li>• 1—CONNECTION-LIMIT</li> <li>• 2—LB.</li> <li>• 3—ASPF.</li> <li>• 4—LOG.</li> <li>• 5—ALG</li> <li>• 6—DS-Lite</li> <li>• 7—TCP MSS</li> <li>• 8—Application of statistical</li> <li>• 9—Inter-zone strategy</li> <li>• 10—WAAS</li> <li>• 11—TCP serial number to check</li> <li>• 12—AFT</li> <li>• 13—DIM Engine processing</li> <li>• 14—TCP Engine restructuring</li> <li>• 15—Traffic log</li> </ul>	N/A
SessionFwdType	Session forward type.	N/A	Unsigned integer. Enumeration: <ul style="list-style-type: none"> <li>• 0—VRF instance name.</li> <li>• 1—VLAN ID.</li> <li>• 2—Inline ID.</li> </ul>	N/A
InitVRF	Session forward value of the initiator.	N/A	String, case-sensitive. Length: 1 to 31 characters.	When SessionFwdType is VLAN ID, the value for InitVRF is VLAN ID. When SessionFwdType is Inline ID, the value for InitVRF is Inline ID. When SessionFwdType is VRF instance name, the value for InitVRF is the VRF instance name.
InitSourceIp	Source IP address of the packet from the initiator to the responder.	N/A	Ipv4 Address.	N/A
InitSourcePort	Source port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
InitDestinationIp	Destination IP address of the packet from the initiator to the responder.	N/A	Ipv4 Address.	N/A
InitDestinationPort	Destination port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InitDSLiteTunnelPeer	Address of the DS-Lite tunnel peer of the initiator.  When the session does not belong to any DS-Lite tunnel, this field is NULL.	N/A	Hexadecimal string, colon-separated.	N/A
InitProtocol	Transport layer protocol name of the packet from the initiator to the responder.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
InitEnProtocol	Transport layer protocol id of the packet from the initiator to the responder.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP.</li> <li>• 1—UDP</li> <li>• 2—ICMP</li> <li>• 3—ICMPv6.</li> <li>• 4—UDP-Lite</li> <li>• 5—SCTP</li> <li>• 6—DCCP</li> <li>• 7—RAWIP</li> </ul>	N/A
Clear	Resets counters.	N/A	This column must be empty.	N/A
StopTime	The time of stopping a specified session's flow.	N/A	Unsigned integer. Value range: 5 to 1000000 seconds.	N/A
TimeRangeStart	Start time of the time range.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
TimeRangeEnd	End time of the time range.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
Application	Application layer protocol.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Interface	Interface name.	N/A	String, case-insensitive. Length: 2 to 47 characters.	N/A
SrcZone	Source security zone name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DstZone	Destination security zone name.	N/A	String, case-insensitive. Length: 1 to 31 characters	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
EnState	Session state(Enumeration).	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP_SYN_SENT.</li> <li>• 1—TCP_SYN_RECV.</li> <li>• 2—TCP_ESTABLISHED.</li> <li>• 3—TCP_FIN_WAIT.</li> <li>• 4—TCP_CLOSE_WAIT.</li> <li>• 5—TCP_LAST_ACK.</li> <li>• 6—TCP_TIME_WAIT.</li> <li>• 7—TCP_CLOSE.</li> <li>• 8—TCP_SYN_SENT2.</li> <li>• 9—DCCP_REQUEST.</li> <li>• 10—DCCP_RESPOND.</li> <li>• 11—DCCP_PARTOPEN.</li> <li>• 12—DCCP_OPEN.</li> <li>• 13—DCCP_CLOSEREQ.</li> <li>• 14—DCCP_CLOSING.</li> <li>• 15—DCCP_TIMEWAIT.</li> <li>• 16—ICMP_REQUEST.</li> <li>• 17—ICMP_REPLY.</li> <li>• 20—RAWIP_OPEN.</li> <li>• 21—RAWIP_READY.</li> <li>• 22—SCTP_CLOSED.</li> <li>• 23—SCTP_COOKIE_WAIT.</li> <li>• 24—SCTP_COOKIE_EXCHANGED.</li> <li>• 25—SCTP_ESTABLISHED.</li> <li>• 26—SCTP_SHUTDOWN_SENT.</li> <li>• 27—SCTP_SHUTDOWN_RECEIVED.</li> <li>• 28—SCTP_SHUTDOWN_ACK_SENT.</li> <li>• 29—UDP_OPEN.</li> <li>• 30—UDP_READY.</li> <li>• 31—UDPLITE_OPEN.</li> <li>• 32—UDPLITE_READY.</li> </ul>	N/A
RuleName	Security policy rule name.	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A
SessionDir	Direction of the session.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Initiator.</li> <li>• 1—Responder.</li> </ul>	N/A

# Session/ClearIpv6Sessions

Clear IPv6 sessions which meet the conditions.

## XML structure

```
<Session>
  <ClearIpv6Sessions>
    <Session>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Type></Type>
      <SessionFwdType></SessionFwdType>
      <InitVRF></InitVRF>
      <InitSourceIp></InitSourceIp>
      <InitSourcePort></InitSourcePort>
      <InitDestinationIp></InitDestinationIp>
      <InitDestinationPort></InitDestinationPort>
      <InitProtocol></InitProtocol>
      <InitEnProtocol></InitEnProtocol>
      <Clear></Clear>
      <StopTime></StopTime>
      <TimeRangeStart></TimeRangeStart>
      <TimeRangeEnd></TimeRangeEnd>
      <Application></Application>
      <Interface></Interface>
      <SrcZone></SrcZone>
      <DstZone></DstZone>
      <EnState></EnState>
      <RuleName></RuleName>
      <SessionDir></SessionDir>
    </Session>
  </ClearIpv6Sessions>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	ClearIpv6Sessions
Table type	Multi-instance table
Row name	Session



Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Moudle	Type of the module which created the session.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—NAT.</li> <li>• 1—CONNECTION-LIMIT</li> <li>• 2—LB.</li> <li>• 3—ASPF.</li> <li>• 4—LOG.</li> <li>• 5—ALG</li> <li>• 6—DS-Lite</li> <li>• 7—TCP MSS</li> <li>• 8—Application of statistical</li> <li>• 9—Inter-zone strategy</li> <li>• 10—WAAS</li> <li>• 11—TCP serial number to check</li> <li>• 12—AFT</li> <li>• 13—DIM Engine processing</li> <li>• 14—TCP Engine restructuring</li> <li>15—Traffic log</li> </ul>	N/A
SessionFwdType	Session forward type.	N/A	Unsigned integer. Enumeration: <ul style="list-style-type: none"> <li>• 0—VRF instance name.</li> <li>• 1—VLAN ID.</li> <li>• 2—Inline ID.</li> </ul>	N/A
InitVRF	Session forward value of the initiator.	N/A	String, case-sensitive. Length: 1 to 31 characters.	When SessionFwdType is VLAN ID, the value for InitVRF is VLAN ID. When SessionFwdType is Inline ID, the value for InitVRF is Inline ID. When SessionFwdType is

Column name	Column description	Column type	Data type and restrictions	Remarks
				VRF instance name, the value for InitVRF is the VRF instance name.
InitSourceIp	Source IP address of the packet from the initiator to the responder.	N/A	Ipv6 Address.	N/A
InitSourcePort	Source port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InitDestinationIp	Destination IP address of the packet from the initiator to the responder.	N/A	Ipv6 Address.	N/A
InitDestinationPort	Destination port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
InitProtocol	Transport layer protocol name of the packet from the initiator to the responder.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
InitEnProtocol	Transport layer protocol id of the packet from the initiator to the responder.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP.</li> <li>• 1—UDP</li> <li>• 2—ICMP</li> <li>• 3—ICMPv6.</li> <li>4—UDP-Lite</li> <li>• 5—SCTP</li> <li>• 6—DCCP</li> <li>• 7—RAWIP</li> </ul>	N/A
Clear	Resets counters.	N/A	This column must be empty.	N/A
StopTime	The time of stopping a specified session's flow.	N/A	Unsigned integer. Value range: 5 to 1000000 seconds.	N/A
TimeRangeStart	Start time of the time range.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
TimeRangeEnd	End time of the time range.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
Application	Application layer protocol.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
Interface	Interface name.	N/A	String, case-insensitive. Length: 2 to 47 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZone	Source security zone name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DstZone	Destination security zone name.	N/A	String, case-insensitive. Length: 1 to 31 characters	N/A
EnState	Session state(Enumeration).	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP_SYN_SENT.</li> <li>• 1—TCP_SYN_RECV.</li> <li>• 2—TCP_ESTABLISHED.</li> <li>• 3—TCP_FIN_WAIT.</li> <li>• 4—TCP_CLOSE_WAIT.</li> <li>• 5—TCP_LAST_ACK.</li> <li>• 6—TCP_TIME_WAIT.</li> <li>• 7—TCP_CLOSE.</li> <li>• 8—TCP_SYN_SENT2.</li> <li>• 9—DCCP_REQUEST.</li> <li>• 10—DCCP_RESPOND.</li> <li>• 11—DCCP_PARTOPEN.</li> <li>• 12—DCCP_OPEN.</li> <li>• 13—DCCP_CLOSEREQ.</li> <li>• 14—DCCP_CLOSING.</li> <li>• 15—DCCP_TIMEWAIT.</li> <li>• 18—ICMPV6_REQUEST.</li> <li>• 19—ICMPV6_REPLY.</li> <li>• 20—RAWIP_OPEN.</li> <li>• 21—RAWIP_READY.</li> <li>• 22—SCTP_CLOSED.</li> <li>• 23—SCTP_COOKIE_WAIT.</li> <li>• 24—SCTP_COOKIE_EXCHANGED.</li> <li>• 25—SCTP_ESTABLISHED.</li> <li>• 26—SCTP_SHUTDOWN_SENT.</li> <li>• 27—SCTP_SHUTDOWN_RECEIVED.</li> <li>• 28—SCTP_SHUTDOWN_ACK_SENT.</li> <li>• 29—UDP_OPEN.</li> <li>• 30—UDP_READY.</li> <li>• 31—UDPLITE_OPEN.</li> <li>• 32—UDPLITE_READY.</li> </ul>	N/A
RuleName	Security policy name.	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SessionDir	Direction of the session.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Initiator.</li> <li>1—Responder.</li> </ul>	N/A

## Session/ConnectionLimit/GlobalStatistics

This table contains connection limit global statistics.

### XML structure

```

<Session>
  <ConnectionLimit>
    <GlobalStatistics>
      <GlobalStatistic>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Clear></Clear>
      </GlobalStatistic>
    </GlobalStatistics>
  </ConnectionLimit>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	GlobalStatistics
Table type	Multi-instance table
Row name	GlobalStatistic
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Clear	Resets counters.	N/A	This column must be empty.	N/A

## Session/ConnectionLimit/ClearAllGlobalStatistics

Clear all connection limit global statistics.

### XML structure

```
<Session>
  <ConnectionLimit>
    <ClearAllGlobalStatistics>
      <Clear></Clear>
    </ClearAllGlobalStatistics>
  </ConnectionLimit>
</Session>
```

### Table description

Item	Description
Feature name	Session
Table name	ClearAllGlobalStatistics
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Resets counters.	N/A	This column must be empty.	N/A

## Session/ConnectionLimit/InterfaceStatistics

This table contains connection limit statistics on interfaces.

### XML structure

```
<Session>
```

```

<ConnectionLimit>
  <InterfaceStatistics>
    <InterfaceStatistic>
      <IfIndex></IfIndex>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Clear></Clear>
    </InterfaceStatistic>
  </InterfaceStatistics>
</ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	InterfaceStatistics
Table type	Multi-instance table
Row name	InterfaceStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Clear	Resets counters.	N/A	This column must be empty.	N/A

# Session/ConnectionLimit/ClearAllInterfaceStatistics

Clear all connection limit statistics on an interface.

## XML structure

```
<Session>
  <ConnectionLimit>
    <ClearAllInterfaceStatistics>
      <InterfaceStatistic>
        <IfIndex></IfIndex>
        <Clear></Clear>
      </InterfaceStatistic>
    </ClearAllInterfaceStatistics>
  </ConnectionLimit>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	ClearAllInterfaceStatistics
Table type	Multi-instance table
Row name	InterfaceStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
Clear	Resets counters.	N/A	This column must be empty.	N/A

# Contents

Session.....	1
Session/Ipv4Persistent.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Session/Ipv6Persistent.....	1
XML structures.....	2
Table description.....	2
Columns.....	2
Session/Ipv4Persistence.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
Session/Ipv6Persistence.....	3
XML structures.....	3
Table description.....	3
Columns.....	4
Session/L4StateAgingTime.....	4
XML structure.....	4
Table description.....	4
Columns.....	5
Session/AppAgingTime.....	6
XML structure.....	6
Table description.....	6
Columns.....	6
Session/ApplicationAgingTime.....	7
XML structure.....	8
Table description.....	8
Columns.....	8
Session/LogThreshold.....	9
XML structure.....	10
Table description.....	10
Columns.....	10
Session/Ipv4LogOnInterfaces.....	11
XML structure.....	11
Table description.....	11
Columns.....	11
Session/Ipv6LogOnInterfaces.....	12
XML structure.....	12
Table description.....	12
Columns.....	12
Session/HotBackup.....	13
XML structure.....	13
Table description.....	13
Columns.....	14
Session/ProtocolHotBackup.....	14
XML structure.....	14
Table description.....	14
Columns.....	14
Session/TopStatistics/Switch.....	15
XML structure.....	15
Table description.....	15
Columns.....	15
Session/TrafficLogFlowBegin.....	15
XML structure.....	15
Table description.....	16
Columns.....	16



Session/TrafficLogThreshold .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
Session/Ipv4LogOnInterZones .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
Session/Ipv6LogOnInterZones .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
Session/ConnectionLimit/Ipv4Policies .....	19
XML structure .....	19
Table description .....	20
Columns .....	20
Session/ConnectionLimit/Ipv6Policies .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
Session/ConnectionLimit/Ipv4LimitRules .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
Session/ConnectionLimit/Ipv6LimitRules .....	23
XML structure .....	24
Table description .....	24
Columns .....	24
Session/ConnectionLimit/Ipv4PolicyAppliedGlobally .....	26
XML structure .....	26
Table description .....	26
Columns .....	27
Session/ConnectionLimit/Ipv6PolicyAppliedGlobally .....	27
XML structure .....	27
Table description .....	27
Columns .....	27
Session/ConnectionLimit/Ipv4PolicyOnInterfaces .....	28
XML structure .....	28
Table description .....	28
Columns .....	28
Session/ConnectionLimit/Ipv6PolicyOnInterfaces .....	28
XML structure .....	29
Table description .....	29
Columns .....	29
Session/StatisticsSwitch .....	29
XML structure .....	29
Table description .....	30
Columns .....	30
Session/SessionLogFlowBegin .....	30
XML structure .....	30
Table description .....	30
Columns .....	31
Session/SessionLogFlowEnd .....	31
XML structure .....	31
Table description .....	31
Columns .....	31

# Session

## Session/Ipv4Persistent

This table contains IPv4 persistent sessions' information. The table supports only one persistent configuration. As a best practice, use the Ipv4Persistence table for IPv4 persistent configuration.

### XML structure

```
<Session>
  <Ipv4Persistent>
    <ACLNumber></ACLNumber>
    <AgingTime></AgingTime>
  </Ipv4Persistent>
</Session>
```

### Table description

Item	Description
Feature name	Session
Table name	Ipv4Persistent
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	IPv4 ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
AgingTime	Aging time for IPv4 persistent sessions (hours).	N/A	Unsigned integer. Value range: 0 to 360. Default: 24.	0 indicates never ageing. This column can only be configured when <i>ACLNumber</i> is also configured.

## Session/Ipv6Persistent

This table contains IPv6 persistent sessions' information. The table supports only one persistent configuration. As a best practice, use the Ipv6Persistence table for IPv6 persistent configuration.

## XML structures

```
<Session>
  <Ipv6Persistent>
    <ACLNumber></ACLNumber>
    <AgingTime></AgingTime>
  </Ipv6Persistent>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6Persistent
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	IPv6 ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
AgingTime	Aging time for IPv6 persistent sessions (hours).	N/A	Unsigned integer. Value range: 0 to 360. Default: 24.	0 indicates never ageing. This column can only be configured when <i>ACLNumber</i> is also configured.

## Session/Ipv4Persistence

This table contains IPv4 persistent sessions' information.

## XML structure

```
<Session>
  <Ipv4Persistence>
    <Persistence>
      <ACLNumber></ACLNumber>
      <AgingTime></AgingTime>
    </Persistence>
  </Ipv4Persistence>
</Session>
```

```

    </Ipv4Persistence>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv4Persistence
Table type	Multi-instance table
Row name	Persistence
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	IPv4 ACL number	Index	Unsigned integer. Value range: 2000 to 3999.	N/A
AgingTime	Aging time for IPv4 persistent sessions in hours	N/A	Unsigned integer. Value range: 0 to 360. Default: 24.	0 indicates never aging. This column can be configured only when <i>ACLNumber</i> is configured.

## Session/Ipv6Persistence

This table contains IPv6 persistent sessions' information.

## XML structures

```

<Session>
  <Ipv6Persistence>
    <Persistent>
      <ACLNumber></ACLNumber>
      <AgingTime></AgingTime>
    </Persistent>
  </Ipv6Persistence>
</Session>

```

## Table description

Item	Description
Feature name	Session

Table name	Ipv6Persistence
Table type	Multi-instance table
Row name	Persistence
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	IPv6 ACL number	Index	Unsigned integer. Value range: 2000 to 3999.	N/A
AgingTime	Aging time for IPv6 persistent sessions in hours	N/A	Unsigned integer. Value range: 0 to 360. Default: 24.	0 indicates never aging. This column can be configured only when <i>ACLNumber</i> is configured.

## Session/L4StateAgingTime

This table contains the aging time for the sessions in transport layer protocol states.

## XML structure

```

<Session>
  <L4StateAgingTime>
    <AgingTime>
      <StateID></StateID>
      <TimeValue></TimeValue>
    </AgingTime>
  </L4StateAgingTime>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	L4StateAgingTime
Table type	Multi-instance table
Row name	AgingTime
Restrictions	None
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StateID	Transport layer protocol state ID.	Index	Unsigned integer. Value range: 0 to 20. <ul style="list-style-type: none"> <li>• <b>0—SYN-SENT and SYN-RCV (TCP)</b></li> <li>• <b>1—ESTABLISHED (TCP).</b></li> <li>• <b>2—FIN-WAIT (TCP).</b></li> <li>• <b>3—UDP-OPEN.</b></li> <li>• <b>4—UDP-READY.</b></li> <li>• <b>5—ICMP -REQUEST.</b></li> <li>• <b>6—ICMP -REPLY.</b></li> <li>• <b>7—RAWIP-OPEN.</b></li> <li>• <b>8—RAWIP-READY.</b></li> <li>• <b>9—UDPLITE-OPNE.</b></li> <li>• <b>10—UDPLITE-READY.</b></li> <li>• <b>11—DCCP-REQUEST.</b></li> <li>• <b>12—DCCP-EST.</b></li> <li>• <b>13—DCCP-CLOSEREQ.</b></li> <li>• <b>14—SCTP-INIT.</b></li> <li>• <b>15—SCTP-EST.</b></li> <li>• <b>16—SCTP-SHUTDOWN.</b></li> <li>• <b>17—ICMPV6-REQUEST.</b></li> <li>• <b>18—ICMPV6-REPLAY.</b></li> <li>• <b>19—TCP-TIME-WAIT.</b></li> <li>• <b>20—TCP-CLOSE.</b></li> </ul>	The aging time can be configured if is the protocol ID is 0 to 8, 19, or 20. The aging time for other protocols uses the default value.
TimeValue	Aging time (seconds).	N/A	Unsigned integer. Value range: 5 to 100000 seconds. Default aging time for sessions in different protocol states is as follows: <ul style="list-style-type: none"> <li>• <b>0—SYN-SENT or SYN-RCV (TCP) : 30</b></li> <li>• <b>1—ESTABLISHED (TCP) : 3600</b></li> <li>• <b>2—FIN-WAIT (TCP): 30</b></li> <li>• <b>3—UDP -OPEN : 30</b></li> <li>• <b>4—UDP -READY : 60</b></li> <li>• <b>5—ICMP -REQUEST : 60</b></li> <li>• <b>6—ICMP -REPLY : 30</b></li> <li>• <b>7—RAWIP-OPEN : 30</b></li> <li>• <b>8—RAWIP-READY : 60</b></li> <li>• <b>9—UDPLITE-OPNE : 30</b></li> <li>• <b>10—UDPLITE-READY : 60</b></li> <li>• <b>11—DCCP-REQUEST : 30</b></li> <li>• <b>12—DCCP-EST : 3600</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>13—DCCP-CLOSEREQ : 30</li> <li>14—SCTP-INIT : 30</li> <li>15—SCTP-EST : 3600</li> <li>16—SCTP-SHUTDOWN: 30</li> <li>17—ICMPV6-REQUEST :60</li> <li>18—ICMPV6-REPLAY : 30</li> <li>19—TCP-TIME-WAIT :2</li> <li>20—TCP-CLOSE: 2</li> </ul>	

## Session/AppAgingTime

This table contains the aging time for the sessions of application layer protocols.

### XML structure

```

<Session>
  <AppAgingTime>
    <AgingTime>
      <AppID></AppID>
      <TimeValue></TimeValue>
    </AgingTime>
  </AppAgingTime>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	AppAgingTime
Table type	Multi-instance table
Row name	AgingTime
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppID	Application layer	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	protocol ID.		Value range: 0 to 16. <ul style="list-style-type: none"> <li>• 0—DNS.</li> <li>• 1—FTP.</li> <li>• 2—GTP.</li> <li>• 3—H.225.</li> <li>• 4—H.245.</li> <li>• 5—RAS.</li> <li>• 6—RTSP.</li> <li>• 7—SIP.</li> <li>• 8—TFTP.</li> <li>• 9—ILS.</li> <li>• 10—MGCP.</li> <li>• 11—NBT.</li> <li>• 12—PPTP.</li> <li>• 13—RSH.</li> <li>• 14—SCCP.</li> <li>• 15—SQLNET.</li> <li>• 16—XDMCP.</li> </ul>	
TimeValue	Aging time ( seconds).	N/A	Unsigned integer. Value range and default aging time for sessions of application layer protocols are as follows: Value range: <ul style="list-style-type: none"> <li>• 0—DNS: 1 to 100000 seconds.</li> <li>• 1-16—FTP-XDMCP: 5 to 100000 seconds</li> </ul> Default aging time: <ul style="list-style-type: none"> <li>• 0—DNS: 1.</li> <li>• 1—FTP: 3600.</li> <li>• 2—GTP: 60.</li> <li>• 3—H.225: 3600.</li> <li>• 4—H.245: 3600.</li> <li>• 5—RAS: 300.</li> <li>• 6—RTSP: 3600.</li> <li>• 7—SIP: 300.</li> <li>• 8—TFTP: 60.</li> <li>• 9—ILS: 3600.</li> <li>• 10—MGCP: 60.</li> <li>• 11—NBT: 3600.</li> <li>• 12—PPTP: 3600.</li> <li>• 13—RSH: 60.</li> <li>• 14—SCCP: 3600.</li> <li>• 15—SQLNET: 600.</li> <li>• 16—XDMCP: 3600.</li> </ul>	N/A

## Session/ApplicationAgingTime

This table contains the aging time for the sessions of application layer protocols.



## XML structure

```
<Session>
  <ApplicationAgingTime>
    <AgingTime>
      <AppName></AppName>
      <TimeValue></TimeValue>
    </AgingTime>
  </ApplicationAgingTime>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	ApplicationAgingTime
Table type	Multi-instance table
Row name	ApplicationAgingTime
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppName	Application layer protocol name.	Index	String, case-insensitive. Length: 1 to 63 characters.	This value can be pre-defined or user-defined application layer protocol name.  Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".  The application layer protocol name must be standard and can be identified by the equipment.
TimeValue	Aging time ( seconds).	N/A	<ul style="list-style-type: none"><li>• Unsigned integer.</li><li>• Value range and default aging time for sessions of application layer protocols are as follows:</li><li>• Value range:</li><li>• 1 to 100000 seconds.</li><li>• Default aging time of pre-defined applications:</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• DNS: 1.</li> <li>• FTP: 3600.</li> <li>• GTP-CONTROL:60.</li> <li>• GTP-USER:60.</li> <li>• GPRSDATA:60.</li> <li>• GPRSSIG:60.</li> <li>• H225: 3600.</li> <li>• H245: 3600.</li> <li>• RAS: 300.</li> <li>• RTSP: 3600.</li> <li>• SIP: 300.</li> <li>• TFTP: 60.</li> <li>• ILS: 3600.</li> <li>• MGCP-CALLAGENT:60.</li> <li>• MGCP-GATEWAY:60.</li> <li>• PPTP: 3600.</li> <li>• RSH: 60.</li> <li>• SCCP: 3600.</li> <li>• SQLNET: 600.</li> <li>• XDMCP: 3600.</li> <li>• BOOTPC:120.</li> <li>• BOOTPS:120.</li> <li>• FTPDATA:240.</li> <li>• HTTPS:600.</li> <li>• L2TP:120.</li> <li>• NETBIOS-DGM:3600</li> <li>• NETBIOS-NS:3600</li> <li>• NETBIOS-SSN:3600.</li> <li>• NTP:120.</li> <li>• QQ:120.</li> <li>• RIP:120.</li> <li>• SNMP:120.</li> <li>• SNMPTRAP:120.</li> <li>• STUN:600.</li> <li>• SYSLOG:120.</li> <li>• TACACSDS:120.</li> <li>• WHO:120.</li> <li>• Default aging time of other pre-defined and user-defined applications: 1200s.Default aging time of other pre-defined and user-defined applications: 1200s.</li> </ul>	

## Session/LogThreshold

This table contains threshold for session logging.

## XML structure

```
<Session>
  <LogThreshold>
    <TimeThreshold></TimeThreshold>
    <FlowThreshold>
      <Type></Type>
      <Threshold></Threshold>
    </FlowThreshold>
  </LogThreshold>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	LogThreshold
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeThreshold	Time-based session logging threshold (minutes).	N/A	Unsigned integer. Value range: 10 to 120.	The value must be integer times of 10.
FlowThreshold	Traffic-based session logging threshold ( minutes).	Data structure.	Members include: <ul style="list-style-type: none"><li>Type.</li><li>Threshold.</li></ul>	
Type	Type of traffic-based session logging.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Packet-based threshold for traffic-based logging.</li><li>1—Byte-based threshold for traffic-based logging.</li></ul>	If you set both the byte-based and packet-based thresholds, the last configuration takes effect.
Threshold	Threshold for traffic-based logging.	N/A	Unsigned integer. Value range: 1 to 100000.	If type is 0, the unit is mega-packets. If type is 1, the unit is mega-bytes.

# Session/Ipv4LogOnInterfaces

This table contains interfaces on which IPv4 session logging is enabled.

## XML structure

```
<Session>
  <Ipv4LogOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <ACLNumber></ACLNumber>
    </Interface>
  </Ipv4LogOnInterfaces>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv4LogOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
Direction	Direction of the interface where session logging is enabled.	Index	Enumeration: <ul style="list-style-type: none"><li>0—Inbound.</li><li>1—Outbound.</li></ul>	N/A
ACLNumber	IPv4 ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	If an ACL is specified, this configuration enables session logging for sessions that match the permit statements in the ACL.

Column name	Column description	Column type	Data type and restrictions	Remarks
				<p>If no ACL is specified, this configuration enables session logging for all IPv4 sessions on the interface.</p> <p>This column can be null.</p>

## Session/Ipv6LogOnInterfaces

This table contains interfaces to which IPv6 session logging is enabled.

### XML structure

```

<Session>
  <Ipv6LogOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <ACLNumber></ACLNumber>
    </Interface>
  </Ipv6LogOnInterfaces>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	Ipv6LogOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	<p>This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC,</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				FCB and encrypt interface.
Direction	Direction of the interface where session logging is enabled.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ACLNumber	IPv6 ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	If an ACL is specified, this configuration enables session logging for sessions that match the permit statements in the ACL. If no ACL is specified, this configuration enables session logging for all IPv6 sessions on the interface.  This column can be null.

## Session/HotBackup

This table contains session hot backuping configurations.

### XML structure

```

<Session>
  <HotBackup>
    <EnableHotBackup></EnableHotBackup>
  </HotBackup>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	HotBackup
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EnableHotBackup	Whether enable hot backup for session tables.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false (default).</li></ul>	N/A

## Session/ProtocolHotBackup

This table contains protocols which need hot backuping.

## XML structure

```
<Session>
  <ProtocolHotBackup>
    <ProtocolInfo>
      <ProtocolID></ProtocolID>
      <EnableBackup></EnableBackup>
    </ProtocolInfo>
  </ProtocolHotBackup>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	ProtocolHotBackup
Table type	Multi-instance table
Row name	ProtocolInfo
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProtocolID	ProtocolID.	Index	Enumeration: <ul style="list-style-type: none"><li>1—DNS.</li><li>2—HTTP.</li></ul>	Default, sessions of these protocols are not synchronized.
EnableBackup	Whether enable protocol backup.	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>	N/A

# Session/TopStatistics/Switch

This table contains session top statistics configuration of switch.

## XML structure

```
<Session>
  <TopStatistics>
    <Switch>
      <Enable></Enable>
    </Switch>
  </TopStatistics>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Switch
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether enable session top statistics	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>	N/A

# Session/TrafficLogFlowBegin

This table contains traffic log flow begin configuration.

## XML structure

```
<Session>
  <TrafficLogFlowBegin>
    <OutputCreateLog></OutputCreateLog>
  </TrafficLogFlowBegin>
```



</Session>

## Table description

Item	Description
Feature name	Session
Table name	TrafficLogFlowBegin
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
OutputCreate Log	Whether enable traffic logging.	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>	N/A

## Session/TrafficLogThreshold

This table contains threshold for traffic log threshold logging.

## XML structure

```
<Session>
  <TrafficLogThreshold>
    <TimeThreshold></TimeThreshold>
    <FlowThreshold>
      <Type></Type>
      <Threshold></Threshold>
    </FlowThreshold>
  </TrafficLogThreshold>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	TrafficLogThreshold
Table type	Single-instance table
Row name	None

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeThreshold	Time-based traffic logging threshold (minutes).	N/A	Unsigned integer. Value range: 10 to 120.	The value must be integer times of 10.
FlowThreshold	Traffic-based traffic logging threshold ( minutes).	Data structure.	Members include: <ul style="list-style-type: none"> <li>Type.</li> <li>Threshold.</li> </ul>	N/A
Type	Type of traffic-based Traffic logging.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Packet-based threshold for traffic-based logging.</li> <li>1—Byte-based threshold for traffic-based logging.</li> </ul>	If you set both the byte-based and packet-based thresholds, the last configuration takes effect.
Threshold	Threshold for traffic-based logging.	N/A	Unsigned integer. Value range: 1 to 1000.	If type is 0, the unit is mega-packets. If type is 1, the unit is mega-bytes.

## Session/Ipv4LogOnInterZones

This table contains session traffic log enable ipv4 configuration.

### XML structure

```

<Session>
  <Ipv4LogOnInterZones>
    <InterZone>
      <SourceZone></SourceZone>
      <DestinationZone></DestinationZone>
      <EnableLog></EnableLog>
      <Mode></Mode>
      <ACLNumber></ACLNumber>
    </InterZone>
  </Ipv4LogOnInterZones>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv4LogOnInterZones
Table type	Multi-instance table
Row name	InterZone
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SourceZone	Source Zone.	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
DestinationZone	Destination Zone	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
EnableLog	Logging enable	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>	N/A
Mode	Whether by-server	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>	N/A
ACLNumber	ACL number	N/A	Unsigned integer. <ul style="list-style-type: none"><li>Value range: 2000 to 3999.</li></ul>	N/A

## Session/Ipv6LogOnInterZones

This table contains session traffic log enable ipv6 configuration.

## XML structure

```
<Session>
  <Ipv6LogOnInterZones>
    <InterZone>
      <SourceZone></SourceZone>
      <DestinationZone></DestinationZone>
      <EnableLog></EnableLog>
      <Mode></Mode>
      <ACLNumber></ACLNumber>
```

```

    </InterZone>
  </Ipv6LogOnInterZones>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6LogOnInterZones
Table type	Multi-instance table
Row name	InterZone
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SourceZone	Source Zone.	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
DestinationZone	Destination Zone	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
EnableLog	Logging enable	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO</li> </ul>	N/A
Mode	Whether by-server	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO</li> </ul>	N/A
ACLNumber	ACL number	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>Value range: 2000 to 3999.</li> </ul>	N/A

## Session/ConnectionLimit/Ipv4Policies

This table contains IPv4 connection limit policy configurations..

## XML structure

```

<Session>
  <ConnectionLimit>

```

```

<Ipv4Policies>
  <Policy>
    <PolicyNumber></PolicyNumber>
    <Description></Description>
  </Policy>
</Ipv4Policies>
</ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv4Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv4 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A
Description	IPv4 connection limit policy description	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A

## Session/ConnectionLimit/Ipv6Policies

This table contains IPv6 connection limit policy configurations..

## XML structure

```

<Session>
  <ConnectionLimit>
    <Ipv6Policies>
      <Policy>
        <PolicyNumber></PolicyNumber>
        <Description></Description>
      </Policy>
    </Ipv6Policies>
  </ConnectionLimit>
</Session>

```

```

    </ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv6 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A
Description	IPv6 connection limit policy description	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A

## Session/ConnectionLimit/Ipv4LimitRules

This table contains IPv4 connection limit rule configurations.

## XML structure

```

<Session>
  <ConnectionLimit>
    <Ipv4LimitRules>
      <Rule>
        <PolicyNumber></PolicyNumber>
        <RuleNumber></RuleNumber>
        <ACLNumber></ACLNumber>
        <ACLName></ACLName>
        <HighThreshold></HighThreshold>
        <LowThreshold></LowThreshold>
        <ClmRate></ClmRate>
        <LimitType>
          <PerSource></PerSource>
          <PerDestination></PerDestination>

```

```

        <PerService></PerService>
    </LimitType>
    <Description></Description>
    <PermitNew></PermitNew>
</Rule>
</Ipv4LimitRules>
</ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv4LimitRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv4 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A
RuleNumber	IPv4 connection limit rule ID.	Index	Unsigned integer. Value range: 1 to 256.	N/A
ACLNumber	IPv4 ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	Either <i>ACLNumber</i> or <i>ACLName</i> is required, and you cannot configure both.
ACLName	IPv4 ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Either <i>ACLNumber</i> or <i>ACLName</i> is required, and you cannot configure both.
HighThreshold	Upper connection limit	N/A	Unsigned integer. Value range: 1 to 4294967294.	When user connections in a range or of a type exceed the upper connection limit, new connections cannot be created.  This column is affirmatively chosen item.

Column name	Column description	Column type	Data type and restrictions	Remarks
LowThreshold	Lower connection limit	N/A	Unsigned integer. Value range: 1 to 4294967294.	The lower connection limit cannot be greater than the upper connection limit. New connections cannot be created until the connection number goes below the lower connection limit.  This column is affirmatively chosen item.
ClmRate	Maximum number of connections per second	N/A	Unsigned integer. Value range: 5 to 10000000.	When the number of connections per second greater than maximum number of connections per second, new connections cannot be created.  This column is affirmatively chosen item.
LimitType	Connection limit type	Data structure.	Members include: <ul style="list-style-type: none"> <li>PerSource.</li> <li>PerDestination.</li> <li>PerService.</li> </ul>	N/A
PerSource	Limits connections by source IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
PerDestination	Limits connections by destination IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
PerService	Limits connections by service port.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
Description	IPv4 connection limit rule description.	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A
PermitNew	Permit new connection establishment after user connections exceed the upper limit.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES.</li> <li>false—NO(default).</li> </ul>	N/A

## Session/ConnectionLimit/Ipv6LimitRules

This table contains IPv6 connection limit rule configurations.



## XML structure

```
<Session>
  <ConnectionLimit>
    <Ipv6LimitRules>
      <Rule>
        <PolicyNumber></PolicyNumber>
        <RuleNumber></RuleNumber>
        <ACLNumber></ACLNumber>
        <ACLName></ACLName>
        <HighThreshold></HighThreshold>
        <LowThreshold></LowThreshold>
        <ClmRate></ClmRate>
        <LimitType>
          <PerSource></PerSource>
          <PerDestination></PerDestination>
          <PerService></PerService>
        </LimitType>
        <Description></Description>
        <PermitNew></PermitNew>
      </Rule>
    </Ipv6LimitRules>
  </ConnectionLimit>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6LimitRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv6 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	IPv6 connection limit rule ID.	Index	Unsigned integer. Value range: 1 to 256.	N/A
ACLNumber	IPv6 ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	Either <i>ACLNumber</i> or <i>ACLName</i> is required, and you cannot configure both.
ACLName	IPv6 ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Either <i>ACLNumber</i> or <i>ACLName</i> is required, and you cannot configure both.
HighThreshold	Upper connection limit	N/A	Unsigned integer. Value range: 1 to 4294967294.	When user connections in a range or of a type exceed the upper connection limit, new connections cannot be created.  This column is affirmatively chosen item.
LowThreshold	Lower connection limit	N/A	Unsigned integer. Value range: 1 to 4294967294.	The lower connection limit cannot be greater than the upper connection limit. New connections cannot be created until the connection number goes below the lower connection limit.  This column is affirmatively chosen item.
ClmRate	Maximum number of connections per second	N/A	Unsigned integer. Value range: 5 to 10000000.	When the number of connections per second greater than maximum number of connections per second, new connections cannot be created.  This column is affirmatively chosen item.
LimitType	Connection limit type	Data structure.	Members include: <ul style="list-style-type: none"> <li>PerSource.</li> <li>PerDestination.</li> <li>PerService.</li> </ul>	N/A
PerSource	Limits connections by source IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
PerDestination	Limits connections by destination IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PerService	Limits connections by service port.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
Description	IPv6 connection limit rule description.	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A
PermitNew	Permit new connection establishment after user connections exceed the upper limit.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES.</li> <li>false—NO(default).</li> </ul>	N/A

## Session/ConnectionLimit/Ipv4PolicyAppliedGlobally

This table contains IPv4 connection limit policy applied globally.

### XML structure

```

<Session>
  <ConnectionLimit>
    <Ipv4PolicyAppliedGlobally>
      <PolicyNumber></PolicyNumber>
    </Ipv4PolicyAppliedGlobally>
  </ConnectionLimit>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	Ipv4PolicyAppliedGlobally
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv4 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A

## Session/ConnectionLimit/Ipv6PolicyAppliedGlobally

This table contains IPv6 connection limit policy applied globally.

## XML structure

```
<Session>
  <ConnectionLimit>
    <Ipv6PolicyAppliedGlobally>
      <PolicyNumber></PolicyNumber>
    </Ipv6PolicyAppliedGlobally>
  </ConnectionLimit>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6PolicyAppliedGlobally
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv6 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A

# Session/ConnectionLimit/Ipv4PolicyOnInterfaces

This table contains interfaces to which IPv4 connection limit policy is applied.

## XML structure

```
<Session>
  <ConnectionLimit>
    <Ipv4PolicyOnInterfaces>
      <Interface>
        <IfIndex></IfIndex>
        <PolicyNumber></PolicyNumber>
      </Interface>
    </Ipv4PolicyOnInterfaces>
  </ConnectionLimit>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv4PolicyOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
PolicyNumber	IPv4 connection limit policy number	N/A	Unsigned integer. Value range: 1 to 32.	N/A

# Session/ConnectionLimit/Ipv6PolicyOnInterfaces

This table contains interfaces to which IPv6 connection limit policy is applied.

## XML structure

```
<Session>
  <ConnectionLimit>
    <Ipv6PolicyOnInterfaces>
      <Interface>
        <IfIndex></IfIndex>
        <PolicyNumber></PolicyNumber>
      </Interface>
    </Ipv6PolicyOnInterfaces>
  </ConnectionLimit>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6PolicyOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
PolicyNumber	IPv6 connection limit policy number	N/A	Unsigned integer. Value range: 1 to 32.	N/A

## Session/StatisticsSwitch

This table contains session statistics configuration of switch.

## XML structure

```
<Session>
```

```

<StatisticsSwitch>
  <Enable></Enable>
</StatisticsSwitch>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	StatisticsSwitch
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether enable session statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

## Session/SessionLogFlowBegin

This table contains session log flow begin configuration.

## XML structure

```

<Session>
  <SessionLogFlowBegin>
    <SessionCreateLog></SessionCreateLog>
  </SessionLogFlowBegin>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	SessionLogFlowBegin
Table type	Single-instance table
Row name	N/A

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SessionCreateLog	Whether enable session create logging.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A

## Session/SessionLogFlowEnd

This table contains session log flow end configuration.

## XML structure

```
<Session>
  <SessionLogFlowEnd>
    <SessionDeleteLog></SessionDeleteLog>
  </SessionLogFlowEnd>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	SessionLogFlowEnd
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SessionDeleteLog	Whether enable session deletelogging.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A



# Contents

Session.....	1
Session/Ipv4Persistent.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Session/Ipv6Persistent.....	1
XML structures.....	2
Table description.....	2
Columns.....	2
Session/Ipv4Persistence .....	2
XML structure.....	2
Table description.....	3
Columns.....	3
Session/Ipv6Persistence .....	3
XML structures .....	3
Table description.....	3
Columns.....	4
Session/L4StateAgingTime .....	4
XML structure.....	4
Table description.....	4
Columns.....	5
Session/AppAgingTime .....	6
XML structure.....	6
Table description.....	6
Columns.....	7
Session/ApplicationAgingTime.....	8
XML structure.....	8
Table description.....	8
Columns.....	8
Session/LogThreshold .....	10
XML structure.....	10
Table description.....	10
Columns.....	10
Session/Ipv4LogOnInterfaces .....	11
XML structure.....	11
Table description.....	11
Columns.....	11
Session/Ipv6LogOnInterfaces .....	12
XML structure.....	12
Table description.....	12
Columns.....	13
Session/HotBackup .....	13
XML structure.....	13
Table description.....	13
Columns.....	14
Session/ProtocolHotBackup .....	14
XML structure.....	14
Table description.....	14
Columns.....	15
Session/SessionStatistics .....	15
XML structure.....	15
Table description.....	17
Columns.....	17
Session/TopStatistics/Switch .....	22
XML structure.....	22
Table description.....	22
Columns.....	22

Session/TopStatistics/CountingByAddress .....	22
XML structure .....	22
Table description .....	23
Columns .....	23
Session/TopStatistics/SampleTime .....	24
XML structure .....	24
Table description .....	24
Columns .....	25
Session/HistoryStatistics .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
Session/TrafficLogFlowBegin .....	26
XML structure .....	26
Table description .....	27
Columns .....	27
Session/TrafficLogThreshold .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
Session/Ipv4LogOnInterZones .....	28
XML structure .....	28
Table description .....	28
Columns .....	29
Session/Ipv6LogOnInterZones .....	29
XML structure .....	29
Table description .....	30
Columns .....	30
Session/Ipv4Sessions .....	30
XML structure .....	30
Table description .....	32
Columns .....	32
Session/Ipv6Sessions .....	38
XML structure .....	38
Table description .....	39
Columns .....	39
Session/ConnectionLimit/Ipv4Policies .....	45
XML structure .....	45
Table description .....	45
Columns .....	45
Session/ConnectionLimit/Ipv6Policies .....	46
XML structure .....	46
Table description .....	46
Columns .....	46
Session/ConnectionLimit/Ipv4LimitRules .....	47
XML structure .....	47
Table description .....	47
Columns .....	48
Session/ConnectionLimit/Ipv6LimitRules .....	49
XML structure .....	49
Table description .....	50
Columns .....	50
Session/ConnectionLimit/Ipv4PolicyAppliedGlobally .....	52
XML structure .....	52
Table description .....	52
Columns .....	52
Session/ConnectionLimit/Ipv6PolicyAppliedGlobally .....	52
XML structure .....	52
Table description .....	53
Columns .....	53
Session/ConnectionLimit/Ipv4PolicyOnInterfaces .....	53
XML structure .....	53

Table description .....	53
Columns .....	54
Session/ConnectionLimit/Ipv6PolicyOnInterfaces .....	54
XML structure .....	54
Table description .....	54
Columns .....	55
Session/ConnectionLimit/GlobalStatistics .....	55
XML structure .....	55
Table description .....	55
Columns .....	56
Session/ConnectionLimit/InterfaceStatistics .....	56
XML structure .....	56
Table description .....	57
Columns .....	57
Session/StatisticsSwitch .....	57
XML structure .....	57
Table description .....	58
Columns .....	58
Session/SessionLogFlowBegin .....	58
XML structure .....	58
Table description .....	58
Columns .....	59
Session/SessionLogFlowEnd .....	59
XML structure .....	59
Table description .....	59
Columns .....	59

# Session

## Session/Ipv4Persistent

This table contains IPv4 persistent sessions' information. The table supports only one persistent configuration. As a best practice, use the Ipv4Persistence table for IPv4 persistent configuration.

### XML structure

```
<Session>
  <Ipv4Persistent>
    <ACLNumber></ACLNumber>
    <AgingTime></AgingTime>
  </Ipv4Persistent>
</Session>
```

### Table description

Item	Description
Feature name	Session
Table name	Ipv4Persistent
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	IPv4 ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
AgingTime	Aging time for IPv4 persistent sessions (hours).	N/A	Unsigned integer. Value range: 0 to 360. Default: 24.	0 indicates never aging. This column can only be configured when <i>ACLNumber</i> is also configured.

## Session/Ipv6Persistent

This table contains IPv6 persistent sessions' information. The table supports only one persistent configuration. As a best practice, use the Ipv6Persistence table for IPv6 persistent configuration.

## XML structures

```
<Session>
  <Ipv6Persistent>
    <ACLNumber></ACLNumber>
    <AgingTime></AgingTime>
  </Ipv6Persistent>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6Persistent
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	IPv6 ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
AgingTime	Aging time for IPv6 persistent sessions (hours).	N/A	Unsigned integer. Value range: 0 to 360. Default: 24.	0 indicates never aging. This column can only be configured when <i>ACLNumber</i> is also configured.

## Session/Ipv4Persistence

This table contains IPv4 persistent sessions' information.

## XML structure

```
<Session>
  <Ipv4Persistence>
    <Persistence>
      <ACLNumber></ACLNumber>
      <AgingTime></AgingTime>
    </Persistence>
  </Ipv4Persistence>
</Session>
```

</Session>

## Table description

Item	Description
Feature name	Session
Table name	Ipv4Persistence
Table type	Multi-instance table
Row name	Persistence
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	IPv4 ACL number	Index	Unsigned integer. Value range: 2000 to 3999.	N/A
AgingTime	Aging time for IPv4 persistent sessions, in hours	N/A	Unsigned integer. Value range: 0 to 360. Default: 24.	0 indicates never aging. This column can be configured only when <i>ACLNumber</i> is configured.

## Session/Ipv6Persistence

This table contains IPv6 persistent sessions' information.

## XML structures

```
<Session>
  <Ipv6Persistence>
    <Persistence>
      <ACLNumber></ACLNumber>
      <AgingTime></AgingTime>
    </Persistence>
  </Ipv6Persistence>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6Persistence

Table type	Multi-instance table
Row name	Persistence
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	IPv6 ACL number	Index	Unsigned integer. Value range: 2000 to 3999.	N/A
AgingTime	Aging time for IPv6 persistent sessions, in hours	N/A	Unsigned integer. Value range: 0 to 360. Default: 24.	0 indicates never aging. This column can be configured only when <i>ACLNumber</i> is configured.

## Session/L4StateAgingTime

This table contains the aging time for the sessions in transport layer protocol states.

## XML structure

```

<Session>
  <L4StateAgingTime>
    <AgingTime>
      <StateID></StateID>
      <StateName></StateName>
      <TimeValue></TimeValue>
    </AgingTime>
  </L4StateAgingTime>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	L4StateAgingTime
Table type	Multi-instance table
Row name	AgingTime
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StateID	Transport layer protocol state ID.	Index	Unsigned integer. Value range: 0 to 20. <ul style="list-style-type: none"> <li>• <b>0—SYN-SENT and SYN-RCV (TCP)</b></li> <li>• <b>1—ESTABLISHED (TCP).</b></li> <li>• <b>2—FIN-WAIT (TCP).</b></li> <li>• <b>3—UDP-OPEN.</b></li> <li>• <b>4—UDP-READY.</b></li> <li>• <b>5—ICMP -REQUEST.</b></li> <li>• <b>6—ICMP -REPLY.</b></li> <li>• <b>7—RAWIP-OPEN.</b></li> <li>• <b>8—RAWIP-READY.</b></li> <li>• <b>9—UDPLITE-OPNE.</b></li> <li>• <b>10—UDPLITE-READY.</b></li> <li>• <b>11—DCCP-REQUEST.</b></li> <li>• <b>12—DCCP-EST.</b></li> <li>• <b>13—DCCP-CLOSEREQ.</b></li> <li>• <b>14—SCTP-INIT.</b></li> <li>• <b>15—SCTP-EST.</b></li> <li>• <b>16—SCTP-SHUTDOWN.</b></li> <li>• <b>17—ICMPV6-REQUEST.</b></li> <li>• <b>18—ICMPV6-REPLAY.</b></li> <li>• <b>19—TCP-TIME-WAIT.</b></li> <li>• <b>20—TCP-CLOSE.</b></li> </ul>	The aging time can be configured if is the protocol ID is 0 to 8, 19, or 20. The aging time for other protocols uses the default value.
StateName	Transport layer protocol state name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
TimeValue	Aging time (seconds).	N/A	Unsigned integer. Value range: 5 to 100000 seconds. Default aging time for sessions in different protocol states is as follows: <ul style="list-style-type: none"> <li>• <b>0—SYN-SENT or SYN-RCV (TCP) : 30</b></li> <li>• <b>1—ESTABLISHED (TCP) : 3600</b></li> <li>• <b>2—FIN-WAIT (TCP): 30</b></li> <li>• <b>3—UDP -OPEN : 30</b></li> <li>• <b>4—UDP -READY : 60</b></li> <li>• <b>5—ICMP -REQUEST : 60</b></li> <li>• <b>6—ICMP -REPLY : 30</b></li> <li>• <b>7—RAWIP-OPEN : 30</b></li> <li>• <b>8—RAWIP-READY : 60</b></li> <li>• <b>9—UDPLITE-OPNE : 30</b></li> <li>• <b>10—UDPLITE-READY : 60</b></li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>• 11—DCCP-REQUEST : 30</li> <li>• 12—DCCP-EST : 3600</li> <li>• 13—DCCP-CLOSEREQ : 30</li> <li>• 14—SCTP-INIT : 30</li> <li>• 15—SCTP-EST : 3600</li> <li>• 16—SCTP-SHUTDOWN: 30</li> <li>• 17—ICMPV6-REQUEST :60</li> <li>• 18—ICMPV6-REPLAY : 30</li> <li>• 19—TCP-TIME-WAIT :2</li> <li>• 20—TCP-CLOSE : 2</li> </ul>	

## Session/AppAgingTime

This table contains the aging time for the sessions of application layer protocols.

### XML structure

```

<Session>
  <AppAgingTime>
    <AgingTime>
      <AppID></AppID>
      <AppName></AppName>
      <TimeValue></TimeValue>
    </AgingTime>
  </AppAgingTime>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	AppAgingTime
Table type	Multi-instance table
Row name	AgingTime
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppID	Application layer protocol ID.	Index	Unsigned integer. Value range: 0 to 16. <ul style="list-style-type: none"> <li>• 0—DNS.</li> <li>• 1—FTP.</li> <li>• 2—GTP.</li> <li>• 3—H.225.</li> <li>• 4—H.245.</li> <li>• 5—RAS.</li> <li>• 6—RTSP.</li> <li>• 7—SIP.</li> <li>• 8—TFTP.</li> <li>• 9—ILS.</li> <li>• 10—MGCP.</li> <li>• 11—NBT.</li> <li>• 12—PPTP.</li> <li>• 13—RSH.</li> <li>• 14—SCCP.</li> <li>• 15—SQLNET.</li> <li>• 16—XDMCP.</li> </ul>	N/A
AppName	Application layer protocol name.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
TimeValue	Aging time (seconds).	N/A	Unsigned integer. Value range and default aging time for sessions of application layer protocols are as follows: Value range: <ul style="list-style-type: none"> <li>• 0—DNS: 1 to 100000 seconds.</li> <li>• 1-16—FTP-XDMCP: 5 to 100000 seconds</li> </ul> Default aging time: <ul style="list-style-type: none"> <li>• 0—DNS: 1.</li> <li>• 1—FTP: 3600.</li> <li>• 2—GTP: 60.</li> <li>• 3—H.225: 3600.</li> <li>• 4—H.245: 3600.</li> <li>• 5—RAS: 300.</li> <li>• 6—RTSP: 3600.</li> <li>• 7—SIP: 300.</li> <li>• 8—TFTP: 60.</li> <li>• 9—ILS: 3600.</li> <li>• 10—MGCP: 60.</li> <li>• 11—NBT: 3600.</li> <li>• 12—PPTP: 3600.</li> <li>• 13—RSH: 60.</li> <li>• 14—SCCP: 3600.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>15—SQLNET: 600.</li> <li>16—XDMCP: 3600.</li> </ul>	

## Session/ApplicationAgingTime

This table contains the aging time for the sessions of application layer protocols.

### XML structure

```

<Session>
  <ApplicationAgingTime>
    <AgingTime>
      <AppName></AppName>
      <AppID></AppID>
      <TimeValue></TimeValue>
    </AgingTime>
  </ApplicationAgingTime>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	ApplicationAgingTime
Table type	Multi-instance table
Row name	ApplicationAgingTime
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AppName	Application layer protocol name.	Index	String, case-insensitive. Length: 1 to 63 characters.	<p>This value can be pre-defined or user-defined application layer protocol name.</p> <p>Valid characters include digits, letters, hyphens (-), and underlines (_), but can't be "invalid" and "other".</p> <p>The application layer</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				protocol name must be standard and can be identified by the equipment.
AppID	Application layer protocol ID.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$	N/A
TimeValue	Aging time ( seconds).	N/A	Unsigned integer. Value range and default aging time for sessions of application layer protocols are as follows: Value range: 1 to 100000 seconds. Default aging time of pre-defined applications: <ul style="list-style-type: none"> <li>• DNS: 1.</li> <li>• FTP: 3600.</li> <li>• GTP-CONTROL:60.</li> <li>• GTP-USER:60.</li> <li>• GPRSDATA:60.</li> <li>• GPRSSIG:60.</li> <li>• H225: 3600.</li> <li>• H245: 3600.</li> <li>• RAS: 300.</li> <li>• RTSP: 3600.</li> <li>• SIP: 300.</li> <li>• TFTP: 60.</li> <li>• ILS: 3600.</li> <li>• MGCP-CALLAGENT:60.</li> <li>• MGCP-GATEWAY:60.</li> <li>• PPTP: 3600.</li> <li>• RSH: 60.</li> <li>• SCCP: 3600.</li> <li>• SQLNET: 600.</li> <li>• XDMCP: 3600.</li> <li>• BOOTPC:120.</li> <li>• BOOTPS:120.</li> <li>• FTPDATA:240.</li> <li>• HTTPS:600.</li> <li>• L2TP:120.</li> <li>• NETBIOS-DGM:3600</li> <li>• NETBIOS-NS:3600</li> <li>• NETBIOS-SSN:3600.</li> <li>• NTP:120.</li> <li>• QQ:120.</li> <li>• RIP:120.</li> <li>• SNMP:120.</li> <li>• SNMPTRAP:120.</li> <li>• STUN:600.</li> <li>• SYSLOG:120.</li> <li>• TACACSDS:120.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>WHO:120.</li> </ul> Default aging time of other pre-defined and user-defined applications: 1200s.	

## Session/LogThreshold

This table contains threshold for session logging.

### XML structure

```

<Session>
  <LogThreshold>
    <TimeThreshold></TimeThreshold>
    <FlowThreshold>
      <Type></Type>
      <Threshold></Threshold>
    </FlowThreshold>
  </LogThreshold>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	LogThreshold
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeThreshold	Time-based session logging threshold (minutes).	N/A	Unsigned integer. Value range: 10 to 120.	The value must be integer times of 10.
FlowThreshold	Traffic-based session logging threshold ( minutes).	Data structure.	Members include: <ul style="list-style-type: none"> <li>Type.</li> <li>Threshold.</li> </ul>	
Type	Type of traffic-based	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Packet-based</li> </ul>	If you set both the byte-based and

Column name	Column description	Column type	Data type and restrictions	Remarks
	session logging.		threshold for traffic-based logging. <ul style="list-style-type: none"> <li>1—Byte-based threshold for traffic-based logging.</li> </ul>	packet-based thresholds, the last configuration takes effect.
Threshold	Threshold for traffic-based logging.	N/A	Unsigned integer. Value range: 1 to 100000.	If type is 0, the unit is mega-packets. If type is 1, the unit is mega-bytes.

## Session/Ipv4LogOnInterfaces

This table contains interfaces on which IPv4 session logging is enabled.

### XML structure

```

<Session>
  <Ipv4LogOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <ACLNumber></ACLNumber>
    </Interface>
  </Ipv4LogOnInterfaces>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	Ipv4LogOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt

Column name	Column description	Column type	Data type and restrictions	Remarks
				interface.
Direction	Direction of the interface where session logging is enabled.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ACLNumber	IPv4 ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	If an ACL is specified, this configuration enables session logging for sessions that match the permit statements in the ACL. If no ACL is specified, this configuration enables session logging for all IPv4 sessions on the interface.  This column can be null.

## Session/Ipv6LogOnInterfaces

This table contains interfaces to which IPv6 session logging is enabled.

### XML structure

```

<Session>
  <Ipv6LogOnInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Direction></Direction>
      <ACLNumber></ACLNumber>
    </Interface>
  </Ipv6LogOnInterfaces>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	Ipv6LogOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index.	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
Direction	Direction of the interface where session logging is enabled.	Index	Enumeration: <ul style="list-style-type: none"><li>0—Inbound.</li><li>1—Outbound.</li></ul>	N/A
ACLNumber	IPv6 ACL number.	N/A	Unsigned integer. Value range: 2000 to 3999.	If an ACL is specified, this configuration enables session logging for sessions that match the permit statements in the ACL. If no ACL is specified, this configuration enables session logging for all IPv6 sessions on the interface.  This column can be null.

## Session/HotBackup

This table contains session hot backuping configurations.

### XML structure

```
<Session>
  <HotBackup>
    <EnableHotBackup></EnableHotBackup>
  </HotBackup>
</Session>
```

### Table description

Item	Description
Feature name	Session
Table name	HotBackup
Table type	Single-instance table
Row name	None



Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EnableHotBackup	Whether enable hot backuping for session tables.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false (default).</li> </ul>	N/A

## Session/ProtocolHotBackup

This table contains protocols which need hot backuping.

## XML structure

```

<Session>
  <ProtocolHotBackup>
    <ProtocolInfo>
      <ProtocolID></ProtocolID>
      <ProtocolName></ProtocolName>
      <EnableBackup></EnableBackup>
    </ProtocolInfo>
  </ProtocolHotBackup>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	ProtocolHotBackup
Table type	Multi-instance table
Row name	ProtocolInfo
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProtocolID	ProtocolID.	Index	Enumeration: <ul style="list-style-type: none"><li>1—DNS.</li><li>2—HTTP.</li></ul>	Default, sessions of these protocols are not synchronized.
ProtocolName	Protocol name for which backup is enabled.	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
EnableBackup	Whether enable protocol backup.	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO(default).</li></ul>	N/A

## Session/SessionStatistics

This table contains statistics of sessions.

### XML structure

```
<Session>
  <SessionStatistics>
    <SessionStatistic>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <SourceIpv4></SourceIpv4>
      <DestinationIpv4></DestinationIpv4>
      <SourcePort></SourcePort>
      <DestinationPort></DestinationPort>
      <Protocol></Protocol>
      <CurSessionCount></CurSessionCount>
      <CurRelationCount></CurRelationCount>
      <SessionCount>
        <TCPCCount></TCPCCount>
        <UDPCCount></UDPCCount>
        <ICMPCCount></ICMPCCount>
        <ICMPv6Count></ICMPv6Count>
        <UDPLiteCount></UDPLiteCount>
        <SCTPCCount></SCTPCCount>
        <DCCPCCount></DCCPCCount>
        <RawIPCount></RawIPCount>
        <DNSCount></DNSCount>
        <FTPCCount></FTPCCount>
        <GTPCount></GTPCount>
```

```

<H323Count></H323Count>
<HTTPCount></HTTPCount>
<ILSCount></ILSCount>
<MGCPCount></MGCPCount>
<NBTCCount></NBTCCount>
<PPTPCount></PPTPCount>
<RSHCount></RSHCount>
<RTSPCount></RTSPCount>
<SCCPCount></SCCPCount>
<SIPCount></SIPCount>
<SMTPCount></SMTPCount>
<SQLNETCount></SQLNETCount>
<SSHCount></SSHCount>
<TELNETCount></TELNETCount>
<TFTPCount></TFTPCount>
<XDMCPCount></XDMCPCount>
</SessionCount>
<SessionEstablishedRate>
  <TCPRate></TCPRate>
  <UDPRate></UDPRate>
  <ICMPRate></ICMPRate>
  <ICMPv6Rate></ICMPv6Rate>
  <UDPLiteRate></UDPLiteRate>
  <SCTPRate></SCTPRate>
  <DCCPRate></DCCPRate>
  <RawIPRate></RawIPRate>
</SessionEstablishedRate>
<ReceivedPktsBytes>
  <TCPBytes></TCPBytes>
  <TCPPkts></TCPPkts>
  <UDPBytes></UDPBytes>
  <UDPPkts></UDPPkts>
  <ICMPBytes></ICMPBytes>
  <ICMPPkts></ICMPPkts>
  <ICMPv6Bytes></ICMPv6Bytes>
  <ICMPv6Pkts></ICMPv6Pkts>
  <UDPLiteBytes></UDPLiteBytes>
  <UDPLitePkts></UDPLitePkts>
  <SCTPBytes></SCTPBytes>
  <SCTPPkts></SCTPPkts>
  <DCCPBytes></DCCPBytes>
  <DCCPPkts></DCCPPkts>
  <RawIPBytes></RawIPBytes>
  <RawIPPkts></RawIPPkts>

```

```

        </ReceivedPktsBytes>
    </SessionStatistic>
</SessionStatistics>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	SessionStatistics
Table type	Multi-instance table
Row name	SessionStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
SourceIpv4	Source IP address of the packet from the initiator to the responder.	N/A	Ipv4 Address.	This column can be used as query condition.
DestinationIpv4	Destination IP address of the packet from the initiator to the responder.	N/A	Ipv4 Address.	This column can be used as query condition.
SourcePort	Source port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.
DestinationPort	Destination port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.

Protocol	Transport layer protocol name of the packet from the initiator to the responder.	N/A	Enumeration string: <ul style="list-style-type: none"> <li>• dccp</li> <li>• icmp</li> <li>• raw-ip</li> <li>• sctp</li> <li>• tcp</li> <li>• udp</li> <li>• udp-lite</li> </ul>	This column can be used as query condition.
CurSessionCount	Total number of current sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
CurRelationCount	Total number of current relation entries.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
SessionCount	Number of sessions of different protocols.	Data structure.	Members include: <ul style="list-style-type: none"> <li>• TCPCount.</li> <li>• UDPCount.</li> <li>• ICMPCount.</li> <li>• ICMPv6Count.</li> <li>• UDPLiteCount.</li> <li>• SCTPCount.</li> <li>• DCCPCount.</li> <li>• RawIPCount.</li> </ul>	N/A
TCPCount	Number of TCP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
UDPCount	Number of UDP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ICMPCount	Number of ICMP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ICMPv6Count	Number of ICMPv6 sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
UDPLiteCount	Number of UDP-Lite sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
SCTPCount	Number of SCTP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
DCCPCount	Number of DCCP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
RawIPCount	Number of Raw IP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
DNSCount	Number of DNS sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
FTPCount	Number of FTP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
GTPCount	Number of GTP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
H323Count	Number of H323 sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
HTTPCount	Number of HTTP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ILSCount	Number of ILS sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
MGCPCount	Number of MGCP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
NBTPCount	Number of NBT sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
PPTPCount	Number of PPTP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
RSHCount	Number of RSH sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
RTSPCount	Number of RTSP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
SCCPCount	Number of SCCP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
SIPCount	Number of SIP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
SMTPCount	Number of SMTP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
SQLNETCount	Number of SQLNET sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
SSHCount	Number of SSH sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
TELNETCount	Number of TELNET sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
TFTPCount	Number of TFTP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
XDMCPCount	Number of XDMCP sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
SessionEstablishedRate	Session establishment rate, and rates for establishing sessions of different protocols.	Data structure.	Members include: <ul style="list-style-type: none"> <li>• TCPRate.</li> <li>• UDPRate.</li> <li>• ICMPRate.</li> <li>• ICMPv6Rate.</li> <li>• UDPLiteRate.</li> <li>• SCTPRate.</li> <li>• DCCPRate.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>RawIPRate.</li> </ul>	
TCPRate	Establishment rate of TCP sessions (per second).	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
UDPRate	Establishment rate of UDP sessions (per second).	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ICMPRate	Establishment rate of ICMP sessions (per second).	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ICMPv6Rate	Establishment rate of ICMPv6 sessions (per second).	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
UDPLiteRate	Establishment rate of UDP-Lite sessions (per second).	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
SCTPRate	Establishment rate of SCTP sessions (per second).	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
DCCPRate	Establishment rate of DCCP sessions (per second).	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
RawIPRate	Establishment rate of Raw IP sessions (per second).	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ReceivedPkts Bytes	Number of received packets and packet bytes of different protocols.	Data structure.	Members include: <ul style="list-style-type: none"> <li>TCPBytes.</li> <li>TCPPkts.</li> <li>UDPBytes.</li> <li>UDPPkts.</li> <li>ICMPBytes.</li> <li>ICMPPkts.</li> <li>ICMPv6Bytes.</li> <li>ICMPv6Pkts.</li> <li>UDPLiteBytes.</li> <li>UDPLitePkts.</li> <li>SCTPBytes.</li> <li>SCTPPkts.</li> <li>DCCPBytes.</li> <li>DCCPPkts.</li> <li>RawIPBytes.</li> <li>RawIPPkts.</li> </ul>	N/A
TCPBytes	Number of	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	received TCP packet bytes.		Value range: 0 to $2^{64} - 1$ .	
TCPPkts	Number of received TCP packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
UDPBytes	Number of received UDP packet bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
UDPPkts	Number of received UDP packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ICMPBytes	Number of received ICMP packet bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ICMPPkts	Number of received ICMP packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ICMPv6Bytes	Number of received ICMPv6 packet bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ICMPv6Pkts	Number of received ICMPv6 packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
UDPLiteBytes	Number of received UDP-Lite packet bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
UDPLitePkts	Number of received UDP-Lite packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
SCTPBytes	Number of received SCTP packet bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
SCTPPkts	Number of received SCTP packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DCCPBytes	Number of received DCCP packet bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DCCPPkts	Number of received DCCP packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RawIPBytes	Number of received Raw IP packet bytes.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RawIPPkts	Number of received Raw IP packets.	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A



# Session/TopStatistics/Switch

This table contains session top statistics configuration of switch.

## XML structure

```
<Session>
  <TopStatistics>
    <Switch>
      <Enable></Enable>
    </Switch>
  </TopStatistics>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Switch
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether enable session top statistics	N/A	Boolean: <ul style="list-style-type: none"><li><b>true.</b></li><li><b>false.</b></li></ul>	N/A

# Session/TopStatistics/CountingByAddress

This table contains top statistics for sessions by addresses.

## XML structure

```
<Session>
  <TopStatistics>
    <CountingByAddress>
      <Item>
        <Type></Type>
        <Period></Period>
```

```

    <Sequence></Sequence>
    <Address>
        <IPv4Addr></IPv4Addr>
        <IPv6Addr></IPv6Addr>
    </Address>
    <SumCount></SumCount>
    <EstablishedRate></EstablishedRate>
</Item>
</CountingByAddress>
</TopStatistics>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	CountingByAddress
Table type	Multi-instance table
Row name	Item
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Type of top statistics	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Top statistics by source address.</li> <li>1—Top statistics by destination address.</li> </ul>	N/A
Period	Period of history session statistics	Index	Unsigned integer. Value range: 0 to 2. <ul style="list-style-type: none"> <li>0—1 hour.</li> <li>1—1 day.</li> <li>2—30 days.</li> </ul>	N/A
Sequence	Sequence number for top statistics	Index	Unsigned integer. Value range: 1 to 10.	N/A
Address	Source or destination network layer address	Data structure	Members include: <ul style="list-style-type: none"> <li>IPv4Addr.</li> <li>IPv6Addr.</li> </ul>	N/A
IPv4Addr	IPv4 address	N/A	IPv4 address.	Columns IPv4Addr and IPv6Addr are mutually exclusive.

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv6Addr	IPv6 address	N/A	IPv6 address.	Columns IPv4Addr and IPv6Addr are mutually exclusive.
SumCount	Total number of sessions established in a period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
EstablishedRate	Average establishment rate of sessions established between a pair of samples in a period	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

## Session/TopStatistics/SampleTime

This table contains sample time for the top statistics in a period.

### XML structure

```

<Session>
  <TopStatistics>
    <SampleTime>
      <Item>
        <Type></Type>
        <Period></Period>
        <SampleTime></SampleTime>
      </Item>
    </SampleTime>
  </TopStatistics>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	SampleTime
Table type	Multi-instance table
Row name	Item
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Type of top statistics	Index	Enumeration: <ul style="list-style-type: none"><li>0—Top statistics by source address.</li><li>1—Top statistics by destination address.</li></ul>	N/A
Period	Period of history session statistics	Index	Unsigned integer. Value range: 0 to 2. <ul style="list-style-type: none"><li>0—1 hour.</li><li>1—1 day.</li><li>2—30 days.</li></ul>	N/A
SampleTime	Sample time in a period	N/A	String. Length: 1 to 32 characters.	Example: 2000-04-25 21:23:23.

## Session/HistoryStatistics

This table contains session history statistics.

## XML structure

```
<Session>
  <HistoryStatistics>
    <Item>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Period></Period>
      <Sequence></Sequence>
      <Time></Time>
      <SessionCount></SessionCount>
      <EstablishedRate></EstablishedRate>
    </Item>
  </HistoryStatistics>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	HistoryStatistics

Table type	Multi-instance table
Row name	Item
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Period	Period of history session statistics	Index	Unsigned integer. Value range: 0 to 2. <ul style="list-style-type: none"> <li>0—1 hour.</li> <li>1—1 day.</li> <li>2—30 days.</li> </ul>	N/A
Sequence	Number of history statistics time point	Index	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Time	Current time	N/A	String. Length: 1 to 32 characters.	N/A
SessionCount	Number of history session count	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$	N/A
Established Rate	Number of history new established rate	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

## Session/TrafficLogFlowBegin

This table contains traffic log flow begin configuration.

## XML structure

```

<Session>
  <TrafficLogFlowBegin>
    <OutputCreateLog></OutputCreateLog>
  </TrafficLogFlowBegin>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	TrafficLogFlowBegin
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
OutputCreate Log	Whether enable traffic logging.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true.</b></li><li><b>false.</b></li></ul>	N/A

## Session/TrafficLogThreshold

This table contains threshold for traffic threshold logging.

## XML structure

```
<Session>
  <TrafficLogThreshold>
    <TimeThreshold></TimeThreshold>
    <FlowThreshold>
      <Type></Type>
      <Threshold></Threshold>
    </FlowThreshold>
  </TrafficLogThreshold>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	TrafficLogThreshold
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeThreshold	Time-based traffic logging threshold (minutes).	N/A	Unsigned integer. Value range: 10 to 120.	The value must be integer times of 10.
FlowThreshold	Traffic-based traffic logging threshold ( minutes).	Data structure.	Members include: <ul style="list-style-type: none"><li>Type.</li><li>Threshold.</li></ul>	N/A
Type	Type of traffic-based Traffic logging.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Packet-based threshold for traffic-based logging.</li><li>1—Byte-based threshold for traffic-based logging.</li></ul>	If you set both the byte-based and packet-based thresholds, the last configuration takes effect.
Threshold	Threshold for traffic-based logging.	N/A	Unsigned integer. Value range: 1 to 1000.	If type is 0, the unit is mega-packets. If type is 1, the unit is mega-bytes.

## Session/Ipv4LogOnInterZones

This table contains session traffic log enable ipv4 configuration.

### XML structure

```
<Session>
  <Ipv4LogOnInterZones>
    <InterZone>
      <SourceZone></SourceZone>
      <DestinationZone></DestinationZone>
      <EnableLog></EnableLog>
      <Mode></Mode>
      <ACLNumber></ACLNumber>
    </InterZone>
  </Ipv4LogOnInterZones>
</Session>
```

### Table description

Item	Description
Feature name	Session

Table name	Ipv4LogOnInterZones
Table type	Multi-instance table
Row name	InterZone
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SourceZone	Source Zone.	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
DestinationZone	Destination Zone	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
EnableLog	Logging enable	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO</li> </ul>	N/A
Mode	Whether by-server	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO</li> </ul>	N/A
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A

## Session/Ipv6LogOnInterZones

This table contains session traffic log enable ipv6 configuration.

## XML structure

```

<Session>
  <Ipv6LogOnInterZones>
    <InterZone>
      <SourceZone></SourceZone>
      <DestinationZone></DestinationZone>
      <EnableLog></EnableLog>
      <Mode></Mode>
      <ACLNumber></ACLNumber>
    </InterZone>
  </Ipv6LogOnInterZones>
</Session>

```



## Table description

Item	Description
Feature name	Session
Table name	Ipv6LogOnInterZones
Table type	Multi-instance table
Row name	InterZone
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SourceZone	Source Zone.	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
DestinationZone	Destination Zone	Index	String, case-insensitive. Length: 1 to 31 characters.	Characters ">", ">>" and " " can't be included.
EnableLog	Logging enable	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>	N/A
Mode	Whether by-server	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>	N/A
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A

## Session/Ipv4Sessions

The table of IPv4 sessions.

## XML structure

```
<Session>
  <Ipv4Sessions>
    <Session>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Handle></Handle>
      <PerChassis></PerChassis>
      <PerSlot></PerSlot>
```

```

<PerCpuID></PerCpuID>
<PerHandle></PerHandle>
<LocalCreate></LocalCreate>
<SessionMax></SessionMax>
<Type></Type>
<SessionFwdType></SessionFwdType>
<InitVRF></InitVRF>
<InitSourceIp></InitSourceIp>
<InitSourcePort></InitSourcePort>
<InitDestinationIp></InitDestinationIp>
<InitDestinationPort></InitDestinationPort>
<InitDSLiteTunnelPeer></InitDSLiteTunnelPeer>
<InitProtocol></InitProtocol>
<ResponseVRF></ResponseVRF>
<ResponseSourceIp></ResponseSourceIp>
<ResponseSourcePort></ResponseSourcePort>
<ResponseDestinationIp></ResponseDestinationIp>
<ResponseDestinationPort></ResponseDestinationPort>
<ResponseDSLiteTunnelPeer></ResponseDSLiteTunnelPeer>
<ResponseProtocol></ResponseProtocol>
<Application></Application>
<State></State>
<StartTime></StartTime>
<TTL></TTL>
<RecvInterface></RecvInterface>
<RecvSecurityZone></RecvSecurityZone>
<SendInterface></SendInterface>
<SendSecurityZone></SendSecurityZone>
<InitToResponsePackets></InitToResponsePackets>
<InitToResponseBytes></InitToResponseBytes>
<ResponseToInitPackets></ResponseToInitPackets>
<ResponseToInitBytes></ResponseToInitBytes>
<InitEnProtocol></InitEnProtocol>
<StopTime></StopTime>
<Backupflag></Backupflag>
<InitRuleName></InitRuleName>
<EnState></EnState>
<TimeRangeStart></TimeRangeStart>
<TimeRangeEnd></TimeRangeEnd>
<SessionDir></SessionDir>
<PageNum></PageNum>
<PageCnt></PageCnt>
<TotalCnt></TotalCnt>
</Session>
</Ipv4Sessions>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv4Sessions
Table type	Multi-instance table
Row name	Session
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Handle	Session Handle	Index	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	This column has no practical sense, it's only the index of the table.
PerChassis	ID of the member where the entity resides	N/A	Unsigned integer. Value range: 0 to 65534.	This column is for several times to get
PerSlot	Slot ID of the entity	N/A	Unsigned integer. Value range: 0 to 65534.	This column is for several times to get
PerCPUID	CPU ID	N/A	Unsigned integer. Value range: 0 to 7.	This column is for several times to get
PerHandle	Handle	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	This column is for several times to get
LocalCreate	Mark of the session that Local board Created	N/A	Unsigned integer. Value range: 0 to 1. <ul style="list-style-type: none"> <li>0—All boards</li> <li>1—Local board</li> </ul>	N/A
SessionMax	The number of one time get	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Type of the module which created the session.	N/A	Unsigned integer. Enumeration: <ul style="list-style-type: none"> <li>0—NAT.</li> <li>1—CONNECTION-LIMIT.</li> <li>2—LB.</li> <li>3—ASPF.</li> <li>4—LOG.</li> <li>5—ALG.</li> <li>6—DS-Lite.</li> <li>7—TCP MSS.</li> <li>8—Application of statistical.</li> <li>9—Inter-zone strategy.</li> <li>10—WAAS.</li> <li>11—TCP serial number to check.</li> <li>12—AFT.</li> <li>13—DIM Engine processing.</li> <li>14—TCP Engine restructuring.</li> <li>15—Traffic log.</li> </ul>	This column can be used as query condition.
SessionFwdType	Session forward type.	N/A	Unsigned integer. Enumeration: <ul style="list-style-type: none"> <li>0—VRF instance name.</li> <li>1—VLAN ID.</li> <li>2—Inline ID.</li> </ul>	This column can be used as query condition.
InitVRF	Session forward value of the initiator.	N/A	String, case-insensitive. Length: 1 to 31 characters.	1 This column can be used as query condition.  2 When SessionFwdType is VLAN ID, the value for InitVRF is VLAN ID. When SessionFwdType is Inline ID, the value for InitVRF is Inline ID. When SessionFwdType is VRF instance name, the value for InitVRF is the VRF instance name.
InitSourceIp	Source IP address of the packet from the initiator to the responder.	N/A	Ipv4 Address.	This column can be used as query condition.
InitSourcePort	Source port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.

Column name	Column description	Column type	Data type and restrictions	Remarks
InitDestinationIp	Destination IP address of the packet from the initiator to the responder.	N/A	Ipv4 Address.	This column can be used as query condition.
InitDestinationPort	Destination port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.
InitDSLiteTunnelPeer	Address of the DS-Lite tunnel peer of the initiator.  When the session does not belong to any DS-Lite tunnel, this field is NULL.	N/A	String, case-insensitive. Length: 1 to 46 characters.	N/A
InitProtocol	Transport layer protocol name of the packet from the initiator to the responder.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column can be used as query condition.
ResponseVRF	Session forward value of the responder.	N/A	String, case-insensitive. Length: 1 to 31 characters.	1 This column can be used as query condition.  2 When SessionFwdType is VLAN ID, the value for InitVRF is VLAN ID. When SessionFwdType is Inline ID, the value for InitVRF is Inline ID. When SessionFwdType is VRF instance name, the value for InitVRF is the VRF instance name.
ResponseSourceIp	Source IP address of the packet from the responder to the initiator.	N/A	Ipv4 Address.	This column can be used as query condition.
ResponseSourcePort	Source port of the packet from the responder to the initiator.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.
ResponseDestinationIp	Destination IP address of the packet from the responder to the initiator.	N/A	Ipv4 Address.	This column can be used as query condition.

Column name	Column description	Column type	Data type and restrictions	Remarks
ResponseDestinationPort	Destination port of the packet from the responder to the initiator.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.
ResponseDSLiteTunnelPeer	Address of the DS-Lite tunnel peer of the responder.  When the session does not belong to any DS-Lite tunnel, this field is NULL.	N/A	String, case-insensitive. Length: 1 to 46 characters.	N/A
ResponseProtocol	Transport layer protocol name of the packet from the responder to the initiator.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
Application	Application layer protocol.  The value of OTHER indicates an unknown protocol with a non-well-known port.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column can be used as query condition.
State	Session state(String).	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
StartTime	Session establishment time.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
TTL	Remaining lifetime of the session, in seconds.v	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ seconds.	N/A
RecvInterface	Interface name of the packet receiver.	N/A	String, case-insensitive. Length: 2 to 47 characters.	This column can be used as query condition.
RecvSecurityZone	SecurityZone name of the packet receiver	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column can be used as query condition.
SendInterface	Interface name of the packet sender.	N/A	String, case-insensitive. Length: 2 to 47 characters.	This column can be used as query condition.
SendSecurityZone	SecurityZone name of the packet sender	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column can be used as query condition.

Column name	Column description	Column type	Data type and restrictions	Remarks
InitToResponsePackets	Number of packets from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
InitToResponseBytes	Number of packet bytes from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ResponseToInitPackets	Number of packets from the responder to the initiator.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ResponseToInitBytes	Number of packet bytes from the responder to the initiator.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
InitEnProtocol	Transport layer protocol id of the packet from the initiator to the responder.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP.</li> <li>• 1—UDP.</li> <li>• 2—ICMP.</li> <li>• 3—ICMPv6.</li> <li>• 4—UDP-Lite.</li> <li>• 5—SCTP.</li> <li>• 6—DCCP.</li> <li>• 7—RAWIP.</li> <li>• 8—ALL.</li> </ul>	This column can be used as query condition.
StopTime	Remaining time of stopping a specified session's flow	N/A	Unsigned integer.	N/A
Backupflag	Session state's mask: owner, director, etc	N/A	Unsigned Char. 0x40—OWNER 0x80—DIRECTOR	N/A
InitRuleName	The name of rule of which is matched by zone checking	N/A	String, case-insensitive. Length: 1 to 127 characters.	This column can be used as query condition.

Column name	Column description	Column type	Data type and restrictions	Remarks
EnState	Session state(Enumeration).	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP_SYN_SENT.</li> <li>• 1—TCP_SYN_RECV.</li> <li>• 2—TCP_ESTABLISHED.</li> <li>• 3—TCP_FIN_WAIT.</li> <li>• 4—TCP_CLOSE_WAIT.</li> <li>• 5—TCP_LAST_ACK.</li> <li>• 6—TCP_TIME_WAIT.</li> <li>• 7—TCP_CLOSE.</li> <li>• 8—TCP_SYN_SENT2.</li> <li>• 9—DCCP_REQUEST.</li> <li>• 10—DCCP_RESPOND.</li> <li>• 11—DCCP_PARTOPEN.</li> <li>• 12—DCCP_OPEN.</li> <li>• 13—DCCP_CLOSEREQ.</li> <li>• 14—DCCP_CLOSING.</li> <li>• 15—DCCP_TIMEWAIT.</li> <li>• 16—ICMP_REQUEST.</li> <li>• 17—ICMP_REPLY.</li> <li>• 20—RAWIP_OPEN.</li> <li>• 21—RAWIP_READY.</li> <li>• 22—SCTP_CLOSED.</li> <li>• 23—SCTP_COOKIE_WAIT.</li> <li>• 24—SCTP_COOKIE_ECHOED.</li> <li>• 25—SCTP_ESTABLISHED.</li> <li>• 26—SCTP_SHUTDOWN_SENT.</li> <li>• 27—SCTP_SHUTDOWN_RECV.</li> <li>• 28—SCTP_SHUTDOWN_ACK_SENT.</li> <li>• 29—UDP_OPEN.</li> <li>• 30—UDP_READY.</li> <li>• 31—UDPLITE_OPEN.</li> <li>• 32—UDPLITE_READY.</li> </ul>	This column can be used as query condition.
TimeRangeStart	Start time of the time range.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	This column can be used as query condition.
TimeRangeEnd	End time of the time range.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	This column can be used as query condition.
SessionDir	Direction of the session.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Initiator.</li> <li>• 1—Responder.</li> <li>• 2—Both.</li> </ul>	This column can be used as query condition.



Column name	Column description	Column type	Data type and restrictions	Remarks
PageNum	Page number.	N/A	Unsigned integer. Value range: 1 to $2^{32} - 1$ .	This column can be used as query condition.
PageCnt	Number of sessions per page.	N/A	Unsigned integer. Value range: 1 to $2^{32} - 1$ .	This column can be used as query condition.
TotalCnt	Total number of sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

## Session/Ipv6Sessions

This table is used to display the ipv6 session details.

### XML structure

```

<Session>
  <Ipv6Sessions>
    <Session>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Handle></Handle>
      <PerChassis></PerChassis>
      <PerSlot></PerSlot>
      <PerCPUID></PerCPUID>
      <PerHandle></PerHandle>
      <LocalCreate></LocalCreate>
      <SessionMax></SessionMax>
      <Type></Type>
      <SessionFwdType></SessionFwdType>
      <InitVRF></InitVRF>
      <InitSourceIp></InitSourceIp>
      <InitSourcePort></InitSourcePort>
      <InitDestinationIp></InitDestinationIp>
      <InitDestinationPort></InitDestinationPort>
      <InitProtocol></InitProtocol>
      <ResponseVRF></ResponseVRF>
      <ResponseSourceIp></ResponseSourceIp>
      <ResponseSourcePort></ResponseSourcePort>
      <ResponseDestinationIp></ResponseDestinationIp>
      <ResponseDestinationPort></ResponseDestinationPort>
      <ResponseProtocol></ResponseProtocol>
      <Application></Application>
      <State></State>
      <StartTime></StartTime>
      <TTL></TTL>
    </Session>
  </Ipv6Sessions>
</Session>

```

```

<RecvInterface></RecvInterface>
<RecvSecurityZone></RecvSecurityZone>
<SendInterface></SendInterface>
<SendSecurityZone></SendSecurityZone>
<InitToResponsePackets></InitToResponsePackets>
<InitToResponseBytes></InitToResponseBytes>
<ResponseToInitPackets></ResponseToInitPackets>
<ResponseToInitBytes></ResponseToInitBytes>
<InitEnProtocol></InitEnProtocol>
<StopTime></StopTime>
<Backupflag></Backupflag>
<InitRuleName></InitRuleName>
<EnState></EnState>
<TimeRangeStart></TimeRangeStart>
<TimeRangeEnd></TimeRangeEnd>
<SessionDir></SessionDir>
<PageNum></PageNum>
<PageCnt></PageCnt>
<TotalCnt></TotalCnt>
</Session>
</Ipv6Sessions>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6Sessions
Table type	Multi-instance table
Row name	Session
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Handle	Handle.	Index	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	This column has no practical sense, it's only the index of the table.
PerChasis	ID of the member where the entity resides	N/A	Unsigned integer. Value range: 0 to 65534.	This column is for several times to get
PerSlot	Slot ID of the entity	N/A	Unsigned integer. Value range: 0 to 65534	This column is for several times to get
PerCPUID	CPU ID	N/A	Unsigned integer. Value range: 0 to 7	This column is for several times to get
PerHandle	Handle	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$	This column is for several times to get
LocalCreate	Mark of the session that Local board Created	N/A	Unsigned integer. Value range: 0 to 1. <ul style="list-style-type: none"> <li>0—All boards</li> <li>1—Local board</li> </ul>	N/A
SessionMax	The number of one time get	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
Type	Type of the module which created the session.	N/A	Unsigned integer. Enumeration: <ul style="list-style-type: none"> <li>0—NAT.</li> <li>1—CONNECTION-LIMIT</li> <li>2—LB.</li> <li>3—ASPF.</li> <li>4—LOG.</li> <li>5—ALG</li> <li>6—DS-Lite</li> <li>7—TCP MSS</li> <li>8—Application of statistical</li> <li>9—Inter-zone strategy</li> <li>10—WAAS</li> <li>11—TCP serial number to check</li> <li>12—AFT</li> <li>13—DIM Engine processing</li> <li>14—TCP Engine restructuring</li> <li>15—Traffic log</li> </ul>	This column can be used as query condition.
SessionFwdType	Session forward type.	N/A	Unsigned integer. Enumeration: <ul style="list-style-type: none"> <li>0—VRF instance name.</li> <li>1—VLAN ID.</li> <li>2—Inline ID.</li> </ul>	This column can be used as query condition.

Column name	Column description	Column type	Data type and restrictions	Remarks
InitVRF	Session forward value of the initiator.	N/A	String, case-sensitive. Length: 1 to 31 characters.	1 This column can be used as query condition.  2 When SessionFwdType is VLAN ID, the value for InitVRF is VLAN ID; SessionFwdType is Inline ID, the value for InitVRF is Inline ID, SessionFwdType is VRF instance name, the value for InitVRF is VRF instance name.
InitSourceIp	Source IP address of the packet from the initiator to the responder.	N/A	Ipv6 Address.	This column can be used as query condition.
InitSourcePort	Source port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.
InitDestinationIp	Destination IP address of the packet from the initiator to the responder.	N/A	Ipv6 Address.	This column can be used as query condition.
InitDestinationPort	Destination port of the packet from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.
InitProtocol	Transport layer protocol name of the packet from the initiator to the responder.	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column can be used as query condition.
ResponseVRF	Session forward value of the responder.	N/A	String, case-sensitive. Length: 1 to 31 characters.	1 This column can be used as query condition.  2 When SessionFwdType is VLAN ID, the value for InitVRF is VLAN ID; SessionFwdType is Inline ID, the value for InitVRF is Inline ID, SessionFwdType is VRF instance name, the value for InitVRF is VRF instance name.

Column name	Column description	Column type	Data type and restrictions	Remarks
ResponseSourceIp	Source IP address of the packet from the responder to the initiator.	N/A	Ipv6 Address.	This column can be used as query condition.
ResponseSourcePort	Source port of the packet from the responder to the initiator.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.
ResponseDestinationIp	Destination IP address of the packet from the responder to the initiator.	N/A	Ipv6 Address.	This column can be used as query condition.
ResponseDestinationPort	Destination port of the packet from the responder to the initiator.	N/A	Unsigned integer. Value range: 0 to 65535.	This column can be used as query condition.
ResponseProtocol	Transport layer protocol name of the packet from the responder to the initiator.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
Application	Application layer protocol. The value of OTHER indicates an unknown protocol with a non-well-known port.	N/A	String, case-insensitive. Length: 1 to 63 characters.	This column can be used as query condition.
State	Session state(String).	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
StartTime	Session establishment time.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
TTL	Remaining lifetime of the session, in seconds.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ seconds.	N/A
RecvInterface	Interface name of the packet receiver.	N/A	String, case-insensitive. Length: 2 to 47 characters.	This column can be used as query condition.
RecvSecurityZone	SecurityZone name of the packet receiver	N/A	String, case-insensitive. Length: 1 to 31 characters.	This column can be used as query condition.
SendInterface	Interface name of the packet sender.	N/A	String, case-insensitive. Length: 2 to 47 characters.	This column can be used as query condition.

Column name	Column description	Column type	Data type and restrictions	Remarks
SendSecurityZone	SecurityZone name of the packet sender	N/A	String, case-insensitive. Length: 1 to 31 characters	This column can be used as query condition.
InitToResponsePackets	Number of packets from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
InitToResponseBytes	Number of packet bytes from the initiator to the responder.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ResponseToInitPackets	Number of packets from the responder to the initiator.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
ResponseToInitBytes	Number of packet bytes from the responder to the initiator.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A
InitEnProtocol	Transport layer protocol id of the packet from the initiator to the responder.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP.</li> <li>• 1—UDP.</li> <li>• 2—ICMP.</li> <li>• 3—ICMPv6.</li> <li>• 4—UDP-Lite.</li> <li>• 5—SCTP.</li> <li>• 6—DCCP.</li> <li>• 7—RAWIP.</li> <li>• 8—ALL.</li> </ul>	This column can be used as query condition.
StopTime	Remaining time of stopping a specified session's flow	N/A	Unsigned integer..	N/A
Backupflag	Session state's mask: owner, director, etc	N/A	Unsigned Char. <ul style="list-style-type: none"> <li>• 0x40—OWNER</li> <li>• 0x80—DIRECTOR</li> </ul>	N/A
InitRuleName	The name of rule of which is matched by zone checking	N/A	String, case-insensitive. Length: 1 to 127 characters.	This column can be used as query condition.

Column name	Column description	Column type	Data type and restrictions	Remarks
EnState	Session state(Enumeration).	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—TCP_SYN_SENT.</li> <li>• 1—TCP_SYN_RECV.</li> <li>• 2—TCP_ESTABLISHED.</li> <li>• 3—TCP_FIN_WAIT.</li> <li>• 4—TCP_CLOSE_WAIT.</li> <li>• 5—TCP_LAST_ACK.</li> <li>• 6—TCP_TIME_WAIT.</li> <li>• 7—TCP_CLOSE.</li> <li>• 8—TCP_SYN_SENT2.</li> <li>• 9—DCCP_REQUEST.</li> <li>• 10—DCCP_RESPOND.</li> <li>• 11—DCCP_PARTOPEN.</li> <li>• 12—DCCP_OPEN.</li> <li>• 13—DCCP_CLOSEREQ.</li> <li>• 14—DCCP_CLOSING.</li> <li>• 15—DCCP_TIMEWAIT.</li> <li>• 18—ICMPV6_REQUEST.</li> <li>• 19—ICMPV6_REPLY.</li> <li>• 20—RAWIP_OPEN.</li> <li>• 21—RAWIP_READY.</li> <li>• 22—SCTP_CLOSED.</li> <li>• 23—SCTP_COOKIE_WAIT.</li> <li>• 24—SCTP_COOKIE_ECHOED.</li> <li>• 25—SCTP_ESTABLISHED.</li> <li>• 26—SCTP_SHUTDOWN_SENT.</li> <li>• 27—SCTP_SHUTDOWN_RECV.</li> <li>• 28—SCTP_SHUTDOWN_ACK_SENT.</li> <li>• 29—UDP_OPEN.</li> <li>• 30—UDP_READY.</li> <li>• 31—UDPLITE_OPEN.</li> <li>• 32—UDPLITE_READY.</li> </ul>	This column can be used as query condition.
TimeRangeStart	Start time of the time range.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	This column can be used as query condition.
TimeRangeEnd	End time of the time range.	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	This column can be used as query condition.
SessionDir	Direction of the session.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Initiator.</li> <li>• 1—Responder.</li> <li>• 2—Both.</li> </ul>	This column can be used as query condition.

Column name	Column description	Column type	Data type and restrictions	Remarks
PageNum	Page number.	N/A	Unsigned integer. Value range: 1 to $2^{32} - 1$ .	This column can be used as query condition.
PageCnt	Number of sessions per page.	N/A	Unsigned integer. Value range: 1 to $2^{32} - 1$ .	This column can be used as query condition.
TotalCnt	Total number of sessions.	N/A	Unsigned integer. Value range: 0 to $2^{32} - 1$ .	N/A

## Session/ConnectionLimit/Ipv4Policies

This table contains IPv4 connection limit policy configurations..

### XML structure

```

<Session>
  <ConnectionLimit>
    <Ipv4Policies>
      <Policy>
        <PolicyNumber></PolicyNumber>
        <Description></Description>
      </Policy>
    </Ipv4Policies>
  </ConnectionLimit>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	Ipv4Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv4 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Description	IPv4 connection limit policy description	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A

## Session/ConnectionLimit/Ipv6Policies

This table contains IPv6 connection limit policy configurations..

### XML structure

```

<Session>
  <ConnectionLimit>
    <Ipv6Policies>
      <Policy>
        <PolicyNumber></PolicyNumber>
        <Description></Description>
      </Policy>
    </Ipv6Policies>
  </ConnectionLimit>
</Session>

```

### Table description

Item	Description
Feature name	Session
Table name	Ipv6Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv6 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A
Description	IPv6 connection limit policy description	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A

# Session/ConnectionLimit/Ipv4LimitRules

This table contains IPv4 connection limit rule configurations.

## XML structure

```
<Session>
  <ConnectionLimit>
    <Ipv4LimitRules>
      <Rule>
        <PolicyNumber></PolicyNumber>
        <RuleNumber></RuleNumber>
        <ACLNumber></ACLNumber>
        <ACLName></ACLName>
        <HighThreshold></HighThreshold>
        <LowThreshold></LowThreshold>
        <ClmRate></ClmRate>
        <LimitType>
          <PerSource></PerSource>
          <PerDestination></PerDestination>
          <PerService></PerService>
        </LimitType>
        <Description></Description>
        <PermitNew></PermitNew>
      </Rule>
    </Ipv4LimitRules>
  </ConnectionLimit>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv4LimitRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv4 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A
RuleNumber	IPv4 connection limit rule ID.	Index	Unsigned integer. Value range: 1 to 256.	N/A
ACLNumber	IPv4 ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	Either <i>ACLNumber</i> or <i>ACLName</i> is required, and you cannot configure both.
ACLName	IPv4 ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Either <i>ACLNumber</i> or <i>ACLName</i> is required, and you cannot configure both.
HighThreshold	Upper connection limit	N/A	Unsigned integer. Value range: 1 to 4294967294.	When user connections in a range or of a type exceed the upper connection limit, new connections cannot be created.  This column is affirmatively chosen item.
LowThreshold	Lower connection limit	N/A	Unsigned integer. Value range: 1 to 4294967294.	The lower connection limit cannot be greater than the upper connection limit. New connections cannot be created until the connection number goes below the lower connection limit.  This column is affirmatively chosen item.
ClmRate	Maximum number of connections per second	N/A	Unsigned integer. Value range: 5 to 10000000.	When the number of connections per second greater than maximum number of connections per second, new connections cannot be created.  This column is affirmatively chosen item.
LimitType	Connection limit type	Data structure.	Members include: <ul style="list-style-type: none"> <li>PerSource.</li> <li>PerDestination.</li> <li>PerService.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
PerSource	Limits connections by source IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
PerDestination	Limits connections by destination IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
PerService	Limits connections by service port.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
Description	IPv4 connection limit rule description.	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A
PermitNew	Permit new connection establishment after user connections exceed the upper limit.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES.</li> <li>false—NO.</li> </ul>	N/A

## Session/ConnectionLimit/Ipv6LimitRules

This table contains IPv6 connection limit rule configurations.

### XML structure

```

<Session>
  <ConnectionLimit>
    <Ipv6LimitRules>
      <Rule>
        <PolicyNumber></PolicyNumber>
        <RuleNumber></RuleNumber>
        <ACLNumber></ACLNumber>
        <ACLName></ACLName>
        <HighThreshold></HighThreshold>
        <LowThreshold></LowThreshold>
        <ClmRate></ClmRate>
        <LimitType>
          <PerSource></PerSource>
          <PerDestination></PerDestination>
          <PerService></PerService>
        </LimitType>
        <Description></Description>
        <PermitNew></PermitNew>
      </Rule>
    </Ipv6LimitRules>
  </ConnectionLimit>
</Session>

```

```

    </Rule>
  </Ipv6LimitRules>
</ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6LimitRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv6 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A
RuleNumber	IPv6 connection limit rule ID.	Index	Unsigned integer. Value range: 1 to 256.	N/A
ACLNumber	IPv6 ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	Either <i>ACLNumber</i> or <i>ACLName</i> is required, and you cannot configure both.
ACLName	IPv6 ACL name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Either <i>ACLNumber</i> or <i>ACLName</i> is required, and you cannot configure both.
HighThreshold	Upper connection limit	N/A	Unsigned integer. Value range: 1 to 4294967294.	When user connections in a range or of a type exceed the upper connection limit, new connections cannot be created.  This column is affirmatively chosen item.

Column name	Column description	Column type	Data type and restrictions	Remarks
LowThreshold	Lower connection limit	N/A	Unsigned integer. Value range: 1 to 4294967294.	The lower connection limit cannot be greater than the upper connection limit. New connections cannot be created until the connection number goes below the lower connection limit.  This column is affirmatively chosen item.
ClmRate	Maximum number of connections per second	N/A	Unsigned integer. Value range: 5 to 10000000.	When the number of connections per second greater than maximum number of connections per second, new connections cannot be created.  This column is affirmatively chosen item.
LimitType	Connection limit type	Data structure.	Members include: <ul style="list-style-type: none"> <li>PerSource.</li> <li>PerDestination.</li> <li>PerService.</li> </ul>	N/A
PerSource	Limits connections by source IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
PerDestination	Limits connections by destination IP address.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
PerService	Limits connections by service port.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
Description	IPv6 connection limit rule description.	N/A	String, case-insensitive. Length: 1 to 127 characters.	N/A
PermitNew	Permit new connection establishment after user connections exceed the upper limit.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES.</li> <li>false—NO.</li> </ul>	N/A

# Session/ConnectionLimit/Ipv4PolicyAppliedGlobally

This table contains IPv4 connection limit policy applied globally.

## XML structure

```
<Session>
  <ConnectionLimit>
    <Ipv4PolicyAppliedGlobally>
      <PolicyNumber></PolicyNumber>
    </Ipv4PolicyAppliedGlobally>
  </ConnectionLimit>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	Ipv4PolicyAppliedGlobally
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv4 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A

# Session/ConnectionLimit/Ipv6PolicyAppliedGlobally

This table contains IPv6 connection limit policy applied globally.

## XML structure

```
<Session>
  <ConnectionLimit>
    <Ipv6PolicyAppliedGlobally>
```

```

    <PolicyNumber></PolicyNumber>
  </Ipv6PolicyAppliedGlobally>
</ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6PolicyAppliedGlobally
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyNumber	IPv6 connection limit policy number	Index	Unsigned integer. Value range: 1 to 32.	N/A

# Session/ConnectionLimit/Ipv4PolicyOnInterfaces

This table contains interfaces to which IPv4 connection limit policy is applied.

## XML structure

```

<Session>
  <ConnectionLimit>
    <Ipv4PolicyOnInterfaces>
      <Interface>
        <IfIndex></IfIndex>
        <PolicyNumber></PolicyNumber>
      </Interface>
    </Ipv4PolicyOnInterfaces>
  </ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session



Table name	Ipv4PolicyOnInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
PolicyNumber	IPv4 connection limit policy number	N/A	Unsigned integer. Value range: 1 to 32.	N/A

## Session/ConnectionLimit/Ipv6PolicyOnInterfaces

This table contains interfaces to which IPv6 connection limit policy is applied.

## XML structure

```

<Session>
  <ConnectionLimit>
    <Ipv6PolicyOnInterfaces>
      <Interface>
        <IfIndex></IfIndex>
        <PolicyNumber></PolicyNumber>
      </Interface>
    </Ipv6PolicyOnInterfaces>
  </ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	Ipv6PolicyOnInterfaces
Table type	Multi-instance table
Row name	Interface

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
PolicyNumber	IPv6 connection limit policy number	N/A	Unsigned integer. Value range: 1 to 32.	N/A

## Session/ConnectionLimit/GlobalStatistics

This table contains connection limit global statistics.

## XML structure

```

<Session>
  <ConnectionLimit>
    <GlobalStatistics>
      <GlobalStatistic>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Ipv4DroppedPackets></Ipv4DroppedPackets>
        <Ipv6DroppedPackets></Ipv6DroppedPackets>
      </GlobalStatistic>
    </GlobalStatistics>
  </ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	GlobalStatistics
Table type	Multi-instance table
Row name	GlobalStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the entity resides	Index	Unsigned integer. Value range: 0 to 65534.	N/A
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Ipv4DroppedPackets	Number of dropped IPv4 packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	Number of IPv4 packets that are dropped because the upper connection limit is exceeded when an IPv4 connection limit policy is configured globally.
Ipv6DroppedPackets	Number of dropped IPv6 packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	Number of IPv6 packets that are dropped because the upper connection limit is exceeded when an IPv6 connection limit policy is configured globally.

## Session/ConnectionLimit/InterfaceStatistics

This table contains connection limit statistics on interfaces.

### XML structure

```

<Session>
  <ConnectionLimit>
    <InterfaceStatistics>
      <InterfaceStatistic>
        <IfIndex></IfIndex>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
        <Ipv4DroppedPackets></Ipv4DroppedPackets>
        <Ipv6DroppedPackets></Ipv6DroppedPackets>
      </InterfaceStatistic>
    </InterfaceStatistics>
  </ConnectionLimit>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	InterfaceStatistics
Table type	Multi-instance table
Row name	InterfaceStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	This column can only be the index of local VA, global VA or 3 layer interface except loopback, NULL, FC, FCB and encrypt interface.
Slot	Slot ID of the entity	Index	Unsigned integer. Value range: 0 to 65534.	N/A
CPUID	CPU ID	Index	Unsigned integer. Value range: 0 to 7.	N/A
Ipv4DroppedPackets	Number of dropped IPv4 packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	Number of IPv4 packets that are dropped because the upper connection limit is exceeded when an IPv4 connection limit policy is configured on an interface.
Ipv6DroppedPackets	Number of dropped IPv6 packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	Number of IPv6 packets that are dropped because the upper connection limit is exceeded when an IPv6 connection limit policy is configured on an interface.

## Session/StatisticsSwitch

This table contains session statistics configuration of switch.

## XML structure

```
<Session>
```

```

<StatisticsSwitch>
  <Enable></Enable>
</StatisticsSwitch>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	StatisticsSwitch
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether enable session statistics	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true.</b></li> <li><b>false.</b></li> </ul>	N/A

# Session/SessionLogFlowBegin

This table contains session log flow begin configuration.

## XML structure

```

<Session>
  <SessionLogFlowBegin>
    <SessionCreateLog></SessionCreateLog>
  </SessionLogFlowBegin>
</Session>

```

## Table description

Item	Description
Feature name	Session
Table name	SessionLogFlowBegin
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SessionCreateLog	Whether enable session create logging.	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>	N/A

## Session/SessionLogFlowEnd

This table contains session log flow end configuration.

## XML structure

```
<Session>
  <SessionLogFlowEnd>
    <SessionDeleteLog></SessionDeleteLog>
  </SessionLogFlowEnd>
</Session>
```

## Table description

Item	Description
Feature name	Session
Table name	SessionLogFlowEnd
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SessionDeleteLog	Whether enable session delete logging.	N/A	Boolean: <ul style="list-style-type: none"><li>true—YES</li><li>false—NO</li></ul>	N/A

# Contents

Comware 7 Session NETCONF XML API Error Message Reference.....	1
Session/ConnectionLimit/Ipv4LimitRules.....	1
Session/ConnectionLimit/Ipv6LimitRules.....	1
Session/TopStatistics/Switch .....	2
Session/Ipv4LogOnInterZones.....	2
Session/Ipv6LogOnInterZones.....	2
Session/TrafficLogFlowBegin .....	2
Session/TrafficLogThreshold .....	3
Session/HotBackup .....	3
Session/ProtocolHotBackup .....	3

# Comware 7 Session NETCONF XML API Error Message Reference

## Session/ConnectionLimit/Ipv4LimitRules

Message	Explanation
ACL name must start with an English letter, and it can't be the word 'all'. ACL名称不能为'all',且必须以字母开头。	ACL ipv4 name must start with an English letter, and it can't be the word 'all'(not case sensitive). ACL ipv4名称不能为'all'(不区分大小写),且必须以英文字母开头。
A number or a name is required for the ACL. ACL编号和ACL名称必须且只能配置其中一个。	<ol style="list-style-type: none"><li>1. A number or a name is required for the ACL. ACL 编号和 ACL 名称有且只能有一个。</li><li>2. Operation Replace not allowed to replace from ACL number to ACL name or from ACL name to ACL number. Replace 操作不能从 ACL 编号替换到 ACL 名称,也不能从 ACL 名称切换到 ACL 编号。</li></ol>
The low and high thresholds are required. 触发阈值和恢复阈值都必须配置。	HighThreshold and LowThreshold are required and not equal to zero. 触发阈值和恢复阈值都必须配置且不能配为 0。
Low threshold can't be greater than high threshold. 触发阈值不能小于恢复阈值。	Low threshold can't be greater than high threshold. 触发阈值不能小于恢复阈值。
Another connection limit rule is using the ACL. 此ACL已经被其它规则引用。	An ACL rule can only be applied by one connection limit rule. 一个ACL只允许被一个连接数限制规则所引用。

## Session/ConnectionLimit/Ipv6LimitRules

Message	Explanation
ACL name must start with an English letter, and it can't be the word 'all'. ACL名称不能为'all',且必须以字母开头。	ACL ipv6 name must start with an English letter, and it can't be the word 'all'(not case sensitive). ACL ipv6名称不能为'all'(不区分大小写),且必须以英文字母开头。
A number or a name is required for the ACL. ACL编号和ACL名称必须且只能配置其中一个。	<ol style="list-style-type: none"><li>1. A number or a name is required for the ACL. ACL 编号和 ACL 名称有且只能有一个。</li><li>2. Operation Replace not allowed to replace from ACL number to ACL name or from ACL name to ACL number. Replace 操作不能从 ACL 编号替换到 ACL 名称,也不能从 ACL 名称切换到 ACL 编号。</li></ol>
The low and high thresholds are required. 触发阈值和恢复阈值都必须配置。	HighThreshold and LowThreshold are required and not equal to zero. 触发阈值和恢复阈值都必须配置且不能配为 0。
Low threshold can't be greater than high threshold. 触发阈值不能小于恢复阈值。	Low threshold can't be greater than high threshold. 触发阈值不能小于恢复阈值。
Another connection limit rule is using the ACL. 此ACL已经被其它规则引用。	An ACL rule can only be applied by one connection limit rule. 一个ACL只允许被一个连接数限制规则所引用。



## Session/TopStatistics/Switch

Message	Explanation
The operation is not supported on this the device. 该设备不支持此操作。	Session top statistics not be supported by this device. 该设备不支持头部会话统计功能。
The stop process is running. Please try it later. 关闭操作尚未执行完毕，请稍后重试。	Operation undo enable is processing. Undo 操作正在处理中。

## Session/Ipv4LogOnInterZones

Message	Explanation
The specified source security zone doesn't exist. 指定的源安全域并不存在。	The security zone must exist before being configured as source zone. 指定的源安全域必须已经存在。
The specified destination security zone doesn't exist. 指定的目的安全域并不存在。	The security zone must exist before being configured as destination zone. 指定的目的安全域必须已经存在。
This device doesn't support session traffic log enable { ipv4   ipv6 }. 当前设备不支持更改会话日志流开关。	This device doesn't support session traffic log. 当前设备不支持会话日志流功能。

## Session/Ipv6LogOnInterZones

Message	Explanation
The specified source security zone doesn't exist. 指定的源安全域并不存在。	The security zone must exist before being configured as source zone. 指定的源安全域必须已经存在。
The specified destination security zone doesn't exist. 指定的目的安全域并不存在。	The security zone must exist before being configured as destination zone. 指定的目的安全域必须已经存在。
This device doesn't support session traffic log enable { ipv4   ipv6 }. 当前设备不支持更改会话日志流开关。	This device doesn't support session traffic log. 当前设备不支持会话日志流功能。

## Session/TrafficLogFlowBegin

Message	Explanation
This device doesn't support session traffic log flow-begin. 当前设备不支持输出会话新建日志。	This device doesn't support session traffic log flow-begin. 当前设备不支持输出会话新建日志。

## Session/TrafficLogThreshold

Message	Explanation
This device doesn't support session traffic log threshold. 当前设备不支持更改会话日志输出阈值。	This device doesn't support modify session traffic log threshold. 当前设备不支持更改会话日志输出阈值。

## Session/HotBackup

Message	Explanation
This device doesn't support hotbackup function. 当前设备不支持热备功能。	Some devices dose not support backup session or eim entries. 有一部分设备不支持会话和Eim表项备份功能。

## Session/ProtocolHotBackup

Message	Explanation
This device doesn't support hotbackup function. 当前设备不支持热备功能。	Some devices dose not support backup session or eim entries (for dns and http). 有一部分设备不支持会话和Eim表项备份功能（对于dns和http协议的表项）。



# Contents

- SFLOW.....1
  - SFLOW/sFlowClearCollector.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# SFLOW

## SFLOW/sFlowClearCollector

This table is used to clear the dynamic collectors of sflow.

### XML structure

```
<SFLOW>
  <sFlowClearCollector>
    <ClearCollector>
      <CollectorID></CollectorID>
    </ClearCollector>
  </sFlowClearCollector>
</SFLOW>
```

### Table description

Item	Description
Feature name	SFLOW
Table name	sFlowClearCollector
Table type	Multi-instance table
Row name	ClearCollector
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CollectorID	Collector-id	Index	Unsigned integer. Value range: 1 to MaxCollectorID.	The MaxCollectorID depends on the device model.

# Contents

SFLOW.....	1
SFLOW/sFlowCollector .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
SFLOW/sFlowFlowSampler .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
SFLOW/sFlowCounterSampler .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
SFLOW/sFlowConfig .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
SFLOW/sFlowFlowInstance .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
SFLOW/sFlowCounterInstance .....	9
XML structure .....	9
Table description .....	10
Columns .....	10

# SFLOW

## SFLOW/sFlowCollector

This table contains SFLOW collector configuration information.

### XML structure

```
<SFLOW>
  <sFlowCollector>
    <Collector>
      <CollectorID></CollectorID>
      <VRF></VRF>
      <IpAddress></IpAddress>
      <Port></Port>
      <MaxDatagramSize></MaxDatagramSize>
      <Timeout></Timeout>
      <Description></Description>
    </Collector>
  </sFlowCollector>
</SFLOW>
```

### Table description

Item	Description
Feature name	SFLOW
Table name	sFlowCollector
Table type	Multi-instance table
Row name	Collector
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CollectorID	Collector-id	Index	Unsigned integer. Value range: 1 to MaxCollectorID.	The value of MaxCollectorID depends on the device model.
VRF	VRF instance name	N/A	String, case sensitive. Length: 1 to 31 characters.	If the SFLOW host is on the public network, the length of characters is 0.
IpAddress	The IPv4address or IPv6address of sFlow Collector	N/A	String, dotted decimal notation or Hexadecimal string, colon-separated.	For the create and replace operations, IpAddress must be configured. For the merge operation, IpAddress must be configured only when the instance is not exist. For the delete and remove operations, IpAddress cannot be configured.
Port	UDP port of sFlow Collector	N/A	Unsigned integer. Value range: 1 to 65535. Default: 6343.	N/A
MaxDatagramSize	The max size of sFlow datagram	N/A	Unsigned integer. Value range: 200 to 3000. Default: 1400.	N/A
Timeout	The agetime of sFlow Collector	N/A	Unsigned integer. Value range: 0 to 2147483647. Default: 0.	0 means the instance is static.



Column name	Column description	Column type	Data type and restrictions	Remarks
Description	Description of sFlow Collector	N/A	String, case insensitive. Length: 1 to 127 characters.	For the create and replace operations, Description must be configured. For the merge operation, Description must be configured only when the instance is not exist.

## SFLOW/sFlowFlowSampler

This table contains SFLOW sampler configuration information.

### XML structure

```

<SFLOW>
  <sFlowFlowSampler>
    <FlowSampler>
      <IfIndex></IfIndex>
      <CollectorID></CollectorID>
      <PacketSamplingRate></PacketSamplingRate>
      <SamplingMode></SamplingMode>
      <MaxHeaderSize></MaxHeaderSize>
    </FlowSampler>
  </sFlowFlowSampler>
</SFLOW>

```

### Table description

Item	Description
Feature name	SFLOW
Table name	sFlowFlowSampler
Table type	Multi-instance table
Row name	FlowSampler
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	<p>Layer 2 Ethernet interface</p> <p>Layer 3 Ethernet interface</p> <p>Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.</p>
CollectorID	Collector-id	N/A	<p>Unsigned integer.</p> <p>Value range: 1 to MaxCollectorID.</p>	The value of MaxCollectorID depends on the device model.
PacketSamplingRate	sflow sampling-rate	N/A	<p>Unsigned integer.</p> <p>Value range: MinSamplerRate to MaxSamplerRate.</p>	Values of MinSamplerRate and MaxSamplerRate depend on the device model.
SamplingMode	SamplingMode of SFLOW	N/A	<p>Unsigned integer.</p> <ul style="list-style-type: none"> <li>1—random .</li> <li>2—determine</li> </ul>	The default value of SamplingMode depends on the device model.
MaxHeaderSize	Maximum number of bytes that can be copied	N/A	<p>Unsigned integer.</p> <p>Value range: 18 to 512.</p> <p>Default: 128</p>	N/A

## SFLOW/sFlowCounterSampler

This table contains SFLOW counter sampler configuration information.

## XML structure

```
<SFLOW>
  <sFlowCounterSampler>
    <CounterSampler>
      <IfIndex></IfIndex>
      <CollectorID></CollectorID>
      <Interval></Interval>
    </CounterSampler>
  </sFlowCounterSampler>
</SFLOW>
```

## Table description

Item	Description
Feature name	SFLOW
Table name	sFlowCounterSampler
Table type	Multi-instance table
Row name	CounterSampler
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet interface. Layer 3 Ethernet interface. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in Ifmgr NETCONF XML API Configuration Reference.
CollectorID	Collector-id	N/A	Unsigned integer. Value range: 1 to MaxCollectorID.	The value of MaxCollectorID depends on the device model.
Interval	The interval of counter sampling	N/A	Unsigned integer. Value range: 2 to 86400.	Counter sampling is disabled as default.

## SFLOW/sFlowConfig

This table contains SFLOW config configuration information.

## XML structure

```

<SFLOW>
  <sFlowConfig>
    <AgentIpAddress></AgentIpAddress>
    <SourceIpv4Address></SourceIpv4Address>
    <SourceIpv6Address></SourceIpv6Address>
  </sFlowConfig>
</SFLOW>

```

## Table description

Item	Description
Feature name	SFLOW
Table name	sFlowAgent
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
AgentIpAddress	The IPv4address or IPv6address of sFlow agent	N/A	String, dotted decimal notation or Hexadecimal string, colon-separated.
SourceIpv4Address	The IPv4address of sFlow source	N/A	String, dotted decimal notation or Hexadecimal string, colon-separated.
SourceIpv6Address	The IPv6address of sFlow source	N/A	String, dotted decimal notation or Hexadecimal string, colon-separated.

## SFLOW/sFlowFlowInstance

This table contains sFlow flow instance configuration information.

## XML structure

```
<SFLOW>
  <sFlowFlowInstance>
    <FlowInstance>
      <IfIndex></IfIndex>
      <Instance></Instance>
    </FlowInstance>
  </sFlowFlowInstance>
</SFLOW>
```

```

    <CollectorID></CollectorID>
    <PacketSamplingRate></PacketSamplingRate>
    <SamplingMode></SamplingMode>
    <MaxHeaderSize></MaxHeaderSize>
  </FlowInstance>
</sFlowFlowInstance>
</SFLOW>

```

## Table description

Item	Description
Feature name	SFLOW
Table name	sFlowFlowInstance
Table type	Multi-instance table
Row name	FlowInstance
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	<p>Layer 2 Ethernet interfaces and Layer 3 Ethernet interfaces are supported.</p> <p>Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmg NETCONF XML API Configuration Reference.</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
Instance	sFlow instance ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
CollectorID	Collector ID	N/A	Unsigned integer. Value range: 1 to MaxCollectorID.	The value of MaxCollectorID varies by device model.
PacketSamplingRate	Flow sampling rate	N/A	Unsigned integer. Value range: MinSamplerRate to MaxSamplerRate.	Values of MinSamplerRate and MaxSamplerRate vary by device model.
SamplingMode	Flow sampling mode	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>1—random.</li> <li>2—determine.</li> </ul>	The default value of SamplingMode varies by device model.
MaxHeaderSize	Maximum number of bytes that can be copied	N/A	Unsigned integer. Value range: 18 to 512. Default: 128	N/A

## SFLOW/sFlowCounterInstance

This table contains SFLOW counter instance configuration information.

### XML structure

```

<SFLOW>
  <sFlowCounterInstance>
    <CounterInstance>
      <IfIndex></IfIndex>
      <Instance></Instance>
      <CollectorID></CollectorID>
      <Interval></Interval>
    </CounterInstance>
  </sFlowCounterInstance>
</SFLOW>

```

## Table description

Item	Description
Feature name	SFLOW
Table name	sFlowCounterInstance
Table type	Multi-instance table
Row name	CounterInstance
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet interfaces and Layer 3 Ethernet interfaces are supported.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Instance	sFlow instance ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
CollectorID	Collector ID	N/A	Unsigned integer. Value range: 1 to MaxCollectorID.	The value of MaxCollectorID varies by device model.



Column name	Column description	Column type	Data type and restrictions	Remarks
Interval	Counter sampling interval	N/A	Unsigned integer. Value range: 2 to 86400.	Counter sampling is disabled by default.

# Contents

SFLOW.....	1
SFLOW/sFlowCollector .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
SFLOW/sFlowFlowSampler .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
SFLOW/sFlowCounterSampler .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
SFLOW/sFlowConfig .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
SFLOW/sFlowSpecification .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
SFLOW/sFlowFlowInstance .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
SFLOW/sFlowCounterInstance .....	9
XML structure .....	9
Table description .....	9
Columns .....	10

# SFLOW

## SFLOW/sFlowCollector

This table contains SFLOW collector configuration information.

### XML structure

```
<SFLOW>
  <sFlowCollector>
    <Collector>
      <CollectorID></CollectorID>
      <VRF></VRF>
      <IpAddress></IpAddress>
      <Port></Port>
      <MaxDatagramSize></MaxDatagramSize>
      <Timeout></Timeout>
      <AgeTime></AgeTime>
      <Description></Description>
    </Collector>
  </sFlowCollector>
</SFLOW>
```

### Table description

Item	Description
Feature name	SFLOW
Table name	sFlowCollector
Table type	Multi-instance table
Row name	Collector
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CollectorID	Collector-id	Index	Unsigned integer. Value range: 1 to MaxCollectorID.	The value of MaxCollectorID depends on the device model.
VRF	VRF instance name	N/A	String, case sensitive. Length: 1 to 31 characters.	If the SFLOW host is on the public network, the length of characters is 0.
IpAddress	The IPv4address or IPv6address of sFlow Collector	N/A	String, dotted decimal notation or Hexadecimal string, colon-separated.	N/A
Port	UDP port of sFlow Collector	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
MaxDatagramSize	The max size of sFlow datagram	N/A	Unsigned integer. Value range: 200 to 3000.	N/A
Timeout	The age time of sFlow Collector	N/A	Unsigned integer. Value range: 0 to 2147483647.	0 means the instance is static.
AgeTime	The remaining aging time of sFlow Collector	N/A	Unsigned integer. Value range: 0 to 2147483647.	N/A
Description	Description of sFlow Collector	N/A	String, case insensitive. Length: 1 to 127 characters.	N/A

## SFLOW/sFlowFlowSampler

This table contains SFLOW sampler configuration information.

## XML structure

```
<SFLOW>
  <sFlowFlowSampler>
```

```

<FlowSampler>
  <IfIndex></IfIndex>
  <CollectorID></CollectorID>
  <PacketSamplingRate></PacketSamplingRate>
  <SamplingMode></SamplingMode>
  <MaxHeaderSize></MaxHeaderSize>
  <Status></Status>
</FlowSampler>
</sFlowFlowSampler>
</SFLOW>

```

## Table description

Item	Description
Feature name	SFLOW
Table name	sFlowFlowSampler
Table type	Multi-instance table
Row name	FlowSampler
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet interface Layer 3 Ethernet interface
CollectorID	Collector-id	N/A	Unsigned integer. Value range: 1 to MaxCollectorID.	The value of MaxCollectorID depends on the device model.
PacketSamplingRate	sflow sampling-rate	N/A	Unsigned integer. Value range: MinSamplerRate to MaxSamplerRate.	The values of MinSamplerRate and MaxSamplerRate depend on the device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
SamplingMode	SamplingMode of SFLOW	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>1—random .</li> <li>2—determine</li> </ul>	The default value of SamplingMode depends on the device model.
MaxHeaderSize	Maximum number of bytes that can be copied	N/A	Unsigned integer. Value range: 18 to 512. Default: 128	N/A
Status	Status of SFLOW	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—Suspended.</li> <li>1—Active</li> </ul>	N/A

## SFLOW/sFlowCounterSampler

This table contains SFLOW counter sampler configuration information.

### XML structure

```

<SFLOW>
  <sFlowCounterSampler>
    <CounterSampler>
      <IfIndex></IfIndex>
      <CollectorID></CollectorID>
      <Interval></Interval>
      <Status></Status>
    </CounterSampler>
  </sFlowCounterSampler>
</SFLOW>

```

### Table description

Item	Description
Feature name	SFLOW
Table name	sFlowCounterSampler
Table type	Multi-instance table
Row name	CounterSampler
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ifindex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet interface. Layer 3 Ethernet interface.
CollectorID	Collector-id	N/A	Unsigned integer. Value range: 1 to MaxCollectorID.	The value of MaxCollectorID depends on the device model.
Interval	The interval of counter sampling	N/A	Unsigned integer. Value range: 2 to 86400.	Counter sampling is disabled as default.
Status	Status of SFLOW	N/A	<b>Unsigned integer.</b> <ul style="list-style-type: none"><li>0—Suspended.</li><li>1—Active</li></ul>	N/A

## SFLOW/sFlowConfig

This table contains SFLOW config configuration information.

## XML structure

```
<SFLOW>
  <sFlowConfig>
    <AgentIpAddress></AgentIpAddress>
    <SourceIpv4Address></SourceIpv4Address>
    <SourceIpv6Address></SourceIpv6Address>
  </sFlowConfig>
</SFLOW>
```

## Table description

Item	Description
Feature name	SFLOW
Table name	sFlowAgent

Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
AgentIpAddress	The IPv4address or IPv6address of sFlow agent	N/A	String, dotted decimal notation or Hexadecimal string, colon-separated.
SourceIpV4Address	The IPv4address of sFlow source	N/A	String, dotted decimal notation or Hexadecimal string, colon-separated.
SourceIpV6Address	The IPv6address of sFlow source	N/A	String, dotted decimal notation or Hexadecimal string, colon-separated.

## SFLOW/sFlowSpecification

This table contains SFLOW specification information.

## XML structure

```

<SFLOW>
  <sFlowSpecification>
    <MaxCollectorID></MaxCollectorID>
    <MinSamplerRate></MinSamplerRate>
    <MaxSamplerRate></MaxSamplerRate>
    <DefaultSamplerMode></DefaultSamplerMode>
  </sFlowSpecification>
</SFLOW>

```



## Table description

Item	Description
Feature name	SFLOW
Table name	sFlowSpecification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
MaxCollectorID	The maximum of CollectorID.	N/A	Unsigned integer.
MinSamplerRate	The minimum of samplerRate.	N/A	Unsigned integer.
MaxSamplerRate	The maximum of SamplerRate.	N/A	Unsigned integer.
DefaultSamplerMode	The default of SamplerMode	N/A	Unsigned integer.

## SFLOW/sFlowFlowInstance

This table contains sFlow flow instance configuration information.

## XML structure

```
<SFLOW>
  <sFlowFlowInstance>
    <FlowInstance>
      <IfIndex></IfIndex>
      <Instance></Instance>
      <CollectorID></CollectorID>
      <PacketSamplingRate></PacketSamplingRate>
      <SamplingMode></SamplingMode>
      <MaxHeaderSize></MaxHeaderSize>
      <Status></Status>
    </FlowInstance>
  </sFlowFlowInstance>
</SFLOW>
```

## Table description

Item	Description
Feature name	SFLOW
Table name	sFlowFlowInstance
Table type	Multi-instance table
Row name	FlowInstance
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Layer 2 Ethernet interfaces and Layer 3 Ethernet interfaces are supported.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Instance	sFlow instance ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
CollectorID	Collector ID	N/A	Unsigned integer. Value range: 1 to MaxCollectorID.	The value of MaxCollectorID varies by device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
PacketSamplingRate	Flow sampling rate	N/A	Unsigned integer. Value range: MinSamplerRate to MaxSamplerRate.	The values of MinSamplerRate and MaxSamplerRate vary by device model.
SamplingMode	Flow sampling mode	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>1—random.</li> <li>2—determine.</li> </ul>	The default value of SamplingMode varies by device model.
MaxHeaderSize	Maximum number of bytes that can be copied	N/A	Unsigned integer. Value range: 18 to 512. Default: 128	N/A
Status	Status of sFlow	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—Suspended.</li> <li>1—Active.</li> </ul>	N/A

## SFLOW/sFlowCounterInstance

This table contains sFlow counter instance configuration information.

### XML structure

```

<SFLOW>
  <sFlowCounterInstance>
    <CounterInstance>
      <IfIndex></IfIndex>
      <Instance></Instance>
      <CollectorID></CollectorID>
      <Interval></Interval>      <Status></Status>
    </CounterInstance>
  </sFlowCounterInstance>
</SFLOW>

```

### Table description

Item	Description
Feature name	SFLOW

Table name	sFlowCounterInstance
Table type	Multi-instance table
Row name	CounterInstance
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ifindex	Interface index	Index	Unsigned integer.	<p>Layer 2 Ethernet interfaces and Layer 3 Ethernet interfaces are supported.</p> <p>Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.</p>
Instance	sFlow instance ID	Index	Unsigned integer. Value range: 1 to 4.	N/A
CollectorID	Collector ID	N/A	Unsigned integer. Value range: 1 to MaxCollectorID.	The value of MaxCollectorID varies by device model.
Interval	Counter sampling interval	N/A	Unsigned integer. Value range: 2 to 86400.	Counter sampling is disabled by default.
Status	Status of sFlow	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0—Suspended.</li> <li>1—Active.</li> </ul>	N/A

# Contents

SFLOW.....	1
SFLOW/sFlowCollector .....	1
SFLOW/sFlowFlowSampler .....	1
SFLOW/sFlowCounterSampler .....	2
SFLOW/sFlowConfig .....	2
SFLOW/sFlowSpecification .....	2
SFLOW/sFlowFlowInstance .....	2
SFLOW/sFlowCounterInstance .....	3
SFOW/sFlowClearCollector.....	3

# SFLOW

## SFLOW/sFlowCollector

Message	Explanation
Invalid IP address. 非法的IP地址。	Invalid IP address, please modify configuration under guidance. 非法的IP地址，请按照配置指导进行配置
The value is out of range. 参数值超出范围。	The value is out of range, please modify configuration under guidance. 参数值超出范围，请按照配置指导进行配置
Configuration items don't meet the requirements. 不符合配置要求。	Configuration items don't meet the requirements, please modify configuration under guidance. 不符合配置要求，请按照配置指导进行配置
The same IP address already exists. 相同的IP地址已经存在。	Same configuration has existed when creating a new configuration. 相同的IP地址已经存在。请按照配置指导进行配置
The same IPv6 address already exists. 相同的IPV6地址已经存在。	Same configuration has existed when creating a new configuration. 相同的IPV6地址已经存在。请按照配置指导进行配置
Invalid IPv6 address. 非法的IPV6地址。	Invalid configuration, please modify configuration under guidance. 非法的IPV6地址。请按照配置指导进行配置

## SFLOW/sFlowFlowSampler

Message	Explanation
The value is out of range. 参数值超出范围。	The value is out of range, please modify configuration under guidance. 参数值超出范围，请按照配置指导进行配置
The collector ID is already binded 此collector ID已经被绑定。	The collector ID is already binded, please modify configuration under guidance. 此collector ID已经被绑定，请按照配置指导进行配置

# SFLOW/sFlowCounterSampler

Message	Explanation
The value is out of range. 参数值超出范围。	The value is out of range, please modify configuration under guidance. 参数值超出范围。请按照配置指导进行配置
The collector ID is already binded 此collector ID已经被绑定。	The collector ID is already binded, please modify configuration under guidance. 此collector ID已经被绑定。请按照配置指导进行配置

# SFLOW/sFlowConfig

Message	Explanation
Invalid IP address. 非法的IP地址。	Invalid IP address, please modify configuration under guidance. 非法的IP地址。请按照配置指导进行配置
Invalid IPv6 address. 非法的IPV6地址。	Invalid IPv6 address, please modify configuration under guidance. 非法的IPV6地址，请按照配置指导进行配置

# SFLOW/sFlowSpecification

Message	Explanation

# SFLOW/sFlowFlowInstance

Message	Explanation
The value is out of range. 参数值超出范围。	The value is out of range, please modify configuration under guidance. 参数值超出范围。请按照配置指导进行配置
The collector ID is already binded 此collector ID已经被绑定。	The collector ID is already binded, please modify configuration under guidance. 此collector ID已经被绑定。请按照配置指导进行配置

## SFLOW/sFlowCounterInstance

Message	Explanation
The value is out of range. 参数值超出范围。	The value is out of range, please modify configuration under guidance. 参数值超出范围。请按照配置指导进行配置
The collector ID is already binded 此collector ID已经被绑定。	The collector ID is already binded, please modify configuration under guidance. 此collector ID已经被绑定。请按照配置指导进行配置

## SFLOW/sFlowClearCollector

Message	Explanation
The value is out of range. 参数值超出范围。	The value is out of range, please modify configuration under guidance. 参数值超出范围。请按照配置指导进行配置



# Contents

- SLBG .....1
  - SLBG/Groups .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - SLBG/Members .....2
    - XML structure .....2
    - Table description .....2
    - Columns .....3

# SLBG

## SLBG/Groups

This table contains information about service loopback groups.

### XML structure

```
<SLBG>
  <SLBGGroups>
    <SLBGGroup>
      <GroupId></GroupId>
      <ServiceType></ServiceType>
    </SLBGGroup>
  </SLBGGroups>
</SLBG>
```

### Table description

Item	Description
Feature name	SLBG
Table name	SLBGGroups
Table type	Multi-instance table
Row name	SLBGGroup
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupId	Service loopback group ID	Index	Unsigned integer. Value range: 1 to 1024.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceType	Service type of the service loopback group	N/A	Unsigned integer. Default: 1.	<p>Required.</p> <p>You cannot change the service type of a service loopback group.</p> <p>You can configure only one service loopback group for a service type.</p> <p>A service loopback group supports one of the following services:</p> <ul style="list-style-type: none"> <li>• <b>1</b>—Tunnel service.</li> <li>• <b>2</b>—Multicast tunnel service.</li> <li>• <b>3</b>—Tunnel service and multicast tunnel service.</li> <li>• <b>4</b>—Multiport service.</li> <li>• <b>8</b>—VSI gateway service.</li> </ul>

## SLBG/Members

This table contains member port information for service loopback groups.

## XML structure

```

<SLBG>
  <SLBGMembers>
    <SLBGMember>
      <IfIndex></IfIndex>
      <GroupId></GroupId>
    </SLBGMember>
  </SLBGMembers>
</SLBG>

```

## Table description

Item	Description
Feature name	SLBG.
Table name	SLBGMembers.
Table type	Multi-instance table.
Row name	SLBGMember.
Restrictions	This table supports only Layer 2 Ethernet interfaces and IRF physical interfaces.
Support for row creation and deletion	No.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Member port index	Index	Unsigned integer.	Interface name or index Some versions support interface name. For more information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
GroupId	Service loopback group ID	N/A	Unsigned integer. Value range: 1 to 1024.	Required. You can add a port to only one service loopback group.

# Contents

- SLBG .....1
  - SLBG/Groups .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - SLBG/Members .....2
    - XML structure .....2
    - Table description .....2
    - Columns .....2

# SLBG

## SLBG/Groups

This table contains information about service loopback groups.

### XML structure

```
<SLBG>
  <SLBGGroups>
    <SLBGGroup>
      <GroupId></GroupId>
      <ServiceType></ServiceType>
      <MemberList></MemberList>
    </SLBGGroup>
  </SLBGGroups>
</SLBG>
```

### Table description

Item	Description
Feature name	SLBG
Table name	SLBGGroups
Table type	Multi-instance table
Row name	SLBGGroup
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupId	Service loopback group ID	Index	Unsigned integer. Value range: 1 to 1024.
ServiceType	Service type of the service loopback group	N/A	Unsigned integer. Default: 1. A service loopback group supports one of the following services: <ul style="list-style-type: none"><li>• <b>1</b>—Tunnel service.</li><li>• <b>2</b>—Multicast tunnel service.</li><li>• <b>3</b>—Tunnel service and multicast tunnel service.</li></ul>

			<ul style="list-style-type: none"> <li>• <b>4</b>—Multiport service.</li> <li>• <b>8</b>—VSI gateway service.</li> </ul>
MemberList	Member list	N/A	<p>Bitmap. No length restrictions.</p> <p>Each octet within this value specifies a set of eight ports, with the first octet specifying ports 1 through 8, the second octet specifying ports 9 through 16, and so on. Within each octet, the most significant bit represents the lowest numbered port, and the least significant bit represents the highest numbered port. Each port of the device is represented by a single bit within the value of this object. If that bit has a value of 1, the port is included in the set of ports. The port is not included if its bit has a value of 0.</p>

## SLBG/Members

This table contains member port information for service loopback groups.

### XML structure

```

<SLBG>
  <SLBGMembers>
    <SLBGMember>
      <IfIndex></IfIndex>
      <GroupId></GroupId>
      <SelectedStatus></SelectedStatus>
    </SLBGMember>
  </SLBGMembers>
</SLBG>

```

### Table description

Item	Description
Feature name	SLBG.
Table name	SLBGMembers.
Table type	Multi-instance table.
Row name	SLBGMember.
Restrictions	This table supports only Layer 2 Ethernet interfaces and IRF physical interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Member port index	Index	Unsigned integer.
GroupId	Service loopback group ID	N/A	Unsigned integer. Value range: 1 to 1024.
SelectedStatus	Selected status of the member port	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Unselected.</li> <li>• 1—Selected.</li> </ul>



# Contents

SLBG .....1

    SLBG/Groups .....1

    SLBG/Members.....1

# SLBG

## SLBG/Groups

Message	Explanation
A service loopback group of this type already exists. 该类型的业务环回组已经存在。	A system can only have a type of service group.
Can not modify service type of the service loopback group. 不允许修改业务环回组的业务类型。	The type of a service group can not be changed.

## SLBG/Members

Message	Explanation
%s has been assigned to another service loopback group. %s已经加入其他业务环回组。	A interface can only assigned to a service group.
The service loopback group doesn't exist. 指定的业务环回组不存在。	The group the port assigned to does not exist.
The port can't be assigned to a service loopback group. 接口不能加入业务环回组。	The port can't be assigned to a service loopback group.
Failed to switch the port type. 切换接口类型失败。	Failed to switch the port type.

# Contents

- SmartMC ..... 1
  - SmartMC/StartProgress ..... 1
  - XML structure ..... 1
  - Table description ..... 1
  - Columns ..... 1

# SmartMC

## SmartMC/StartProgress

This table contains SmartMC process information.

### XML structure

```
<SmartMC>
  <StartProgress>
    <Role></Role>
    <Username></Username>
    <Password></Password>
  </StartProgress>
</SmartMC>
```

### Table description

Item	Description
Feature name	SmartMC
Table name	StartProgress
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global SmartMC functions.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Role	Role of the SmartMC	N/A	String. Members include: <ul style="list-style-type: none"><li>TM.</li><li>TC.</li></ul>	N/A
Username	Local username	N/A	String, case-insensitive. Length: 1 to 55 characters.	Example: admin
Password	Password of the local user	N/A	String. Length: 1 to 63 characters.	Example: 123

# Contents

SmartMC .....	1
SmartMC/DeviceList .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
SmartMC/LinkRelation .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
SmartMC/StartProgress .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# SmartMC

## SmartMC/DeviceList

This table contains all member devices information.

### XML structure

```
<SmartMC>
  <DeviceList>
    <Device>
      <MacAddress></MacAddress>
      <Id></Id>
      <Role></Role>
      <Status></Status>
      <HostName></HostName>
      <Model></Model>
      <Hop></Hop>
      <IpAddress></IpAddress>
      <SerialNumber></SerialNumber>
      <SysVersion></SysVersion>
      <IrfCount></IrfCount>
      <IsSnapshot></IsSnapshot>
    </Device>
  </DeviceList>
</SmartMC>
```

### Table description

Item	Description
Feature name	SmartMC
Table name	DeviceList
Table type	Multi-instance table
Row name	Device
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Id	Member device ID	Index	Unsigned integer Value range: 0 to 255	

MacAddress	Device MAC	NA	NA	Example: 84d9-3196-75ec
Role	Device role	NA	Enumeration: • 1—manager • 2—member	
Status	Device status	NA	Enumeration: • 1—normal • 2—offline	
HostName	Sysname	NA	String Length: 1 to 64 characters	
Model	Device model	NA	String Length: 1 to 32 characters	
Hop	Hop from member to manager	NA	Unsigned integer Value range: 0 to 255	
IpAddress	IP address of the device	NA	IpAddress IPv4: String, dotted decimal notation.	Example: 192.168.22.188
SerialNumber	Device serial number	NA	String Length: 1 to 64 characters	
SysVersion	System version	NA	String Length: 1 to 32 characters	
IrfCount	IRF member count	NA	Unsigned integer	
IsSnapshot	Save Topology	NA	Boolean: • true • false	

## SmartMC/LinkRelation

This table contains the relation of devices.

### XML structure

```

<SmartMC>
  <LinkRelation>
    <Relation>
      <SrcId></SrcId>
      <IfIndex></IfIndex>
      <SrcMAC></SrcMAC>
      <DesId></DesId>
      <DesMAC></DesMAC>
      <STPStatus></STPStatus>
      <LinkStatus></LinkStatus>
    
```

```

    </Relation>
  </LinkRelation>
</SmartMC>

```

## Table description

Item	Description
Feature name	SmartMC
Table name	LinkRelation
Table type	Multi-instance table
Row name	Relation
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrclId	Link source ID	Index	Unsigned integer. Value range: 0 to 255.	N/A
IfIndex	Interface index	Index	Unsigned integer.	N/A
DesId	Link destination ID	N/A	Unsigned integer. Value range: 0 to 255.	N/A
SrcMAC	Link source MAC	N/A	Source MAC address.	Example: 84d9-3196-75ec
DesMAC	Link destination MAC	N/A	Destination MAC address.	Example: 84d9-3196-75fc
STPStatus	STP block status	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	
LinkStatus	Link status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—normal.</li> <li>2—down.</li> <li>3—new</li> </ul>	

## SmartMC/StartProgress

This table contains SmartMC process information.

## XML structure

```

<SmartMC>
  <StartProgress>

```



```

    <Role></Role>
    <Username></Username>
  </StartProgress>
</SmartMC>

```

## Table description

Item	Description
Feature name	SmartMC
Table name	StartProgress
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Role	Role of the SmartMC	N/A	String. Members include: <ul style="list-style-type: none"> <li>TM.</li> <li>TC.</li> </ul>	N/A
Username	Local username	N/A	String, case-insensitive. Length: 1 to 55 characters.	Example: admin

# Contents

SmartMC .....2

SmartMC/StartProgress .....2

# SmartMC

## SmartMC/StartProgress

Message	Explanation
Failed to configure the topology master. 配置为管理设备失败。	Failed to configure the topology master. 配置为管理设备失败。
Invalid Username or Password. 非法的用户名或密码。	Invalid Username or Password. 用户名或密码不能是全0.
The device is already configured as a topology master. 设备角色已经是管理者。	The device is already configured as a topology master. SmartMC网络只能有一个管理者，当前设备角色已经是管理者。
Extra username or password. 多余的用户名或密码。	Extra username or password. 成员设备加入SmartMC网络前不需要设置用户名和密码,使用缺省用户名和密码。
Invalid role. 无效的用户角色。	Invalid role. SmartMC网络中的设备用户角色有TM和TC两种，请选择有效的用户角色。

# Contents

Feature .....	1
SNMP/NotificationStatus .....	1
XML structure .....	1
Table description .....	1
Columns .....	1

# Feature

## SNMP/NotificationStatus

This table contains SNMP notification status action.

### XML structure

```
<SNMP>
  <NotificationStatus>
    <EnableAll></EnableAll>
  </NotificationStatus>
</SNMP>
```

### Table description

Item	Description
Feature name	SNMP
Table name	NotificationStatus
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EnableAll	Status of all the SNMP notifications.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>	N/A

# Contents

SNMP.....	1
SNMP/System.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
SNMP/Agent.....	2
XML structure.....	2
Table description.....	2
Columns.....	3
SNMP/Notification.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
SNMP/Communities.....	5
XML structure.....	5
Table description.....	6
Columns.....	6
SNMP/Contexts.....	8
XML structure.....	8
Table description.....	8
Columns.....	8
SNMP/CommunityMappings.....	9
XML structure.....	9
Table description.....	9
Columns.....	9
SNMP/MIBViews.....	10
XML structure.....	10
Table description.....	10
Columns.....	11
SNMP/Groups.....	11
XML structure.....	11
Table description.....	12
Columns.....	12
SNMP/Users.....	14
XML structure.....	14
Table description.....	15
Columns.....	16
SNMP/RemoteManages.....	18
XML structure.....	18
Table description.....	19
Columns.....	19
SNMP/TargetHosts.....	19
XML structure.....	19
Table description.....	20
Columns.....	20

# SNMP

## SNMP/System

This table contains SNMP system information.

### XML structure

```
<SNMP>
  <System>
    <AgentStatus></AgentStatus>
    <Version>
      <V1></V1>
      <V2C></V2C>
      <V3></V3>
    </Version>
    <Location></Location>
    <Contact></Contact>  </System>
</SNMP>
```

### Table description

Item	Description
Feature name	SNMP
Table name	System
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AgentStatus	SNMP status	N/A	Enumeration: <ul style="list-style-type: none"><li>enable</li><li>disable</li></ul>	You must separately set AgentStatus to enable or disable SNMP.
V1	SNMP V1 status	N/A	Enumeration: <ul style="list-style-type: none"><li>enable</li><li>disable</li></ul> Default: disable.	N/A
V2C	SNMP V2C status	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
V3	SNMP V3 status	N/A	<ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul> Default: disable.	N/A
Location	SNMP physical location information	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable</li> <li>disable</li> </ul> Default: enable.	Using zero-length to restore to default value.
Contact	SNMP contact information	N/A	String. Length: 0 to 255 characters.	Using zero-length to restore to default value.

## SNMP/Agent

This table contains SNMP agent information.

### XML structure

```

<SNMP>
  <Agent>
    <LocalEngineId></LocalEngineId>
    <AgentUdpPort></AgentUdpPort>
    <PacketMaxSize></PacketMaxSize>
    <GetLog></GetLog>
    <SetLog></SetLog>
    <NotificationLog></NotificationLog>
  </Agent>
</SNMP>

```

### Table description

Item	Description
Feature name	SNMP
Table name	Agent
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalEngineId	Local engine ID of agent	N/A	Hex String. Length: 10 to 64 characters.	The number of characters must be even. All-zero and all-F strings are invalid.
AgentUdpPort	UDP port for receiving SNMP packets	N/A	Unsigned integer. Value range: 1 to 65535. Default: 161.	N/A
PacketMaxSize	Maximum size of packets that the agent can receive or send Unit: byte.	N/A	Unsigned integer. Value range: 484 to 17940. Default: 1500.	N/A
GetLog	Logging status of get.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: false	N/A
SetLog	Logging status of set.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: false	N/A
NotificationLog	Logging status of notification.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: false	N/A

## SNMP/Notification

This table contains SNMP notification information.

## XML structure

```
<SNMP>
  <Notification>
    <ColdStart></ColdStart>
    <WarmStart></WarmStart>
    <AuthenticationFailure></AuthenticationFailure>
    <QueueSize></QueueSize>
    <QueueLifeTime></QueueLifeTime>
    <TrapSource></TrapSource>
    <InformSource></InformSource>
  </Notification>
```

< /SNMP>

## Table description

Item	Description
Feature name	SNMP
Table name	Notification
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ColdStart	Status of SNMP coldStart notification.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: true	N/A
WarmStart	Status of SNMP warmStart notification.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: true	N/A
AuthenticationFailure	Status of SNMP authenticationFailure notification.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul> Default: true	N/A
QueueSize	Notification queue size.	N/A	Unsigned integer. Value range: 1 to 1000. Default: 100.	N/A
QueueLifeTime	Lifetime of notifications in the SNMP notification queue. Unit: second.	N/A	Unsigned integer. Value range: 1 to 2592000. Default: 120.	N/A
TrapSource	An interface name, of which primary IP address as the source IP address for the traps.	N/A	String. Length: 2 to 47 characters. Default: no value is specified.	Only the interface which can be assigned an IP address. (The interface type is layer 3 but not NULL or controller.)  The configuration will fail if the interface has not been created and will take effect only after a valid IP address is

Column name	Column description	Column type	Data type and restrictions	Remarks
InformSource	An interface name, of which primary IP address as the source IP address for the informRequests.	N/A	String. Length: 2 to 47 characters. Default: no value is specified.	assigned to the specified interface.  Only the interface which can be assigned an IP address. (The interface type is layer 3 but not NULL or controller.)  The configuration will fail if the interface has not been created and will take effect only after a valid IP address is assigned to the specified interface.

## SNMP/Communities

This table contains SNMP community information.

### XML structure

```

<SNMP>
  <Communities>
    <Community>
      <Name></Name>
      <Type></Type>
      <Role></Role>
      <MIBView></MIBView>
      <IPv4BasicACL>
        <Number></Number>
      </IPv4BasicACL>
      <IPv4AdvancedACL>
        <Number></Number>
      </IPv4AdvancedACL>
      <IPv6BasicACL>
        <Number></Number>
      </IPv6BasicACL>
      <IPv6AdvancedACL>
        <Number></Number>
      </IPv6AdvancedACL>
    </Community>
  </Communities>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	Communities
Table type	Multi-instance table
Row name	Community
Restrictions	<p>The max number of tables depends on SNMP/Capabilities/MaxCommunities in data namespace.</p> <p>'Number' and 'Name' are two configuration ways.</p> <p>Only one way can take effect at the same time for both 'IPv4BasicACL', 'IPv4AdvancedACL', 'IPv6BasicACL' and 'IPv6AdvancedACL'.</p>
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Community name	Index	String. Length:1 to 32 characters.	N/A
Type	Community type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0 – read-only (Default)</li> <li>1 – read-write</li> <li>2 – use-RBAC</li> </ul>	<p>If specified '2 - use-RBAC', then a 'Role' must be included together while 'MIBView' is meaningless.</p> <p>For the other enumerations, 'Role' is meaningless, and must not be included.</p>
Role	User role name for the community.	N/A	String. Length:1 to 63 characters.	Applicable only when 'Type' is '2 - use-RBAC'.
MIBView	MIB view name available for the community.	N/A	String. Length:1 to 32 characters. Default: ViewDefault.	N/A
IPv4BasicACL	Specifies an IPv4 basic ACL to filter NMSs.	Data structure	Members include: Number	<p>If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.</p> <p>If the specified ACL does not have any rules, no NMS in this</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				community can access the SNMP agent.
Number	Number of IPv6 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv4AdvancedACL	Specifies an IPv4 advanced ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.  IPv4BasicACL and IPv4AdvancedACL can't be configured simultaneously
Number	Number of IPv4 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
IPv6BasicACL	Specifies an IPv6 basic ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv6 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv6AdvancedACL	Specifies an IPv6 advanced ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.  IPv6BasicACL and IPv6AdvancedACL can't be configured simultaneously
Number	Number of IPv6 advanced ACL.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 3000 to 3999.	

## SNMP/Contexts

This table contains SNMP context information.

### XML structure

```
<SNMP>
  <Contexts>
    <Context>
      <Name></Name>
    </Context>
  </Contexts>
</SNMP>
```

### Table description

Item	Description
Feature name	SNMP
Table name	Contexts
Table type	Multi-instance table
Row name	Context
Restrictions	The max number of tables depends on SNMP/Capabilities/MaxContexts in data namespace.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Context name	Index	String. Length:1 to 32 characters.	<p>An NMS and an SNMP agent can communicate with each other if the following conditions exist:</p> <ul style="list-style-type: none"> <li>No SNMP context is configured on the NMS and the SNMP agent.</li> <li>The NMS and the SNMP agent use the same SNMP</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
context.				

## SNMP/CommunityMappings

This table contains SNMP communities information.

### XML structure

```

<SNMP>
  <CommunityMappings>
    <Mapping>
      <Community></Community>
      <Context></Context>
    </Mapping>
  </CommunityMappings>
</SNMP>

```

### Table description

Item	Description
Feature name	SNMP
Table name	CommunityMappings
Table type	Multi-instance table
Row name	Mapping
Restrictions	The max number of tables depends on SNMP/Capabilities/MaxCommunityMappings in data namespace.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Community	Community name	Index	String. Length: 1 to 32 characters.	An NMS and an SNMP agent communicate with community, this community can map to a context name of processes in system, and then the NMS can communicate with specified process.

Column name	Column description	Column type	Data type and restrictions	Remarks
Context	Context name	N/A	String. Length:1 to 32 characters.	This column must be specified.

## SNMP/MIBViews

This table contains SNMP MIB view information.

### XML structure

```

<SNMP>
  <MIBViews>
    <View>
      <Name></Name>
      <SubTree></SubTree>
      <Type></Type>
      <Mask></Mask>
    </View>
  </MIBViews>
</SNMP>

```

### Table description

Item	Description
Feature name	SNMP
Table name	MIBViews
Table type	Multi-instance table
Row name	View
Restrictions	<p>The system creates the <b>ViewDefault</b> view when the SNMP agent is enabled.</p> <p>In this default MIB view, all MIB objects in the <b>iso</b> subtree but the <b>snmpUsmMIB</b>, <b>snmpVacmMIB</b>, and <b>snmpModules.18</b> subtrees are accessible.</p> <p>The max number of tables depends on SNMP/Capabilities/MaxMIBViews in data namespace, including the 4 default MIB view records.</p> <p>After deleting, the default MIB view records will be restored after</p>



	the system reboots, and the max number of rows can be created do not change.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	View name.	Index	String. Length:1 to 32 characters.	N/A
SubTree	A MIB subtree by its root node's OID or object name.	Index	String or dotted decimal notation string. Length:1 to 255 characters.	Example for OID, 1.3.6.1.2.1.1. Example for object name, iso.  When creating a row with OIDs, the 'SubTree' will be transform to object name automatic if the whole MIB tree in the system contained these OIDs.
Type	Access type to any node in the subtree.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – included</li> <li>2 – excluded</li> </ul>	This column must be specified.
Mask	A MIB subtree mask	N/A	Hex String. Length: 1 to 32 characters.  Default: no value is specified.	N/A

## SNMP/Groups

This table contains SNMP group information.

## XML structure

```

<SNMP>
  <Groups>
    <Group>
      <Name></Name>
      <SecurityMode></SecurityMode>
      <SecurityLevel></SecurityLevel>
      <ReadView></ReadView>
      <WriteView></WriteView>
    </Group>
  </Groups>
</SNMP>

```

```

<NotifyView></NotifyView>
<IPv4BasicACL>
  <Number></Number>
</IPv4BasicACL>
<IPv4AdvancedACL>
  <Number></Number>
</IPv4AdvancedACL>
<IPv6BasicACL>
  <Number></Number>
</IPv6BasicACL>
<IPv6AdvancedACL>
  <Number></Number>
</IPv6AdvancedACL>
</Group>
</Groups>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	<p>The max number of tables depends on SNMP/Capabilities/MaxGroups in data namespace.</p> <p>'Number' and 'Name' are two configuration ways.</p> <p>Only one way can take effect at the same time for both 'IPv4BasicACL', 'IPv4AdvancedACL', 'IPv6BasicACL' and 'IPv6AdvancedACL'.</p>
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Group name.	Index	String. <ul style="list-style-type: none"> <li>Length:1 to 32 characters.</li> </ul>	N/A
SecurityMode	The security model by this group is provided.	Index	Enumeration: <ul style="list-style-type: none"> <li>1 – v1</li> <li>2 – v2c</li> <li>3 – v3</li> </ul>	N/A
SecurityLevel	Security Level.	Index	Enumeration: <ul style="list-style-type: none"> <li>1 – noAuthNoPriv</li> </ul>	When 'SecurityMode' is '1 – v2' and '2 – v2c', the

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2 – authNoPriv</li> <li>3 – authPriv</li> </ul>	applicable value is just '1 - noAuthNoPriv'.
ReadView	MIB view for read-only access.	N/A	String. Length:1 to 32 characters. Default: ViewDefault.	N/A
WriteView	MIB view for read and write access.	N/A	String. Length:1 to 32 characters. Default: no value is specified.	If no read and write view is specified, this group cannot set any MIB object.
NotifyView	MIB view for notify access.	N/A	String. Length:1 to 32 characters. Default: no value is specified.	The SNMP agent sends notifications to the NMS in this group only for the MIB objects included in the notify view.  If no notify view is specified, the SNMP agent does not send any notification to the NMS in this group.  If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.
IPv4BasicACL	Specifies an IPv4 basic ACL to filter NMSs.	Data structure	Members include: Number	If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv4 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv4AdvancedACL	Specifies an IPv4 advanced ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.  IPv4BasicACL and IPv4AdvancedACL can't be configured simultaneously.
Number	Number of IPv4 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv6BasicACL	Specifies an IPv6 basic ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv6 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv6AdvancedACL	Specifies an IPv6 advanced ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.  IPv6BasicACL and IPv6AdvancedACL can't be configured simultaneously.
Number	Number of IPv6 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A

## SNMP/Users

This table contains SNMP user information.

### XML structure

```

<SNMP>
  <Users>
    <User>
      <SecurityMode></SecurityMode>
      <Name></Name>
      <EngineId></EngineId>
      <Address></Address>
      <VRF></VRF>
      <GroupControl>
        <Group></Group>
        <Role></Role>
      </GroupControl>
    </User>
  </Users>
</SNMP>

```

```

</GroupControl>
<SecurityParam>
  <AuthProtocol></AuthProtocol>
  <AuthKey></AuthKey>
  <PrivProtocol></PrivProtocol>
  <PrivKey></PrivKey>
</SecurityParam>
<IPv4BasicACL>
  <Number></Number>
</IPv4BasicACL>
<IPv4AdvancedACL>
  <Number></Number>
</IPv4AdvancedACL>
<IPv6BasicACL>
  <Number></Number>
</IPv6BasicACL>
<IPv6AdvancedACL>
  <Number></Number>
</IPv6AdvancedACL>
</User>
</Users>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	Users
Table type	Multi-instance table
Row name	User
Restrictions	<p>The max number of tables depends on SNMP/Capabilities/MaxUsers in data namespace.</p> <p>'Group' and 'Role' are two configuration ways. Only one way can take effect at the same time.</p> <p>'Number' and 'Name' are two configuration ways. Only one way can take effect at the same time for both 'IPv4BasicACL', 'IPv4AdvancedACL', 'IPv6BasicACL' and 'IPv6AdvancedACL'.</p> <p>'Remote/Address' and 'Remote/VPN' only applicable when creating a row.</p>
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SecurityMode	The security model by this user is provided.	Index	Enumeration: <ul style="list-style-type: none"> <li>1 – v1</li> <li>2 – v2c</li> <li>3 – v3</li> </ul>	N/A
Name	User name.	Index	String. Length:1 to 32 characters.	N/A
EngineId	SNMP engine ID.	Index	Hex String. Length: 0 or 10 to 64 characters.	<p>There are 2 ways to create a row:</p> <p>The first way is without engine ID for SNMPv3 local user or SNMPv1 and SNMPv2c user .</p> <p>In this way, the 'EngineId'and 'Adress'and 'VRF'must be zero-length.</p> <p>The second way is using the engine ID of remote SNMP manage.</p> <p>In this way, the 'EngineId' must be zero-length, then both the Remote/Address and Remode/VPN in this row must be included.</p> <p>The number of characters must be even.</p> <p>All-zero and all-F strings are invalid.</p>
Address	Address of the remote manage.	index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	<p>Only for remote SNMP manage.</p> <p>IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8</p>
VRF	VRF instance name.	index	String. Length: 0 to 31 characters.	<p>Only for remote SNMP manage</p> <p>VRF'must be zero-length if the remote manage is on the public network.</p>
GroupControl	Group control of this user.	Data structure	Members include: <ul style="list-style-type: none"> <li>Group</li> <li>Role</li> </ul>	'Group' and 'Role' can not be specified together.
Group	Group name.	N/A	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Role	User role name.	N/A	Length:1 to 32 characters. String.	Multi-instance.
SecurityParam	Security parameters of this user.	Data structure	Length:1 to 63 characters. Members include: <ul style="list-style-type: none"> <li>• AuthProtocol</li> <li>• AuthKey</li> <li>• PrivProtocol</li> <li>• PrivKey</li> </ul> Default: no value is specified.	Applicable only when 'SecurityMode' is '3 – v3'.  Applicable only when 'SecurityMode' is '3 – v3'.  'PrivProtocol' and 'PrivKey' must be specified with 'AuthProtocol' and 'AuthKey' together.
AuthProtocol	Authentication algorithm.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1 – MD5</li> <li>• 2 – SHA</li> </ul>	N/A
AuthKey	Authentication key.	N/A	String. Length:1 to 64 characters.	Plaintext key string. Must be specified with 'AuthProtocol'.
PrivProtocol	Encryption algorithm privacy.	N/A for	Enumeration: <ul style="list-style-type: none"> <li>• 1 – DES</li> <li>• 2 – AES</li> <li>• 3 – 3DES</li> <li>• 4 – AES192</li> <li>• 5 – AES256</li> </ul>	N/A
PrivKey	Privacy key.	N/A	String. Length:1 to 64 characters.	Plaintext key string. Must be specified with 'PrivProtocol'.
IPv4BasicACL	Specifies an IPv4 basic ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv4 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv4AdvancedACL	Specifies an IPv4 advanced ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL

Column name	Column description	Column type	Data type and restrictions	Remarks
				does not have any rules, no NMS in this community can access the SNMP agent.  IPv4BasicACL and IPv4AdvancedACL can't be configured simultaneously.
Number	Number of IPv4 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
IPv6BasicACL	Specifies an IPv6 basic ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv6 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv6AdvancedACL	Specifies an IPv6 advanced ACL to filter NMSs.	Data structure	Members include: Number	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.  IPv6BasicACL and IPv6AdvancedACL can't be configured simultaneously.
Number	Number of IPv6 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A

## SNMP/RemoteManages

This table contains SNMP remote manage information.

### XML structure

<SNMP>



```

<RemoteManages>
  <Manage>
    <Address></Address>
    <VRF></VRF>
    <EngineId></EngineId>
  </Manage>
</RemoteManages>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	RemoteManages
Table type	Multi-instance table
Row name	Manage
Restrictions	The max number of tables depends on SNMP/Capabilities/MaxRemoteManages in data namespace.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Address of the remote manage.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8
VRF	VRF instance name.	Index	String. Length: 0 to 31 characters.	If the remote manage is on the public network, the length of characters is 0.
EngineId	SNMP engine ID of the remote manage.	N/A	Hex String. Length: 10 to 64 characters.	The number of characters must be even. All-zero and all-F strings are invalid.

## SNMP/TargetHosts

This table contains SNMP target host information.

## XML structure

```

<SNMP>

```

```

<TargetHosts>
  <UdpHost>
    <TargetType></TargetType>
    <SecurityName></SecurityName>
    <Address></Address>
    <VRF></VRF>
    <SecurityMode></SecurityMode>
    <SecurityLevel></SecurityLevel>
    <Port></Port>
    <AddressType></AddressType>
  </UdpHost>
</TargetHosts>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	TargetHosts
Table type	Multi-instance table
Row name	UdpHost
Restrictions	The max number of tables depends on SNMP/Capabilities/MaxTargetHosts in data namespace.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TargetType	Notifications type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1 – InformRequest</li> <li>2 – Trap</li> </ul>	N/A
SecurityName	Authentication parameter.	Index	String. Length: 1 to 32 characters.	For SNMPv3, 'SecurityName' specifies an username.
Address	Address of the remote manage.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. HostName: Case-insensitive string, Length: 1 to 253 characters.	IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8 HostName example: www.example.com
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	If the remote manage is on the public network, the length of characters

Column name	Column description	Column type	Data type and restrictions	Remarks
				is 0.
SecurityMode	The Security model to be used when generating SNMP notifications.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – v1</li> <li>2 – v2c</li> <li>3 – v3</li> </ul>	If 'TargetType' is '1 – InformRequest', only '2 - v2c' and '3 - v3' are applicable.
SecurityLevel	Security level.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – noAuthNoPriv</li> <li>2 – authNoPriv</li> <li>3 – authPriv</li> </ul>	Applicable only when 'SecurityMode' is '3 – v3'.
Port	UDP port for SNMP notifications	N/A	Unsigned integer. Value range: 0 to 65535. Default: 162.	N/A
AddressType	Host name type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – IPv4 host name</li> <li>2 – IPv6 host name</li> </ul>	If this column is not included, the Address column is an IPv4 or IPv6 address.

# Contents

SNMP.....	1
SNMP/System.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
SNMP/Agent.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
SNMP/Notification.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
SNMP/Communities.....	5
XML structure.....	5
Table description.....	6
Columns.....	6
SNMP/Contexts.....	8
XML structure.....	8
Table description.....	8
Columns.....	8
SNMP/CommunityMappings.....	9
XML structure.....	9
Table description.....	9
Columns.....	9
SNMP/MIBViews.....	10
XML structure.....	10
Table description.....	10
Columns.....	10
SNMP/Groups.....	11
XML structure.....	11
Table description.....	12
Columns.....	12
SNMP/Users.....	14
XML structure.....	14
Table description.....	15
Columns.....	15
SNMP/RemoteManages.....	18
XML structure.....	18
Table description.....	18
Columns.....	19
SNMP/TargetHosts.....	19
XML structure.....	19
Table description.....	19
Columns.....	20
SNMP/Capabilities.....	20
XML structure.....	21
Table description.....	21
Columns.....	21
SNMP/Statistics.....	22
XML structure.....	22
Table description.....	23
Columns.....	23

# SNMP

## SNMP/System

This table contains SNMP system information.

### XML structure

```
<SNMP>
  <System>
    <AgentStatus></AgentStatus>
    <Version>
      <V1></V1>
      <V2C></V2C>
      <V3></V3>
    </Version>
    <Location></Location>
    <Contact></Contact>
  </System>
</SNMP>
```

### Table description

Item	Description
Feature name	SNMP
Table name	System
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AgentStatus	SNMP status	N/A	Enumeration: <ul style="list-style-type: none"><li>enable</li><li>disable</li></ul>	N/A
V1	SNMP V1 status	N/A	Enumeration: <ul style="list-style-type: none"><li>enable</li><li>disable</li></ul>	N/A
V2C	SNMP V2C status	N/A	Enumeration: <ul style="list-style-type: none"><li>enable</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
V3	SNMP V3 status	N/A	<ul style="list-style-type: none"> <li>• disable</li> </ul> Enumeration:	N/A
Location	SNMP physical location information	N/A	<ul style="list-style-type: none"> <li>• enable</li> <li>• disable</li> </ul> String. Length:0 to 255 characters.	N/A
Contact	SNMP contact information	N/A	String. Length:0 to 255 characters.	N/A

## SNMP/Agent

This table contains SNMP agent information.

### XML structure

```

<SNMP>
  <Agent>
    <LocalEngineId></LocalEngineId>
    <AgentUdpPort></AgentUdpPort>
    <PacketMaxSize></PacketMaxSize>
    <GetLog></GetLog>
    <SetLog></SetLog>
    <NotificationLog></NotificationLog>
  </Agent>
</SNMP>

```

### Table description

Item	Description
Feature name	SNMP
Table name	Agent
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalEngineId	Local engine ID of agent	N/A	Hex String. Length: 10 to 64 characters.	The number of characters must be even. All-zero and all-F strings are invalid.
AgentUdpPort	UDP port for receiving SNMP packets	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
PacketMaxSize	Maximum size of packets that the agent can receive or send Unit: byte.	N/A	Unsigned integer. Value range: 484 to 17940.	N/A
GetLog	Logging status of get.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
SetLog	Logging status of set.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A
NotificationLog	Logging status of notification.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b></li> </ul>	N/A

## SNMP/Notification

This table contains SNMP notification information.

### XML structure

```

<SNMP>
  <Notification>
    <ColdStart></ColdStart>
    <WarmStart></WarmStart>
    <AuthenticationFailure></AuthenticationFailure>
    <QueueSize></QueueSize>
    <QueueLifeTime></QueueLifeTime>
    <TrapSource></TrapSource>
    <InformSource></InformSource>
    <EnableModules>
      <Module></Module>
    </EnableModules>
    <DisableModules>
      <Module></Module>
    </DisableModules>
  </Notification>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	Notification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ColdStart	Status of SNMP coldStart notification.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
WarmStart	Status of SNMP warmStart notification.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
AuthenticationFailure	Status of SNMP authenticationFailure notification.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
QueueSize	Notification queue size.	N/A	Unsigned integer. Value range: 1 to 1000.	N/A
QueueLifeTime	Lifetime of notifications in the SNMP notification queue. Unit: second.	N/A	Unsigned integer. Value range: 1 to 2592000.	N/A
TrapSource	An interface name, of which primary IP address as the source IP address for the traps.	N/A	String. Length: 2 to 47 characters.	Only the interface which can be assigned an IP address. (The interface type is layer 3 but not NULL or controller.)  The configuration will fail if the interface has not been created and will take effect only after a valid IP address is assigned to the specified interface.
InformSource	An interface name, of which primary IP address as the source IP address for the informRequests.	N/A	String. Length: 2 to 47 characters.	Only the interface which can be assigned an IP address. (The interface type is layer 3 but not NULL or controller.)



Column name	Column description	Column type	Data type and restrictions	Remarks
				The configuration will fail if the interface has not been created and will take effect only after a valid IP address is assigned to the specified interface.
EnableModules	Modules of notification function status is enable.	N/A	Members include: <ul style="list-style-type: none"> <li>Module</li> </ul>	For a module that has sub-modules, the status is <b>enable</b> if the notification function of one of its sub-modules is enabled.
Module	Module name.	N/A	String. Length: 1 to 127 characters.	N/A
DisableModules	Modules of notification function status is disable.	N/A	Members include: <ul style="list-style-type: none"> <li>Module</li> </ul>	For a module that has sub-modules, the status is <b>disable</b> if the notification function of any of its sub-modules is disabled.
Module	Module name.	N/A	String. Length: 1 to 127 characters.	N/A

## SNMP/Communities

This table contains SNMP community information.

### XML structure

```

<SNMP>
  <Communities>
    <Community>
      <Name></Name>
      <Type></Type>
      <Role></Role>
      <MIBView></MIBView>
      <IPv4BasicACL>
        <Number></Number>
      </IPv4BasicACL>
      <IPv4AdvancedACL>
        <Number></Number>
      </IPv4AdvancedACL>
      <IPv6BasicACL>

```

```

        <Number></Number>
    </IPv6BasicACL>
    <IPv6AdvancedACL>
        <Number></Number>
    </IPv6AdvancedACL>
    <Context></Context>
</Community>
</Communities>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	Communities
Table type	Multi-instance table
Row name	Community
Restrictions	<p>The max number of tables depends on SNMP/Capabilities/MaxCommunities.</p> <p>'Number' and 'Name' are two configuration ways.</p> <p>Only one way can take effect at the same time for both 'IPv4BasicACL', 'IPv4AdvancedACL', 'IPv6BasicACL' and 'IPv6AdvancedACL'.</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Community name	Index	String. Length:1 to 32 characters.	N/A
Type	Community type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0 – read-only</li> <li>1 – read-write</li> <li>2 – use-RBAC</li> </ul>	<p>If specified '2 - use-RBAC', then a 'Role' must be included together.</p> <p>For the other enumerations, 'Role' is meaningless, and must not be included.</p>
Role	User role name for the community.	N/A	String. Length:1 to 63 characters.	Applicable only when 'Type' is '2 - use-RBAC'.
MIBView	MIB view name available for the community.	N/A	String. Length:1 to 32 characters.	Applicable only when 'Type' is '0 – read-only' or '1 – read-write'.
IPv4BasicACL	Specifies an IPv4	Data	Members include:	If no ACL is specified, or

Column name	Column description	Column type	Data type and restrictions	Remarks
	basic ACL to filter NMSs.	structure	<ul style="list-style-type: none"> <li>Number</li> </ul>	<p>the specified ACL does not exist, all NMSs in this community can access the SNMP agent.</p> <p>If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.</p>
Number	Number of IPv4 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv4AdvancedACL	Specifies an IPv4 advanced ACL to filter NMSs.	Data structure	Members include: Number	<p>If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.</p> <p>If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.</p>
Number	Number of IPv4 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
IPv6BasicACL	Specifies an IPv6 basic ACL to filter NMSs.	Data structure	Members include: <ul style="list-style-type: none"> <li>Number</li> </ul>	<p>If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.</p> <p>If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.</p>
Number	Number of IPv6 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv6AdvancedACL	Specifies an IPv6 advanced ACL to filter NMSs.	Data structure	Members include: Number	<p>If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.</p> <p>If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.</p>
Number	Number of IPv6 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Context	The context mapped to a community.	N/A	String. Length:1 to 32 characters.	If no mapping between an SNMP community and an SNMP context exists, this field is not included.

## SNMP/Contexts

This table contains SNMP context information.

### XML structure

```

<SNMP>
  <Contexts>
    <Context>
      <Name></Name>
    </Context>
  </Contexts>
</SNMP>

```

### Table description

Item	Description
Feature name	SNMP
Table name	Contexts
Table type	Multi-instance table
Row name	Context
Restrictions	The max number of tables depends on SNMP/Capabilities/MaxContexts.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Context name	Index	String. Length: 1 to 32 characters.	<p>An NMS and an SNMP agent can communicate with each other if the following conditions exist:</p> <ul style="list-style-type: none"> <li>No SNMP context is configured on the NMS and the SNMP agent.</li> <li>The NMS and the SNMP agent use</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				the same SNMP context.

## SNMP/CommunityMappings

This table contains SNMP communities information.

### XML structure

```

<SNMP>
  <CommunityMappings>
    <Mapping>
      <Community></Community>
      <Context></Context>
    </Mapping>
  </CommunityMappings>
</SNMP>

```

### Table description

Item	Description
Feature name	SNMP
Table name	CommunityMappings
Table type	Multi-instance table
Row name	Mapping
Restrictions	The max number of tables depends on SNMP/Capabilities/MaxCommunityMappings.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Community	Community name	Index	String. Length: 1 to 32 characters.	An NMS and an SNMP agent communicate with community, this community can map to a context name of processes in system, then the NMS can communicate with specified process.
Context	Context name	N/A	String. Length:1 to 32 characters.	N/A

# SNMP/MIBViews

This table contains SNMP MIB view information.

## XML structure

```
<SNMP>
  <MIBViews>
    <View>
      <Name></Name>
      <SubTree></SubTree>
      <Type></Type>
      <Mask></Mask>
      <Status></Status>
    </View>
  </MIBViews>
</SNMP>
```

## Table description

Item	Description
Feature name	SNMP
Table name	MIBViews
Table type	Multi-instance table
Row name	View
Restrictions	<p>The system creates the <b>ViewDefault</b> view when the SNMP agent is enabled.</p> <p>In this default MIB view, all MIB objects in the <b>iso</b> subtree but the <b>snmpUsmMIB</b>, <b>snmpVacmMIB</b>, and <b>snmpModules.18</b> subtrees are accessible.</p> <p>The max number of tables depends on SNMP/Capabilities/MaxMIBViews, including the 4 default MIB view records.</p> <p>After deleting, the default MIB view records will be restored after the system reboots, and the max number of rows can be created do not change.</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	View name.	Index	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 32 characters.	
SubTree	A MIB subtree by its root node's OID or object name.	Index	String or dotted decimal notation string. Length: 1 to 255 characters.	Example for OID, 1.3.6.1.2.1.1. Example for object name, iso.  When creating a row with OIDs, the 'SubTree' will be transform to object name automatic if the whole MIB tree in the system contained these OIDs.
Type	Access type to any node in the subtree.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – included</li> <li>2 – excluded</li> </ul>	N/A
Mask	A MIB subtree mask	N/A	Hex String. Length: 1 to 32 characters.	N/A
Status	Status of the MIB view.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – active</li> <li>2 - inactive</li> </ul>	Only SNMP set operation can temporarily disable a MIB view without deleting it.

## SNMP/Groups

This table contains SNMP group information.

### XML structure

```

<SNMP>
  <Groups>
    <Group>
      <Name></Name>
      <SecurityMode></SecurityMode>
      <SecurityLevel></SecurityLevel>
      <ReadView></ReadView>
      <WriteView></WriteView>
      <NotifyView></NotifyView>
      <IPv4BasicACL>
        <Number></Number>
      </IPv4BasicACL>
      <IPv4AdvancedACL>
        <Number></Number>
      </IPv4AdvancedACL>
    </Group>
  </Groups>
</SNMP>

```

```

</IPv4AdvancedACL>
<IPv6BasicACL>
  <Number></Number>
</IPv6BasicACL>
<IPv6AdvancedACL>
  <Number></Number>
</IPv6AdvancedACL>
</Group>
</Groups>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	<p>The max number of tables depends on SNMP/Capabilities/MaxGroups.</p> <p>'Number' and 'Name' are two configuration ways.</p> <p>Only one way can take effect at the same time for both 'IPv4BasicACL', 'IPv4AdvancedACL', 'IPv6BasicACL' and 'IPv6AdvancedACL'.</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Group name.	Index	String. Length:1 to 32 characters.	N/A
SecurityMode	The security model by this group is provided.	Index	Enumeration: <ul style="list-style-type: none"> <li>1 – v1</li> <li>2 – v2c</li> <li>3 – v3</li> </ul>	N/A
SecurityLevel	Security Level.	Index	Enumeration: <ul style="list-style-type: none"> <li>1 – noAuthNoPriv</li> <li>2 – authNoPriv</li> <li>3 – authPriv</li> </ul>	When 'SecurityMode' is '1 – v2' and '2 – v2c', the applicable value is just '1 - noAuthNoPriv'.
ReadView	MIB view for read-only access.	N/A	String. Length:1 to 32 characters.	N/A
WriteView	MIB view for read and write access.	N/A	String. Length:1 to 32	If no read and write view is specified, this group cannot set any MIB



Column name	Column description	Column type	Data type and restrictions	Remarks
NotifyView	MIB view for notify access.	N/A	characters. String. Length:1 to 32 characters.	object.  The SNMP agent sends notifications to the NMS in this group only for the MIB objects included in the notify view.  If no notify view is specified, the SNMP agent does not send any notification to the NMS in this group.  If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.
IPv4BasicACL	Specifies an IPv4 basic ACL to filter NMSs.	Data structure	Members include: • Number	If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv4 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A  If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.
IPv4AdvancedACL	Specifies an IPv4 advanced ACL to filter NMSs.	Data structure	Members include: Number	If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv4 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A  If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.
IPv6BasicACL	Specifies an IPv6 basic ACL to filter NMSs.	Data structure	Members include: • Number	If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv6 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv6AdvancedACL	Specifies an IPv6 advanced ACL to	Data structure	Members include:	If no ACL is specified, or the specified ACL does

Column name	Column description	Column type	Data type and restrictions	Remarks
	filter NMSs.		Number	not exist, all NMSs in this community can access the SNMP agent.  If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv6 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A

## SNMP/Users

This table contains SNMP user information.

## XML structure

```

<SNMP>
  <Users>
    <User>
      <SecurityMode></SecurityMode>
      <Name></Name>
      <EngineId></EngineId>
      <Address></Address>
      <VRF></VRF>
      <GroupControl>
        <Group></Group>
        <Role></Role>
      </GroupControl>
      <SecurityParam>
        <AuthProtocol></AuthProtocol>
        <AuthKey></AuthKey>
        <PrivProtocol></PrivProtocol>
        <PrivKey></PrivKey>
      </SecurityParam>
      <IPv4BasicACL>
        <Number></Number>
      </IPv4BasicACL>
      <IPv4AdvancedACL>
        <Number></Number>
      </IPv4AdvancedACL>
      <IPv6BasicACL>
        <Number></Number>
      </IPv6BasicACL>

```

```

<IPv6AdvancedACL>
  <Number></Number>
</IPv6AdvancedACL>
<Status></Status>
</User>
</Users>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	Users
Table type	Multi-instance table
Row name	User
Restrictions	<p>The max number of tables depends on SNMP/Capabilities/MaxUsers.</p> <p>'Group' and 'Role' are two configuration ways. Only one way can take effect at the same time.</p> <p>'Number' and 'Name' are two configuration ways. Only one way can take effect at the same time for both 'IPv4BasicACL', 'IPv4AdvancedACL', 'IPv6BasicACL' and 'IPv6AdvancedACL'.</p>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SecurityMode	The security model by this user is provided.	Index	Enumeration: <ul style="list-style-type: none"> <li>1 – v1</li> <li>2 – v2c</li> <li>3 – v3</li> </ul>	N/A
Name	User name.	Index	String. Length:1 to 32 characters.	N/A
EngineId	SNMP engine ID.	Index	Hex String. Length: 0 or 10 to 64 characters.	<p>There are 2 ways to create a row:</p> <p>The first way is without engine ID for SNMPv3 local user or SNMPv1 and SNMPv2c user .</p> <p>In this way, the 'EngineId'and 'Adress'and 'VRF'must be zero-length.</p> <p>The second way is using</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				the engine ID of remote SNMP manage.  In this way, the 'EngineId' 'Address' and 'VPN' in this row must be included.
				The number of characters must be even.  All-zero and all-F strings are invalid.
Address	Address of the remote manage.	index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	Only for remote SNMP manage.  IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8
VRF	VRF instance name.	index	String. Length: 0 to 31 characters.	Only for remote SNMP manage  VRF must be zero-length if the remote manage is on the public network.
GroupControl	Group control of this user.	Data structure	Members include: • Group • Role	'Group' and 'Role' can not be specified together.
Group	Group name.	N/A	String. Length: 1 to 32 characters.	N/A
Role	User role name.	N/A	String. Length: 1 to 63 characters.	Multi-instance.
SecurityParam	Security parameters of this user.	Data structure	Members include: • AuthProtocol • AuthKey • PrivProtocol • PrivKey	Applicable only when 'SecurityMode' is '3 - v3'.  Applicable only when 'SecurityMode' is '3 - v3'.  'PrivProtocol' and 'PrivKey' must be specified with 'AuthProtocol' and 'AuthKey' together.
AuthProtocol	Authentication algorithm.	N/A	Enumeration: • 1 - MD5 • 2 - SHA	N/A
AuthKey	Authentication key.	N/A	String. Length: 1 to 64 characters.	Plaintext key string.  Must be specified with 'AuthProtocol'.
PrivProtocol	Encryption	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	algorithm for privacy.		<ul style="list-style-type: none"> <li>1 – DES</li> <li>2 – AES</li> <li>3 – 3DES</li> <li>4 – AES192</li> <li>5 – AES256</li> </ul>	
PrivKey	Privacy key.	N/A	String. Length:1 to 64 characters.	Plaintext key string. Must be specified with 'PrivProtocol'.  If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent.
IPv4BasicACL	Specifies an IPv4 basic ACL to filter NMSs.	Data structure	Members include: <ul style="list-style-type: none"> <li>Number</li> </ul>	If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv4 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv4AdvancedACL	Specifies an IPv4 advanced ACL to filter NMSs.	Data structure	Members include: <ul style="list-style-type: none"> <li>Number</li> </ul>	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent. If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv4 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
IPv6BasicACL	Specifies an IPv6 basic ACL to filter NMSs.	Data structure	Members include: <ul style="list-style-type: none"> <li>Number</li> </ul>	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can access the SNMP agent. If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv6 basic ACL.	N/A	Unsigned integer. Value range: 2000 to 2999.	N/A
IPv6AdvancedACL	Specifies an IPv6 advanced ACL to filter NMSs.	Data structure	Members include: <ul style="list-style-type: none"> <li>Number</li> </ul>	If no ACL is specified, or the specified ACL does not exist, all NMSs in this community can

Column name	Column description	Column type	Data type and restrictions	Remarks
				access the SNMP agent. If the specified ACL does not have any rules, no NMS in this community can access the SNMP agent.
Number	Number of IPv6 advanced ACL.	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Status	Status of the user.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – active</li> <li>2 - inactive</li> </ul>	Only SNMP set operation can temporarily disable a user without deleting it.

## SNMP/RemoteManages

This table contains SNMP remote manage information.

### XML structure

```

<SNMP>
  <RemoteManages>
    <Manage>
      <Address></Address>
      <VRF></VRF>
      <EngineId></EngineId>
    </Manage>
  </RemoteManages>
</SNMP>

```

### Table description

Item	Description
Feature name	SNMP
Table name	RemoteManages
Table type	Multi-instance table
Row name	Manage
Restrictions	The max number of tables depends on SNMP/Capabilities/MaxRemoteManages.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Address of the remote manage.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8
VRF	VRF name.	Index	String. Length: 0 to 31 characters.	If the remote manage is on the public network, the length of characters is 0.
EngineId	SNMP engine ID of the remote manage.	N/A	Hex String. Length: 10 to 64 characters.	The number of characters must be even. All-zero and all-F strings are invalid.

## SNMP/TargetHosts

This table contains SNMP target host information.

## XML structure

```

<SNMP>
  <TargetHosts>
    <UdpHost>
      <TargetType></TargetType>
      <SecurityName></SecurityName>
      <Address></Address>
      <VRF></VRF>
      <SecurityMode></SecurityMode>
      <SecurityLevel></SecurityLevel>
      <Port></Port>
      <AddressType></AddressType>
    </UdpHost>
  </TargetHosts>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	TargetHosts
Table type	Multi-instance table

Row name	UdpHost
Restrictions	The max number of tables depends on SNMP/Capabilities/MaxTargetHosts.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TargetType	Notifications type.	Index	Enumeration: <ul style="list-style-type: none"> <li>1 – InformRequest</li> <li>2 – Trap</li> </ul>	N/A
SecurityName	Authentication parameter.	Index	String. Length: 1 to 32 characters.	For SNMPv3, 'SecurityName' specifies an username.
Address	Address of the remote manage.	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. HostName: Case-insensitive string, Length: 1 to 253 characters.	IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8 HostName example: www.example.com
VRF	VRF instance name.	Index	String. Length: 0 to 31 characters.	If the remote manage is on the public network, the length of characters is 0.
SecurityMode	The Security model to be used when generating SNMP notifications.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – v1</li> <li>2 – v2c</li> <li>3 – v3</li> </ul>	If 'TargetType' is '1 – InformRequest', only '2 – v2c' and '3 – v3' are applicable.
SecurityLevel	Security Level.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – noAuthNoPriv</li> <li>2 – authNoPriv</li> <li>3 – authPriv</li> </ul>	Applicable only when 'SecurityMode' is '3 – v3'.
Port	UDP port for SNMP notifications	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
AddressType	Host name type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1 – IPv4 host name</li> <li>2 – IPv6 host name</li> </ul>	If this column is not included, the Address column is an IPv4 or IPv6 address.

## SNMP/Capabilities

This table contains capabilities information.



## XML structure

```
<SNMP>
  <Capabilities>
    <MaxCommunities></MaxCommunities>
    <MaxContexts></MaxContexts>
    <MaxCommunityMappings></MaxCommunityMappings>
    <MaxMIBViews></MaxMIBViews>
    <MaxGroups></MaxGroups>
    <MaxUsers></MaxUsers>
    <MaxRemoteManages></MaxRemoteManages>
    <MaxTargetHosts></MaxTargetHosts>
    <MaxV3Roles></MaxV3Roles>
  </Capabilities>
</SNMP>
```

## Table description

Item	Description
Feature name	SNMP
Table name	Capabilities
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxCommunities	Maximum number of communities.	N/A	Unsigned integer.	N/A
MaxContexts	Maximum number of contexts.	N/A	Unsigned integer.	N/A
MaxCommunityMappings	Maximum number of community to context mappings.	N/A	Unsigned integer.	Each community can only mapping to one context.
MaxMIBViews	Maximum number of MIB views.	N/A	Unsigned integer.	N/A
MaxGroups	Maximum number of groups.	N/A	Unsigned integer.	N/A
MaxUsers	Maximum number of users.	N/A	Unsigned integer.	N/A
MaxRemoteManages	Maximum number of remote manages.	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxTargetHosts	Maximum number of target-hosts.	N/A	Unsigned integer.	N/A
MaxV3Roles	Maximum number of roles for one SNMPv3 user.	N/A	Unsigned integer.	Each SNMPv3 user can support multi-roles.

## SNMP/Statistics

This table contains SNMP statistics information.

### XML structure

```

<SNMP>
  <Statistics>
    <InPkts></InPkts>
    <OutPkts></OutPkts>
    <InBadVersions></InBadVersions>
    <InBadCommunityNames></InBadCommunityNames>
    <InBadCommunityUses></InBadCommunityUses>
    <InASNParseErrs></InASNParseErrs>
    <InTooBigs></InTooBigs>
    <InNoSuchNames></InNoSuchNames>
    <InBadValues></InBadValues>
    <InReadOnlys></InReadOnlys>
    <InGenErrs></InGenErrs>
    <InTotalReqVars></InTotalReqVars>
    <InTotalSetVars></InTotalSetVars>
    <InGetRequests></InGetRequests>
    <InGetNexts></InGetNexts>
    <InSetRequests></InSetRequests>
    <InGetResponses></InGetResponses>
    <InTraps></InTraps>
    <OutTooBigs></OutTooBigs>
    <OutNoSuchNames></OutNoSuchNames>
    <OutBadValues></OutBadValues>
    <OutGenErrs></OutGenErrs>
    <OutGetRequests></OutGetRequests>
    <OutGetNexts></OutGetNexts>
    <OutSetRequests></OutSetRequests>
    <OutGetResponses></OutGetResponses>
    <OutTraps></OutTraps>
    <SilentDrops></SilentDrops>
  </Statistics>
</SNMP>

```

## Table description

Item	Description
Feature name	SNMP
Table name	Statistics
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
InPkts	The total number of Messages delivered to the SNMP entity from the transport service.	N/A	Unsigned integer.	N/A
OutPkts	The total number of SNMP Messages which were passed from the SNMP protocol entity to the transport service.	N/A	Unsigned integer.	N/A
InBadVersions	The total number of SNMP Messages which were delivered to the SNMP protocol entity and were for an unsupported SNMP version	N/A	Unsigned integer.	N/A
InBadCommunityNames	The total number of SNMP Messages delivered to the SNMP protocol entity which used a SNMP community name not known to said entity.	N/A	Unsigned integer.	N/A
InBadCommunityUses	The total number of SNMP Messages delivered to the SNMP protocol entity which represented an	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	SNMP operation which was not allowed by the SNMP community named in the Message.			
InASNParseErrors	The total number of ASN.1 or BER errors encountered by the SNMP protocol entity when decoding received SNMP Messages.	N/A	Unsigned integer.	N/A
InTooBig	The total number of SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is 'tooBig'.	N/A	Unsigned integer.	N/A
InNoSuchNames	The total number of SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is 'noSuchName'.	N/A	Unsigned integer.	N/A
InBadValues	The total number of SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is 'badValue'.	N/A	Unsigned integer.	N/A
InReadOnly	The total number valid SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is 'readOnly'.	N/A	Unsigned integer.	N/A
InGenErrs	The total number of SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the error-status field is 'genErr'			
InTotalReqVars	The total number of MIB objects which have been retrieved successfully by the SNMP protocol entity as the result of receiving valid SNMP Get-Request and Get-Next PDUs.	N/A	Unsigned integer.	N/A
InTotalSetVars	The total number of MIB objects which have been altered successfully by the SNMP protocol entity as the result of receiving valid SNMP Set-Request PDUs.	N/A	Unsigned integer.	N/A
InGetRequests	The total number of SNMP Get-Request PDUs which have been accepted and processed by the SNMP protocol entity.	N/A	Unsigned integer.	N/A
InGetNexts	The total number of SNMP Get-Next PDUs which have been accepted and processed by the SNMP protocol entity.	N/A	Unsigned integer.	N/A
InSetRequests	The total number of SNMP Set-Request PDUs which have been accepted and processed by the SNMP protocol entity.	N/A	Unsigned integer.	N/A
InGetResponses	The total number of SNMP Get-Response PDUs which have been accepted and processed by the SNMP protocol entity.	N/A	Unsigned integer.	N/A
InTraps	The total number	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	of SNMP Trap PDUs which have been accepted and processed by the SNMP protocol entity.			
OutTooBigs	The total number of SNMP PDUs which were generated by the SNMP protocol entity and for which the value of the error-status field is 'tooBig.'	N/A	Unsigned integer.	N/A
OutNoSuchNames	The total number of SNMP PDUs which were generated by the SNMP protocol entity and for which the value of the error-status is 'noSuchName'.	N/A	Unsigned integer.	N/A
OutBadValues	The total number of SNMP PDUs which were generated by the SNMP protocol entity and for which the value of the error-status field is 'badValue'.	N/A	Unsigned integer.	N/A
OutGenErrs	The total number of SNMP PDUs which were generated by the SNMP protocol entity and for which the value of the error-status field is 'genErr'.	N/A	Unsigned integer.	N/A
OutGetRequests	The total number of SNMP Get-Request PDUs which have been generated by the SNMP protocol entity.	N/A	Unsigned integer.	N/A
OutGetNexts	The total number of SNMP Get-Next PDUs which have been generated by the SNMP protocol entity.	N/A	Unsigned integer.	N/A
OutSetRequests	The total number of SNMP Set-Request	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	PDU's which have been generated by the SNMP protocol entity.			
OutGetResponses	The total number of SNMP Get-Response PDU's which have been generated by the SNMP protocol entity.	N/A	Unsigned integer.	N/A
OutTraps	The total number of SNMP Trap PDU's which have been generated by the SNMP protocol entity.	N/A	Unsigned integer.	N/A
SilentDrops	The total number of Confirmed Class PDU's (such as GetRequest-PDU's, GetNextRequest-PDU's, GetBulkRequest-PDU's, SetRequest-PDU's, and InformRequest-PDU's) delivered to the SNMP entity which were silently dropped because the size of a reply containing an alternate Response Class PDU (such as a Response-PDU) with an empty variable-bindings field was greater than either a local constraint or the maximum message size associated with the originator of the request.	N/A	Unsigned integer.	N/A

# Contents

SNMP.....	2
SNMP/System.....	2
SNMP/Agent.....	2
SNMP/Notification.....	2
SNMP/Communities.....	3
SNMP/Contexts.....	3
SNMP/CommunityMappings.....	4
SNMP/MIBViews.....	4
SNMP/Groups.....	4
SNMP/Users.....	5
SNMP/RemoteManages.....	7
SNMP/TargetHosts.....	7
SNMP/Statistics.....	8
SNMP/NotificationStatus.....	8



# SNMP

## SNMP/System

Message	Explanation
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。
Operation failed. Please separately set the AgentStatus column to Disable in the System table. 操作失败。请单独设置System表的AgentStatus列为Disable以关闭SNMP功能。	Disable snmp first. 请先去使能 SNMP 服务。

## SNMP/Agent

Message	Explanation
The number of hexadecimal characters must be even for an engine ID. 引擎ID的16进制字符个数必须是偶数。	Engine ID set failed. 引擎 ID 的 16 进制字符个数必须是偶数。
The engine ID can't be all 0s or all Fs. 引擎ID不能为零或者全F。	Engine ID set failed. 引擎 ID 不能为零或者全 F。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

## SNMP/Notification

Message	Explanation
The interface has no IP address now. Please configure an IP address for the interface first. 接口未设置IP 地址。 请先指定接口的IP地址。	Set the interface for trap succeed, but the interface has no IP address now. 接口未设置 IP 地址。 请设置接口的 IP 地址。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

# SNMP/Communities

Message	Explanation
Column Role can't be deleted for RBAC-based SNMP communities. 基于RBAC方式配置的团体，不能删除Role列。	'Delete' operation failed. 基于 RBAC 方式配置的团体，不能删除 Role 列。
Column Role must be specified for RBAC-based SNMP communities. 基于RBAC方式配置的团体，必须指定Role列。	SNMP communities of VACM convert to RBAC-based failed. Please specify 'Role'. 团体类型由 VACM 切换为 RBAC，请先指定团体角色。
When community type is read-only or read-write, column Role is invalid and can't be configured. 基于VACM方式配置团体时，Role列无效，且不能指定该列的值。	Column 'Role' is invalid for communities of VACM. VACM 类型团体，不需要配置 'Role'。
When community type is user-RBAC, column MIBView is invalid and can't be configured. 基于RBAC方式配置团体时，MIBView列无效，且不能指定该列的值。	Column 'MIBView' is invalid for communities of RBAC. RBAC 类型团体，不需要配置 'MIBView'。
Operation failed. The number of communities reached the upper limit. 创建的community数量已达到最大值。	Create community failed. 创建的 community 数量已达到最大值。
IPv4BasicACL and IPv4AdvancedACL can't be configured together. IPv4BasicACL和IPv4AdvancedACL不能同时配置。	Create or replace community failed. IPv4BasicACL 和 IPv4AdvancedACL 不能同时配置。
IPv6BasicACL and IPv6AdvancedACL can't be configured together. IPv6BasicACL和IPv6AdvancedACL不能同时配置。	Create or replace community failed. IPv6BasicACL 和 IPv6AdvancedACL 不能同时配置。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

# SNMP/Contexts

Message	Explanation
Operation failed. The number of contexts reached the upper limit. 创建的上下文数量已达到上限最大值。	Failed to create context. 创建的上下文数量已达到上限最大值。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

# SNMP/CommunityMappings

Message	Explanation
Column Context can't be deleted. Context列不能删除。	Can't delete the default context. Context 列不能删除。
Operation failed.The number of maps reached the upper limit. 创建的community maps数量已达到最大值。	Create community map failed. 创建的 community maps 数量已达到最大值。
Value for column Context must be specified. 必须指定Context列的值。	Create community map failed. 必须指定 Context 列的值。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

# SNMP/MIBViews

Message	Explanation
Value for column Type must be specified. 必须指定Type列的值。	MIB view type must be specified. 必须指定 Type 列的值。
Operation failed. The number of user-defined MIB views reached the upper limit. 用户定义的MIB视图数量已达到最大值。	Failed to create MIB-view. 用户定义的 MIB 视图数量已达到最大值。
Invalid MIB sub-tree node name or OID. 指定的MIB节点名或OID无效。	Please specify 'SubTree' value in the message. 指定的 MIB 节点名或 OID 无效。
The number of hexadecimal characters must be even for a subtree mask. 子树掩码的16进制字符个数必须是偶数。	Failed to set MIB subtree mask. 子树掩码的 16 进制字符个数必须是偶数。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

# SNMP/Groups

Message	Explanation
Security model of an SNMPv1 or SNMPv2c group can only be noAuthNoPriv. SNMPv1和SNMPv2c组不支持认证和加密。	Failed to set 'SecurityLevel'. Please set 'SecurityLevel' to 2. SNMPv1 和 SNMPv2c 组不支持认证和加密。
Operation failed.The number of groups reached the upper limit. 创建的group数量已达到最大值。	Create group failed. 创建的 group 数量已达到最大值。

Columns Role and Mibviews can't be configured together. Role列和MIBView列不能同时配置。	Create group failed. Role 列和 MIBView 列不能同时配置。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

## SNMP/Users

Message	Explanation
The engine ID can't be all 0s or all Fs. 引擎ID不能为全零或者全F。	Invalid engine ID. 引擎 ID 不能为全零或者全 F。
Operation failed.The number of users reached the upper limit. 创建的用户数量已达到最大值。	Failed create new user. 创建的用户数量已达到最大值。
Can't find the remote engine ID specified by the IP address. 未找到该IP地址对应的远端引擎ID。	Failed to get, merge, replace or delete the remote engine. 未找到该 IP 地址对应的远端引擎 ID。
The last user role can't be deleted. 最后一个用户角色不能删除。	The last user role can't be deleted. 最后一个用户角色不能删除。
Operation failed. The number of user role reached the upper limit. 添加的用户角色数量已达到最大值。	Failed to add new user role. 添加的用户角色数量已达到最大值。
Value for column Group or Role must be specified. 必须指定Group或者Role列的值。	Parameters not complete in the message. 必须指定 Group 或者 Role 列的值。
Values for columns AuthProtocol and AuthKey must be specified together. 必须同时指定AuthProtocol和AuthKey的值。	'AuthProtocol' and 'AuthKey' must be specified together or not together. 必须同时指定 AuthProtocol 和 AuthKey 的值。
Values for columns PrivProtocol and PrivKey must be specified together. 必须同时指定PrivProtocol和PrivKey的值。	'PrivProtocol' and 'PrivKey' must be specified together or not together. 必须同时指定 PrivProtocol 和 PrivKey 的值。
When columns PrivProtocol and PrivKey are issued, columns AuthProtocol and AuthKey must be issued too. 当下发了PrivProtocol和PrivKey列, 必须同时下发 AuthProtocol和AuthKey列。	'AuthProtocol' and 'AuthKey', 'PrivProtocol' and 'PrivKey' must be specified together or not together. 当下发了 PrivProtocol 和 PrivKey 列, 必须同时下发 AuthProtocol 和 AuthKey 列。
Column Group or Role can't be deleted. 不能删除Group或者Role列。	Group control doesn't support delete operation. 不能删除 Group 或者 Role 列。
The engine ID mismatch the remote SNMP entity. 引擎ID和远端SNMP实体不匹配。	The engine ID mismatch with 'VPN name' and 'Address'. 引擎 ID 和远端 SNMP 实体不匹配。
Invalid user. 无效用户。	The engine ID mismatch with 'VPN name' and 'Address'. 引擎 ID 和 'VPN name'、'Address' 不匹配, 无效用户。
Value for column Group must be specified.	Group must be specified in 'create' and 'replace' operation.

必须指定Group列的值。	缺少 group 值，操作失败。
Column Group can't be deleted. 不能删除Group列。	Users of SNMPv1 and SNMPv2c can't delete group column. SNMPv1 和 SNMPv2c 用户不能删除 group 列。
EngineID, IP address and VRF are invalid for an SNMPv1 or SNMPv2c user. 对SNMPv1和SNMPv2c引擎ID,IP地址和VRF无效。	SNMPv1 or SNMPv2c user doesn't need 'EngineID', 'IP address' and 'VRF'. SNMPv1 和 SNMPv2c 用户没有引擎 ID,IP 地址和 VRF 等属性。
User role, authentication and privacy are all invalid for an SNMPv1 or SNMPv2c user. 对SNMPv1和SNMPv2c用户,用户角色,认证和加密都是无效的。	'User role', 'authentication' and 'privacy' are valid for SNMPv3 user. 用户角色,认证和加密是 SNMPv3 新增属性,对 SNMPv1 和 SNMPv2c 用户无效。
One user only support one Group. 一个用户仅支持一个组。	One user only support one Group. 一个用户仅支持一个组。
Values for columns AuthProtocol and AuthKey must be deleted together. 必须同时删除AuthProtocol和AuthKey的值。	'AuthProtocol' and 'AuthKey' can't be deleted separately. 必须同时删除 AuthProtocol 和 AuthKey 的值。
Values for columns PrivProtocol and PrivKey must be deleted together. 必须同时删除PrivProtocol和AuthKey的值。	'PrivProtocol' and 'PrivKey' can't be deleted separately. 必须同时删除 PrivProtocol 和 AuthKey 的值。
When columns AuthProtocol and AuthKey are deleted, PrivProtocol and PrivKey columns must be deleted too. 当删除AuthProtocol和AuthKey列,, 必须同时删除 PrivProtocol和PrivKey列。	'AuthProtocol', 'AuthKey' and 'PrivProtocol', 'PrivKey' can't be deleted separately. 当删除 AuthProtocol 和 AuthKey 列,, 必须同时删除 PrivProtocol 和 PrivKey 列。
Values for indexes EngineId or Address must be assigned for an SNMPv3 remote user. SNMPV3远端用户必须指定引擎ID或IP地址。	Please specify 'EngineId' and 'Address' for SNMPv3 remote users. SNMPV3 远端用户必须指定引擎 ID 或 IP 地址。
The shared key must contain uppercase letters, lowercase letters, digits, and symbols. 公钥必须包含大小写字母,数字和符号。	Set key for user of SNMPv3 failed. 公钥必须同时包含大小写字母,数字和符号。
The shared key must contain at least 15 characters. 公钥至少包含15个字符。	Set key for user of SNMPv3 failed. 公钥至少包含 15 个字符,设置密码失败。
Only users with the network-admin user role can configure SNMPv3 features. 只能具有network-admin 角色的用户才能配置 SNMPv3功能。	Set SNMPv3 feature failed. network-admin 角色的用户才能配置 SNMPv3 功能。
Value for index Address must be assigned for an SNMPv3 remote user. SNMPV3远端用户必须指定IP地址。	Value for index Address must be assigned for an SNMPv3 remote user. SNMPV3 远端用户必须指定 IP 地址。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为 Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

# SNMP/RemoteManages

Message	Explanation
Operation failed. The number of configured remote engines reached the upper limit. 可配置的远端引擎数量已达到最大值。	Failed to set new remote engine. 可配置的远端引擎数量已达到最大值。
Invalid IP address for the remote SNMP entity. 远端SNMP实体的IP地址无效。	Failed to set new remote engine or delete remote engine. 远端 SNMP 实体的 IP 地址无效。
When Column VPN is issued, Column Address must be issued too. 当下发了VPN列，Address列必须和VPN列同时下发。	'VPN' and 'Address' must be specified together or not together. 当下发了 VPN 列，Address 列必须和 VPN 列同时下发。
Column Address or Column VPN can't be changed. Address或者VPN列不能被修改。	'VPN' and 'Address' can't be changed. Address 或者 VPN 列不能被修改或删除。
Column Address or VPN can't be deleted. Address或者VPN列不能被删除。	'VPN' and 'Address' can't be deleted. Address 或者 VPN 列不能被删除或修改。
Value for column EngineId must be specified. 必须指定引擎ID。	Please specify the engine ID. 引擎 ID 是必配属性，请指定。
Column EngineId can't be deleted. 引擎ID列不能删除。	Can't delete the default engine ID. 引擎 ID 是必配属性，不能删除。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

# SNMP/TargetHosts

Message	Explanation
Value for column SecurityMode must be specified. 必须指定SecurityMode列的值。	The security model is used when generating SNMP notifications. SecurityMode 是必配属性，请指定。
Operation failed. The number of specified target hosts reached the upper limit. 指定的目标主机数量已达到最大值。	Failed to create target host. 指定的目标主机数量已达到最大值。
Invalid IP address for an SNMP target host. 无效的目标主机IP地址。	Invalid IP address in message. 无效的目标主机 IP 地址。
Column SecurityMode can't be deleted. SecurityMode列不能删除。	Please specify the security model to be deleted. SecurityMode 是必配属性，不能删除。
An SNMPv1 or SNMPv2c targethost can only receive notifications as traps. SNMPv1日志主机只能接收trap报文。	An SNMPv1 or SNMPv2c targethost can't receive notifications as inform. SNMPv1 日志主机只能接收 trap 报文。
Invalid target host IP address. 无效的目标主机IP地址。	Please confirm the IP address of the target host. 无效的目标主机 IP 地址。

Invalid host name. 无效的目标主机名。	Please confirm the valid host name. 无效的目标主机名。
Column AddressType can't be deleted. 不能删除AddressType列。	'AddressType' shows address is host name or IPv4, IPv6 address. 'AddressType' can't be deleted. 'AddressType'是必配属性，不能删除。
Value for column AddressType must be specified. 必须指定AddressType列的值。	'AddressType' must be specified for replace operation. 'AddressType'是必配属性，请指定。
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

## SNMP/Statistics

Message	Explanation
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

## SNMP/NotificationStatus

Message	Explanation
Operation failed. Please separately set the AgentStatus column to Enable in the System table. 操作失败。请单独设置System表的AgentStatus列为Enable以使能SNMP。	Enable snmp first. 请先使能 SNMP 服务。

# Contents

- SSH .....1
  - SSH/Server .....1
  - XML structure .....1
  - Table description .....1
  - Columns .....2



# SSH

## SSH/Server

This table contains information about global SSH Server functions.

### XML structure

```
<SSH>
  <Server>
    <STelnetState></STelnetState>
    <SFTPState></SFTPState>
    <SCPState></SCPState>
    <DSCP></DSCP>
    <DSCP6></DSCP6>
    <Ipv4ACLNum></Ipv4ACLNum>
    <Ipv6ACLNum></Ipv6ACLNum>
    <SFTPIidleTimeout></SFTPIidleTimeout>
    <RekeyInterval></RekeyInterval>
    <AuthRetries></AuthRetries>
    <AuthTimeout></AuthTimeout>
    <CompatibleSSH1XState></CompatibleSSH1XState>
  </Server>
</SSH>
```

### Table description

Item	Description
Feature name	SSH
Table name	Server
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global SSH Server functions.
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions
STelnetState	Global STelnet Server feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables STelnet Server.</li> <li><b>false</b>—Disables STelnet Server(default).</li> </ul>
SFTPState	Global SFTP Server feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables SFTP Server.</li> <li><b>false</b>—Disables SFTP Server(default).</li> </ul>
SCPState	Global SCP Server feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables SCP Server.</li> <li><b>false</b>—Disables SCP Server(default).</li> </ul>
DSCP	Set the IPv4 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:48
DSCP6	Set the IPv6 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:48.
Ipv4ACLNum	Specify an IPv4 ACL used to control the SSH clients' access	N/A	Unsigned integer. Value range: 2000 to 4999.
Ipv6ACLNum	Specify an IPv6 ACL used to control the SSH clients' access	N/A	Unsigned integer. Value range: 2000 to 4999.
SFTPIidleTimeout	Specify SFTP timeout value(minute)	N/A	Unsigned integer. Value range: 1 to 35791. Default value: 10.
RekeyInterval	Specify the SSH server key rekey-interval(hour)	N/A	Unsigned integer. Value range: 1 to 24.
AuthRetries	Specify authentication retry times	N/A	Unsigned integer. Value range: 1 to 5. Default value: 3.
AuthTimeout	Specify authentication timeout(second)	N/A	Unsigned integer. Value range: 1 to 120. Default value: 60
CompatibleSSH1XState	The SSH Server compatible ssh1x	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables SSH Server compatible ssh1x (default).</li> <li><b>false</b>—Disables SSH Server compatible ssh1x.</li> </ul>

# Contents

- SSH .....1
  - SSH/Capabilities.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1
  - SSH/Server .....1
    - XML structure.....2
    - Table description.....2
    - Columns.....2

# SSH

## SSH/Capabilities

This table contains the capabilities information of the SSH.

### XML structure

```
<SSH>
  <Capabilities>
    <CompatibleSSH1XStateSupport></CompatibleSSH1XStateSupport>
    <RekeyIntervalSupport></RekeyIntervalSupport>
  </Capabilities>
</SSH>
```

### Table description

Item	Description
Feature name	SSH
Table name	Capabilities
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
CompatibleSSH1XStateSupport	Whether The SSH Server compatible ssh1x is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>
RekeyIntervalSupport	Whether the SSH server key rekey-interval is supported.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b></li><li><b>false</b></li></ul>

## SSH/Server

This table contains global SSH Server information.

# XML structure

```
<SSH>
  <Server>
    <STelnetState></STelnetState>
    <SFTPState></SFTPState>
    <SCPState></SCPState>
    <DSCP></DSCP>
    <DSCP6></DSCP6>
    <Ipv4ACLNum></Ipv4ACLNum>
    <Ipv6ACLNum></Ipv6ACLNum>
    <SFTPIidleTimeout></SFTPIidleTimeout>
    <RekeyInterval></RekeyInterval>
    <AuthRetries></AuthRetries>
    <AuthTimeout></AuthTimeout>
    <CompatibleSSH1XState></CompatibleSSH1XState>
  </Server>
</SSH>
```

## Table description

Item	Description
Feature name	SSH
Table name	Server
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global SSH Server configurations.

## Columns

Column name	Column description	Column type	Data type and restrictions
STelnetState	Global STelnet Server feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enables STelnet Server.</li><li><b>false</b>—Disables STelnet Server(default).</li></ul>
SFTPState	Global SFTP Server feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enables SFTP Server.</li><li><b>false</b>—Disables SFTP Server(default).</li></ul>

Column name	Column description	Column type	Data type and restrictions
SCPState	Global SCP Server feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables SCP Server.</li> <li><b>false</b>—Disables SCP Server(default).</li> </ul>
DSCP	Set the IPv4 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:48
DSCP6	Set the IPv6 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:48.
Ipv4ACLNum	Specify an IPv4 ACL used to control the SSH clients' access	N/A	Unsigned integer. Value range: 2000 to 4999.
Ipv6ACLNum	Specify an IPv6 ACL used to control the SSH clients' access	N/A	Unsigned integer. Value range: 2000 to 4999.
SFTPIdeTimeout	Specify SFTP timeout value(minute)	N/A	Unsigned integer. Value range: 1 to 35791. Default value: 10. Unit: minute.
RekeyInterval	Specify the SSH server key rekey-interval(hour)	N/A	Unsigned integer. Value range: 1 to 24. Uint: hour.
AuthRetries	Specify authentication retry times	N/A	Unsigned integer. Value range: 1 to 5. Default value: 3.
AuthTimeout	Specify authentication timeout(second)	N/A	Unsigned integer. Value range: 1 to 120. Default value: 60 Unit: second.
CompatibleSSH1XState	The SSH Server compatible ssh1x	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables SSH Server compatible ssh1x (default).</li> <li><b>false</b>—Disables SSH Server compatible ssh1x.</li> </ul>

# Contents

SSH .....1

    SSH/Server .....1

# SSH

## SSH/Server

Message	Explanation
There is the same configuration, failed to create. 存在相同配置无法创建。	If the current operation type is “create”, it does not support the existing configuration to be created again.
SSH Listens on port failed to open. SSH侦听端口使能失败	When the SSH service port number has been used by other services, it does not support to enable SSH server.
Failed to connect the SSH process. 连接SSH进程失败	If the daemon of SSH failed to connect, it will prompt this information.
The existence of default configuration, failed to delete. 删除时已经是默认配置	If the current operation type is “delete”, it does not support the default configuration to be deleted.



# Contents

SSL.....	1
SSL/ClientPolicies.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
SSL/ServerPolicies.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
SSL/SSLGlobalConfig.....	4
XML structure.....	4
Table description.....	4
Columns.....	5

# SSL

## SSL/ClientPolicies

This table is used to operate SSL client policies.

### XML structure

```
<SSL>
  <ClientPolicies>
    <Policy>
      <Name></Name>
      <SSLVersion></SSLVersion>
      <PKIDomain></PKIDomain>
      <PerferCipherList>
        <CipherItem></CipherItem>
      </PerferCipherList>
      <ServerVerify></ServerVerify>
    </Policy>
  </ClientPolicies>
</SSL>
```

### Table description

Item	Description
Feature name	SSL
Table name	ClientPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the SSL client policy	Index	String, case insensitive. Length: 1 to 31 characters. Case insensitive	N/A
SSLVersion	SSL protocol version of the SSL client	N/A	Enumeration: <ul style="list-style-type: none"><li>1—TSL 1.0</li><li>2—SSL 3.0</li><li>3—TSL 1.1</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<b>4</b> —TSL 1.2 Default value is TSL 1.0	
PKIDomain	Specify a PKI domain for the SSL client policy	N/A	String, case insensitive. Length: 1 to 31 characters. Case insensitive	N/A
PerferCipherList	Preferred cipher suite list for the SSL client policy	Data structure	Members include: <ul style="list-style-type: none"> <li>CipherItem.</li> </ul>	N/A
CipherItem	Cipher suite ID	N/A	Unsigned integer. Value range: 1 to 23. The cipher suite ID is defined by SSLCapabilities table.	A maximum of one CipherItem can be specified in PerferCipherList.
ServerVerify	Whether to verify the SSL server	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Verify the SSL server (default).</li> <li><b>false</b>—Don't verify the SSL server.</li> </ul>	N/A

## SSL/ServerPolicies

This table is used to operate SSL server policies.

### XML structure

```

<SSL>
  <ServerPolicies>
    <Policy>
      <Name></Name>
      <SessionCacheSize></SessionCacheSize>
      <SessionTimeout></SessionTimeout>
      <PKIDomain></PKIDomain>
      <CipherSuiteList>
        <CipherItem></CipherItem>
      </CipherSuiteList>
      <ClientVerify></ClientVerify>
      <ClientVerifyMode></ClientVerifyMode>
      <SSLVersionControl>
        <SSL3Enabled></SSL3Enabled>
        <TLS1Dot0Enabled></TLS1Dot0Enabled>
        <TLS1Dot1Enabled></TLS1Dot1Enabled>
        <TLS1Dot2Enabled></TLS1Dot2Enabled>
      </SSLVersionControl>
    </Policy>
  </ServerPolicies>
</SSL>

```

## Table description

Item	Description
Feature name	SSL
Table name	ServerPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the SSL server policy	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
SessionCacheSize	Maximum number of cached sessions	N/A	Unsigned integer. Value range: 100 to 20480 Default value is 500	N/A
SessionTimeout	Session timeout value	N/A	Unsigned integer. Value range: 1 to 4294967295 Default value is 3600	N/A
PKIDomain	Specify an PKI domain for the SSL server policy	N/A	String, case insensitive. Length: 1 to 31 characters.	N/A
CipherSuiteList	Cipher suite list for the SSL server policy	Data structure	Members include: <ul style="list-style-type: none"> <li>CipherItem.</li> </ul>	N/A
CipherItem	Cipher suite ID	N/A	Unsigned integer. Value range: 1 to 23. The cipher suite ID is defined by SSLCapabilities table.	A maximum of 11 CipherItems can be specified in CipherSuiteList. Default: All cipher suites are supported.
ClientVerify	Whether to verify the SSL client	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Verify the SSL client.</li> <li><b>false</b>—Don't verify the SSL client (default).</li> </ul>	N/A
ClientVerifyMode	Client authentication mode	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>0</b>—SSL client authentication is disabled.</li> <li><b>1</b>—Mandatory SSL client authentication .</li> <li><b>2</b>—Optional SSL client authentication.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SSLVersionControl	SSL version control	Data structure	Members include: <ul style="list-style-type: none"> <li>• SSL3Enabled</li> <li>• TLS1Dot0Enabled</li> <li>• TLS1Dot1Enabled</li> <li>• TLS1Dot2Enabled</li> </ul>	N/A
SSL3Enabled	Enable SSL3.0	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable(default).</li> <li>• <b>false</b>—Disable.</li> </ul>	N/A
TLS1Dot0Enabled	Enable TLS1.0	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable(default).</li> <li>• <b>false</b>—Disable.</li> </ul>	N/A
TLS1Dot1Enabled	Enable TLS1.1	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable(default).</li> <li>• <b>false</b>—Disable.</li> </ul>	N/A
TLS1Dot2Enabled	Enable TLS1.2	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enable(default).</li> <li>• <b>false</b>—Disable.</li> </ul>	N/A

## SSL/SSLGlobalConfig

This table is used to operate SSL global config.

### XML structure

```

<SSL>
  <SSLGlobalConfig>
    <SSL3Enabled></SSL3Enabled>
    <RenegotiationEnabled></RenegotiationEnabled>
    <TLS1Dot0Enabled></TLS1Dot0Enabled>
    <TLS1Dot1Enabled></TLS1Dot1Enabled>
    <TLS1Dot2Enabled></TLS1Dot2Enabled>
  </SSLGlobalConfig>
</SSL>

```

### Table description

Item	Description
Feature name	SSL
Table name	SSLGlobalConfig
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
SSL3Enabled	Enable SSL3.0.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable(default).</li> <li><b>false</b>—Disable.</li> </ul>
RenegotiationEnabled	Enable SSL renegotiation.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable(default).</li> <li><b>false</b>—Disable.</li> </ul>
TLS1Dot0Enabled	Enable TLS1.0	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable(default).</li> <li><b>false</b>—Disable.</li> </ul>
TLS1Dot1Enabled	Enable TLS1.1	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable(default).</li> <li><b>false</b>—Disable.</li> </ul>
TLS1Dot2Enabled	Enable TLS1.2	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable(default).</li> <li><b>false</b>—Disable.</li> </ul>

# Contents

SSL.....	1
SSL/ClientPolicies.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
SSL/ServerPolicies.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
SSL/SSLCapabilities.....	4
XML structure.....	4
Table description.....	4
Columns.....	5
SSL/SSLGlobalConfig.....	5
XML structure.....	5
Table description.....	5
Columns.....	6

# SSL

## SSL/ClientPolicies

This table is used to get SSL client policies.

### XML structure

```
<SSL>
  <ClientPolicies>
    <Policy>
      <Name></Name>
      <SSLVersion></SSLVersion>
      <PKIDomain></PKIDomain>
      <PerferCipherList>
        <CipherItem></CipherItem>
      </PerferCipherList>
      <ServerVerify></ServerVerify>
    </Policy>
  </ClientPolicies>
</SSL>
```

### Table description

Item	Description
Feature name	SSL
Table name	ClientPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the SSL client policy	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
SSLVersion	SSL protocol version of the SSL client	N/A	Enumeration: <ul style="list-style-type: none"><li>1—TSL 1.0</li><li>2—SSL 3.0</li><li>3—TSL 1.1</li><li>4—TSL 1.2</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
PKIDomain	Specify a PKI domain for the SSL client policy	N/A	String, case insensitive. Length: 1 to 31 characters.	N/A
PerferCipherList	Preferred cipher suite list for the SSL client policy	Data structure	Members include: <ul style="list-style-type: none"> <li>CipherItem.</li> </ul>	N/A
CipherItem	Cipher suite ID	N/A	Unsigned integer. Value range: 1 to 23. The cipher suite ID is defined by SSLCapabilities table.	A maximum of one CipherItem can be specified in PerferCipherList.
ServerVerify	Whether to verify the SSL server	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Verify the SSL server.</li> <li><b>false</b>—Don't verify the SSL server.</li> </ul>	N/A

## SSL/ServerPolicies

This table is used to get SSL server policies.

### XML structure

```

<SSL>
  <ServerPolicies>
    <Policy>
      <Name></Name>
      <SessionCacheSize></SessionCacheSize>
      <SessionTimeout></SessionTimeout>
      <PKIDomain></PKIDomain>
      <CipherSuiteList>
        <CipherItem></CipherItem>
      </CipherSuiteList>
      <ClientVerify></ClientVerify>
      <ClientVerifyMode></ClientVerifyMode>
      <SSLVersionControl>
        <SSL3Enabled></SSL3Enabled>
        <TLS1Dot0Enabled></TLS1Dot0Enabled>
        <TLS1Dot1Enabled></TLS1Dot1Enabled>
        <TLS1Dot2Enabled></TLS1Dot2Enabled>
      </SSLVersionControl>
    </Policy>
  </ServerPolicies>
</SSL>

```

## Table description

Item	Description
Feature name	SSL
Table name	ServerPolicies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Name of the SSL server policy	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
SessionCacheSize	Maximum number of cached sessions	N/A	Unsigned integer. Value range: 100 to 20480	N/A
SessionTimeout	Session timeout value	N/A	Unsigned integer. Value range: 1 to 4294967295	N/A
PKIDomain	Specify a PKI domain for the SSL server policy	N/A	String, case insensitive. Length: 1 to 31 characters.	N/A
CipherSuiteList	Cipher suite list for the SSL server policy	Data structure	Members include: <ul style="list-style-type: none"> <li>CipherItem.</li> </ul>	N/A
CipherItem	Cipher suite ID	N/A	Unsigned integer. Value range: 1 to 23. The cipher suite ID is defined by SSLCapabilities table.	A maximum of 11 CipherItems can be specified in CipherSuiteList.
ClientVerify	Whether to verify the SSL client	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Verify the SSL client.</li> <li><b>false</b>—Don't verify the SSL client</li> </ul>	N/A
ClientVerifyMode	Client authentication mode	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>0</b>—SSL client authentication is disabled.</li> <li><b>1</b>—Mandatory SSL client authentication .</li> <li><b>2</b>—Optional SSL client authentication.</li> </ul>	N/A
SSLVersionControl	SSL version control	Data structure	Members include: <ul style="list-style-type: none"> <li>SSL3Enabled</li> <li>TLS1Dot0Enabled</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>TLS1Dot1Enabled</li> <li>TLS1Dot2Enabled</li> </ul>	
SSL3Enabled	Enabling status of SSL3.0	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
TLS1Dot0Enabled	Enabling status of TLS1.0	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
TLS1Dot1Enabled	Enabling status of TLS1.1	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
TLS1Dot2Enabled	Enabling status of TLS1.2	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## SSL/SSLCapabilities

This table displays all the algorithm capabilities that the SSL module support.

### XML structure

```

<SSL>
  <SSLCapabilities>
    <SSLCapability>
      <ID></ID>
      <Name></Name>
      <Strength></Strength>
      <IsDefaultCipherSuite></IsDefaultCipherSuite>
    </SSLCapability>
  </SSLCapabilities>
</SSL>

```

### Table description

Item	Description
Feature name	SSL
Table name	SSLCapabilities
Table type	Multi-instance table
Row name	SSLCapability
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	SSL supports algorithm ID	Index	Unsigned integer.	N/A
Name	SSL supports algorithm name	N/A	String. Length: 1 to 255 characters Case insensitive.	N/A
Strength	The strength of the algorithm	N/A	Unsigned integer	Biger Value, More stong.
IsDefaultCipherSuite	If the algorithm is default cipher suite.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—The algorithm is the default</li><li><b>false</b>—The algorithm isn't the default</li></ul>	

## SSL/SSLGlobalConfig

This table is used to operate SSL global config.

## XML structure

```
<SSL>
  <SSLGlobalConfig>
    <SSL3Enabled></SSL3Enabled>
    <RenegotiationEnabled></RenegotiationEnabled>
    <TLS1Dot0Enabled></TLS1Dot0Enabled>
    <TLS1Dot1Enabled></TLS1Dot1Enabled>
    <TLS1Dot2Enabled></TLS1Dot2Enabled>
  </SSLGlobalConfig>
</SSL>
```

## Table description

Item	Description
Feature name	SSL
Table name	SSLGlobalConfig
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
SSL3Enabled	Enable SSL3.0.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disable.</li></ul>
RenegotiationEnabled	Enable SSL renegotiation.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disable.</li></ul>
TLS1Dot0Enabled	Enable TLS1.0	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disable.</li></ul>
TLS1Dot1Enabled	Enable TLS1.1	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disable.</li></ul>
TLS1Dot2Enabled	Enable TLS1.2	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enable.</li><li>• <b>false</b>—Disable.</li></ul>

# Contents

Comware 7 SSL NETCONF XML API Error Message Reference.....1

    SSL/SSLGlobalConfig.....1

    SSL/ServerPolicies.....1

# Comware 7 SSL NETCONF XML API Error Message Reference

## SSL/SSLGlobalConfig

Message	Explanation
Can't disable all SSL protocol versions. 不能禁止使用所有SSL协议版本。	An SSL server use at least one SSL protocol version. SSL服务器需要至少支持一个SSL版本才能正常工作。

## SSL/ServerPolicies

Message	Explanation
Can't disable all SSL protocol versions. 不能禁止使用所有SSL协议版本。	An SSL server use at least one SSL protocol version. SSL服务器需要至少支持一个SSL版本才能正常工作。

# Contents

SSLVPN.....	1
SSLVPN/LogoutAlls.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
SSLVPN/LogoutUsers.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
SSLVPN/LogoutSessions .....	2
XML structure.....	2
Table description.....	3
Columns.....	3
SSLVPN/ClearAllIpacStats.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
SSLVPN/ClearIpacStatsContexts .....	4
XML structure.....	4
Table description.....	4
Columns.....	4
SSLVPN/ClearIpacStatsSessions.....	5
XML structure.....	5
Table description.....	5
Columns.....	5
SSLVPN/GlobalCustoms .....	5
XML structure.....	5
Table description.....	6
Columns.....	6



# SSLVPN

## SSLVPN/LogoutAlls

This table contains information about force logout of all SSL VPN users.

### XML structure

```
<SSLVPN>
  <LogoutAlls>
    <LogoutAll>
      <ContextName></ContextName>
    </LogoutAll>
  </LogoutAlls>
</SSLVPN>
```

### Table description

Item	Description
Feature name	SSLVPN
Table name	LogoutAlls
Table type	Multi-instance table
Row name	LogoutAll
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).

## SSLVPN/LogoutUsers

This table contains is used to log out all SSL VPN users.

### XML structure

```
<SSLVPN>
  <LogoutUsers>
    <LogoutUser>
```

```

        <ContextName></ContextName>
        <UserName></UserName>
    </LogoutUser>
</LogoutUsers>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	LogoutUsers
Table type	Multi-instance table
Row name	LogoutUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
Username	Username	Index	String. Length: 1 to 63 characters.

## SSLVPN/LogoutSessions

This table contains information about force logout of SSL VPN users by session ID.

## XML structure

```

<SSLVPN>
  <LogoutSessions>
    <LogoutSession>
      <ContextName></ContextName>
      <SessionID></SessionID>
    </LogoutSession>
  </LogoutSessions>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	LogoutSessions
Table type	Multi-instance table
Row name	LogoutSession
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
SessionID	User session ID	Index	Unsigned integer. Value range: 1 to 4294967295.	The ID is used only for sequencing. It is randomly assigned.

## SSLVPN/ClearAllIpacStats

This table contains information about resetting IP access statistics of all SSLVPN users.

## XML structure

```
<SSLVPN>
  <ClearAllIpacStats>
    <Clear></Clear>
  </ClearAllIpacStats>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	ClearAllIpacStats
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clears IP access statistics on all users.	N/A	This column must be empty.	Clear

## SSLVPN/ClearIpacStatsContexts

This table contains information about resetting IP access statistics of SSL VPN users within specific SSLVPN context.

## XML structure

```
<SSLVPN>
  <ClearIpacStatsContexts>
    <ClearIpacStatsContext>
      <ContextName></ContextName>
    </ClearIpacStatsContext>
  </ClearIpacStatsContexts>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	ClearIpacStatsContexts
Table type	Multi-instance table
Row name	ClearIpacStatsContext
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A

# SSLVPN/ClearIpacStatsSessions

This table contains information about resetting IP access statistics of SSL VPN users by session ID.

## XML structure

```
<SSLVPN>
  <ClearIpacStatsSessions>
    <ClearIpacStatsSession>
      <ContextName></ContextName>
      <SessionID></SessionID>
    </ClearIpacStatsSession>
  </ClearIpacStatsSessions>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	ClearIpacStatsSessions
Table type	Multi-instance table
Row name	ClearIpacStatsSession
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
SessionID	User session ID	Index	Unsigned integer. Value range: 1 to 4294967295.	The ID is used only for sequencing. It is randomly assigned.

# SSLVPN/GlobalCustoms

This table is used to customize SSL VPN user access clients.

## XML structure

```
<SSLVPN>
```

```

<GlobalCustoms>
  <GlobalCustom>
    <IPClientName></IPClientName>
  </GlobalCustom>
</GlobalCustoms>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	GlobalCustoms
Table type	Multi-instance table
Row name	GlobalCustom
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPClientName	Name of the custom IP access client	Column	String, case insensitive. Length: 0 to 63 characters. The string cannot contain colons (:), question marks (?), asterisks (*), angle brackets (< >), ditto marks ("), slashes (/), backslashes (\), vertical bars ( ).	When the string length is 0, this column deletes the custom IP access client.

# Contents

SSLVPN.....	1
SSLVPN/Gateways .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
SSLVPN/Contexts .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
SSLVPN/Contexts_v2 .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
SSLVPN/ContextGateways .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
SSLVPN/IpAcContexts .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
SSLVPN/UISettings .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
SSLVPN/PortForwardLists .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
SSLVPN/PortForwardItems .....	15
XML structure .....	16
Table description .....	16
Columns .....	16
SSLVPN/Ipv4AddressPools .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
SSLVPN/RouteLists .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
SSLVPN/RouteItems .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
SSLVPN/PolicyGroups .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
SSLVPN/TcpAcPolicys .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
SSLVPN/IpAcPolicys .....	22
XML structure .....	22
Table description .....	23
Columns .....	23

SSLVPN/IpAcPolycys_v2 .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
SSLVPN/URIACLs .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
SSLVPN/URIACLItems .....	28
XML structure .....	28
Table description .....	28
Columns .....	29
SSLVPN/WebAcPolycys .....	29
XML structure .....	29
Table description .....	29
Columns .....	30
SSLVPN/UrlLists .....	30
XML structure .....	30
Table description .....	31
Columns .....	31
SSLVPN/UrlItems .....	31
XML structure .....	31
Table description .....	32
Columns .....	32
SSLVPN/UrlCtxItems .....	32
XML structure .....	32
Table description .....	33
Columns .....	33
SSLVPN/UrlItemResources .....	34
XML structure .....	34
Table description .....	34
Columns .....	35
SSLVPN/SnatPools .....	35
XML structure .....	35
Table description .....	35
Columns .....	36
SSLVPN/Ipv6SnatPools .....	36
XML structure .....	36
Table description .....	36
Columns .....	37
SSLVPN/UrlResources .....	37
XML structure .....	37
Table description .....	37
Columns .....	38
SSLVPN/SnatResources .....	38
XML structure .....	38
Table description .....	38
Columns .....	39
SSLVPN/UserControls .....	39
XML structure .....	39
Table description .....	39
Columns .....	40
SSLVPN/GlobalLog .....	40
XML structure .....	40
Table description .....	40
Columns .....	41
SSLVPN/PortForwardCtxItems .....	41
XML structure .....	41
Table description .....	41
Columns .....	42
SSLVPN/PortForwardItemResources .....	42
XML structure .....	42



Table description .....	43
Columns .....	43
SSLVPN/Shortcuts .....	43
XML structure .....	43
Table description .....	44
Columns .....	44
SSLVPN/ShortcutLists .....	44
XML structure .....	44
Table description .....	45
Columns .....	45
SSLVPN/ShortcutResources .....	45
XML structure .....	45
Table description .....	46
Columns .....	46
SSLVPN/ShortcutPolicys .....	46
XML structure .....	46
Table description .....	47
Columns .....	47
SSLVPN/Users .....	47
XML structure .....	47
Table description .....	48
Columns .....	48

# SSLVPN

## SSLVPN/Gateways

This table contains SSL VPN gateway configuration information.

### XML structure

```
<SSLVPN>
  <Gateways>
    <Gateway>
      <Name></Name>
      <AddressType></AddressType>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <VRF></VRF>
      <SSLServerPolicy></SSLServerPolicy>
      <HTTPRedirect></HTTPRedirect>
      <RedirectPort></RedirectPort>
      <Enable></Enable>
    </Gateway>
  </Gateways>
</SSLVPN>
```

### Table description

Item	Description
Feature name	SSLVPN
Table name	Gateways
Table type	Multi-instance table
Row name	Gateway
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN gateway name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			letters, digits, and underscores (_).	
AddressType	Whether the SSL VPN gateway address is an IPv6 address	N/A	Boolean: <ul style="list-style-type: none"> <li>false—IPv4.</li> <li>true—IPv6.</li> </ul>	N/A
Ipv4Address	IPv4 address of the SSL VPN gateway	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address	IPv6 address of the SSL VPN gateway	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
PortNumber	Port number of the SSL VPN gateway	N/A	Unsigned integer. Value range: 443, 1025 to 65535. Default: 443.	N/A
VRF	Name of the VRF instance associated with the SSL VPN gateway	N/A	String. Length: 0 to 31 characters.	If the gateway is on the public network, the length of characters is 0.
SSLServerPolicy	Name of the SSL server policy used by the SSL VPN gateway	N/A	String, case insensitive. Length: 1 to 31 characters.	By default, no SSL server policy is used by the SSL VPN gateway.
HTTPRedirect	Whether HTTP traffic is redirected	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Redirected.</li> <li>false—Not redirected.</li> </ul>	N/A
RedirectPort	Port number of the redirected HTTP traffic	N/A	Unsigned integer. Value range: 80, 1025 to 65535. Default: 80.	N/A
Enable	Whether the SSL VPN gateway is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>	N/A

## SSLVPN/Contexts

This table contains SSL VPN context configuration information.

### XML structure

```

<SSLVPN>
  <Contexts>
    <Context>
      <Name></Name>
      <Gateway>

```

```

    <Name></Name>
    <AccessType></AccessType>
    <Domain></Domain>
    <VirtualHost></VirtualHost>
</Gateway>
<VRF></VRF>
<MaxUsers></MaxUsers>
<IdleTimeout></IdleTimeout>
<AADomain></AADomain>
<EMOServer>
    <Address></Address>
    <PortNumber></PortNumber>
</EMOServer>
<DefaultPolicyGroup></DefaultPolicyGroup>
<Enable></Enable>
</Context>
</Contexts>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Contexts
Table type	Multi-instance table
Row name	Context
Restrictions	The Contexts table does not support multiple links. Tables ContextGateways and contexts_v2 are added to support multiple links, and new features are added in the these two tables. The Contexts table is included only for compatibility. No new features will be added to this table. Use new tables ContextGateway and contexts_v2 instead of this table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
Gateway	Associated gateway	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>AccessType.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Domain.</li> <li>VirtualHost.</li> </ul>	
Name	Associated gateway name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
AccessType	Gateway access method	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—domain.</li> <li>2—virtual host.</li> </ul>	N/A
Domain	Domain specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), and underscores (_).	N/A
VirtualHost	Virtual host specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	N/A
VRF	Name of the VRF instance associated with the SSL VPN context	N/A	String. Length: 0 to 31 characters.	If the context is on the public network, the length of characters is 0.
MaxUsers	Maximum number of SSL VPN user connections	N/A	Unsigned integer. Value range: 1 to 1048575.	N/A
IdleTimeout	User connection idle timeout time	N/A	Unsigned integer. Value range: 1 to 1440, in minutes. Default: 30 minutes.	N/A
AAADomain	SSL VPN context AAA domain	N/A	String, case insensitive. Length: 1 to 255 characters. The string cannot contain the following characters: / \   " : * ? < > @ The string cannot be any of the following values: d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.	N/A
EMOServer	EMO server	Data structure	Members include: <ul style="list-style-type: none"> <li>Address.</li> <li>PortNumber.</li> </ul>	N/A
Address	IPv4 address or host name of the	N/A	IPv4 address: String, dotted decimal notation.	IPv4 address example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
	EMO server		Host name: String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	Host name example: www.example.com.
PortNumber	Port number of the EMO server	N/A	Unsigned integer. Value range: 1025 to 65535.	N/A
DefaultPolicy Group	Default policy group	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Enable	Whether the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>	N/A

## SSLVPN/Contexts\_v2

This table contains SSL VPN context\_v2 configuration information.

### XML structure

```

<SSLVPN>
  <Contexts_v2>
    <Context_v2>
      <Name></Name>
      <VRF></VRF>
      <MaxUsers></MaxUsers>
      <IdleTimeout></IdleTimeout>
      <TrafficThreshold></TrafficThreshold>
      <AAADomain></AAADomain>
      <EMOServer>
        <Address></Address>
        <PortNumber></PortNumber>
      </EMOServer>
      <MessageServer>
        <Address></Address>
        <PortNumber></PortNumber>
      </MessageServer>
      <SmsImcServer>
        <Address></Address>
        <PortNumber></PortNumber>
        <VRF></VRF>
      </SmsImcServer>
    </Context_v2>
  </Contexts_v2>
</SSLVPN>

```

```

    <DefaultPolicyGroup></DefaultPolicyGroup>
    <SSLClientPolicy></SSLClientPolicy>
    <Enable></Enable>
  </Context_v2>
</Contexts_v2>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Contexts_v2
Table type	Multi-instance table
Row name	Context_v2
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
VRF	Name of the VRF instance associated with the SSL VPN context	N/A	String. Length: 0 to 31 characters.	If the context is on the public network, the length of characters is 0.
MaxUsers	Maximum number of SSL VPN user connections	N/A	Unsigned integer. Value range: 1 to 1048575.	N/A
IdleTimeout	User connection idle timeout time	N/A	Unsigned integer. Value range: 1 to 1440, in minutes. Default: 30 minutes.	N/A
TrafficThreshold	Set the minimum traffic to avoid idle-cut	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
AAADomain	SSL VPN context AAA domain	N/A	String, case insensitive. Length: 1 to 255 characters. The string cannot contain the following characters:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			/\ ":*?<>@ The string cannot be any of the following values: d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.	
EMOServer	EMO server	Data structure	Members include: <ul style="list-style-type: none"> <li>Address.</li> <li>PortNumber.</li> </ul>	N/A
Address	IPv4 address or host name of the EMO server	N/A	IPv4 address: String, dotted decimal notation. Host name: String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	IPv4 address example: 1.1.1.1. Host name example: www.example.com.
PortNumber	Port number of the EMO server	N/A	Unsigned integer. Value range: 1025 to 65535.	N/A
MessageServer	Message server	Data structure	Members include: <ul style="list-style-type: none"> <li>Address.</li> <li>PortNumber.</li> </ul>	N/A
Address	IPv4 address or host name of the Message server	N/A	IPv4 address: String, dotted decimal notation. Host name: String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	IPv4 address example: 1.1.1.1. Host name example: www.example.com.
PortNumber	Port number of the Message server	N/A	Unsigned integer. Value range: 1025 to 65535.	N/A
SmsImcServer	Short Message Service of IMC server	Data structure	Members include: <ul style="list-style-type: none"> <li>Address.</li> <li>PortNumber.</li> </ul>	New feature, not compatible with the old table.
Address	IPv4 address of the IMC server	N/A	String, dotted decimal notation.	New feature, not compatible with the old table. Example: 1.1.1.1.
PortNumber	Port number of the IMC server	N/A	Unsigned integer. Value range: 1 to 65535.	New feature, not compatible with the old table.
VRF	Name of the VRF instance associated with the IMC server	N/A	String: Length: 0 to 31 characters.	If the IMC server is on the public network, the length of characters is 0.
SmsImc	Whether the SMS-IMC	N/A	Boolean:	New feature, not compatible with the old



Column name	Column description	Column type	Data type and restrictions	Remarks
	message authentication of the SSL VPN context is enabled.		<ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>	table.
DefaultPolicy Group	Default policy group	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
SSLClientPolicy	Name of the SSL client policy used by the SSL VPN context	N/A	String, case insensitive. Length: 1 to 31 characters.	New feature, not compatible with the old table.
Enable	Whether the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>	N/A

## SSLVPN/ContextGateways

This table contains information about the SSL VPN gateway associated with the [context](#).

### XML structure

```

<SSLVPN>
  <ContextGateways>
    <ContextGateway>
      <ContextName></ContextName>
      <GatewayName></GatewayName>
      <AccessType></AccessType>
      <Domain></Domain>
      <VirtualHost></VirtualHost>
    </ContextGateway>
  </ContextGateways>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	ContextGateways
Table type	Multi-instance table
Row name	ContextGateway
Restrictions	None

Support for row creation and deletion	Yes
---------------------------------------	-----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
GatewayName	Associated gateway name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
AccessType	Gateway access method	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—domain.</li> <li>2—virtual host.</li> </ul>	N/A
Domain	Domain specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), and underscores (_).	N/A
VirtualHost	Virtual host specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	N/A

## SSLVPN/IpAcContexts

This table contains SSL VPN IP access configuration information for context.

## XML structure

```

<SSLVPN>
  <IpAcContexts>
    <IpAcContext>
      <ContextName></ContextName>
      <AcIfIndex></AcIfIndex>
      <KeepAlive></KeepAlive>
      <Ipv4AddressPool>
        <Name></Name>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </Ipv4AddressPool>
      <DNSServer>

```

```

        <Primary></Primary>
        <Secondary></Secondary>
    </DNSServer>
    <WINSServer>
        <Primary></Primary>
        <Secondary></Secondary>
    </WINSServer>
    <ConnCloseLog></ConnCloseLog>
    <PacketDropLog></PacketDropLog>
    <IPClientAutoActive></IPClientAutoActive>
    <WebResourceAutoPush></WebResourceAutoPush>
    <RateLimitUp>
        <Unit></Unit>
        <Value></Value>
    </RateLimitUp>
    <RateLimitDown>
        <Unit></Unit>
        <Value></Value>
    </RateLimitDown>
</IpAcContext>
</IpAcContexts>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	IpAcContexts
Table type	Multi-instance table
Row name	IpAcContext
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
AcIfIndex	Index of the referenced SSL VPN access	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	interface			
KeepAlive	Keepalive interval	N/A	Unsigned integer. Value range: 0 to 600, in seconds. Default: 30 seconds.	N/A
Ipv4AddressPool	Referenced address pool	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
Name	SSL VPN IP address pool name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4PrefixLength	SSL VPN IPv4 address pool prefix length	N/A	Unsigned integer. Value range: 1 to 30.	N/A
DNSServer	DNS server	Data structure	Members include: <ul style="list-style-type: none"> <li>Primary.</li> <li>Secondary.</li> </ul>	N/A
Primary	IPv4 address of primary DNS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Secondary	IPv4 address of secondary DNS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
WINSServer	WINS server	Data structure	Members include: <ul style="list-style-type: none"> <li>Primary.</li> <li>Secondary.</li> </ul>	N/A
Primary	IPv4 address of primary WINS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Secondary	IPv4 address of secondary WINS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ConnCloseLog	Enabling status of IP access connection close logging.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>	N/A
PacketDropLog	Enabling status of packet drop logging.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>	N/A
IPClientAutomatic	Enabling status of automatic startup of the IP access client after Web login.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>	N/A
WebResourceAutoPush	Enabling status of automatic	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	pushing of accessible resources through Web after IP access client login.		<ul style="list-style-type: none"> <li>false—Disabled (default).</li> </ul>	
RateLimitUp	Upstream rate limit	Data structure	Members include: <ul style="list-style-type: none"> <li>Unit.</li> <li>Value.</li> </ul>	“Unit” and “value” must both be configured.
Unit	Unit for the rate limit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—kbps</li> <li>2—pps</li> </ul>	N/A
Value	Rate limit value	N/A	Unsigned integer. Value range: 1000 to 100000000.	N/A
RateLimitDown	Downstream rate limit	Data structure	Members include: <ul style="list-style-type: none"> <li>Unit.</li> <li>Value.</li> </ul>	“Unit” and “value” must both be configured.
Unit	Unit for the rate limit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—kbps</li> <li>2—pps</li> </ul>	N/A
Value	Rate limit value	N/A	Unsigned integer. Value range: 1000 to 100000000.	N/A

## SSLVPN/UISettings

This table contains SSL VPN context UI configuration information.

### XML structure

```

<SSLVPN>
  <UISettings>
    <UISetting>
      <ContextName></ContextName>
      <VerifyCode></VerifyCode>
      <DPWD></DPWD>
      <DisplayLogo></DisplayLogo>
      <HidePasswordInput></HidePasswordInput>
      <LogoFile></LogoFile>
      <LoginMsg>
        <English></English>
        <Chinese></Chinese>
      </LoginMsg>
      <Title>
        <English></English>

```

```

    <Chinese></Chinese>
</Title>
<CertificateAuthen></CertificateAuthen>
<PasswordAuthen></PasswordAuthen>
<AuthenUse></AuthenUse>
<UserLog></UserLog>
<ResourceLog></ResourceLog>
<Filter></Filter>
<Brief></Brief>
</UISetting>
</UISettings>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UISettings
Table type	Multi-instance table
Row name	UISetting
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
VerifyCode	Whether the verify code is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>
DPWD	Whether the dynamic password is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>
DisplayLogo	Whether the logo is displayed	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Displayed (default).</li> <li>false—Not displayed.</li> </ul>
HidePasswordInput	Whether to hide the password input box	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hide the password box.</li> <li>false—Not hide the password box (default).</li> </ul>
LogoFile	Logo file path	N/A	String, case insensitive.

Column name	Column description	Column type	Data type and restrictions
			Length: 1 to 255 characters.
LoginMsg	Web login message	Data structure	Members include: <ul style="list-style-type: none"> <li>English.</li> <li>Chinese.</li> </ul>
English	English login message string	N/A	String. Length: 1 to 255 characters.
Chinese	Chinese login message string	N/A	String. Length: 1 to 255 characters.
Title	Web title	Data structure	Members include: <ul style="list-style-type: none"> <li>English.</li> <li>Chinese.</li> </ul>
English	English title string	N/A	String. Length: 1 to 255 characters.
Chinese	Chinese title string	N/A	String. Length: 1 to 255 characters.
CertificateAuthen	Whether certificate authentication of the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>
ResourcerLog	Whether Resource logging of the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>
Filter	Whether resource access log filtering is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>
Brief	Whether brief logging for resource access is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>
UserLog	Whether user logging of the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>
PasswordAuthen	Whether password authentication of the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled(default).</li> <li>false—Disabled.</li> </ul>
AuthenUse	The authentication methods required for user login.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—all(default).</li> <li>1—any-one.</li> </ul>

# SSLVPN/PortForwardLists

This table contains SSL VPN port forwarding list configuration information.

## XML structure

```
<SSLVPN>
  <PortForwardLists>
    <PortForwardList>
      <ContextName></ContextName>
      <ListName></ListName>
    </PortForwardList>
  </PortForwardLists>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	PortForwardLists
Table type	Multi-instance table
Row name	PortForwardList
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN port forwarding list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

# SSLVPN/PortForwardItems

This table contains SSL VPN port forwarding entry configuration information.



# XML structure

```
<SSLVPN>
  <PortForwardItems>
    <PortForwardItem>
      <ContextName></ContextName>
      <ListName></ListName>
      <LocalPortNumber></LocalPortNumber>
      <LocalName></LocalName>
      <RemoteServer></RemoteServer>
      <RemotePortNumber></RemotePortNumber>
      <Description></Description>
    </PortForwardItem>
  </PortForwardItems>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	PortForwardItems
Table type	Multi-instance table
Row name	PortForwardItem
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN port forwarding list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
LocalPortNumber	Port number of the local server	Index	Unsigned integer. Value range: 1 to 65535.
LocalName	Domain name of the local server	Index	String, case insensitive. Length: 1 to 253 characters. The string can contain only letters, digits, hyphens (-), underscores (_), square brackets ([]), colon(:) and dots (.).

Column name	Column description	Column type	Data type and restrictions
RemoteServer	Domain name of the remote server	N/A	String, case insensitive. Length: 1 to 253 characters. The string can contain only letters, digits, hyphens (-), underscores (_), square brackets ([]), colon(:) and dots (.).
RemotePortNumber	Port number of the remote server	N/A	Unsigned integer. Value range: 1 to 65535.
Description	Description for the port forwarding entry	N/A	String. Length: 1 to 63 characters.

## SSLVPN/Ipv4AddressPools

This table contains SSL VPN IPv4 address pool configuration information.

### XML structure

```

<SSLVPN>
  <Ipv4AddressPools>
    <Ipv4AddressPool>
      <Name></Name>
      <Ipv4AddressStart></Ipv4AddressStart>
      <Ipv4AddressEnd></Ipv4AddressEnd>
    </Ipv4AddressPool>
  </Ipv4AddressPools>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	Ipv4AddressPools
Table type	Multi-instance table
Row name	Ipv4AddressPool
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN IP address pool name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4AddressStart	Start IPv4 address of the pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1. Ipv4AddressStart cannot be larger than Ipv4AddressEnd.
Ipv4AddressEnd	End IPv4 address of the pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

## SSLVPN/RouteLists

This table contains SSL VPN route list configuration information.

## XML structure

```

<SSLVPN>
  <RouteLists>
    <RouteList>
      <ContextName></ContextName>
      <ListName></ListName>
    </RouteList>
  </RouteLists>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	RouteLists
Table type	Multi-instance table
Row name	RouteList
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN route list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/RouteItems

This table contains SSL VPN route entry configuration information.

## XML structure

```
<SSLVPN>
  <RouteItems>
    <RouteItem>
      <ContextName></ContextName>
      <ListName></ListName>
      <RouteType></RouteType>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
    </RouteItem>
  </RouteItems>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	RouteItems
Table type	Multi-instance table
Row name	RouteItem
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
ListName	SSL VPN route list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
RouteType	The way how the route is specified	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Exclude.</li><li>1—Include.</li></ul>	N/A
Ipv4Address	Destination IPv4 address of the route	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	IPv4 address prefix length	Index	Unsigned integer. Value range: 0 to 32.	N/A

## SSLVPN/PolicyGroups

This table contains SSL VPN policy group basic configuration information.

## XML structure

```
<SSLVPN>
  <PolicyGroups>
    <PolicyGroup>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
    </PolicyGroup>
  </PolicyGroups>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	PolicyGroups
Table type	Multi-instance table
Row name	PolicyGroup

Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/TcpAcPolicys

This table contains SSL VPN TCP access configuration information for policy groups.

## XML structure

```

<SSLVPN>
  <TcpAcPolicys>
    <TcpAcPolicy>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <PortForwardName></PortForwardName>
      <URIACLName></URIACLName>
      <Ipv4AclNumber></Ipv4AclNumber>
      <Ipv6AclNumber></Ipv6AclNumber>
    </TcpAcPolicy>
  </TcpAcPolicys>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	TcpAcPolicys
Table type	Multi-instance table
Row name	TcpAcPolicy
Restrictions	None

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
PortForwardName	SSL VPN port forwarding list name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
Ipv4AclNumber	Referenced IPv4 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.
Ipv6AclNumber	Referenced IPv6 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.

## SSLVPN/IpAcPolicys

This table contains SSL VPN IP access configuration information for policy groups.

## XML structure

```

<SSLVPN>
  <IpAcPolicys>
    <IpAcPolicy>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <KeepAlive></KeepAlive>
      <Ipv4AclNumber></Ipv4AclNumber>
      <Ipv4AddressPool>
        <Name></Name>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </Ipv4AddressPool>
    </IpAcPolicy>
  </IpAcPolicys>
</SSLVPN>

```

```

<AccessRoute>
  <RouteType></RouteType>
  <RouteList></RouteList>
  <Ipv4Address></Ipv4Address>
  <Ipv4PrefixLength></Ipv4PrefixLength>
</AccessRoute>
<DNSServer>
  <Primary></Primary>
  <Secondary></Secondary>
</DNSServer>
<WINSServer>
  <Primary></Primary>
  <Secondary></Secondary>
</WINSServer>
</IpAcPolicy>
</IpAcPolicys>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	IpAcPolicys
Table type	Multi-instance table
Row name	IpAcPolicy
Restrictions	The IpacPolicys table does not support multiple user groups. The IpacPolicys_v2 table is added to support multiple user groups. The IpacPolicys table is included only for compatibility. No new features will be added to this table. Use the new table IpacPolicys_v2 instead of this table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
KeepAlive	Keepalive interval	N/A	Unsigned integer. Value range: 0 to 600, in seconds. Default: 30 seconds.	N/A
Ipv4AclNumber	Referenced IPv4 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Ipv4AddressPool	Referenced address pool	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
Name	SSL VPN IP address pool name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4PrefixLength	SSL VPN IPv4 address pool prefix length	N/A	Unsigned integer. Value range: 1 to 30.	N/A
AccessRoute	Route issued to the client	Data structure	Members include: <ul style="list-style-type: none"> <li>RouteType.</li> <li>RouteList.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
RouteType	The way how the route is specified	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Route list.</li> <li>2—IPv4 address.</li> <li>3—All.</li> </ul>	N/A
RouteList	SSL VPN route list name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	Available when RouteType is 1.
Ipv4Address	Destination IPv4 address of the route	N/A	String, dotted decimal notation.	Example: 1.1.1.1. Available when RouteType is 2.
Ipv4PrefixLength	IPv4 address prefix length	N/A	Unsigned integer. Value range: 0 to 32.	Available when RouteType is 2.
DNSServer	DNS server	Data structure	Members include: <ul style="list-style-type: none"> <li>Primary.</li> <li>Secondary.</li> </ul>	N/A
Primary	IPv4 address of primary DNS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Secondary	IPv4 address of secondary DNS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
WINSServer	WINS server	Data structure	Members include: <ul style="list-style-type: none"> <li>Primary.</li> <li>Secondary.</li> </ul>	N/A
Primary	IPv4 address of primary WINS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Secondary	IPv4 address of secondary WINS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

## SSLVPN/IpAcPolicys\_v2

This table contains SSL VPN IP access configuration information for policy groups.

### XML structure

```

<SSLVPN>
  <IpAcPolicys_v2>
    <IpAcPolicy_v2>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <Ipv4AddressPool>
        <Name></Name>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </Ipv4AddressPool>
      <Ipv4AclNumber></Ipv4AclNumber>
      <Ipv6AclNumber></Ipv6AclNumber>
      <AccessRoute>
        <RouteType></RouteType>
        <RouteList></RouteList>
        <Ipv4Address></Ipv4Address>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </AccessRoute>
      <ForceAll></ForceAll>
      <URIACLName></URIACLName>
    </IpAcPolicy_v2>
  </IpAcPolicys_v2>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	IpAcPolicys_v2
Table type	Multi-instance table

Row name	IpAcPolicy_v2
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4AddressPool	Referenced address pool	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
Name	SSL VPN IPv4 address pool name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4PrefixLength	SSL VPN IPv4 address pool prefix length	N/A	Unsigned integer. Value range: 1 to 30.	N/A
Ipv4AclNumber	Referenced IPv4 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Ipv6AclNumber	Referenced IPv6 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	New feature, not compatible with the old table.
AccessRoute	Route issued to the client	Data structure	Members include: <ul style="list-style-type: none"> <li>RouteType.</li> <li>RouteList.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
RouteType	The way how the route is specified	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Route list.</li> <li>2—IPv4 address.</li> </ul>	N/A
ForceAll	Whether the force all is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>false—Enabled.</li> <li>true—Disabled.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RouteList	SSL VPN route list name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	Available when RouteType is 1.
Ipv4Address	Destination IPv4 address of the route	N/A	String, dotted decimal notation.	Example: 1.1.1.1. Available when RouteType is 2.
Ipv4PrefixLength	IPv4 address prefix length	N/A	Unsigned integer. Value range: 0 to 32.	Available when RouteType is 2.
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	New feature, not compatible with the old table.

## SSLVPN/URIACLs

This table contains SSL VPN URI ACL configuration information.

### XML structure

```

<SSLVPN>
  <URIACLs>
    <URIACL>
      <ContextName></ContextName>
      <URIACLName></URIACLName>
    </URIACL>
  </URIACLs>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	URIACLs
Table type	Multi-instance table
Row name	URIACL
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
URIACLName	SSL VPN URI ACL name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).

## SSLVPN/URIACLItems

This table contains SSL VPN URI ACL entry configuration information.

## XML structure

```
<SSLVPN>
  <URIACLItems>
    <URIACLItem>
      <ContextName></ContextName>
      <URIACLName></URIACLName>
      <RuleNumber></RuleNumber>
      <Action></Action>
      <Pattern></Pattern>
    </URIACLItem>
  </URIACLItems>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	URIACLItems
Table type	Multi-instance table
Row name	URIACLItem
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
URIACLName	SSL VPN URI ACL name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
RuleNumber	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Action	Action	N/A	Unsigned integer. Value range: 1 to 2. <ul style="list-style-type: none"><li>1—Permit.</li><li>2—Deny.</li></ul>
Pattern	Rule pattern	N/A	String, case insensitive. Length: 1 to 256 characters.

## SSLVPN/WebAcPolicys

This table contains SSL VPN Web access configuration information for policy groups.

## XML structure

```
<SSLVPN>
  <WebAcPolicys>
    <WebAcPolicy>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <Ipv4AclNumber></Ipv4AclNumber>
      <Ipv6AclNumber></Ipv6AclNumber>
      <URIACLName></URIACLName>
    </WebAcPolicy>
  </WebAcPolicys>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	WebAcPolicys

Table type	Multi-instance table
Row name	WebAcPolicy
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	
Ipv4AcNumber	Referenced IPv4 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	
Ipv6AcNumber	Referenced IPv6 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A

## SSLVPN/UrlLists

This table contains SSL VPN URL list configuration information.

## XML structure

```

<SSLVPN>
  <UrlLists>
    <UrlList>
      <ContextName></ContextName>
      <ListName></ListName>
      <Heading></Heading>
    </UrlList>
  </UrlLists>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UrlLists
Table type	Multi-instance table
Row name	UrlList
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN URL list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
Heading	SSL VPN URL list heading	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).

## SSLVPN/UrlItems

This table contains SSL VPN URL entry configuration information.

## XML structure

```
<SSLVPN>
  <UrlItems>
    <UrlItem>
      <ContextName></ContextName>
      <ListName></ListName>
      <UrlName></UrlName>
      <UrlValue></UrlValue>
      <URIACLName></URIACLName>
    </UrlItem>
  </UrlItems>
</SSLVPN>
```



</SSLVPN>

## Table description

Item	Description
Feature name	SSLVPN
Table name	UrlItems
Table type	Multi-instance table
Row name	UrlItem
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN URL list name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
UrlName	URL name	Index	String, case insensitive. Length: 1 to 31 characters.
UrlValue	URL string	N/A	String, case insensitive. Length: 1 to 253 characters.
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. the string can contain only letters, digits, and underscores(_).

## SSLVPN/UrlCtxItems

This table contains SSL VPN URL item configuration information.

## XML structure

```
<SSLVPN>
  <UrlCtxItems>
    <UrlCtxItem>
      <ContextName></ContextName>
```

```

<ItemName></ItemName>
<UrlMapping>
  <MappingType></MappingType>
  <Domain></Domain>
  <GatewayName></GatewayName>
  <VirtualHost></VirtualHost>
  <Rewrite></Rewrite>
</UrlMapping>
<UrlValue></UrlValue>
<URIACLName></URIACLName>
</UrlCtxItem>
</UrlCtxItems>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UrlCtxItems
Table type	Multi-instance table
Row name	UrlCtxItem
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
ItemName	URL item name	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
UrlMapping	URL mapping	Data structure	Members include: <ul style="list-style-type: none"> <li>MappingType.</li> <li>Domain.</li> <li>GatewayName.</li> <li>VirtualHost.</li> <li>Rewrite.</li> </ul>	N/A
MappingType	URL mapping type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—domain mapping.</li> <li>2—port mapping.</li> </ul>	N/A
Domain	Domain name	N/A	String, case insensitive.	N/A

	specified for the domain mapping		Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	
GatewayName	Gateway name specified for the port mapping	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
VirtualHost	Virtual host name specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	N/A
Rewrite	Whether absolute URL rewriting is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled (default).</li> </ul>	N/A
UrlValue	URL string	N/A	String, case insensitive. Length: 1 to 253 characters.	N/A
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores(_).	N/A

## SSLVPN/UrlItemResources

This table contains SSL VPN URL item resource configuration information.

### XML structure

```

<SSLVPN>
  <UrlItemResources>
    <UrlItemResource>
      <ContextName></ContextName>
      <UrlListName></UrlListName>
      <ItemName></ItemName>
    </UrlItemResource>
  </UrlItemResources>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	UrlItemResources

Item	Description
Table type	Multi-instance table
Row name	UrlItemResource
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
UrlListName	SSL VPN URL list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
ItemName	URL item name	Index	String, case insensitive. Length: 1 to 31 characters.	N/A

## SSLVPN/SnatPools

This table contains SSL VPN SNAT pool configuration information.

## XML structure

```

<SSLVPN>
  <SnatPools>
    <SnatPool>
      <Name></Name>
      <Ipv4AddressStart></Ipv4AddressStart>
      <Ipv4AddressEnd></Ipv4AddressEnd>
    </SnatPool>
  </SnatPools>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	SnatPools

Table type	Multi-instance table
Row name	SnatPool
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN SNAT pool name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
Ipv4AddressStart	Start IPv4 address of the SNAT pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1. Ipv4AddressStart cannot be higher than Ipv4AddressEnd.
Ipv4AddressEnd	End IPv4 address of the SNAT pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

## SSLVPN/Ipv6SnatPools

This table contains SSL VPN Ipv6 SNAT pool configuration information.

## XML structure

```

<SSLVPN>
  <Ipv6SnatPools>
    <Ipv6SnatPool>
      <Name></Name>
      <Ipv6AddressStart></Ipv6AddressStart>
      <Ipv6AddressEnd></Ipv6AddressEnd>
    </Ipv6SnatPool>
  </Ipv6SnatPools>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Ipv6SnatPools
Table type	Multi-instance table

Row name	Ipv6SnatPool
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN SNAT pool name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
Ipv6AddressStart	Start IPv6 address of the SNAT pool	N/A	Hexadecimal string, colon-separated.	Example: 1.1.1.1. Ipv4AddressStart cannot be higher than Ipv4AddressEnd.
Ipv6AddressEnd	End IPv6 address of the SNAT pool	N/A	Hexadecimal string, colon-separated.	Example: 1.1.1.1.

## SSLVPN/UrlResources

This table contains SSL VPN URL resource configuration information.

## XML structure

```

<SSLVPN>
  <UrlResources>
    <UrlResource>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <ListName></ListName>
    </UrlResource>
  </UrlResources>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UrlResources
Table type	Multi-instance table
Row name	UrlResource

Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
ListName	SSL VPN URL list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/SnatResources

This table contains SSL VPN SNAT resource configuration information.

## XML structure

```

<SSLVPN>
  <SnatResources>
    <SnatResource>
      <ContextName></ContextName>
      <SnatPoolName></SnatPoolName>
    </SnatResource>
  </SnatResources>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	SnatResources
Table type	Multi-instance table
Row name	SnatResource
Restrictions	None

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
SnatPoolName	SSL VPN SNAT pool name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).

## SSLVPN/UserControls

This table contains SSL VPN user control configuration information.

## XML structure

```

<SSLVPN>
  <UserControls>
    <UserControl>
      <ContextName></ContextName>
      <MaxOnlineNum></MaxOnlineNum>
      <ForceLogout></ForceLogout>
      <SessionConnectionNum></SessionConnectionNum>
    </UserControl>
  </UserControls>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UserControls
Table type	Multi-instance table
Row name	UserControl
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
MaxOnlineNum	Maximum online number of each SSL VPN user for the context	N/A	Unsigned integer. Value range: 0 to 1048575. Default: 32.	If the maxOnlineNum is 0, the context doesn't control the maximum online number of each SSL VPN user.
ForceLogout	Whether the force logout is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled.</li><li>false—Disabled (default).</li></ul>	N/A
SessionConnNum	Maximum number of connections for each session	N/A	Unsigned integer. Value range: 0, 10 to 1000. Default: 64.	If the MaxSessionConnNum is 0, the context doesn't control the maximum number of connections for each session.

## SSLVPN/GlobalLog

This table contains SSL VPN global log configuration information.

## XML structure

```
<SSLVPN>
  <GlobalLog>
    <GlobalLogEnable></GlobalLogEnable>
  </GlobalLog>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	GlobalLog
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalLogEnable	Whether the global log is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled.</li><li>false—Disabled (default).</li></ul>	N/A

## SSLVPN/PortForwardCtxItems

This table contains SSL VPN port forwarding items control configuration information.

## XML structure

```
<SSLVPN>
  <PortForwardCtxItems>
    <PortForwardCtxItem>
      <ContextName></ContextName>
      <ItemName></ItemName>
      <LocalPortNumber></LocalPortNumber>
      <LocalName></LocalName>
      <RemoteServer></RemoteServer>
      <RemotePortNumber></RemotePortNumber>
      <Description></Description>
      <Execution></Execution>
    </PortForwardCtxItem>
  </PortForwardCtxItems>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	PortForwardCtxItems
Table type	Multi-instance table
Row name	PortForwardCtxItem
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ItemName	Port forwarding item name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
LocalPortNumber	Port number of the local server	N/A	Unsigned integer. Value range: 1 to 65535.
LocalName	Domain name of the local server	N/A	String, case insensitive. Length: 1 to 253 characters. The string can contain only letters, digits, hyphens (-), underscores (_), square brackets ([]), colon(:) and dots (.).
RemoteServer	Domain name of the remote server	N/A	String, case insensitive. Length: 1 to 253 characters. The string can contain only letters, digits, hyphens (-), underscores (_), square brackets ([]), colon(:) and dots (.).
RemotePortNumber	Port number of the remote server	N/A	Unsigned integer. Value range: 1 to 65535.
Description	Description for the port forwarding entry	N/A	String. Length: 1 to 63 characters.
Execution	Configure the script to execute for the port forwarding item	N/A	String, case insensitive. Length: 1 to 255 characters.

## SSLVPN/PortForwardItemResources

This table contains SSL VPN port forwarding item resource configuration information.

### XML structure

```
<SSLVPN>
  <PortForwardItemResources>
    <PortForwardItemResource>
      <ContextName></ContextName>
      <PortForwardName></PortForwardName>
      <ItemName></ItemName>
```

```

        </PortForwardItemResource>
    </PortForwardItemResources>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	PortForwardItemResource
Table type	Multi-instance table
Row name	PortForwardItemResourc
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PortForwardName	SSL VPN port forwarding list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
ItemName	Port forwarding item name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/Shortcuts

This table contains SSL VPN short cut configuration information.

## XML structure

```

<SSLVPN>
  <Shortcuts>
    <Shortcut>
      <ContextName></ContextName>
      <ShortcutName></ShortcutName>
      <Description></Description>
    </Shortcut>
  </Shortcuts>
</SSLVPN>

```

```

        <Execution></Execution>
    </Shortcut>
</Shortcuts>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Shortcuts
Table type	Multi-instance table
Row name	Shortcut
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ShortcutName	SSL VPN short cut name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
Description	Description for the port forwarding entry	N/A	String. Length: 1 to 63 characters.
Execution	Configure the script to execute for the shortcut	N/A	String, case insensitive. Length: 1 to 255 characters.

## SSLVPN/ShortcutLists

This table contains SSL VPN short cut list configuration information.

## XML structure

```

<SSLVPN>
  <ShortcutLists>
    <ShortcutList>

```

```

    <ContextName></ContextName>
    <ShortcutListName></ShortcutListName>
  </ShortcutList>
</ShortcutLists>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	ShortcutLists
Table type	Multi-instance table
Row name	ShortcutList
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ShortcutListName	SSL VPN shortcut list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/ShortcutResources

This table contains SSL VPN short cut list resource configuration information.

## XML structure

```

<SSLVPN>
  <ShortcutResources>
    <ShortcutResource>
      <ContextName></ContextName>
      <ShortcutListName></ShortcutListName>
      <ShortcutName></ShortcutName>
    </ShortcutResource>
  </ShortcutResources>

```

</SSLVPN>

## Table description

Item	Description
Feature name	SSLVPN
Table name	ShortcutRefers
Table type	Multi-instance table
Row name	ShortcutRefer
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ShortcutListName	SSL VPN short cut list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
ShortcutName	SSL VPN short cut name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/ShortcutPolicys

This table contains SSL VPN short cut information for policy groups.

## XML structure

```
<SSLVPN>
  <ShortcutPolicys>
    <ShortcutPolicy>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <ShortcutListName></ShortcutListName>
    </ShortcutPolicy>
  </ShortcutPolicys>
```

</SSLVPN>

## Table description

Item	Description
Feature name	SSLVPN
Table name	ShortcutPolicys
Table type	Multi-instance table
Row name	ShortcutPolicy
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
ShortcutListName	SSL VPN shortcut list name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/Users

This table contains SSL VPN user bind address information.

## XML structure

```
<SSLVPN>
  <Users>
    <User>
      <ContextName></ContextName>
      <UserName></UserName>
      <BindAddress></BindAddress>
      <AutoBindAddressNum></AutoBindAddressNum>
    </User>
  </Users>
</SSLVPN>
```



```
</Users>  
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Users
Table type	Multi-instance table
Row name	User
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
UserName	SSLVPN user name	Index	String, case insensitive. Length: 1 to 63 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
BindAddress	IP address list	N/A	String, dotted decimal notation.	Example: 10.1.1.5,10.1.1.10-10.1.1.20
AutoBindAddressNum	Automatically allocate available IP addresses to the user	N/A	Unsigned integer. Value range: 1 to 10	This column is not displayed by the GET operation

# Contents

SSLVPN.....	1
SSLVPN/Gateways .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
SSLVPN/Contexts .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
SSLVPN/Contexts_v2 .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
SSLVPN/ContextGateways .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
SSLVPN/IpAcContexts .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
SSLVPN/UISettings .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
SSLVPN/PortForwardLists .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
SSLVPN/PortForwardItems .....	15
XML structure .....	16
Table description .....	16
Columns .....	16
SSLVPN/Ipv4AddressPools .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
SSLVPN/RouteLists .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
SSLVPN/RouteItems .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
SSLVPN/PolicyGroups .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
SSLVPN/TcpAcPolicys .....	21
XML structure .....	21
Table description .....	21
Columns .....	22
SSLVPN/IpAcPolicys .....	22
XML structure .....	22
Table description .....	23
Columns .....	23

SSLVPN/IpAcPolycys_v2 .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
SSLVPN/Sessions .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
SSLVPN/ContextStatistics .....	29
XML structure .....	29
Table description .....	29
Columns .....	29
SSLVPN/URIACLs .....	29
XML structure .....	29
Table description .....	30
Columns .....	30
SSLVPN/URIACLItems .....	30
XML structure .....	30
Table description .....	31
Columns .....	31
SSLVPN/WebAcPolycys .....	31
XML structure .....	31
Table description .....	32
Columns .....	32
SSLVPN/UrlLists .....	32
XML structure .....	32
Table description .....	33
Columns .....	33
SSLVPN/UrlItems .....	33
XML structure .....	33
Table description .....	34
Columns .....	34
SSLVPN/UrlCtxItems .....	34
XML structure .....	35
Table description .....	35
Columns .....	35
SSLVPN/UrlItemResources .....	36
XML structure .....	36
Table description .....	37
Columns .....	37
SSLVPN/SnatPools .....	37
XML structure .....	37
Table description .....	38
Columns .....	38
SSLVPN/Ipv6SnatPools .....	38
XML structure .....	38
Table description .....	39
Columns .....	39
SSLVPN/UrlResources .....	39
XML structure .....	39
Table description .....	40
Columns .....	40
SSLVPN/SnatResources .....	40
XML structure .....	40
Table description .....	41
Columns .....	41
SSLVPN/UserControls .....	41
XML structure .....	41
Table description .....	41
Columns .....	42
SSLVPN/Specification .....	42
XML structure .....	42

Table description .....	42
Columns .....	43
SSLVPN/GlobalLog .....	43
XML structure .....	43
Table description .....	43
Columns .....	43
SSLVPN/IpAcStatistics .....	43
XML structure .....	44
Table description .....	44
Columns .....	44
SSLVPN/IpAcContextStatistics .....	46
XML structure .....	46
Table description .....	46
Columns .....	46
SSLVPN/PortForwardCtxItems .....	47
XML structure .....	47
Table description .....	48
Columns .....	48
SSLVPN/PortForwardItemResources .....	49
XML structure .....	49
Table description .....	49
Columns .....	49
SSLVPN/Shortcuts .....	50
XML structure .....	50
Table description .....	50
Columns .....	50
SSLVPN/ShortcutLists .....	51
XML structure .....	51
Table description .....	51
Columns .....	51
SSLVPN/ShortcutResources .....	51
XML structure .....	52
Table description .....	52
Columns .....	52
SSLVPN/ShortcutPolicys .....	52
XML structure .....	53
Table description .....	53
Columns .....	53
SSLVPN/Users .....	53
XML structure .....	54
Table description .....	54
Columns .....	54
SSLVPN/GlobalCustomInfos .....	55
XML structure .....	55
Table description .....	55
Columns .....	55

# SSLVPN

## SSLVPN/Gateways

This table contains SSL VPN gateway information.

### XML structure

```
<SSLVPN>
  <Gateways>
    <Gateway>
      <Name></Name>
      <AddressType></AddressType>
      <Ipv4Address></Ipv4Address>
      <Ipv6Address></Ipv6Address>
      <PortNumber></PortNumber>
      <VRF></VRF>
      <SSLServerPolicy></SSLServerPolicy>
      <HTTPRedirect></HTTPRedirect>
      <RedirectPort></RedirectPort>
      <Enable></Enable>
      <OperStatus></OperStatus>
      <DownReason></DownReason>
    </Gateway>
  </Gateways>
</SSLVPN>
```

### Table description

Item	Description
Feature name	SSLVPN
Table name	Gateways
Table type	Multi-instance table
Row name	Gateway
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN gateway name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			letters, digits, and underscores (_).	
AddressType	Whether the SSL VPN gateway address is an IPv6 address	N/A	Boolean: <ul style="list-style-type: none"> <li>false—IPv4.</li> <li>true—IPv6.</li> </ul>	N/A
Ipv4Address	IPv4 address of the SSL VPN gateway	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv6Address	IPv6 address of the SSL VPN gateway	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
PortNumber	Port number of the SSL VPN gateway	N/A	Unsigned integer. Value range: 443, 1025 to 65535.	N/A
VRF	Name of the VRF instance associated with the SSL VPN gateway	N/A	String. Length: 0 to 31 characters.	If the gateway is on the public network, the length of characters is 0.
SSLServerPolicy	Name of the SSL server policy used by the SSL VPN gateway	N/A	String, case insensitive. Length: 1 to 31 characters.	N/A
HTTPRedirect	Whether HTTP traffic is redirected	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Redirected.</li> <li>false—Not redirected.</li> </ul>	N/A
RedirectPort	Port number of the redirected HTTP traffic	N/A	Unsigned integer. Value range: 80, 1025 to 65535.	N/A
Enable	Whether the SSL VPN gateway is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
OperStatus	SSL VPN gateway operation status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—up.</li> <li>2—down.</li> </ul>	N/A
DownReason	Reason why the operation status of the SSL VPN gateway is down	N/A	String. Length: 1 to 127 characters.	This column is available only when the SSL VPN gateway operation status is down.

## SSLVPN/Contexts

This table contains SSL VPN context information.

## XML structure

<SSLVPN>

```

<Contexts>
  <Context>
    <Name></Name>
    <Gateway>
      <Name></Name>
      <AccessType></AccessType>
      <Domain></Domain>
      <VirtualHost></VirtualHost>
    </Gateway>
    <VRF></VRF>
    <MaxUsers></MaxUsers>
    <IdleTimeout></IdleTimeout>
    <AADDomain></AADDomain>
    <EMOServer>
      <Address></Address>
      <PortNumber></PortNumber>
    </EMOServer>
    <DefaultPolicyGroup></DefaultPolicyGroup>
    <Enable></Enable>
    <OperStatus></OperStatus>
    <DownReason></DownReason>
  </Context>
</Contexts>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Contexts
Table type	Multi-instance table
Row name	Context
Restrictions	The Contexts table does not support multiple links. Tables ContextGateways and contexts_v2 are added to support multiple links, and new features are added in the these two tables. The Contexts table is included only for compatibility. No new features will be added to this table. Use new tables ContextGateways and contexts_v2 instead of this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Gateway	Associated gateway	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>AccessType.</li> <li>Domain.</li> <li>VirtualHost.</li> </ul>	N/A
Name	Associated gateway name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
AccessType	Gateway access method	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—domain.</li> <li>2—virtual host.</li> </ul>	N/A
Domain	Domain specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), and underscores (_).	N/A
VirtualHost	Virtual host specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	N/A
VRF	Name of the VRF instance associated with the SSL VPN context	N/A	String. Length: 0 to 31 characters.	If the context is on the public network, the length of characters is 0.
MaxUsers	Maximum number of SSL VPN user connections	N/A	Unsigned integer. Value range: 1 to 1048575.	N/A
IdleTimeout	User connection idle timeout time	N/A	Unsigned integer. Value range: 1 to 1440, in minutes.	N/A
AAADomain	SSL VPN context AAA domain	N/A	String, case insensitive. Length: 1 to 255 characters. The string cannot contain the following characters: / \   " : * ? < > @ The string cannot be any of the following values: d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.	N/A
EMOServer	EMO server	Data structure	Members include: <ul style="list-style-type: none"> <li>Address.</li> <li>PortNumber.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
Address	IPv4 address or host name of the EMO server	N/A	IPv4 address: String, dotted decimal notation. Host name: String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	IPv4 address example: 1.1.1.1. Host name example: www.example.com.
PortNumber	Port number of the EMO server	N/A	Unsigned integer. Value range: 1025 to 65535.	N/A
DefaultPolicy Group	Default policy group	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Enable	Whether the SSL VPN context is enabled.	N/A	Boolean: • true—Enabled. • false—Disabled.	N/A
OperStatus	SSL VPN context operation status	N/A	Enumeration: • 1—up. • 2—down.	N/A
DownReason	Reason why the operation status of the SSL VPN context is down	N/A	String. Length: 1 to 127 characters.	This column is available only when the SSL VPN context operation status is down.

## SSLVPN/Contexts\_v2

This table contains SSL VPN context information.

### XML structure

```

<SSLVPN>
  <Contexts_v2>
    <Context_v2>
      <Name></Name>
      <VRF></VRF>
      <MaxUsers></MaxUsers>
      <IdleTimeout></IdleTimeout>
      <AAADomain></AAADomain>
      <EMOServer>
        <Address></Address>
        <PortNumber></PortNumber>
      </EMOServer>
      <MessageServer>
        <Address></Address>

```

```

        <PortNumber></PortNumber>
    </MessageServer>
    <SmsImcServer>
        <Address></Address>
        <PortNumber></PortNumber>
        <VRF></VRF>
    </SmsImcServer>
    <SmsImc></SmsImc>
    <DefaultPolicyGroup></DefaultPolicyGroup>
    <SSLClientPolicy></SSLClientPolicy>
    <Enable></Enable>
    <OperStatus></OperStatus>
    <DownReason></DownReason>
</Context_v2>
</Contexts_v2>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Contexts_v2
Table type	Multi-instance table
Row name	Context_v2
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
VRF	Name of the VRF instance associated with the SSL VPN context	N/A	String. Length: 0 to 31 characters.	If the context is on the public network, the length of characters is 0.
MaxUsers	Maximum number of SSL VPN user connections	N/A	Unsigned integer. Value range: 1 to 1048575.	N/A
IdleTimeout	User connection idle timeout time	N/A	Unsigned integer. Value range: 1 to 1440, in minutes.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AAADomain	SSL VPN context AAA domain	N/A	String, case insensitive. Length: 1 to 255 characters. The string cannot contain the following characters: / \   " : * ? < > @ The string cannot be any of the following values: d, de, def, defa, defau, default, default, i, if, if-, if-u, if-un, if-unk, if-unkn, if-unkno, if-unknow, or if-unknown.	N/A
EMOServer	EMO server	Data structure	Members include: <ul style="list-style-type: none"> <li>Address.</li> <li>PortNumber.</li> </ul>	N/A
Address	IPv4 address or host name of the EMO server	N/A	IPv4 address: String, dotted decimal notation. Host name: String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	IPv4 address example: 1.1.1.1. Host name example: www.example.com.
PortNumber	Port number of the EMO server	N/A	Unsigned integer. Value range: 1025 to 65535.	N/A
MessageServer	Message server	Data structure	Members include: <ul style="list-style-type: none"> <li>Address.</li> <li>PortNumber.</li> </ul>	N/A
Address	IPv4 address or host name of the Message server	N/A	IPv4 address: String, dotted decimal notation. Host name: String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	IPv4 address example: 1.1.1.1. Host name example: www.example.com.
PortNumber	Port number of the Message server	N/A	Unsigned integer. Value range: 1025 to 65535.	N/A
SmsImcServer	Short Message Service of IMC server	Data structure	Members include: <ul style="list-style-type: none"> <li>Address.</li> <li>PortNumber.</li> </ul>	New feature, not compatible with the old table.
Address	IPv4 address or host name of the IMC server	N/A	String, dotted decimal notation.	New feature, not compatible with the old table. Example: 1.1.1.1.
PortNumber	Port number of the IMC server	N/A	Unsigned integer. Value range: 1 to 65535.	New feature, not compatible with the old table.
VRF	Name of the VRF	N/A	String:	If the IMC server is on

Column name	Column description	Column type	Data type and restrictions	Remarks
	instance associated with the IMC server		Length: 0 to 31 characters.	the public network, the length of characters is 0.
SmsImc	Whether the SMS-IMC message authentication of the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	New feature, not compatible with the old table.
DefaultPolicy Group	Default policy group	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
SSLClientPolicy	Name of the SSL client policy used by the SSL VPN context	N/A	String, case insensitive. Length: 1 to 31 characters.	New feature, not compatible with the old table.
Enable	Whether the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
OperStatus	SSL VPN context operation status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—up.</li> <li>2—down.</li> </ul>	N/A
DownReason	Reason why the operation status of the SSL VPN context is down	N/A	String. Length: 1 to 127 characters.	This column is available only when the SSL VPN context operation status is down.

## SSLVPN/ContextGateways

This table contains information about the SSL VPN gateway associated with the context.

### XML structure

```

<SSLVPN>
  <ContextGateways>
    <ContextGateway>
      <ContextName></ContextName>
      <GatewayName></GatewayName>
      <AccessType></AccessType>
      <Domain></Domain>
      <VirtualHost></VirtualHost>
    </ContextGateway>
  </ContextGateways>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	ContextGateways
Table type	Multi-instance table
Row name	ContextGateway
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
GatewayName	Associated gateway name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
AccessType	Gateway access method	N/A	Enumeration: <ul style="list-style-type: none"><li>1—domain.</li><li>2—virtual host.</li></ul>	N/A
Domain	Domain specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), and underscores (_).	N/A
VirtualHost	Virtual host specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	N/A

## SSLVPN/IpAcContexts

This table contains SSL VPN IP access information for contexts.

## XML structure

```
<SSLVPN>
  <UISettings>
    <UISetting>
```

```

<ContextName></ContextName>
<VerifyCode></VerifyCode>
<DPWD></DPWD>
<DisplayLogo></DisplayLogo>
<LogoFile></LogoFile>
<LoginMsg>
  <English></English>
  <Chinese></Chinese>
</LoginMsg>
<Title>
  <English></English>
  <Chinese></Chinese>
</Title>
<CertificateAuthen></CertificateAuthen>
<PasswordAuthen></PasswordAuthen>
<AuthenUse></AuthenUse>
<UserLog></UserLog>
<ResourceLog></ResourceLog>
<Filter></Filter>
<Brief></Brief>
</UISetting>
</UISettings>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	IpAcContexts
Table type	Multi-instance table
Row name	IpAcContext
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
AcclIndex	Index of the referenced SSL VPN access interface	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
KeepAlive	Keepalive interval	N/A	Unsigned integer. Value range: 0 to 600, in seconds. Default: 30 seconds.	N/A
Ipv4AddressPool	Referenced address pool	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
Name	SSL VPN IP address pool name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4PrefixLength	SSL VPN IPv4 address pool prefix length	N/A	Unsigned integer. Value range: 1 to 30.	N/A
DNSServer	DNS server	Data structure	Members include: <ul style="list-style-type: none"> <li>Primary.</li> <li>Secondary.</li> </ul>	N/A
Primary	IPv4 address of primary DNS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Secondary	IPv4 address of secondary DNS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
WINSServer	WINS server	Data structure	Members include: <ul style="list-style-type: none"> <li>Primary.</li> <li>Secondary.</li> </ul>	N/A
Primary	IPv4 address of primary WINS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Secondary	IPv4 address of secondary WINS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
ConnCloseLog	Enabling status of IP access connection close logging.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
PacketDropLog	Enabling status of packet drop logging.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
IPClientAutomatic	Enabling status of automatic startup of the IP access client after Web login.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
WebResourceAutoPush	Enabling status of automatic	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	pushing of accessible resources through Web after IP access client login.		<ul style="list-style-type: none"> <li>false—Disabled.</li> </ul>	
RateLimitUp	Upstream rate limit	Data structure	Members include: <ul style="list-style-type: none"> <li>Unit.</li> <li>Value.</li> </ul>	N/A
Unit	Unit for the rate limit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—kbps</li> <li>2—pps</li> </ul>	N/A
Value	Rate limit value	N/A	Unsigned integer. Value range: 1000 to 100000000.	N/A
RateLimitDown	Downstream rate limit	Data structure	Members include: <ul style="list-style-type: none"> <li>Unit.</li> <li>Value.</li> </ul>	N/A
Unit	Unit for the rate limit	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—kbps</li> <li>2—pps</li> </ul>	N/A
Value	Rate limit value	N/A	Unsigned integer. Value range: 1000 to 100000000.	N/A

## SSLVPN/UISettings

This table contains SSL VPN context UI information.

### XML structure

```

<SSLVPN>
  <UISettings>
    <UISetting>
      <ContextName></ContextName>
      <VerifyCode></VerifyCode>
      <DPWD></DPWD>
      <DisplayLogo></DisplayLogo>
      <HidePasswordInput></HidePasswordInput>
      <LogoFile></LogoFile>
      <LoginMsg>
        <English></English>
        <Chinese></Chinese>
      </LoginMsg>
      <Title>
        <English></English>

```



```

    <Chinese></Chinese>
</Title>
<CertificateAuthen></CertificateAuthen>
<PasswordAuthen></PasswordAuthen>
<AuthenUse></AuthenUse>
<UserLog></UserLog>
<ResourceLog></ResourceLog>
<Filter></Filter>
<Brief></Brief>
</UISetting>
</UISettings>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UISettings
Table type	Multi-instance table
Row name	UISetting
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
VerifyCode	Whether the verify code is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
DPWD	Whether the dynamic password is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
DisplayLogo	Whether the logo is displayed	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Displayed.</li> <li>false—Not displayed.</li> </ul>
HidePasswor dInput	Whether to hide the password input box	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hide the password box.</li> <li>false—Not hide the password box (default).</li> </ul>
LogoFile	Logo file path	N/A	String, case insensitive. Length: 1 to 255 characters.
LoginMsg	Web login	Data	Members include:

Column name	Column description	Column type	Data type and restrictions
	message	structure	<ul style="list-style-type: none"> <li>English.</li> <li>Chinese.</li> </ul>
English	English login message string	N/A	String. Length: 1 to 255 characters.
Chinese	Chinese login message string	N/A	String. Length: 1 to 255 characters.
Title	Web title	Data structure	Members include: <ul style="list-style-type: none"> <li>English.</li> <li>Chinese.</li> </ul>
English	English title string	N/A	String. Length: 1 to 255 characters.
Chinese	Chinese title string	N/A	String. Length: 1 to 255 characters.
ResourcerLog	Whether Resource logging of the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
Filter	Whether resource access log filtering is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
Brief	Whether brief logging for resource access is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
CertificateAuthen	Whether certificate authentication of the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
UserLog	Whether user logging of the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
PasswordAuthen	Whether password authentication of the SSL VPN context is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>
AuthenUse	The authentication methods required for user login.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—all.</li> <li>1—any-one.</li> </ul>

# SSLVPN/PortForwardLists

This table contains SSL VPN port forwarding list information.

## XML structure

```
<SSLVPN>
  <PortForwardLists>
    <PortForwardList>
      <ContextName></ContextName>
      <ListName></ListName>
    </PortForwardList>
  </PortForwardLists>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	PortForwardLists
Table type	Multi-instance table
Row name	PortForwardList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN port forwarding list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

# SSLVPN/PortForwardItems

This table contains SSL VPN port forwarding entry information.

# XML structure

```
<SSLVPN>
  <PortForwardItems>
    <PortForwardItem>
      <ContextName></ContextName>
      <ListName></ListName>
      <LocalPortNumber></LocalPortNumber>
      <LocalName></LocalName>
      <RemoteServer></RemoteServer>
      <RemotePortNumber></RemotePortNumber>
      <Description></Description>
    </PortForwardItem>
  </PortForwardItems>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	PortForwardItems
Table type	Multi-instance table
Row name	PortForwardItem
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN port forwarding list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
LocalPortNumber	Port number of the local server	Index	Unsigned integer. Value range: 1 to 65535.
LocalName	Domain name of the local server	Index	String, case insensitive. Length: 1 to 253 characters. The string can contain only letters, digits, hyphens (-), underscores (_), square brackets ([]), colon(:) and dots (.).
RemoteServe	Domain name of	N/A	String, case insensitive.

Column name	Column description	Column type	Data type and restrictions
r	the remote server		Length: 1 to 253 characters. The string can contain only letters, digits, hyphens (-), underscores (_), square brackets ([]), colon(:) and dots (.).
RemotePortNumber	Port number of the remote server	N/A	Unsigned integer. Value range: 1 to 65535.
Description	Description for the port forwarding entry	N/A	String. Length: 1 to 63 characters.

## SSLVPN/Ipv4AddressPools

This table contains SSL VPN IPv4 address pool information.

### XML structure

```

<SSLVPN>
  <Ipv4AddressPools>
    <Ipv4AddressPool>
      <Name></Name>
      <Ipv4AddressStart></Ipv4AddressStart>
      <Ipv4AddressEnd></Ipv4AddressEnd>
    </Ipv4AddressPool>
  </Ipv4AddressPools>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	Ipv4AddressPools
Table type	Multi-instance table
Row name	Ipv4AddressPool
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN IP address pool name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			are \t \r \n ?.	
Ipv4AddressStart	Start IPv4 address of the pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1. Ipv4AddressStart cannot be larger than Ipv4AddressEnd.
Ipv4AddressEnd	End IPv4 address of the pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

## SSLVPN/RouteLists

This table contains SSL VPN route list information.

### XML structure

```

<SSLVPN>
  <RouteLists>
    <RouteList>
      <ContextName></ContextName>
      <ListName></ListName>
    </RouteList>
  </RouteLists>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	RouteLists
Table type	Multi-instance table
Row name	RouteList
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN route	Index	String, case insensitive.

Column name	Column description	Column type	Data type and restrictions
	list name		Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/RouteItems

This table contains SSL VPN route item information.

## XML structure

```

<SSLVPN>
  <RouteItems>
    <RouteItem>
      <ContextName></ContextName>
      <ListName></ListName>
      <RouteType></RouteType>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
    </RouteItem>
  </RouteItems>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	RouteItems
Table type	Multi-instance table
Row name	RouteItem
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
RouteType	The way how the route is specified	N/A	Enumeration: • 0—Exclude.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Include.</li> </ul>	
ListName	SSL VPN route list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4Address	Destination IPv4 address of the route	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	IPv4 address prefix length	Index	Unsigned integer. Value range: 0 to 32.	N/A

## SSLVPN/PolicyGroups

This table contains SSL VPN policy group basic information.

### XML structure

```

<SSLVPN>
  <PolicyGroups>
    <PolicyGroup>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <IsDefault></IsDefault>
    </PolicyGroup>
  </PolicyGroups>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	PolicyGroups
Table type	Multi-instance table
Row name	PolicyGroup
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context	Index	String, case insensitive.



Column name	Column description	Column type	Data type and restrictions
	name		Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
IsDefault	Whether the SSL VPN policy group is the default group of the context	N/A	Boolean: <ul style="list-style-type: none"> <li>true—The SSL VPN policy group is the default group of the context.</li> <li>false—The SSL VPN policy group is not the default group of the context.</li> </ul>

## SSLVPN/TcpAcPolicys

This table contains SSL VPN TCP access information for policy groups.

### XML structure

```

<SSLVPN>
  <TcpAcPolicys>
    <TcpAcPolicy>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <PortForwardName></PortForwardName>
      <URIACLName></URIACLName>
      <Ipv4AclNumber></Ipv4AclNumber>
      <Ipv6AclNumber></Ipv6AclNumber>
    </TcpAcPolicy>
  </TcpAcPolicys>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	TcpAcPolicys
Table type	Multi-instance table
Row name	TcpAcPolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
PortForwardName	SSL VPN port forwarding list name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
Ipv4AclNumber	Referenced IPv4 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.
Ipv6AclNumber	Referenced IPv6 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.

## SSLVPN/IpAcPolicys

This table contains SSL VPN IP access information for policy groups.

## XML structure

```

<SSLVPN>
  <IpAcPolicys>
    <IpAcPolicy>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <KeepAlive></KeepAlive>
      <Ipv4AclNumber></Ipv4AclNumber>
      <Ipv4AddressPool>
        <Name></Name>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </Ipv4AddressPool>
      <AccessRoute>

```

```

    <RouteType></RouteType>
    <RouteList></RouteList>
    <Ipv4Address></Ipv4Address>
    <Ipv4PrefixLength></Ipv4PrefixLength>
  </AccessRoute>
  <DNSServer>
    <Primary></Primary>
    <Secondary></Secondary>
  </DNSServer>
  <WINSServer>
    <Primary></Primary>
    <Secondary></Secondary>
  </WINSServer>
</IpAcPolicy>
</IpAcPolicys>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	IpAcPolicys
Table type	Multi-instance table
Row name	IpAcPolicy
Restrictions	The IpacPolicys table does not support multiple user groups. The IpacPolicys_v2 table is added to support multiple user groups. The IpacPolicy table is included only for compatibility. No new features will be added to this table. Use the new table IpacPolicys_v2 instead of this table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
KeepAlive	Keepalive interval	N/A	Unsigned integer. Value range: 0 to 600, in	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			seconds.	
Ipv4AclNumber	Referenced IPv4 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	N/A
Ipv4AddressPool	Referenced address pool	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
Name	SSL VPN IP address pool name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4PrefixLength	SSL VPN IPv4 address pool prefix length	N/A	Unsigned integer. Value range: 1 to 30.	N/A
AccessRoute	Route issued to the client	Data structure	Members include: <ul style="list-style-type: none"> <li>RouteType.</li> <li>RouteList.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
RouteType	The way how the route is specified	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Route list.</li> <li>2—IPv4 address.</li> <li>3—All.</li> </ul>	N/A
RouteList	SSL VPN route list name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4Address	Destination IPv4 address of the route	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	IPv4 address prefix length	N/A	Unsigned integer. Value range: 0 to 32.	N/A
DNSServer	DNS server	Data structure	Members include: <ul style="list-style-type: none"> <li>Primary.</li> <li>Secondary.</li> </ul>	N/A
Primary	IPv4 address of primary DNS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Secondary	IPv4 address of secondary DNS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
WINSServer	WINS server	Data structure	Members include: <ul style="list-style-type: none"> <li>Primary.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Secondary.</li> </ul>	
Primary	IPv4 address of primary WINS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Secondary	IPv4 address of secondary WINS server	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

## SSLVPN/IpAcPolicys\_v2

This table contains SSL VPN IP access information for policy groups.

### XML structure

```

<SSLVPN>
  <IpAcPolicys_v2>
    <IpAcPolicy_v2>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <Ipv4AddressPool>
        <Name></Name>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </Ipv4AddressPool>
      <Ipv4AclNumber></Ipv4AclNumber>
      <Ipv6AclNumber></Ipv6AclNumber>
      <AccessRoute>
        <RouteType></RouteType>
        <RouteList></RouteList>
        <Ipv4Address></Ipv4Address>
        <Ipv4PrefixLength></Ipv4PrefixLength>
      </AccessRoute>
      <ForceAll></ForceAll>
      <URIACLName></URIACLName>
    </IpAcPolicy_v2>
  </IpAcPolicys_v2>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	IpAcPolicys
Table type	Multi-instance table
Row name	IpAcPolicy

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4AddressPool	Referenced address pool	Data structure	Members include: <ul style="list-style-type: none"> <li>Name.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
Name	SSL VPN IPv4 address pool name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
Ipv4PrefixLength	SSL VPN IPv4 address pool prefix length	N/A	Unsigned integer. Value range: 1 to 30.	N/A
Ipv4AclNumber	Referenced IPv4 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	New feature, not compatible with the old table.
Ipv6AclNumber	Referenced IPv6 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.	New feature, not compatible with the old table.
AccessRoute	Route issued to the client	Data structure	Members include: <ul style="list-style-type: none"> <li>RouteType.</li> <li>RouteList.</li> <li>Ipv4Address.</li> <li>Ipv4PrefixLength.</li> </ul>	N/A
RouteType	The way how the route is specified	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Route list.</li> <li>2—IPv4 address.</li> </ul>	N/A
ForceAll	Whether the force all is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
RouteList	SSL VPN route list name	N/A	String, case insensitive. Length: 1 to 31 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			The value can contain Chinese characters. Invalid characters are \t \r \n ?.	
Ipv4Address	Destination IPv4 address of the route	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	IPv4 address prefix length	N/A	Unsigned integer. Value range: 0 to 32.	N/A
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	New feature, not compatible with the old table.

## SSLVPN/Sessions

This table contains SSL VPN session information.

### XML structure

```

<SSLVPN>
  <Sessions>
    <Session>
      <ContextName></ContextName>
      <UserName></UserName>
      <SessionID></SessionID>
      <UserAddressType></UserAddressType>
      <UserIpv4Address></UserIpv4Address>
      <UserIpv6Address></UserIpv6Address>
      <ConnNumber></ConnNumber>
      <PGroupName></PGroupName>
      <IdleTimeout></IdleTimeout>
      <CreatedTime></CreatedTime>
      <LastUsedTime></LastUsedTime>
      <TerminalInfo></TerminalInfo>
    </Session>
  </Sessions>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	Sessions

Table type	Multi-instance table
Row name	Session
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
UserName	Username	Index	String. Length: 1 to 63 characters.	N/A
SessionID	User session ID	Index	Unsigned integer. Value range: 1 to 4294967295.	The ID is used only for sequencing. It is randomly assigned.
UserAddress Type	Whether the user address is an IPv6 address	N/A	Boolean: <ul style="list-style-type: none"> <li>false—IPv4.</li> <li>true—IPv6.</li> </ul>	N/A
UserIpv4Address	User IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
UserIpv6Address	User IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
ConnNumber	Number of connections for the user session	N/A	Unsigned integer.	N/A
PGroupName	SSL VPN policy group name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
IdleTimeout	User connection idle timeout time	N/A	Unsigned integer. Value range: 60 to 86400, in seconds.	N/A
CreatedTime	Session creation time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
LastUsedTime	Session idle duration	N/A	Time. Format: HH:MM:SS.	N/A
TerminalInfo	TerminalInfo	N/A	String. Length: 1 to 20 characters.	N/A



# SSLVPN/ContextStatistics

This table contains SSL VPN context session statistics.

## XML structure

```
<SSLVPN>
  <ContextStatistics>
    <ContextStatistic>
      <ContextName></ContextName>
      <SessionNumber></SessionNumber>
    </ContextStatistic>
  </ContextStatistics>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	ContextStatistics
Table type	Multi-instance table
Row name	ContextStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
SessionNumber	Number of user sessions for the SSL VPN context	N/A	Unsigned integer.

# SSLVPN/URIACLs

This table contains SSL VPN URI ACL information.

## XML structure

```
<SSLVPN>
  <URIACLs>
    <URIACL>
```

```

    <ContextName></ContextName>
    <URIACLName></URIACLName>
  </URIACL>
</URIACLs >
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	URIACLs
Table type	Multi-instance table
Row name	URIACL
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
URIACLName	SSL VPN URI ACL name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).

## SSLVPN/URIACLItems

This table contains SSL VPN URI ACL entry information.

## XML structure

```

<SSLVPN>
  <URIACLItems>
    <URIACLItem>
      <ContextName></ContextName>
      <URIACLName></URIACLName>
      <RuleNumber></RuleNumber>
      <Action></Action>
      <Pattern></Pattern>
    </URIACLItem>
  </URIACLItems>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	URIACLItems
Table type	Multi-instance table
Row name	URIACLItem
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
URIACLNam e	SSL VPN URI ACL name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
RuleNumber	Rule ID	Index	Unsigned integer. Value range: 0 to 65534.
Action	Action	N/A	Unsigned integer. Value range: 1 to 2. <ul style="list-style-type: none"><li>1—Permit.</li><li>2—Deny.</li></ul>
Pattern	Rule pattern	N/A	String, case insensitive. Length: 1 to 256 characters.

## SSLVPN/WebAcPolicys

This table contains SSL VPN Web access information for policy groups.

## XML structure

```
<SSLVPN>
  <WebAcPolicys>
    <WebAcPolicy>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <Ipv4AclNumber></Ipv4AclNumber>
      <Ipv6AclNumber></Ipv6AclNumber>
      <URIACLName></URIACLName>
```

```

    </WebAcPolicy>
  </WebAcPolicys>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	WebAcPolicys
Table type	Multi-instance table
Row name	WebAcPolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
Ipv4AcINumber	Referenced IPv4 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.
Ipv6AcINumber	Referenced IPv6 advanced ACL number	N/A	Unsigned integer. Value range: 3000 to 3999.
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).

## SSLVPN/UrlLists

This table contains SSL VPN URL list information for policy groups.

## XML structure

```

<SSLVPN>
  <UrlLists>

```

```

<UrlList>
  <ContextName></ContextName>
  <ListName></ListName>
  <Heading></Heading>
</UrlList>
</UrlLists>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UrlLists
Table type	Multi-instance table
Row name	UrlList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN URL list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
Heading	SSL VPN URL list heading	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).

## SSLVPN/UrlItems

This table contains SSL VPN URL entry information for policy groups.

## XML structure

```

<SSLVPN>
  <UrlItems>
    <UrlItem>
      <ContextName></ContextName>

```

```

    <ListName></ListName>
    <UrlName></UrlName>
    <UrlValue></UrlValue>
    <URIACLName></URIACLName>
  </UrlItem>
</UrlItems>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UrlItems
Table type	Multi-instance table
Row name	UrlItem
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ListName	SSL VPN URL list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
UrlName	URL name	Index	String, case insensitive. Length: 1 to 31 characters.
UrlValue	URL value	N/A	String, case insensitive. Length: 1 to 253 characters.
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).

## SSLVPN/UrlCtxItems

This table contains SSL VPN URL item configuration information.

## XML structure

```
<SSLVPN>
  <UrlCtxItems>
    <UrlCtxItem>
      <ContextName></ContextName>
      <ItemName></ItemName>
      <UrlMapping>
        <MappingType></MappingType>
        <Domain></Domain>
        <GatewayName></GatewayName>
        <VirtualHost></VirtualHost>
        <Rewrite></Rewrite>
      </UrlMapping>
      <UrlValue></UrlValue>
      <URIACLName></URIACLName>
    </UrlCtxItem>
  </UrlCtxItems>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UrlCtxItems
Table type	Multi-instance table
Row name	UrlCtxItem
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
ItemName	URL item name	Index	String, case insensitive. Length: 1 to 31 characters.	N/A
UrlMapping	URL mapping	Data structure	Members include: <ul style="list-style-type: none"><li>MappingType.</li><li>Domain.</li><li>GatewayName.</li><li>VirtualHost.</li><li>Rewrite.</li></ul>	N/A

MappingType	URL mapping type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—domain mapping.</li> <li>2—port mapping.</li> </ul>	N/A
Domain	Domain name specified for the domain mapping	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	N/A
GatewayName	Gateway name specified for the port mapping	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
VirtualHost	Virtual host name specified for the associated gateway	N/A	String, case insensitive. Length: 1 to 127 characters. The string can contain only letters, digits, hyphens (-), underscores (_), and dots (.).	N/A
Rewrite	Whether absolute URL rewriting is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A
UrlValue	URL string	N/A	String, case insensitive. Length: 1 to 253 characters.	N/A
URIACLName	SSL VPN URI ACL name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores(_).	N/A

## SSLVPN/UrlItemResources

This table contains SSL VPN URL item resource configuration information.

### XML structure

```

<SSLVPN>
  <UrlItemResources>
    <UrlItemResource>
      <ContextName></ContextName>
      <UrlListName></UrlListName>
      <ItemName></ItemName>
    </UrlItemResource>
  </UrlItemResources>
</SSLVPN>

```



## Table description

Item	Description
Feature name	SSLVPN
Table name	UrlItemResources
Table type	Multi-instance table
Row name	UrlItemResource
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
UrlListName	SSL VPN URL list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
ItemName	URL item name	Index	String, case insensitive. Length: 1 to 31 characters.	N/A

## SSLVPN/SnatPools

This table contains SSL VPN SNAT pool information for policy groups.

## XML structure

```
<SSLVPN>
  <SnatPools>
    <SnatPool>
      <Name></Name>
      <Ipv4AddressStart></Ipv4AddressStart>
      <Ipv4AddressEnd></Ipv4AddressEnd>
    </SnatPool>
  </SnatPools>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	SnatPools
Table type	Multi-instance table
Row name	SnatPool
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN SNAT pool name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
Ipv4AddressStart	Start IPv4 address of the SNAT pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1. Ipv4AddressStart cannot be higher than Ipv4AddressEnd.
Ipv4AddressEnd	End IPv4 address of the SNAT pool	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

## SSLVPN/Ipv6SnatPools

This table contains SSL VPN Ipv6 SNAT pool information for policy groups.

## XML structure

```
<SSLVPN>
  <Ipv6SnatPools>
    <Ipv6SnatPool>
      <Name></Name>
      <Ipv6AddressStart></Ipv6AddressStart>
      <Ipv6AddressEnd></Ipv6AddressEnd>
    </Ipv6SnatPool>
  </Ipv6SnatPools>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Ipv6SnatPools
Table type	Multi-instance table
Row name	Ipv6SnatPool
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	SSL VPN SNAT pool name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
Ipv6AddressStart	Start IPv6 address of the SNAT pool	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. Ipv6AddressStart cannot be higher than Ipv6AddressEnd.
Ipv6AddressEnd	End IPv6 address of the SNAT pool	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.

## SSLVPN/UrlResources

This table contains SSL VPN URL resource information for policy groups.

## XML structure

```
<SSLVPN>
  <UrlResources>
    <UrlResource>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <ListName></ListName>
    </UrlResource>
  </UrlResources>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UrlResources
Table type	Multi-instance table
Row name	UrlResource
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
ListName	SSL VPN URL list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/SnatResources

This table contains SSL VPN SNAT resource information for policy groups.

## XML structure

```
<SSLVPN>
  <SnatResources>
    <SnatResource>
      <ContextName></ContextName>
      <SnatPoolName></SnatPoolName>
    </SnatResource>
  </SnatResources>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	SnatResources
Table type	Multi-instance table
Row name	SnatResource
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
SnatPoolName	SSL VPN SNAT pool name	N/A	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).

## SSLVPN/UserControls

This table contains SSL VPN user control information for policy groups.

## XML structure

```
<SSLVPN>
  <UserControls>
    <UserControl>
      <ContextName></ContextName>
      <MaxOnlineNum></MaxOnlineNum>
      <ForceLogout></ForceLogout>
      <SessionConnectionNum></SessionConnectionNum>
    </UserControl>
  </UserControls>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	UserControls

Table type	Multi-instance table
Row name	UserControl
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
MaxOnlineNum	Maximum online number of each SSL VPN user for the context	N/A	Unsigned integer. Value range: 0 to 1048575.	If the maxOnlineNum is 0, the context doesn't control the maximum online number of each SSL VPN user.
ForceLogout	Whether the force logout is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled .</li> </ul>	N/A
SessionConnectionNum	Maximum number of connections for each session	N/A	Unsigned integer. Value range: 0, 10 to 1000.	If the SessionConnctionNum is 0, the context doesn't control the maximum number of connections for each session.

## SSLVPN/Specification

This table contains information about the SSLVPN function specification.

## XML structure

```

<SSLVPN>
  <Specifications>
    <ControllerType></ControllerType>
  </Specifications>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Specifications
Table type	Single-instance table

Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ControllerType	SSL VPN ControllerType	Column	Enumeration: <ul style="list-style-type: none"> <li>0—None.</li> <li>1—M9K.</li> </ul>	N/A

## SSLVPN/GlobalLog

This table contains SSLVPN global log configuration information.

## XML structure

```
<SSLVPN>
  <GlobalLog>
    <GlobalLogEnable></GlobalLogEnable>
  </GlobalLog>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	GlobalLog
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalLogEnable	Whether the global log is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul>	N/A

## SSLVPN/IpAcStatistics

This table contains SSLVPN IP access packet statistics for each user .

## XML structure

```
<SSLVPN>
  <IpAcStatistics>
    <IpAcStatistic>
      <ContextName></ContextName>
      <UserName></UserName>
      <SessionID></SessionID>
      <UserAddressType></UserAddressType>
      <UserIpv4Address></UserIpv4Address>
      <UserIpv6Address></UserIpv6Address>
      <RecvReqPkts></RecvReqPkts>
      <SendReqPkts></SendReqPkts>
      <DropReqPkts></DropReqPkts>
      <RecvReplyPkts></RecvReplyPkts>
      <SendReplyPkts></SendReplyPkts>
      <DropReplyPkts></DropReplyPkts>
      <KeepalivePkts></KeepalivePkts>
      <KeepaliveReplyPkts></KeepaliveReplyPkts>
      <RecvUpdateCfgPkts></RecvUpdateCfgPkts>
      <SendUpdateCfgPkts></SendUpdateCfgPkts>
    </IpAcStatistic>
  </IpAcStatistics>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	IpAcStatistics
Table type	Multi-instance table
Row name	IpAcStatistic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
UserName	Username	Index	String. Length: 1 to 63 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
SessionID	User session ID	Index	Unsigned integer. Value range: 1 to 4294967295.	The ID is used only for sequencing. It is randomly assigned.
UserAddress Type	Type of user address	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	N/A
UserIpv4Address	User IPv4 address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
UserIpv6Address	User IPv6 address	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
RecvReqPkts	Number of received IP access request packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
SendReqPkts	Number of sent IP access request packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DropReqPkts	Number of dropped IP access request packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RecvReplyPkts	Number of received IP access reply packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
SendReplyPkts	Number of sent IP access reply packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
DropReplyPkts	Number of dropped IP access reply packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
KeepalivePkts	Number of keepalive packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
KeepaliveReplyPkts	Number of keepalive reply packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RecvUpdateConfigPkts	Number of received configuration updating reply packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SendUpdateCfgPkts	Number of sent configuration updating reply packets during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## SSLVPN/IpAcContextStatistics

This table contains IP access packet statistics for each SSL VPN context.

### XML structure

```

<SSLVPN>
  <IpAcContextStatistics>
    <IpAcContextStatistic>
      <ContextName></ContextName>
      <ClientInBytes></ClientInBytes>
      <ClientOutBytes></ClientOutBytes>
      <ServerInBytes></ServerInBytes>
      <ServerOutBytes></ServerOutBytes>
    </IpAcContextStatistic>
  </IpAcContextStatistics>
</SSLVPN>

```

### Table description

Item	Description
Feature name	SSLVPN
Table name	IpAcContextStatistics
Table type	Multi-instance table
Row name	IpAcContextStatistic
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientInBytes	Number of IP access request bytes received from client during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ClientOutBytes	Number of IP access reply bytes sent to client during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ServerInBytes	Number of IP access reply bytes received from server during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
ServerOutBytes	Number of IP access request packet bytes sent to server during a specific period	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## SSLVPN/PortForwardCtxItems

This table contains SSL VPN port forwarding items control configuration information.

### XML structure

```

<SSLVPN>
  <PortForwardCtxItems>
    <PortForwardCtxItem>
      <ContextName></ContextName>
      <ItemName></ItemName>
      <LocalPortNumber></LocalPortNumber>
      <LocalName></LocalName>
      <RemoteServer></RemoteServer>
      <RemotePortNumber></RemotePortNumber>
      <Description></Description>
      <Execution></Execution>
    </PortForwardCtxItem>
  </PortForwardCtxItems>
</SSLVPN>

```

## Table description

Item	Description
Feature name	SSLVPN
Table name	PortForwardCtxItems
Table type	Multi-instance table
Row name	PortForwardCtxItem
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ItemName	Port forwarding item name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
LocalPortNumber	Port number of the local server	N/A	Unsigned integer. Value range: 1 to 65535.
LocalName	Domain name of the local server	N/A	String, case insensitive. Length: 1 to 253 characters. The string can contain only letters, digits, hyphens (-), underscores (_), square brackets ([]), colon(:) and dots (.).
RemoteServer	Domain name of the remote server	N/A	String, case insensitive. Length: 1 to 253 characters. The string can contain only letters, digits, hyphens (-), underscores (_), square brackets ([]), colon(:) and dots (.).
RemotePortNumber	Port number of the remote server	N/A	Unsigned integer. Value range: 1 to 65535.
Description	Description for the port forwarding entry	N/A	String. Length: 1 to 63 characters.
Execution	Configure the script to execute for the port forwarding item	N/A	String, case insensitive. Length: 1 to 255 characters.

# SSLVPN/PortForwardItemResources

This table contains SSL VPN port forwarding item resource configuration information.

## XML structure

```
<SSLVPN>
  <PortForwardItemResources>
    <PortForwardItemResource>
      <ContextName></ContextName>
      <PortForwardName></PortForwardName>
      <ItemName></ItemName>
    </PortForwardItemResource>
  </PortForwardItemResources>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	PortForwardItemResource
Table type	Multi-instance table
Row name	PortForwardItemResourc
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PortForwardName	SSL VPN port forwarding list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
ItemName	Port forwarding item name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

# SSLVPN/Shortcuts

This table contains SSL VPN short cut configuration information.

## XML structure

```
<SSLVPN>
  <Shortcuts>
    <Shortcut>
      <ContextName></ContextName>
      <ShortcutName></ShortcutName>
      <Description></Description>
      <Execution></Execution>
    </Shortcut>
  </Shortcuts>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Shortcuts
Table type	Multi-instance table
Row name	Shortcut
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ShortcutName	SSL VPN short cut name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
Description	Description for the port forwarding entry	N/A	String. Length: 1 to 63 characters.
Execution	Configure the script to execute for the shortcut	N/A	String, case insensitive. Length: 1 to 255 characters.

# SSLVPN/ShortcutLists

This table contains SSL VPN short cut list configuration information.

## XML structure

```
<SSLVPN>
  <ShortcutLists>
    <ShortcutList>
      <ContextName></ContextName>
      <ShortcutListName></ShortcutListName>
    </ShortcutList>
  </ShortcutLists>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	ShortcutLists
Table type	Multi-instance table
Row name	ShortcutList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ShortcutListName	SSL VPN short cut list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

# SSLVPN/ShortcutResources

This table contains SSL VPN short cut list resource configuration information.

## XML structure

```
<SSLVPN>
  <ShortcutResources>
    <ShortcutResource>
      <ContextName></ContextName>
      <ShortcutListName></ShortcutListName>
      <ShortcutName></ShortcutName>
    </ShortcutResource>
  </ShortcutResources>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	ShortcutRefers
Table type	Multi-instance table
Row name	ShortcutRefer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
ShortcutListName	SSL VPN short cut list name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
ShortcutName	SSL VPN short cut name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/ShortcutPolicies

This table contains SSL VPN short cut information for policy groups.



## XML structure

```
<SSLVPN>
  <ShortcutPolicys>
    <ShortcutPolicy>
      <ContextName></ContextName>
      <PGroupName></PGroupName>
      <ShortcutListName></ShortcutListName>
    </ShortcutPolicy>
  </ShortcutPolicys>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	ShortcutPolicys
Table type	Multi-instance table
Row name	ShortcutPolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).
PGroupName	SSL VPN policy group name	Index	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.
ShortcutListName	SSL VPN shortcut list name	N/A	String, case insensitive. Length: 1 to 31 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.

## SSLVPN/Users

This table contains SSL VPN user bind address information.

## XML structure

```
<SSLVPN>
  <Users>
    <User>
      <ContextName></ContextName>
      <UserName></UserName>
      <BindAddress></BindAddress>
      <AutoBindAddressNum></AutoBindAddressNum>
    </User>
  </Users>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	Users
Table type	Multi-instance table
Row name	User
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextName	SSL VPN context name	Index	String, case insensitive. Length: 1 to 31 characters. The string can contain only letters, digits, and underscores (_).	N/A
UserName	SSLVPN user	Index	String, case insensitive. Length: 1 to 63 characters. The value can contain Chinese characters. Invalid characters are \t \r \n ?.	N/A
BindAddress	IP address list	N/A	String, dotted decimal notation.	Example: 10.1.1.5,10.1.1.10-10.1.1.20
AutoBindAddressNum	Automatically allocate available IP addresses to the user	N/A	Unsigned integer. Value range: 1 to 10	This column is not displayed by the GET operation

# SSLVPN/GlobalCustomInfos

This table contains global customization information about SSL VPN user access clients.

## XML structure

```
<SSLVPN>
  <GlobalCustomInfos>
    <GlobalCustomInfo>
      <CurrentIPClient></CurrentIPClient>
    </GlobalCustomInfo>
  </GlobalCustomInfos>
</SSLVPN>
```

## Table description

Item	Description
Feature name	SSLVPN
Table name	GlobalCustomInfos
Table type	Multi-instance table
Row name	GlobalCustomInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CurrentIPClient	Type of the current IP access client of the SSL VPN user.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Default.</li><li>2—Custom.</li></ul>	N/A

# Contents

SSLVPN.....	2
SSLVPN/Gateways .....	2
SSLVPN/Contexts.....	2
SSLVPN/Contexts_v2.....	4
SSLVPN/ContextGateways .....	4
SSLVPN/IpAcContexts.....	5
SSLVPN/UISettings.....	5
SSLVPN/PortForwardLists .....	6
SSLVPN/PortForwardItems.....	6
SSLVPN/Ipv4AddressPools .....	6
SSLVPN/RouteLists .....	7
SSLVPN/RouteItems .....	7
SSLVPN/PolicyGroups.....	8
SSLVPN/TcpAcPolicys.....	8
SSLVPN/IpAcPolicys .....	8
SSLVPN/IpAcPolicys_v2 .....	9
SSLVPN/Sessions .....	9
SSLVPN/ContextStatistics .....	9
SSLVPN/URIACLs .....	9
SSLVPN/URIACLItems .....	10
SSLVPN/WebAcPolicys .....	10
SSLVPN/UrlLists.....	11
SSLVPN/UrlItems .....	11
SSLVPN/UrlCtxItems .....	11
SSLVPN/UrlItemResources.....	12
SSLVPN/SnatPools.....	13
SSLVPN/Ipv6SnatPools .....	13
SSLVPN/UrlResources .....	14
SSLVPN/SnatResources .....	14
SSLVPN/UserControls .....	15
SSLVPN/GlobalLog .....	15
SSLVPN/IpAcStatistics.....	15
SSLVPN/IpAcContextStatistics .....	15
SSLVPN/PortForwardCtxItems .....	15
SSLVPN/PortForwardItemResources .....	16
SSLVPN/Shortcuts.....	16
SSLVPN/ShortCutLists.....	16
SSLVPN/ShortcutResources .....	17
SSLVPN/ShortcutPolicys .....	17
SSLVPN/Users.....	17
SSLVPN/GlobalCustomInfos .....	18
SSLVPN/LogoutAlls.....	18
SSLVPN/LogoutUsers.....	19
SSLVPN/LogoutSessions .....	19
SSLVPN/GlobalCustoms .....	19

# SSLVPN

## SSLVPN/Gateways

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
Invalid IP address. IP地址无效。	When configuring an IP address,the specified address is invalid. 配置IP地址时，指定的地址无效。
Can't delete the gateway. It is associated with contexts. 指定的SSL VPN网关已经被SSL VPN访问实例引用，无法删除。	Delete the specified gateway,which is referenced by other access instances. 删除指定gateway时，此网关被其它访问实例引用。
The specified port number must be different from the HTTP redirection port number. 指定的端口号不能是HTTP重定向端口号。	Configuring the IP address port is the same as redirecting port. HTTPS的端口号不能与HTTP重定向端口相同。
The port has already been used. 此端口号已被占用。	Configuration redirection ports have been occupied by other configurations. 配置的重定向端口已被其它配置占用。
Can't enable the SSL VPN gateway: The gateway IP address is already used by another SSL VPN gateway. 开启当前的SSL VPN网关失败：该网关的IP地址已经被其它SSL VPN网关使用。	The address bound by the open gateway has been used by other gateways. 开启网关失败，此网关的IP地址被其它网关使用。
The specified IP address and port number can't be the same as those of other SSL VPN gateways. 指定IP地址和端口号不能与其他网关相同。	The configured IP address and port are the same as the existing gateway. 配置的IP地址和端口和已有的网关相同。
The specified IPv6 address and port number can't be the same as those of other SSL VPN gateways. 指定IPv6地址和端口号不能与其他网关相同。	The configured IPv6 address and port are the same as the existing gateway. 配置的IPv6地址和端口和已有的网关相同。

## SSLVPN/Contexts

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
Invalid IP address. IP地址无效。	When configuring an IP address,the specified address is invalid. 配置IP地址时，指定的地址无效
The specified SSL VPN gateway doesn't exist. 指定的SSL VPN网关不存在。	When adding the gateway,the specified name does not exist. 添加SSL VPN网关时，指定的名称不存在。

<p>A context has already been associated with the gateway without specifying a domain name or virtual host name.</p> <p>该SSL VPN网关已经被其他的SSL VPN访问实例引用，且引用时未指定域名和虚拟主机名。</p>	<p>Configure the gateway under the access instance, which has been monopolized by other access instances.</p> <p>访问实例下配置网关，此网关已经被其它访问实例独占。</p>
<p>The domain name is already used by a context associated with the gateway.</p> <p>不能为引用同一个SSL VPN网关的不同SSL VPN访问实例指定相同的域名。</p>	<p>Configure the gateway and domain name under the access instance, which has been referenced by the same domain name as other access instances.</p> <p>访问实例下配置网关和域名，此网关已经被其它访问实例以相同的域名引用。</p>
<p>The virtual host name is already used by a context associated with the gateway.</p> <p>不能为引用同一个SSL VPN网关的不同SSL VPN访问实例指定相同的虚拟主机名称。</p>	<p>Configure the gateway and virtual host name under the access instance, which has been referenced by the same virtual host name as other access instances.</p> <p>访问实例下配置网关和虚拟主机名，此网关已经被其它访问实例以相同的虚拟主机名引用。</p>
<p>Invalid AAA domain name.</p> <p>AAA域名非法。</p>	<p>The name specified for configuring the AAA domain name is invalid.</p> <p>配置AAA域名，指定的名称无效。</p>
<p>An address in the address pool conflicted with an address on the device.</p> <p>地址池中的地址和设备中的地址存在冲突。</p>	<p>The configured IP address pool conflicts with the address in the device.</p> <p>配置的IP地址池和设备中的地址有冲突。</p>
<p>Maximum number of associated gateways already reached.</p> <p>SSL VPN网关引用数已达上限。</p>	<p>The maximum number of reference gateways is reached.</p> <p>引用网关数达到最大值。</p>
<p>The virtual host name is already used in the URL mapping configuration of an URL item in the SSL VPN context.</p> <p>当前SSL VPN访问实例下的URL表项已经使用该虚拟主机名。</p>	<p>The reference gateway is a virtual host name, the same as the domain referenced by a resource map under a URL item in the current context.</p> <p>引用网关为虚拟主机名方式，与当前Context中某个URL表项下URL资源映射所引用的域名相同。</p>
<p>The gateway is already used in the URL mapping configuration of an URL item.</p> <p>该网关已被URL表项下的资源映射配置使用。</p>	<p>The reference gateway is an exclusive reference that has been referenced by the URL resource mapping under the context url table entry.</p> <p>引用网关为独占式引用，而该网关已经被Context URL表项下的URL资源映射所引用。</p>
<p>The gateway is already associated with another SSL VPN context through a domain name or virtual host name.</p> <p>该SSL VPN网关已经被其他SSL VPN访问实例以域名或虚拟主机名的方式引用。</p>	<p>Configure the gateway monopoly, which has been referenced by the domain name or virtual host name of other contexts.</p> <p>配置网关独占方式，而该网关已经被其它Context已域名或虚拟主机名的方式引用。</p>
<p>The specified gateway name and virtual host name are already used in the URL mapping configuration of an URL item.</p> <p>指定的网关及虚拟主机名已被URL表项使用。</p>	<p>The reference gateway is a virtual host name, gateway and virtual host names are already used in the URL mapping</p> <p>引用网关为虚拟主机名方式，其网关及虚拟主机名已被URL表项使用。</p>

## SSLVPN/Contexts\_v2

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
Invalid IP address. IP地址无效。	When configuring an IP address,the specified address is invalid. 配置IP地址时，指定的地址无效
Invalid AAA domain name. AAA域名非法。	The name specified for configuring the AAA domain name is invalid. 配置AAA域名，指定的名称无效。
An address in the address pool conflicted with an address on the device. 地址池中的地址和设备中的地址存在冲突。	The configured IP address pool conflicts with the address in the device. 配置的IP地址池和设备中的地址有冲突。

## SSLVPN/ContextGateways

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN gateway doesn't exist. 指定的SSL VPN网关不存在。	When adding the gateway,the specified name does not exist. 添加网关时，指定名称的网关不存在。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
A context has already been associated with the gateway without specifying a domain name or virtual host name. 该SSL VPN网关已经被其他的SSL VPN访问实例引用，且引用时未指定域名和虚拟主机名。	Configure the gateway under the access instance,which has been monopolized by other access instances. 访问实例下配置网关，此网关已经被其它访问实例独占
The domain name is already used by a context associated with the gateway. 不能为引用同一个SSL VPN网关的不同SSL VPN访问实例指定相同的域名。	Configure the gateway and domain name under the access instance,which has been referenced by the same domain name as other access instances. 访问实例下配置网关和域名，此网关已经被其它访问实例已相同的域名引用。
The virtual host name is already used by a context associated with the gateway. 不能为引用同一个SSL VPN网关的不同SSL VPN访问实例指定相同的虚拟主机名称。	Configure the gateway and virtual host name under the access instance,which has been referenced by the same virtual host name as other access instances. 访问实例下配置网关和虚拟主机名，此网关已经被其它访问实例以相同的虚拟主机名引用。
Maximum number of associated gateways already reached. SSL VPN网关引用数已达上限。	The maximum number of reference gateways is reached. 引用网关数达到最大值。

<p>The virtual host name is already used in the URL mapping configuration of an URL item in the SSL VPN context.</p> <p>当前SSL VPN访问实例下的URL表项已经使用该虚拟主机名。</p>	<p>The reference gateway is a virtual host name, the same as the domain referenced by a resource map under a URL item in the current context.</p> <p>引用网关为虚拟主机名方式，与当前Context中某个URL表项下URL资源映射所引用的域名相同。</p>
<p>The gateway is already used in the URL mapping configuration of an URL item.</p> <p>该网关已被URL表项下的资源映射配置使用。</p>	<p>The reference gateway is an exclusive reference that has been referenced by the URL resource mapping under the context turl table entry.</p> <p>引用网关为独占式引用，而该网关已经被Context URL表项下的URL资源映射所引用。</p>
<p>The gateway is already associated with another SSL VPN context through a domain name or virtual host name.</p> <p>该SSL VPN网关已经被其他SSL VPN访问实例以域名或虚拟主机名的方式引用。</p>	<p>Configure the gateway monopoly, which has been referenced by the domain name or virtual host name of other contexts.</p> <p>配置网关独占方式，而该网关已经被其它Context以域名或虚拟主机名的方式引用。</p>
<p>The specified gateway name and virtual host name are already used in the URL mapping configuration of an URL item.</p> <p>指定的网关及虚拟主机名已被URL表项使用。</p>	<p>The reference gateway is a virtual host name, gateway and virtual host names are already used in the URL mapping</p> <p>引用网关为虚拟主机名方式，其网关及虚拟主机名已被URL表项使用。</p>

## SSLVPN/IpAcContexts

Message	Explanation
<p>SSL VPN is not enabled.</p> <p>SSL VPN服务没有开启。</p>	<p>Get or configuration data when the SSLVPN process is not started.</p> <p>当SSLVPN进程没有开启时，获取数据或下发配置。</p>
<p>Invalid IP address.</p> <p>IP地址无效。</p>	<p>When configuring an IP address,the specified address is invalid.</p> <p>配置IP地址时，指定的地址无效</p>
<p>An address in the address pool conflicted with an address on the device.</p> <p>地址池中的地址和设备中的地址存在冲突。</p>	<p>The configured IP address pool conflicts with the address in the device.</p> <p>配置的IP地址池和设备中的地址有冲突。</p>

## SSLVPN/UISettings

Message	Explanation
<p>SSL VPN is not enabled.</p> <p>SSL VPN服务没有开启。</p>	<p>Get or configuration data when the SSLVPN process is not started.</p> <p>当SSLVPN进程没有开启时，获取数据或下发配置。</p>
<p>Invalid file name.</p> <p>文件名非法。</p>	<p>When configuring a file name,the specified name is invalid.</p> <p>配置文件名时，指定的名称无效</p>
<p>The logo file doesn't exist.</p> <p>logo文件不存在。</p>	<p>Configure the logo file,the specified file does not exist.</p> <p>配置logo文件，指定的文件不存在。</p>
<p>File size should not exceed 100KB.</p>	<p>The length of the file exceeds 100KB.</p>



文件大小不能超过100KB。	文件的大小超过100KB。
----------------	---------------

## SSLVPN/PortForwardLists

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
Can't delete the port-forwarding list. It is associated with policy groups. 指定的端口转发列表已经被策略组引用，无法删除。	Delete the port forward list,which has been referenced by the policy group. 删除端口转发列表时，此列表已被策略组引用。

## SSLVPN/PortForwardItems

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
Remote server name is required. 需要输入远端服务器名称。	Create a port to publish entry,the remote server name is not issued. 创建端口转发表项，并没有指定远端服务器名称。
Remote server port is required. 需要输入远端服务器端口号。	Create a port to publish entry,the remote server port is not issued. 创建端口转发表项，并没有指定远端服务器端口没有下发。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
Can't delete the port forwarding item. Reason: The item has been assigned to a port forwarding list. 无法删除端口转发表项，因为此表项已端口转发列表引用	Delete the referenced port forwarding item. 删除已被引用的端口转发列表。

## SSLVPN/Ipv4AddressPools

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The start IP address is required.	When configuring an address,there is no start IP.

需要输入地址池的起始地址。	配置地址时，没有指定起始地址。
The end IP address is required. 需要输入地址池的结束地址。	When configuring an address,there is no end IP. 配置地址时，没有指定结束地址。
The IP address range can't overlap with an existing IP address range. 地址范围不能与已有地址池的地址范围重叠。	Configure the IP address range to overlap the address range in the existing address pool. 配置IP地址范围和已有地址池中的地址范围重叠。
Invalid IP address. IP地址无效。	When configuring an IP address,the specified address is invalid. 配置IP地址时，指定的地址无效
The start IP address must be smaller than or equal to the end IP address. 地址池的起始地址必须小于或等于结束地址。	When configuring an IP address, the starting address is greater than the ending address. 配置IP地址时，起始地址大于结束地址。
The IP address range can't include loopback addresses. 地址池的地址范围不能包含环回地址。	The configured IP address contains the loopback address. 配置的IP地址中包含环回地址。
An address in the address pool conflicted with an address on the device. 地址池中的地址和设备中的地址存在冲突。	The configured IP address pool conflicts with the address in the device. 配置的IP地址池和设备中的地址有冲突。

## SSLVPN/RouteLists

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
Can't delete the route list. It is referenced by policy groups. 指定的路由列表已经被策略组引用，无法删除。	Delete the routing list referenced by the policy group. 删除已被策略组引用的路由列表。

## SSLVPN/RouteItems

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
Invalid IP address. IP地址无效。	When configuring an IP address,the specified address is invalid. 配置IP地址时，指定的地址无效
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。

## SSLVPN/PolicyGroups

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
Can't delete the policy group. It is associated with contexts. 指定的策略组已经被SSL VPN访问实例引用，无法删除。	Delete the referenced policy group. 删除已经被SSLVPN 访问实例引用的策略组。

## SSLVPN/TcpAcPolicys

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified port-forwarding list doesn't exist. 指定的端口转发列表不存在。	Configure a list of port forwarding references that do not exist. 配置引用不存在的端口转发列表。
The uri-acl does not exist. URI ACL不存在。	When configuring data, the URI ACL does not exist. 配置数据时，URI ACL不存在。

## SSLVPN/IpAcPolicys

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
Invalid IP address. IP地址无效。	When configuring an IP address,the specified address is invalid. 配置IP地址时，指定的地址无效
The route list doesn't exist. 引用的路由列表不存在。	Configure routing lists that do not exist. 配置引用不存在的路由列表。

## SSLVPN/IpAcPolicys\_v2

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
Invalid IP address. IP地址无效。	When configuring an IP address,the specified address is invalid. 配置IP地址时，指定的地址无效
The route list doesn't exist. 引用的路由列表不存在。	Configure routing lists that do not exist. 配置引用不存在的路由列表。
The uri-acl does not exist. URI ACL不存在。	When configuring data, the URI ACL does not exist. 配置数据时，URI ACL不存在。

## SSLVPN/Sessions

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。

## SSLVPN/ContextStatistics

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。

## SSLVPN/URIACLs

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
The uri-acl is in use. URI ACL正在被使用。	Delete the referenced URI ACL. 删除已被引用的URI ACL。

# SSLVPN/URIACLItems

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
The uri-acl does not exist. URI ACL不存在。	When configuring data, the URI ACL does not exist. 配置数据时，URI ACL不存在。
Invalid uri-acl rule ID. 无效的URI ACL规则ID。	When configuring an ID, the specified value is invalid. 配置URI ACL的ID时，指定的值无效。
Please input uri-acl rule action. 需要输入URI ACL规则动作。	When configuring data, no regular action is issued. 配置数据时，必须指定规则动作。
Please input uri-acl rule pattern. 需要输入URI ACL规则样式。	When configuring data, no rule style is issued. 配置数据时，必须指定规则样式。
Pattern string is invalid. 模式字符串不合法。	When configuring data, the specified pattern string is invalid. 配置数据时，指定的模式字符串无效。
Protocol string is invalid. 协议类型不合法	When configuring data, the specified protocol is invalid. 配置数据时，指定的协议无效。
Host name string is invalid. 主机地址或域名不合法。	When configuring data, the specified host address or domain name is invalid. 配置数据时，指定的主机地址或域名无效。
Port string is invalid. 端口不合法。	When configuring data, the specified port is invalid. 配置数据时，指定的端口无效。
Path string is invalid. 路径不合法。	When configuring data, the specified path is invalid. 配置数据时，指定的路径无效。

# SSLVPN/WebAcPolicys

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The uri-acl does not exist. URI ACL不存在。	When configuring data, the URI ACL does not exist. 配置数据时，URI ACL不存在。

## SSLVPN/UrlLists

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
Can't delete the url list: It is associated with policy groups. 指定的URL列表被策略组引用，无法删除。	Delete the URL list referenced by the policy group. 删除已被策略组引用的URL列表。

## SSLVPN/UrlItems

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
The specified url-list list doesn't exist. 指定的URL列表不存在。	When configuring data, the specified URL list does not exist. 配置数据时，指定的URL列表不存在。
Can't delete the URL item because it has been assigned to a URL list. 无法删除URL表项，因为该表项已被URL列表引用。	Delete the URL item referenced by the URL list. 删除已被URL 列表引用的URL表项。
The URL is already specified for another URL item in the SSL VPN context. 当前SSL VPN访问实例下的其他URL表项中已存在该URL。	In the case of resource mapping, the URL item is configured with the same value as the other URL item. 资源映射情况下，配置的URL表项和其它URL表项相同。

## SSLVPN/UrlCtxItems

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN gateway doesn't exist. 指定的SSL VPN网关不存在。	When adding the gateway,the specified name does not exist. 添加网关时，指定的名称不存在。
The specified SSL VPN context doesn't exist.	When the configuration is added,the context instance does not exist.

指定的SSL VPN访问实例不存在。	添加配置时，访问实例不存在。
The specified URL item doesn't exist. 指定的URL表项不存在。	When configuring data, the specified URL item does not exist. 配置数据时，指定的URL表项不存在。
The domain name is already used in the URL mapping configuration of another URL item in the SSL VPN context. 当前SSL VPN访问实例下的其他URL表项下域名映射配置已使用该域名。	The configuration domain name is the same as the domain name mapped under other URL item. 配置域名和其它URL表项下域名映射的域名相同。
The domain name specified in the URL item is the same as the gateway's virtual host name specified for the SSL VPN context. 该URL表项配置的域名与当前SSL VPN访问实例下配置的网关虚拟主机名相同。	The configured domain name is the same as the gateway virtual host name under the current access instance. 配置域名和当前SSLVPN访问实例下的网关虚拟主机名相同。
The URL specified for the URL item is the same as the URL specified for another URL item (in the same SSL VPN context) that has URL mapping configured. 指定的URL与当前SSL VPN访问实例下的其他URL表项中配置的URL相同。	Configuring URL mapping ,the URL configured under the URL item is the same as other URL item configured with resource mapping under the current context. 配置资源映射时，该URL表项下配置的URL与当前Context下的其它配置了资源映射的URL表项的URL相同
The gateway is already used in the URL mapping configuration of another URL item. 其他URL表项下的端口映射已配置该网关。	The referenced gateway is called an exclusive reference, the gateway is already referenced by the URL resource map under the url table entry of the context. 引用的网关名为独占引用，而该网关已经被Context 的URL表项下URL资源映射所引用
The gateway name and virtual host name are already associated with an SSL VPN context. 该URL表项配置的网关及虚拟主机名已经被SSL VPN访问实例使用。	The reference gateway name and virtual host name are the same as the gateway and virtual host name referenced by the context. 引用的网关名和虚拟主机名与Context引用的网关和虚拟主机名都相同
The gateway name and virtual host name specified in the URL item are already used in the URL mapping of another URL item. 该URL表项配置的网关及虚拟主机名已被其他URL表项使用。	When configuring URL mapping ,the configured gateway and virtual host names under the url table item have been used by other URL table items. 配置资源映射时，该URL表项下配置的网关及虚拟主机名已经被其它URL表项使用。
The gateway name specified in the URL item is already associated with an SSL VPN context. 该URL表项引用的网关已经和SSL VPN访问实例关联。	When configuring URL mapping ,the referenced gateway is already associated with the SSLVPN access instance. 配置资源映射时，引用的网关已经和SSLVPN访问实例关联。

## SSLVPN/UrlItemResources

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。

The specified url-list list doesn't exist. 指定的URL列表不存在。	When configuring data, the specified URL list does not exist. 配置数据时，指定的URL列表不存在。
The specified URL item doesn't exist. 指定的URL表项不存在。	When configuring data, the specified URL item does not exist. 配置数据时，指定的URL表项不存在。

## SSLVPN/SnatPools

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
Invalid IP address. IP地址无效。	When configuring an IP address,the specified address is invalid. 配置IP地址时，指定的地址无效
An address in the address pool conflicted with an address on the device. 地址池中的地址和设备中的地址存在冲突。	The configured IP address pool conflicts with the address in the device. 配置的IP地址池和设备中的地址有冲突。
The end address must be greater than or equal to the start address. 地址池的结束地址必须大于或等于起始地址。	When configuring an IP address, the end address is less than the beginning address. 配置IP地址时，结束地址小于起始地址。
Number of addresses in the SNAT pool exceeded the limit. 地址池内的地址数量已达上限。	When configuring an IP address, the number of addresses exceeds the maximum. 配置IP地址时，地址数量超过最大值。
The specified SNAT pool member can't overlap with an existing member in another SNAT pool. 地址范围不能与已有地址池的地址范围重叠。	Configure the IP address range to overlap the address range in the existing address pool. 配置IP地址范围和已有地址池中的地址范围重叠。
The start IP address is required. 需要输入SNAT POOL的起始地址。	When configuring an address,there is no start IP. 配置地址时，没有指定起始地址。
The end IP address is required. 需要输入SNAT POOL的结束地址。	When configuring an address,there is no end IP. 配置地址时，没有指定结束地址。

## SSLVPN/Ipv6SnatPools

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
Invalid IP address. IP地址无效。	When configuring an IP address,the specified address is invalid. 配置IPv6地址时，指定的地址无效
An address in the address pool conflicted with an address on the device. 地址池中的地址和设备中的地址存在冲突。	The configured IP address conflicts with the address in the device. 配置的IPv6地址池和设备中的地址有冲突。



The end address must be greater than or equal to the start address. 地址池的结束地址必须大于或等于起始地址。	When configuring an IP address, the end address is less than the beginning address. 配置IPv6地址时，结束地址小于起始地址。
Number of addresses in the SNAT pool exceeded the limit. 地址池内的地址数量已达上限。	When configuring an IP address, the number of addresses exceeds the maximum. 配置IPv6地址时，地址数量超过最大值。
The specified SNAT pool member can't overlap with an existing member in another SNAT pool. 地址范围不能与已有地址池的地址范围重叠。	Configure the IP address range to overlap the address range in the existing address pool. 配置IPv6地址范围和已有地址池中的地址范围重叠。
The start IP address is required. 需要输入SNAT POOL的起始地址。	When configuring an address,there is no start IP. 配置IPv6地址时，没有指定起始地址。
The end IP address is required. 需要输入SNAT POOL的结束地址。	When configuring an address,there is no end IP. 配置IPv6地址时，没有指定结束地址。

## SSLVPN/UrlResources

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
The specified policy group doesn't exist. 指定的策略组不存在。	When the configuration is added,the policy group instance does not exist. 添加配置时，策略组不存在。
The specified url-list list doesn't exist. 指定的URL列表不存在。	When configuring data, the specified URL list does not exist. 配置数据时，指定的URL列表不存在。

## SSLVPN/SnatResources

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified snat pool doesn't exist. 指定的SNAT地址池不存在。	When configuring data, the specified SNAT pool does not exist. 配置数据时，指定的SNAT地址池不存在。

## SSLVPN/UserControls

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。

## SSLVPN/GlobalLog

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。

## SSLVPN/IpAcStatistics

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。

## SSLVPN/IpAcContextStatistics

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。

## SSLVPN/PortForwardCtxItems

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 配置数据时，访问实例不存在。
Local name is required.	Add the configuration and the local server name is not issued.

需要指定本地服务器名称。	添加配置时，没有指定本地服务器名称。
Local port is required. 需要指定本地服务器端口号	Add the configuration and the local server port is not issued. 添加配置时，没有指定本地服务器端口。
The specified port forwarding item doesn't exist. 指定的端口转发表项不存在	When configuring data,the port forwarding list does not exist. 配置数据时，端口转发列表不存在。
Can't delete the port forwarding item. Reason: The item has been assigned to a port forwarding list. 无法删除端口转发表项，因为此表项已端口转发列表引用	Delete the referenced port forwarding item. 删除已被引用的端口转发列表。

## SSLVPN/PortForwardItemResources

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
The specified port forwarding item doesn't exist. 指定的端口转发表项不存在	When configuring data,the forwarding list does not exist. 配置数据时，端口转发列表不存在。

## SSLVPN/Shortcuts

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
Can't delete the shortcut. Reason: The shortcut has been assigned to a shortcut list. 无法删除快捷方式，因为此快捷方式已被快捷方式列表引用	Delete the referenced shortcut. 删除已被引用的快捷方式。

## SSLVPN/ShortCutLists

Message	Explanation
SSL VPN is not enabled.	Get or configuration data when the SSLVPN process is not started.

SSL VPN服务没有开启。	当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。
Can't delete the shortcut list. Reason: The list has been assigned to a policy group. 无法删除快捷方式列表，因为此快捷方式列表已被策略组引用。	Delete the referenced shortcut list. 删除已被引用的快捷方式列表。

## SSLVPN/ShortcutResources

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added, the context instance does not exist. 添加配置时，访问实例不存在。
The specified shortcut doesn't exist. 指定的快捷方式不存在。	When the configuration is added, the specified shortcut doesn't exist. 配置数据时，指定的快捷方式不存在。
The specified shortcut list doesn't exist. 指定的快捷方式列表不存在。	When the configuration is added, the specified shortcut list doesn't exist. 配置数据时，指定的快捷方式列表不存在。

## SSLVPN/ShortcutPolicys

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Gets or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。

## SSLVPN/Users

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The specified SSL VPN context doesn't exist. 指定的SSL VPN访问实例不存在。	When the configuration is added,the context instance does not exist. 添加配置时，访问实例不存在。

<p>Operation succeeded. However, invalid addresses are included: broadcast or network addresses, or addresses not in the IP access address pool.</p> <p>操作成功，但是包含无效地址：广播地址、网络地址或不在地址池中的地址。</p>	<p>Binding IP addresses contain broadcast addresses, network addresses, or addresses that are not in the address pool.</p> <p>绑定IP地址包含广播地址、网络地址或不在地址池中的地址。</p>
<p>Operation failed. Some of the addresses are already bound to other users.</p> <p>操作失败，部分地址已经被其它用户绑定。</p>	<p>Bind IP addresses, some of which have been bound by other users.</p> <p>绑定的IP地址，部分地址已经被其它用户绑定。</p>
<p>Operation failed. The available IP addresses in the address pool were not enough for auto allocation.</p> <p>操作失败，地址池中可用于分配的地址已经不足以自动分配。</p>	<p>Configuration automatically assigns more addresses than the number of addresses remaining in the address pool.</p> <p>配置自动分配地址数大于地址池中剩余地址数量。</p>
<p>Invalid IP address list.</p> <p>无效的IP地址列表。</p>	<p>The configured IP address is illegal.</p> <p>配置的IP地址无效。</p>
<p>The specified SSL VPN user doesn't exist.</p> <p>指定的SSL VPN用户不存在。</p>	<p>The configured user does not exist.</p> <p>配置下发的用户不存在。</p>
<p>The username cannot contain the following special characters:   / : * ? &lt; &gt; @.</p> <p>用户名不能包含以下特殊字符：  / : * ? &lt; &gt; @。</p>	<p>The username configured to issue contains illegal characters.</p> <p>配置下发的用户名包含非法字符。</p>
<p>Operation failed. No IP access address pool is available in the SSL VPN context.</p> <p>操作失败，在SSL VPN访问实例中不存在有效的地址池。</p>	<p>The SSLVPN access instance does not reference the address pool.</p> <p>SSLVPN访问实例没有引用地址池。</p>
<p>Operation failed. Maximum number of bound addresses already reached."</p> <p>操作失败，已经达到可绑定的最大地址数。</p>	<p>The number of addresses bound by the user exceeds the maximum.</p> <p>用户绑定的地址数超过最大限制。</p>
<p>BindAddress and AutoBindAddrNum cannot both be configured.</p> <p>BindAddress 和 AutoBindAddrNum 不能同时配置。</p>	<p>Simultaneously issue the specified and automatic IP address binding.</p> <p>不能同时下发指定和自动IP地址绑定。</p>

## SSLVPN/GlobalCustomInfos

Message	Explanation
<p>SSL VPN is not enabled.</p> <p>SSL VPN服务没有开启。</p>	<p>Get or configuration data when the SSLVPN process is not started.</p> <p>当SSLVPN进程没有开启时，获取数据或下发配置。</p>

## SSLVPN/LogoutAlls

Message	Explanation
<p>SSL VPN is not enabled.</p> <p>SSL VPN服务没有开启。</p>	<p>Get or configuration data when the SSLVPN process is not started.</p> <p>当SSLVPN进程没有开启时，获取数据或下发配置。</p>

## SSLVPN/LogoutUsers

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。

## SSLVPN/LogoutSessions

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。

## SSLVPN/GlobalCustoms

Message	Explanation
SSL VPN is not enabled. SSL VPN服务没有开启。	Get or configuration data when the SSLVPN process is not started. 当SSLVPN进程没有开启时，获取数据或下发配置。
The file size cannot exceed 50000 KB. 文件大小不能超过50M。	The configuration file size exceeds 50M. 配置文件大小超过50M。
The file does not exist. 文件不存在。	The configuration specified file does not exist. 配置指定的文件不存在。
Invalid file format. The file format must be EXE. 文件格式错误，必须为exe格式。	Configuring the specified file format is illegal. 配置指定的文件格式非法。

# Contents

StaticRoute GSTA .....	1
gsta-staticrt .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
gsta-staticrt/srRoutes .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
Example .....	3

# StaticRoute GSTA

The namespace is "http://www.gsta.com/netconf/gsta-staticrt".

This module can't be under top node.

## gsta-staticrt

This table contains configuration information of gsta-staticrt.

## XML structure

```
<staticrt>
  <staticrtbase>
    <srRoutes>
      <srRoute>
        <vrfName></vrfName>
        <afType></afType>
        <prefix></prefix>
        <maskLength></maskLength>
        <ifName></ifName>
        <destVrfName></destVrfName>
        <nexthop></nexthop>
        <description></description>
        <preference></preference>
        <tag></tag>
        <sessionName></sessionName>
        <isPermanent></isPermanent>
      </srRoute>
    </srRoutes>
  </staticrtbase>
</staticrt>
```

## Table description

Item	Description
Feature name	gsta-staticrt
Table name	staticrt
Table type	Multi-instance table
Row name	staticrtbase
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
srRoutes	Static route list.	Sublist	The details of the sublist refer to srRoutes table.	N/A

## gsta-staticrt/srRoutes

This table contains static route configuration information of gsta-staticrt.

## XML structure

Please refer to the XML Structure of gsta-staticrt/staticrt.

## Table description

Item	Description
Feature name	gsta-staticrt
Table name	srRoutes
Table type	Multi-instance table
Row name	srRoute
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vrfName	Name of the VPN to which a prefix belongs.	Index	String, case-sensitive. Length: 1 to 31 characters.	A null string or a _public_ string indicates the public instance.
afType	Address family type.	Index	String: case-sensitive: <ul style="list-style-type: none"><li>ipv4unicast</li><li>ipv6unicast</li></ul>	N/A
prefix	Destination IP address.	Index	String, dotted decimal notation if afType is ipv4unicast, or colon-separated hexadecimal string if afType is ipv6unicast.	Example: 17.0.0.0, or 123:1::
maskLength	Mask length of an	Index	Unsigned integer.	No more than 32 if

Column name	Column description	Column type	Data type and restrictions	Remarks
	IP address.		Value range: 0 to 128.	afType is ipv4unicast, and no more than 128 if afType is ipv6unicast.
ifName	Output interface of a route.	Index	String, case-insensitive. Length: 0 to 64 characters.	N/A
destVrfName	Name of the destination VPN instance.	Index	String, case-sensitive. Length: 1 to 31 characters.	A <code>_public_</code> string indicates the public instance, and a null string indicates the invalid instance when ifName is not null.
nexthop	Next hop IP address of a route.	Index	String, dotted decimal notation if afType is ipv4unicast, or colon-separated hexadecimal string if afType is ipv6unicast.	Example: 1.1.1.1, or 1::1.
description	Description of a static route.	N/A	String, case-sensitive. Length: 1 to 150 characters.	N/A
preference	Set a priority for the static routing protocol. If no priority is specified, the global default priority is used.	N/A	Unsigned integer. Value range: 1 to 255.	Default value is 60.
tag	Tag of a static route.	N/A	Unsigned integer. Value range: 1 to 4294967295.	Default value is 0.
sessionName	Bind a static BFD session to a static route.	N/A	String, case-sensitive. Length: 1 to 64 characters.	
isPermanent	Enables the static route to be active permanently.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Permanent route.</li> <li><b>false</b>—Not a permanent route.</li> </ul>	Default value is false.

## Example

# Set an IPv6 static route: "ipv6 route-static vpn-instance test 2003:: 64 2001::1 preference 5 bfd static StaticRtBfd description Route to HZ"

```
<gsta-staticrt xc:operation="replace"
xmlns="http://www.gsta.com/netconf/gsta-staticrt">
  <staticrt>
    <staticrtbase>
```

```

<srRoutes>
  <srRoute>
    <vrfName>test</vrfName>
    <afType>ipv6unicast</afType>
    <prefix>2003::</prefix>
    <maskLength>64</maskLength>
    <ifName></ifName>
    <destVrfName></destVrfName>
    <nexthop>2001::1</nexthop>
    <description>Route to HZ</description>
    <preference>5</preference>
    <sessionName>StaticRtBfd</sessionName>
  </srRoute>
</srRoutes>
</staticrtbase>
</staticrt>
</gsta-staticrt>

```

# Contents

StaticRoute GSTA .....	1
gsta-staticrt .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
gsta-staticrt/srRoutes .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
Example .....	3

# StaticRoute GSTA

The namespace is "http://www.gsta.com/netconf/gsta-staticrt".

This module can't be under top node.

## gsta-staticrt

This table contains configuration information of gsta-staticrt.

## XML structure

```
<staticrt>
  <staticrtbase>
    <srRoutes>
      <srRoute>
        <vrfName></vrfName>
        <afType></afType>
        <prefix></prefix>
        <maskLength></maskLength>
        <ifName></ifName>
        <destVrfName></destVrfName>
        <nexthop></nexthop>
        <description></description>
        <preference></preference>
        <tag></tag>
        <sessionName></sessionName>
        <isPermanent></isPermanent>
      </srRoute>
    </srRoutes>
  </staticrtbase>
</staticrt>
```

## Table description

Item	Description
Feature name	gsta-staticrt
Table name	staticrt
Table type	Multi-instance table
Row name	staticrtbase
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
srRoutes	Static route list.	Sublist	The details of the sublist refer to srRoutes table.	N/A

## gsta-staticrt/srRoutes

This table contains static route configuration information of gsta-staticrt.

## XML structure

Please refer to the XML Structure of gsta-staticrt/staticrt.

## Table description

Item	Description
Feature name	gsta-staticrt
Table name	srRoutes
Table type	Multi-instance table
Row name	srRoute
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
vrfName	Name of the VPN to which a prefix belongs.	Index	String, case-sensitive. Length: 1 to 31 characters.	A _public_ string indicates the public instance.
afType	Address family type.	Index	String: case-sensitive: <ul style="list-style-type: none"><li>ipv4unicast</li><li>ipv6unicast</li></ul>	N/A
prefix	Destination IP address.	Index	String, dotted decimal notation if afType is ipv4unicast, or colon-separated hexadecimal string if afType is ipv6unicast.	Example: 17.0.0.0, or 123:1::
maskLength	Mask length of an IP address.	Index	Unsigned integer. Value range: 0 to 128.	No more than 32 if afType is ipv4unicast, and no more than 128 if afType is

Column name	Column description	Column type	Data type and restrictions	Remarks
				ipv6unicast.
ifName	Output interface of a route.	Index	String, case-insensitive. Length: 0 to 64 characters.	N/A
destVrfName	Name of the destination VPN instance.	Index	String, case-sensitive. Length: 1 to 31 characters.	A <code>_public_</code> string indicates the public instance, and a null string indicates the invalid instance when ifName is not null.
nexthop	Next hop IP address of a route.	Index	String, dotted decimal notation if afType is ipv4unicast, or colon-separated hexadecimal string if afType is ipv6unicast.	Example: 1.1.1.1, or 1::1.
description	Description of a static route.	N/A	String, case-sensitive. Length: 1 to 150 characters.	N/A
preference	Set a priority for the static routing protocol. If no priority is specified, the global default priority is used.	N/A	Unsigned integer. Value range: 1 to 255.	Default value is 60.
tag	Tag of a static route.	N/A	Unsigned integer. Value range: 1 to 4294967295.	Default value is 0.
sessionName	Bind a static BFD session to a static route.	N/A	String, case-sensitive. Length: 1 to 64 characters.	
isPermanent	Enables the static route to be active permanently.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Permanent route.</li> <li><b>false</b>—Not a permanent route.</li> </ul>	Default value is false.

## Example

# Get an IPv6 static route: "ipv6 route-static vpn-instance test 2003:: 64 2001::1 preference 5 bfd static StaticRtBfd description Route to HZ"

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <get>
    <filter type="subtree">
      <gsta-staticrt xmlns="http://www.gsta.com/netconf/gsta-staticrt">
        <staticrt>
          <staticrtbase>
            <srRoutes>
```

```

    <srRoute>
      <vrfName>test</vrfName>
      <afType>ipv6unicast</afType>
      <prefix>2003::</prefix>
      <maskLength>64</maskLength>
      <ifName></ifName>
      <destVrfName></destVrfName>
      <nexthop>2001::1</nexthop>
      <description/>
      <preference/>
      <sessionName/>
      <isPermanent/>
    </srRoute>
  </srRoutes>
</staticrtbase>
</staticrt>
</gsta-staticrt>
</filter>
</get>
</rpc>

```



# Contents

gsta-staticrt .....1

gsta-staticrt/staticrt/srRoutes .....1

# gsta-staticrt

## gsta-staticrt/staticrt/srRoutes

Message	Explanation
Route already exists. 路由已存在	Configuration already exists, when setting new configuration.
Maximum number of routes has been reached. 已达到最大路由条数	Maximum number of routes has been reached.
Route does not exist. 路由不存在	The specified configuration doesn't exist, when getting or deleting it.
The specified VRF name does not exist. 目的VRF索引不存在	Please create the VPN instance first.
The specified next hop VRF name does not exist. 下一跳VRF索引不存在	Please create the VPN instance first.
The interface is not supported. 接口不支持	Only routing interfaces are available.
Invalid destination address. 目的地址无效	Only class A, class B, and class C addresses are available.
Invalid next hop address. 下一跳无效	Only class A, class B, and class C addresses are available.
Next-hop address, outbound interface, or both must be specified one. 下一跳地址或者出接口索引必须至少设置一个	Next-hop address, outbound interface, or both must be specified.
The specified interface requires configuring a next hop address. 该接口需要配置下一跳地址	The specified interface requires configuring a next hop address.
The specified interface does not require configuring a next hop address. 该接口不需要配置下一跳	The specified interface does not require configuring a next hop address.
BFD cannot coexist with backup attribute. 静态路由的备份路径属性不能与BFD共存	BFD cannot coexist with backup attribute.
BFD cannot coexist with Track attribute. 静态路由的track属性不能与BFD共存	BFD cannot coexist with Track attribute.
Next hop VRF name should be set to (%s). 下一跳VRF名称应该填(%s)	Next hop VRF name should be set to the specified character string.
A valid output interface is required for a link-local address as the next hop.	A valid output interface is required for a link-local address as the next hop.

Link-local地址作为下一跳需要指定有效出接口	
BFD not supported. 不支持BFD	BFD service has not been started.
The interface does not support BFD. 指定接口不支持BFD	BFD cannot be configured when the output interface is NULL0.
The specified interface name does not exist. 接口名称不存在	The specified interface name does not exist.
BFD cannot coexist with permanent attribute. 静态路由的永久属性不能与BFD共存	BFD cannot coexist with permanent attribute.
Track cannot coexist with permanent attribute. 静态路由的永久属性不能与track共存	Track cannot coexist with permanent attribute.

# Contents

StaticRoute/Ipv4StaticRoutePrefixFile .....	1
XML structure .....	1
Table description .....	1
Columns .....	1

# StaticRoute/Ipv4StaticRoutePrefixFile

This table add IPv4 static route prefix in the file to the group.

## XML structure

```
<StaticRoute>
  <Ipv4StaticRoutePrefixFile>
    <RoutePrefixFileEntry>
      <File></File>
      <Group></Group>
    </RoutePrefixFileEntry>
  </Ipv4StaticRoutePrefixFile>
</StaticRoute>
```

## Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv4StaticRoutePrefixFile
Table type	Multi-instance table
Row name	RoutePrefixFileEntry
Restrictions	Prefix file must exist in the root directory of default storage medium. File Content include prefix like this: 1.1.1.1/32 10.1.1.0/24

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
File	filename. Example: cnc.txt	Index	String. Length: 1 to 255 characters.	N/A
Group	Group name.	index	String. Length: 1 to 31 characters.	N/A.

# Contents

StaticRoute .....	1
StaticRoute/Ipv4StaticRouteConfigurations .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
StaticRoute/Ipv4Group .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
StaticRoute/Ipv4GroupPrefix .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
StaticRoute/Ipv4StaticRouteGroup .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
StaticRoute/Ipv6StaticRouteConfigurations .....	8
XML structure .....	8
Table description .....	9
Columns .....	9

# StaticRoute

## StaticRoute/Ipv4StaticRouteConfigurations

This table contains IPv4 static route configuration information.

### XML structure

```
<StaticRoute>
  <Ipv4StaticRouteConfigurations>
    <RouteEntry>
      <DestVrfIndex></DestVrfIndex>
      <DestTopologyIndex></DestTopologyIndex>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <NexthopVrfIndex></NexthopVrfIndex>
      <NexthopIpv4Address></NexthopIpv4Address>
      <IfIndex></IfIndex>
      <Tag></Tag>
      <Preference></Preference>
      <Description></Description>
      <Permanent></Permanent>
      <BackupPathAttribute>
        <BackupIfIndex></BackupIfIndex>
        <BackupNexthopIpv4Address></BackupNexthopIpv4Address>
      </BackupPathAttribute>
      <BfdAttribute>
        <BfdWorkMode></BfdWorkMode>
        <BfdSourceIpv4Address></BfdSourceIpv4Address>
      </BfdAttribute>
      <TrackEntryID></TrackEntryID>
      <RecursiveHost></RecursiveHost>
    </RouteEntry>
  </Ipv4StaticRouteConfigurations>
</StaticRoute>
```

### Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv4StaticRouteConfigurations
Table type	Multi-instance table
Row name	RouteEntry
Restrictions	None

Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestVrfIndex	Destination VRF index.	Index	Unsigned integer.	Public network index is 0. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
DestTopologyIndex	Destination topology index.	Index	Unsigned integer.	Public network index is 0.
Ipv4Address	Destination IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	Length of the destination IPv4 address prefix.	Index	Unsigned integer. Value range: 0 to 32.	N/A
NextHopVrfIndex	Nexthop VRF index.	Index	Unsigned integer.	When the configuration includes a valid ifIndex, NextHopVrfIndex should be set to the invalid VRF index 0xFFFF. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
NextHopIpv4Address	Nexthop IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.



Column name	Column description	Column type	Data type and restrictions	Remarks
Tag	Route tag.	N/A	Unsigned integer. Value range: 1 to 4294967295.	Default value is 0.
Preference	Route preference.	N/A	Unsigned integer. Value range: 1 to 255.	Default value is 60.
Description	Description information.	N/A	String, case-sensitive. Length: 1 to 150 characters.	N/A
Permanent	Permanent attribute.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Permanent route.</li> <li>• false—Not a Permanent route.</li> </ul>	Default value is false.
BackupPathAttribute	Backup path attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>• BackupIfIndex.</li> <li>• BackupNextHopIPv4Addresses.</li> </ul>	N/A
BackupIfIndex	Backup interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
BackupNextHopIPv4Address	Backup next hop IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
BfdAttribute	BFD attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>• BfdWorkMode.</li> <li>• BfdSourceIPv4Address.</li> </ul>	N/A
BfdWorkMode	BFD work mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Control-packet mode.</li> <li>• 2—Echo-packet mode.</li> </ul>	N/A
BfdSourceIPv4Address	BFD source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
TrackEntryID	Track entry ID.	N/A	Unsigned integer. Value range: 1 to 1024.	N/A
RecursiveHost	Recursive lookup for ARP host routes.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Looks up for only ARP host routes.</li> <li>• false—Looks up for not only ARP host routes, but also other routes.</li> </ul>	Default value is false.

# StaticRoute/Ipv4Group

This table contains IPv4 group configuration information.

## XML structure

```
<StaticRoute>
  <Ipv4Group>
    <GroupEntry>
      <Group></Group>
    </GroupEntry>
  </Ipv4Group>
</StaticRoute>
```

## Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv4Group
Table type	Multi-instance table
Row name	GroupEntry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Group name.	Index	String. Length: 1 to 31 characters.	After a group is created, it cannot be modified.

# StaticRoute/Ipv4GroupPrefix

This table contains IPv4 group prefix configuration information.

## XML structure

```
<StaticRoute>
  <Ipv4GroupPrefix>
    <GroupPrefixEntry>
      <Group></Group>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
    </GroupPrefixEntry>
  </Ipv4GroupPrefix>
</StaticRoute>
```

```

        </GroupPrefixEntry>
    </Ipv4GroupPrefix>
</StaticRoute>

```

## Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv4GroupPrefix
Table type	Multi-instance table
Row name	Ipv4GroupPrefix
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Group name.	Index	String. Length: 1 to 31 characters.	After a group is created, it cannot be modified.
Ipv4Address	Destination IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	Length of the destination IPv4 address prefix.	Index	Unsigned integer. Value range: 0 to 32.	N/A

## StaticRoute/Ipv4StaticRouteGroup

This table contains IPv4 static route group configuration information.

## XML structure

```

<StaticRoute>
  <Ipv4StaticRouteGroup>
    <RouteGroupEntry>
      <DestVrfIndex></DestVrfIndex>
      <DestTopologyIndex></DestTopologyIndex>
      <Group></Group>
      <NextHopVrfIndex></NextHopVrfIndex>
      <NextHopIpv4Address></NextHopIpv4Address>
      <IfIndex></IfIndex>
      <Tag></Tag>
      <Preference></Preference>
    </RouteGroupEntry>
  </Ipv4StaticRouteGroup>
</StaticRoute>

```

```

<Description></Description>
<Permanent></Permanent>
<BackupPathAttribute>
  <BackupIfIndex></BackupIfIndex>
  <BackupNextHopIpv4Address></BackupNextHopIpv4Address>
</BackupPathAttribute>
<BfdAttribute>
  <BfdWorkMode></BfdWorkMode>
  <BfdSourceIpv4Address></BfdSourceIpv4Address>
</BfdAttribute>
<TrackEntryID></TrackEntryID>
<RecursiveHost></RecursiveHost>
</RouteGroupEntry>
</Ipv4StaticRouteGroup>
</StaticRoute>

```

## Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv4StaticRouteGroup
Table type	Multi-instance table
Row name	RouteGroupEntry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestVrfIndex	Destination VRF index.	Index	Unsigned integer.	Public network index is 0. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
DestTopologyIndex	Destination topology index.	Index	Unsigned integer.	Public network index is 0.
Group	Group name.	Index	String. Length: 1 to 31 characters.	After a group is created, it cannot be modified.
NextHopVrfIndex	NextHop VRF	Index	Unsigned integer.	When the configuration

Column name	Column description	Column type	Data type and restrictions	Remarks
	index.			includes a valid ifIndex, NextHopVrfIndex should be set to the invalid VRF index 0xFFFF. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
NextHopIPv4Address	NextHop IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Tag	Route tag.	N/A	Unsigned integer. Value range: 1 to 4294967295.	Default value is 0.
Preference	Route preference.	N/A	Unsigned integer. Value range: 1 to 255.	Default value is 60.
Description	Description information.	N/A	String, case-sensitive. Length: 1 to 150 characters.	N/A
Permanent	Permanent attribute.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Permanent route.</li> <li><b>false</b>—Not a Permanent route.</li> </ul>	Default value is false.
BackupPathAttribute	Backup path attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>BackupIfIndex.</li> <li>BackupNextHopIPv4Addresses.</li> </ul>	N/A
BackupIfIndex	Backup interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
BackupNextHopIp	Backup nexthop	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
v4Address	IPv4 address.			0.0.0.0 is an invalid value.
BfdAttribute	BFD attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>BfdWorkMode.</li> <li>BfdSourceIpv4Address.</li> </ul>	N/A
BfdWorkMode	BFD work mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Control-packet mode.</li> <li><b>2</b>—Echo-packet mode.</li> </ul>	N/A
BfdSourceIpv4Address	BFD source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
TrackEntryID	Track entry ID.	N/A	Unsigned integer. Value range: 1 to 1024.	N/A
RecursiveHost	Recursive lookup for ARP host routes.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Looks up for only ARP host routes.</li> <li>false—Looks up for not only ARP host routes, but also other routes.</li> </ul>	Default value is false.

## StaticRoute/Ipv6StaticRouteConfigurations

This table contains IPv6 static route configuration information.

### XML structure

```

<StaticRoute>
  <Ipv6StaticRouteConfigurations>
    <RouteEntry>
      <DestVrfIndex></DestVrfIndex>
      <DestTopologyIndex></DestTopologyIndex>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <NexthopVrfIndex></NexthopVrfIndex>
      <NexthopIpv6Address></NexthopIpv6Address>
      <IfIndex></IfIndex>
      <Tag></Tag>
      <Preference></Preference>
      <Description></Description>
      <Permanent></Permanent>
      <BfdAttribute>
        <BfdWorkMode></BfdWorkMode>
        <BfdSourceIpv6Address></BfdSourceIpv6Address>
      </BfdAttribute>
    </RouteEntry>
  </Ipv6StaticRouteConfigurations>
</StaticRoute>

```

```

    </RouteEntry>
  </Ipv6StaticRouteConfigurations>
</StaticRoute>

```

## Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv6StaticRouteConfigurations
Table type	Multi-instance table
Row name	RouteEntry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestVrfIndex	Destination VRF index.	Index	Unsigned integer.	Public network index is 0. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
DestTopologyIndex	Destination topology index.	Index	Unsigned integer.	Public network index is 0.
Ipv6Address	Destination IPv6 address.	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
Ipv6PrefixLength	Length of the destination IPv6 address prefix.	Index	Unsigned integer. Value range: 0 to 128.	N/A
NextHopVrfIndex	Nexthop VRF index.	Index	Unsigned integer.	When the configuration includes a valid ifIndex, NextHopVrfIndex should be set to the invalid VRF index 0xFFFF. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn

Column name	Column description	Column type	Data type and restrictions	Remarks
				NETCONF XML API Data Reference.
NextHopIpv6Address	NextHop IPv6 address.	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1. 0::0 is an invalid value.
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Tag	Route tag.	N/A	Unsigned integer. Value range: 1 to 4294967295.	Default value is 0.
Preference	Route preference.	N/A	Unsigned integer. Value range: 1 to 255.	Default value is 60.
Description	Description information.	N/A	String, case-sensitive. Length: 1 to 150 characters.	N/A
Permanent	Permanent attribute.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Permanent route.</li> <li>• <b>false</b>—Not a Permanent route.</li> </ul>	Default value is false.
BfdAttribute	BFD attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>• BfdWorkMode.</li> <li>• BfdSourceIpv6Address.</li> </ul>	N/A
BfdWorkMode	BFD work mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Control-packet mode.</li> <li>• <b>2</b>—Echo-packet mode.</li> </ul>	N/A
BfdSourceIpv6Address	BFD source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. 0::0 is an invalid value.



# Contents

StaticRoute .....	1
StaticRoute/Ipv4StaticRouteConfigurations .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
StaticRoute/Ipv4Group .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
StaticRoute/Ipv4GroupPrefix .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
StaticRoute/Ipv4StaticRouteGroup .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
StaticRoute/Ipv6StaticRouteConfigurations .....	8
XML structure .....	8
Table description .....	8
Columns .....	9

# StaticRoute

## StaticRoute/Ipv4StaticRouteConfigurations

This table contains IPv4 static route running information.

### XML structure

```
<StaticRoute>
  <Ipv4StaticRouteConfigurations>
    <RouteEntry>
      <DestVrfIndex></DestVrfIndex>
      <DestTopologyIndex></DestTopologyIndex>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
      <NexthopVrfIndex></NexthopVrfIndex>
      <NexthopIpv4Address></NexthopIpv4Address>
      <IfIndex></IfIndex>
      <Tag></Tag>
      <Preference></Preference>
      <Description></Description>
      <Permanent></Permanent>
      <BackupPathAttribute>
        <BackupIfIndex></BackupIfIndex>
        <BackupNexthopIpv4Address></BackupNexthopIpv4Address>
      </BackupPathAttribute>
      <BfdAttribute>
        <BfdWorkMode></BfdWorkMode>
        <BfdSourceIpv4Address></BfdSourceIpv4Address>
      </BfdAttribute>
      <TrackEntryID></TrackEntryID>
      <RecursiveHost></RecursiveHost>
    </RouteEntry>
  </Ipv4StaticRouteConfigurations>
</StaticRoute>
```

### Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv4StaticRouteConfigurations
Table type	Multi-instance table
Row name	RouteEntry
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestVrfIndex	Destination VRF index.	Index	Unsigned integer.	Public network index is 0. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see “Appendix” in L3vpn NETCONF XML API Data Reference.
DestTopologyIndex	Destination topology index.	Index	Unsigned integer.	Public network index is 0.
Ipv4Address	Destination IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	Length of the destination IPv4 address prefix.	Index	Unsigned integer. Value range: 0 to 32.	N/A
NextHopVrfIndex	Nexthop VRF index.	Index	Unsigned integer.	When the configuration includes a valid ifIndex,NextHopVrfIndex should be set to the invalid VRF index 0xFFFF. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see “Appendix” in L3vpn NETCONF XML API Data Reference.
NextHopIpv4Address	Nexthop IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Tag	Route tag.	N/A	Unsigned integer. Value range: 1 to 4294967295.	Default value is 0.
Preference	Route preference.	N/A	Unsigned integer. Value range: 1 to 255.	Default value is 60.
Description	Description information.	N/A	String, case-sensitive. Length: 1 to 150 characters.	N/A
Permanent	Permanent attribute.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Permanent</li> </ul>	Default value is false.

Column name	Column description	Column type	Data type and restrictions	Remarks
			route. <ul style="list-style-type: none"> <li>false—Not a permanent route.</li> </ul>	
BackupPathAttribute	Backup path attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>BackupIfIndex.</li> <li>BackupNextHopIPv4Address.</li> </ul>	N/A
BackupIfIndex	Backup interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
BackupNextHopIPv4Address	Backup next-hop IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
BfdAttribute	BFD attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>BfdWorkMode.</li> <li>BfdSourceIPv4Address.</li> </ul>	N/A
BfdWorkMode	BFD work mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Control-packet mode.</li> <li>2—Echo-packet mode.</li> </ul>	N/A
BfdSourceIPv4Address	BFD source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
TrackEntryID	Track entry ID.	N/A	Unsigned integer. Value range: 1 to 1024.	N/A
RecursiveHost	Recursive lookup for ARP host routes.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Looks up for only ARP host routes.</li> <li>false—Looks up for not only ARP host routes, but also other routes.</li> </ul>	N/A

## StaticRoute/Ipv4Group

This table contains IPv4 group configuration information.

### XML structure

```
<StaticRoute>
```

```

<Ipv4Group>
  <GroupEntry>
    <Group></Group>
  </GroupEntry>
</Ipv4Group>
</StaticRoute>

```

## Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv4Group
Table type	Multi-instance table
Row name	GroupEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Group name.	Index	String. Length: 1 to 31 characters.	After a group is created, it cannot be modified.

## StaticRoute/Ipv4GroupPrefix

This table contains IPv4 group prefix configuration information.

## XML structure

```

<StaticRoute>
  <Ipv4GroupPrefix>
    <GroupPrefixEntry>
      <Group></Group>
      <Ipv4Address></Ipv4Address>
      <Ipv4PrefixLength></Ipv4PrefixLength>
    </GroupPrefixEntry>
  </Ipv4GroupPrefix>
</StaticRoute>

```

## Table description

Item	Description
Feature name	StaticRoute

Item	Description
Table name	Ipv4GroupPrefix
Table type	Multi-instance table
Row name	Ipv4GroupPrefix
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	Group name.	Index	String. Length: 1 to 31 characters.	After a group is created, it cannot be modified.
Ipv4Address	Destination IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
Ipv4PrefixLength	Length of the destination IPv4 address prefix.	Index	Unsigned integer. Value range: 0 to 32.	N/A

## StaticRoute/Ipv4StaticRouteGroup

This table contains IPv4 static route group configuration information.

## XML structure

```

<StaticRoute>
  <Ipv4StaticRouteGroup>
    <RouteGroupEntry>
      <DestVrfIndex></DestVrfIndex>
      <DestTopologyIndex></DestTopologyIndex>
      <Group></Group>
      <NextHopVrfIndex></NextHopVrfIndex>
      <NextHopIpv4Address></NextHopIpv4Address>
      <IfIndex></IfIndex>
      <Tag></Tag>
      <Preference></Preference>
      <Description></Description>
      <Permanent></Permanent>
      <BackupPathAttribute>
        <BackupIfIndex></BackupIfIndex>
        <BackupNextHopIpv4Address></BackupNextHopIpv4Address>
      </BackupPathAttribute>
      <BfdAttribute>
        <BfdWorkMode></BfdWorkMode>
        <BfdSourceIpv4Address></BfdSourceIpv4Address>
      </BfdAttribute>
    </RouteGroupEntry>
  </Ipv4StaticRouteGroup>
</StaticRoute>

```

```

        </BfdAttribute>
        <TrackEntryID></TrackEntryID>
        <RecursiveHost></RecursiveHost>
    </RouteGroupEntry>
</Ipv4StaticRouteGroup>
</StaticRoute>

```

## Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv4StaticRouteGroup
Table type	Multi-instance table
Row name	RouteGroupEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestVrfIndex	Destination VRF index.	Index	Unsigned integer.	Public network index is 0. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see “Appendix” in L3vpn NETCONF XML API Data Reference.
DestTopologyIndex	Destination topology index.	Index	Unsigned integer.	Public network index is 0.
Group	Group name.	Index	String. Length: 1 to 31 characters.	After a group is created, it cannot be modified.
NextHopVrfIndex	Nexthop VRF index.	Index	Unsigned integer.	When the configuration includes a valid ifIndex, NextHopVrfIndex should be set to the invalid VRF index 0xFFFF. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see “Appendix” in L3vpn NETCONF XML API Data Reference.
NextHopIpv4Address	Nexthop IPv4 address.	Index	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support

Column name	Column description	Column type	Data type and restrictions	Remarks
				interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Tag	Route tag.	N/A	Unsigned integer. Value range: 1 to 4294967295.	Default value is 0.
Preference	Route preference.	N/A	Unsigned integer. Value range: 1 to 255.	Default value is 60.
Description	Description information.	N/A	String, case-sensitive. Length: 1 to 150 characters.	N/A
Permanent	Permanent attribute.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Permanent route.</li> <li><b>false</b>—Not a Permanent route.</li> </ul>	Default value is false.
BackupPathAttribute	Backup path attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>BackupIfIndex.</li> <li>BackupNextHopIPv4Address.</li> </ul>	N/A
BackupIfIndex	Backup interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
BackupNextHopIPv4Address	Backup nexthop IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
BfdAttribute	BFD attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>BfdWorkMode.</li> <li>BfdSourceIPv4Address.</li> </ul>	N/A
BfdWorkMode	BFD work mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Control-packet mode.</li> <li><b>2</b>—Echo-packet mode.</li> </ul>	N/A
BfdSourceIPv4Address	BFD source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1. 0.0.0.0 is an invalid value.
TrackEntryID	Track entry ID.	N/A	Unsigned integer. Value range: 1 to 1024.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
RecursiveHost	Recursive lookup for ARP host routes.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Looks up for only ARP host routes.</li> <li>false—Looks up for not only ARP host routes, but also other routes.</li> </ul>	N/A

## StaticRoute/Ipv6StaticRouteConfigurations

This table contains IPv6 static route running information.

### XML structure

```

<StaticRoute>
  <Ipv6StaticRouteConfigurations>
    <RouteEntry>
      <DestVrfIndex></DestVrfIndex>
      <DestTopologyIndex></DestTopologyIndex>
      <Ipv6Address></Ipv6Address>
      <Ipv6PrefixLength></Ipv6PrefixLength>
      <NexthopVrfIndex></NexthopVrfIndex>
      <NexthopIpv6Address></NexthopIpv6Address>
      <IfIndex></IfIndex>
      <Tag></Tag>
      <Preference></Preference>
      <Description></Description>
      <Permanent></Permanent>
      <BfdAttribute>
        <BfdWorkMode></BfdWorkMode>
        <BfdSourceIpv6Address></BfdSourceIpv6Address>
      </BfdAttribute>
    </RouteEntry>
  </Ipv6StaticRouteConfigurations>
</StaticRoute>

```

### Table description

Item	Description
Feature name	StaticRoute
Table name	Ipv6StaticRouteConfigurations
Table type	Multi-instance table
Row name	RouteEntry

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DestVrfIndex	Destination VRF index.	Index	Unsigned integer.	Public network index is 0. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see “Appendix” in L3vpn NETCONF XML API Data Reference.
DestTopologyIndex	Destination topology index.	Index	Unsigned integer.	Public network index is 0.
Ipv6Address	Destination IPv6 address.	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
Ipv6PrefixLength	Length of the destination IPv6 address prefix.	Index	Unsigned integer. Value range: 0 to 128.	N/A
NextHopVrfIndex	Nexthop VRF index.	Index	Unsigned integer.	When the configuration includes a valid ifIndex, NextHopVrfIndex should be set to the invalid VRF index 0xFFFF. Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see “Appendix” in L3vpn NETCONF XML API Data Reference.
NextHopIpv6Address	Nexthop IPv6 address.	Index	Hexadecimal string, colon-separated.	Example: 1:1::1:1. 0::0 is an invalid value.
IfIndex	Interface index.	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
Tag	Route tag.	N/A	Unsigned integer. Value range: 1 to 4294967295.	Default value is 0.
Preference	Route preference.	N/A	Unsigned integer. Value range: 1 to 255.	Default value is 60.
Description	Description information.	N/A	String, case-sensitive. Length: 1 to 150 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Permanent	Permanent attribute.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Permanent route.</li> <li>• false—Not a Permanent route.</li> </ul>	Default value is false.
BfdAttribute	BFD attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>• BfdWorkMode</li> <li>• BfdSourceIpv6Address.</li> </ul>	N/A
BfdWorkMode	BFD work mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Control-packet mode.</li> <li>• 2—Echo-packet mode.</li> </ul>	N/A
BfdSourceIpv6Address	BFD source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1. 0::0 is an invalid value.

# Contents

StaticRoute .....	1
StaticRoute/Ipv4StaticRouteConfigurations .....	1
StaticRoute/Ipv6StaticRouteConfigurations .....	3
Openconfig-local-routing/local-routes/static-routes/static .....	6

# StaticRoute

## StaticRoute/Ipv4StaticRouteConfigurations

Message	Explanation
Route already exists. 路由已存在	Configuration already exists, when set new configuration.
Maximum number of routes has been reached. 已达到最大路由条数	Maximum number of routes has been reached.
Route does not exist. 路由不存在	The specified configuration doesn't exist, when getting or deleting it.
The specified VRF index does not exist. 目的VRF索引不存在	Please create vpn-instance first.
The specified next hop VRF index does not exist. 下一跳VRF索引不存在	Please create vpn-instance first.
The interface is not supported. 接口不支持	Only routed ports are available.
Invalid destination address. 目的地址无效	Only class A,class B,class C addresses are available.
Invalid next hop address. 下一跳无效	Only class A,class B,class C addresses are available.
Nexthop address or outbound interface must be specified one. 下一跳地址或者出接口索引必须至少设置一个	Nexthop address or outbound interface must be specified one.
The specified interface need to configure next hop address. 该接口需要配置下一跳地址	The specified interface need to configure next hop address.
The specified interface does not need to configure next hop address. 该接口不需要配置下一跳	The specified interface does not need to configure next hop address.
The backup interface is not supported. 备份接口不支持	Only routed ports are available.
The specified backup interface index need backup next hop address. 该备份出接口需要配置备份下一跳地址	The specified backup interface index need backup next hop address.
Invalid backup next hop address. 备份下一跳无效	The backup next hop address can not be all zero address.
Not need bfd source address to enable bfd, with outbound interface and nexthop have been configured. 静态路由已配置出接口及下一跳，使能BFD检测无需配置BFD源地址	Not need bfd source address to enable bfd, with outbound interface and nexthop have been configured.

Need bfd source address to enable bfd, if only nexthop address configured. 静态路由仅配置下一跳，使能BFD检测必须配置BFD源地址	Need bfd source address to enable bfd, if only nexthop address configured.
Invalid BFD source IP address. BFD源地址无效	Only class A,class B,class C addresses are available.
BFD can not coexist with backup attribute. 静态路由的备份路径属性不能与BFD共存	BFD can not coexist with backup attribute.
Track can not coexist with backup attribute. 静态路由的备份路径属性不能与track共存	Track can not coexist with backup attribute.
BFD can not coexist with track attribute. 静态路由的track属性不能与BFD共存	BFD can not coexist with track attribute.
Next hop VRF index should be set to . 下一跳VRF索引应该填	Next hop VRF index should be set to specified value.
The specified backup interface index does not need backup next hop address. 该备份接口不需要备份下一跳	The specified backup interface index does not need backup next hop address.
Interface has to be valid for a link-local address of nexthop. Link-local地址作为下一跳需要指定有效出接口	Interface has to be valid for a link-local address of nexthop.
Can not enable bfd echo mode for a link-local address of nexthop. Link-local地址作为下一跳不能使能BFD echo检测	Can not enable bfd echo mode for a link-local address of nexthop.
Backup interface can not been configured. 不允许配置备份出接口	Backup interface can not been configured when out interface is NULL0.
Can not enable bfd echo mode, if only next hop address configured. 静态路由仅配置下一跳，BFD Echo检测不可用	Please specify out interface.
The backup interface and next hop address can't be the same with the main interface and next hop address. 备份出接口及下一跳不能与主出接口及下一跳相同	The backup interface and next hop address can't be the same with the main interface and next hop address.
Not support BFD. 不支持BFD	BFD service has not been started.
The interface does not support BFD. 指定接口不支持BFD	BFD can not been configured when out interface is NULL0.
The specified interface index does not exist. 接口不存在	The specified interface index does not exist.
The specified backup interface index does not exist. 备份接口索引不存在	The specified backup interface index does not exist.
BFD can not coexist with permanent attribute. 静态路由的永久属性不能与BFD共存	BFD can not coexist with permanent attribute.

Track can not coexist with permanent attribute. 静态路由的永久属性不能与track共存	Track can not coexist with permanent attribute.
Please input BFD source IP address. 请输入BFD源IP地址	Please input BFD source IP address.
The specified topology index does not exist. 目的MT索引不存在	The specified topology index does not exist.
The VRF does not support topology. 私网下不支持多拓扑配置	DestTopologyIndex should be specified as zero.
The topology route does not support VRF next hop. 多拓扑路由不支持私网下一跳	DestTopologyIndex should be specified as zero.
The topology route does not support BFD. 多拓扑路由不支持关联BFD配置	DestTopologyIndex should be specified as zero.
The topology route does not support track. 多拓扑路由不支持关联track配置	DestTopologyIndex should be specified as zero.
The topology route does not support permanent attribute. 多拓扑路由不支持配置永久属性	DestTopologyIndex should be specified as zero.
Interface and Recursive look up host-route can't both be configured 出接口和迭代主机路由不能同时配置	Interface and Recursive look up host-route can't both be configured

## StaticRoute/Ipv6StaticRouteConfigurations

Message	Explanation
Route already exists. 路由已存在	Configuration already exists, when set new configuration.
Maximum number of routes has been reached. 已达到最大路由条数	Maximum number of routes has been reached.
Route does not exist. 路由不存在	The specified configuration doesn't exist, when getting or deleting it.
The specified VRF index does not exist. 目的VRF索引不存在	Please create vpn-instance first.
The specified next hop VRF index does not exist. 下一跳VRF索引不存在	Please create vpn-instance first.
The interface is not supported. 接口不支持	Only routed ports are available.
Invalid destination address. 目的地址无效	Only class A,class B,class C addresses are available.
Invalid next hop address.	Only class A,class B,class C addresses are available.

下一跳无效	
Nexthop address or outbound interface must be specified one. 下一跳地址或者出接口索引必须至少设置一个	Nexthop address or outbound interface must be specified one.
The specified interface need to configure next hop address. 该接口需要配置下一跳地址	The specified interface need to configure next hop address.
The specified interface does not need to configure next hop address. 该接口不需要配置下一跳	The specified interface does not need to configure next hop address.
The backup interface is not supported. 备份接口不支持	Only routed ports are available.
The specified backup interface index need backup next hop address. 该备份出接口需要配置备份下一跳地址	The specified backup interface index need backup next hop address.
Invalid backup next hop address. 备份下一跳无效	The backup next hop address can not be all zero address.
Not need bfd source address to enable bfd, with outbound interface and nexthop have been configured. 静态路由已配置出接口及下一跳，使能BFD检测无需配置BFD源地址	Not need bfd source address to enable bfd, with outbound interface and nexthop have been configured.
Need bfd source address to enable bfd, if only nexthop address configured. 静态路由仅配置下一跳，使能BFD检测必须配置BFD源地址	Need bfd source address to enable bfd, if only nexthop address configured.
Invalid BFD source IP address. BFD源地址无效	Only class A,class B,class C addresses are available.
BFD can not coexist with backup attribute. 静态路由的备份路径属性不能与BFD共存	BFD can not coexist with backup attribute.
Track can not coexist with backup attribute. 静态路由的备份路径属性不能与track共存	Track can not coexist with backup attribute.
BFD can not coexist with track attribute. 静态路由的track属性不能与BFD共存	BFD can not coexist with track attribute.
Next hop VRF index should be set to . 下一跳VRF索引应该填	Next hop VRF index should be set to specified value.
The specified backup interface index does not need backup next hop address. 该备份接口不需要备份下一跳	The specified backup interface index does not need backup next hop address.
Interface has to be valid for a link-local address of nexthop. Link-local地址作为下一跳需要指定有效出接口	Interface has to be valid for a link-local address of nexthop.
Can not enable bfd echo mode for a link-local address of nexthop. Link-local地址作为下一跳不能使能BFD echo检测	Can not enable bfd echo mode for a link-local address of nexthop.



Backup interface can not been configured. 不允许配置备份出接口	Backup interface can not been configured when out interface is NULL0.
Can not enable bfd echo mode, if only next hop address configured. 静态路由仅配置下一跳，BFD Echo检测不可用	Please specify out interface.
The backup interface and next hop address can't be the same with the main interface and next hop address. 备份出接口及下一跳不能与主出接口及下一跳相同	The backup interface and next hop address can't be the same with the main interface and next hop address.
Not support BFD. 不支持BFD	BFD service has not been started.
The interface does not support BFD. 指定接口不支持BFD	BFD can not been configured when out interface is NULL0.
The specified interface index does not exist. 接口不存在	The specified interface index does not exist.
The specified backup interface index does not exist. 备份接口索引不存在	The specified backup interface index does not exist.
BFD can not coexist with permanent attribute. 静态路由的永久属性不能与BFD共存	BFD can not coexist with permanent attribute.
Track can not coexist with permanent attribute. 静态路由的永久属性不能与track共存	Track can not coexist with permanent attribute.
Invalid next hop IPv6 address. It must be a global unicast address. 无效下一跳地址。下一跳必须是全球单播地址	Invalid next hop IPv6 address. It must be a global unicast address.
Invalid BFD source IPv6 address. BFD源IPv6地址无效	The BFD source IPv6 address cannot be all 0s ,multicast address or loopback address.,.
Please input BFD source IPv6 address. 请输入BFD源IPv6地址	Please input BFD source IPv6 address.
IPv6 address family does not support topology. IPv6地址族不支持多拓扑配置	DestTopologyIndex should be specified as zero.
Please input BFD source IP address. 请输入BFD源IP地址	Please input BFD source IP address.
The specified topology index does not exist. 目的MT索引不存在	The specified topology index does not exist.
The VRF does not support topology. 私网下不支持多拓扑配置	DestTopologyIndex should be specified as zero.
The topology route does not support VRF next hop. 多拓扑路由不支持私网下一跳	DestTopologyIndex should be specified as zero.
The topology route does not support BFD. 多拓扑路由不支持关联BFD配置	DestTopologyIndex should be specified as zero.
The topology route does not support track.	DestTopologyIndex should be specified as zero.

多拓扑路由不支持关联track配置	
The topology route does not support permanent attribute. 多拓扑路由不支持配置永久属性	DestTopologyIndex should be specified as zero.
Interface and Recursive look up host-route can't both be configured 出接口和迭代主机路由不能同时配置	Interface and Recursive look up host-route can't both be configured

## Openconfig-local-routing/local-routes/static-routes/static

Message	Explanation
It is not STATIC 不是静态路由协议号	The identifier should be specified as STATIC.
Instance name must be default 进程号必须为default	Instance name must be default when you configure a static route.



# Contents

STP.....	1
STP/ClearAllIfStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
STP/ClearInterfacesStatistics .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
STP/MigrationCheck .....	2
XML structure .....	2
Table description .....	2
Columns .....	3

# STP

## STP/ClearAllIfStatistics

This table clear the statistics of STP on all interfaces.

### XML structure

```
<STP>
  <ClearAllIfStatistics>
    <Clear></Clear>
  </ClearAllIfStatistics>
</STP>
```

### Table description

Item	Description
Feature name	STP
Table name	ClearAllIfStatistics
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clear the STP statistics on all interfaces.	N/A	This column must be empty.

## STP/ClearInterfacesStatistics

This table clears the STP statistics information per interface.

### XML structure

```
<STP>
  <ClearInterfacesStatistics>
    <InterfaceStatistics>
      <IfIndex></IfIndex>
    </InterfaceStatistics>
  </ClearInterfacesStatistics>
</STP>
```

```

    <Clear></Clear>
  </InterfaceStatistics>
</ClearInterfacesStatistics>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	ClearInterfacesStatistics
Table type	Multi-instance table
Row name	InterfaceStatistics
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer.
Clear	Clears statistics on the the specified interface.	N/A	This column must be empty.

## STP/MigrationCheck

This table performs the MCheck operation to migrate all ports back from STP mode to current configuration mode.

## XML structure

```

<STP>
  <MigrationCheck>
    <MCheck></MCheck>
  </MigrationCheck>
</STP>

```

## Table description

Item	Description
Feature name	STP

Table name	MigrationCheck
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
MCheck	Force all interfaces to send BPDUs according to the protocol version while working in RSTP or MSTP mode.	N/A	This column must be empty

# Contents

STP.....	1
STP/Base.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
STP/Region.....	2
XML structure.....	3
Table description.....	3
Columns.....	3
STP/StiVlans .....	3
XML structure.....	3
Table description.....	4
Columns.....	4
STP/STIs .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
STP/Interfaces .....	5
XML structure.....	5
Table description.....	6
Columns.....	6
STP/StiInterfaces.....	8
XML structure.....	8
Table description.....	9
Columns.....	9
STP/Vlans .....	9
XML structure.....	9
Table description.....	10
Columns.....	10
STP/VlanInterfaces .....	11
XML structure.....	11
Table description.....	11
Columns.....	12



# STP

## STP/Base

This table contains information about global STP functions.

### XML structure

```
<STP>
  <Base>
    <Enable></Enable>
    <BPDUProtect></BPDUProtect>
    <Mode></Mode>
    <TcProtect></TcProtect>
    <TcThreshold></TcThreshold>
    <PathCostMethod></PathCostMethod>
    <HelloTime></HelloTime>
    <MaxHops></MaxHops>
    <MaxAge></MaxAge>
    <ForwardDelay></ForwardDelay >
    <TcSnooping></TcSnooping>
    <DigestSnooping></DigestSnooping>
  </Base>
</STP>
```

### Table description

Item	Description
Feature name	STP
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global functions.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Global STP feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enables STP.</li><li><b>false</b>—Disables STP.</li></ul>

Column name	Column description	Column type	Data type and restrictions
BPDUProtect	Global BPDU guard function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables BPDU guard.</li> <li><b>false</b>—Disables BPDU guard (default).</li> </ul>
Mode	Working mode of the spanning tree protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—STP.</li> <li><b>2</b>—RSTP.</li> <li><b>3</b>—MSTP(default).</li> <li><b>4</b>—PVST.</li> </ul>
TcProtect	Global TC-BPDU guard function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables TC guard (default).</li> <li><b>false</b>—Disables TC guard.</li> </ul>
TcThreshold	Maximum number of TC-BPDUs that can be processed within an interval	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:1-255.</b></li> <li>Default: 6.</li> </ul>
PathCostMethod	Path cost calculation method	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Legacy (default).</li> <li><b>1</b>—802.1D-1998.</li> <li><b>2</b>—802.1t.</li> </ul>
HelloTime	Hello timer in seconds	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:1-10.</b></li> <li>Default: 2.</li> </ul>
MaxHops	Maximum hops of the MST region scope	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:1-40.</b></li> <li>Default: 20.</li> </ul>
MaxAge	Maximum of message aging timer	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:6-40.</b></li> <li>Default: 20.</li> </ul>
ForwardDelay	Forwarding delay timer in seconds	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:4-30.</b></li> <li>Default: 15.</li> </ul>
TcSnooping	TC snooping function	N/A	<b>Boolean:</b> <ul style="list-style-type: none"> <li><b>true</b>—Enables TC snooping.</li> <li><b>false</b>—Disables TC snooping(default).</li> </ul>
DigestSnooping	Global MST digest snooping function	N/A	<b>Boolean:</b> <ul style="list-style-type: none"> <li><b>true</b>—Enables digest snooping.</li> <li><b>false</b>—Disables digest snooping(default).</li> </ul>

## STP/Region

This table contains information about MST region configuration.

## XML structure

```
<STP>
  <Region>
    <Name></Name>
    <RevisionLevel></RevisionLevel>
  </Region>
</STP>
```

## Table description

Item	Description
Feature name	STP
Table name	Region
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global functions.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	MST region name	N/A	String. Length: 1 to 32 characters. <ul style="list-style-type: none"><li>Default: Hex-string of the bridge MAC address.</li></ul>	When a new region name is configured, the active region configuration will be changed.
RevisionLevel	Revision level of the MST region	N/A	Unsigned integer. <ul style="list-style-type: none"><li><b>Value range: 0-65535.</b></li><li><b>Default: 0.</b></li></ul>	When a new revision level is configured, the active region configuration will be changed.

## STP/StiVlans

This table contains information about the VLAN allocation of an MST region.

## XML structure

```
<STP>
  <StiVlans>
    <StiVlan>
      <StiId></StiId>
    </StiVlan>
  </StiVlans>
</STP>
```

```

        <VlanList></VlanList>
    </StiVlan>
</StiVlans>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	StiVlans
Table type	Multi-instance table
Row name	StiVlan
Restrictions	All rows should be wrapped within a whole configuration message, following the region table above.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Stild	Spanning tree index	Index	Unsigned integer. • <b>Value range: 1-4094.</b>	
VlanList	List of VLANs allocated to the MST instance	N/A	Number string. It is a comma-separated list of VLAN items. • The string must not end with a comma or hyphen, or include any whitespace characters. • <b>Default: All VLANs are allocated to spanning tree instance 0(CIST).</b>	<ul style="list-style-type: none"> <li>Each VLAN can only be allocated to one MST instance.</li> <li>Each item can be an individual VLAN ID or a VLAN ID range. A hyphen (-) indicates a VLAN range from the start VLAN ID to end VLAN ID. For example: 1, 2, 3, 5-8, and 10-20.</li> <li>VLAN ID range: 1-4094</li> </ul>

## STP/STIs

This table contains information about STP functions for a spanning tree.

## XML structure

```

<STP>
  <STIs>
    <STI>

```

```

    <StiId></StiId>
    <Priority></Priority>
    <RootType></RootType>
  </STI>
</STIs>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	STIs
Table type	Multi-instance table
Row name	STI
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Stild	Spanning tree index	Index	Unsigned integer. • <b>Value range: 0-4094.</b>	
Priority	Bridge priority of the spanning tree	N/A	Unsigned integer. • <b>Value range: 0-61440, in increments of 4096 (as in 0, 4096, 8192).</b> • <b>Default: 32768.</b>	Configuration is not allowed when the root type is configured as primary root or secondary root, except for the following values combination:  1)priority is 0 when root type is 'primary'. 2)priority is 4096 when root type is 'secondary'".
RootType	Root type of the bridge	N/A	Enumeration: • <b>0</b> —Normal(default). • <b>1</b> —Secondary root. • <b>2</b> —Primary root.	

## STP/Interfaces

This table contains information about interface-level STP functions.

## XML structure

```
<STP>
```

```

<Interfaces>
  <Interface>
    <IfIndex></IfIndex>
    <Enable></Enable>
    <EdgedPort></EdgedPort>
    <PointToPoint></PointToPoint>
    <RootProtect></RootProtect>
    <LoopProtect></LoopProtect>
    <RoleRestrict></RoleRestrict>
    <TcRestrict></TcRestrict>
    <DigestSnooping></DigestSnooping>
    <TransmitHoldCount></TransmitHoldCount>
  </Interface>
</Interfaces>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.	In certain versions, this column supports interface name-to-index conversion. See the product xsd before use. See Table 1 for the format.
Enable	Interface STP feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables STP (default).</li> <li><b>false</b>—Disables STP.</li> </ul>	

Column name	Column description	Column type	Data type and restrictions	Remarks
EdgedPort	Interface edge port configuration	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Configures the interface as an edge port. <b>It should not be configured while the loop protection is enabled.</b></li> <li><b>false</b>—Configures the interface as a non-edge port (default).</li> </ul>	
PointToPoint	Interface point-to-point configuration status	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Force-true.</li> <li><b>2</b>—Force-false.</li> <li><b>3—Auto</b> (default).</li> </ul>	
RootProtect	Interface root guard function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables root protection.</li> <li><b>It should not be configured while the loop protection is enabled.</b></li> <li><b>false</b>—Disables root protection</li> <li>(default).</li> </ul>	
LoopProtect	Interface loop guard function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables loop protection.</li> <li><b>It should not be configured whether the root protection or edge-port is enabled.</b></li> <li><b>false</b>—Disables loop protection</li> <li>(default).</li> </ul>	
RoleRestrict	Interface role restriction function	N/A		Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables role restriction.</li> <li><b>false</b>—Disables role restriction (default).</li> </ul>
TcRestrict	Interface TC restriction function	N/A		Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables TC restriction.</li> <li><b>false</b>—Disables TC restriction (default).</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
DigestSnooping	Interface MST digest snooping function	N/A		<b>Boolean:</b> <ul style="list-style-type: none"> <li><b>true</b>—Enables digest snooping.</li> <li><b>false</b>—Disables digest snooping(default)</li> </ul>
TransmitHoldCount	Interface transmit hold count, which is the maximum number of BPDUs that can be transmitted per seconds	N/A		Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:1-255.</b></li> <li><b>Default: 10.</b></li> </ul>

**Table 1 Interface operation status**

Value	Operation status	Remarks
1	Single interface index	<IfIndex>1</IfIndex>
2	Single interface name	<IfIndex>GigabitEthernet 0/0/2</IfIndex>
3	Multiple interface names	<IfIndex>GigabitEthernet 0/0/2 to GigabitEthernet 0/0/3, GigabitEthernet 1/0/2 to GigabitEthernet 1/0/3, serial0/0/2</IfIndex>
4	Interface range name	<IfIndex>RangeName</IfIndex>
5	Mixture of interface range name and interface names	<IfIndex>RangeName ,GigabitEthernet 0/0/2 to GigabitEthernet 0/0/3, GigabitEthernet 1/0/2 to GigabitEthernet 1/0/3, serial0/0/2</IfIndex>

## STP/StiInterfaces

This table contains information about interface-level STP functions for a spanning tree.

### XML structure

```

<STP>
  <StiInterfaces>
    <StiInterface>
      <StiId></StiId>
      <IfIndex></IfIndex>
      <Priority></Priority>
      <PathCost></PathCost>
    </StiInterface>
  </StiInterfaces>
</STP>

```



## Table description

Item	Description
Feature name	STP
Table name	StilInterfaces
Table type	Multi-instance table
Row name	StilInterface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
Stild	Spanning tree index	Index	Unsigned integer. <ul style="list-style-type: none"><li>• <b>Value range: 0-4094.</b></li></ul>
IfIndex	Interface index	Index	Unsigned integer.
Priority	Spanning tree priority of an interface	N/A	Unsigned integer. <ul style="list-style-type: none"><li>• <b>Value range: 0-240, in increments of 16 (as in 0, 16, 32).</b></li><li>• <b>Default: 128.</b></li></ul>
PathCost	Spanning tree path cost of an interface	N/A	Unsigned integer. <ul style="list-style-type: none"><li>• <b>Legacy value range: 0-200000.</b></li><li>• <b>802.1D-1998 value range: 0-65535.</b></li><li>• <b>802.1t value range: 0-200000000.</b></li><li>• <b>Default: 0. The actual cost will be automatically calculated according to the calculation method configured in STP Base table.</b></li></ul>

## STP/Vlans

This table contains information about PVST functions for a VLAN.

## XML structure

```
<STP>
  <VLANs>
    <VLAN>
      <VlanId></VlanId>
      <Enable></Enable>
      <Priority></Priority>
```

```

<RootType></RootType>
<BridgeTimes>
  <HelloTime></HelloTime>
  <MaxAge></MaxAge>
  <ForwardDelay></ForwardDelay>
</BridgeTimes>
</VLAN>
</VLANs>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	VLANs
Table type	Multi-instance table
Row name	VLAN
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VlanId	VLAN index	Index	Unsigned integer. • <b>Value range: 1-4094.</b>	The max VLAN ID of some product may be 4093.
Enable	PVST feature status	N/A	Boolean: • <b>true</b> —Enables PVST(default). • <b>false</b> —Disables PVST.	
Priority	Priority of the VLAN	N/A	Unsigned integer. • <b>Value range: 0-61440, in increments of 4096 (as in 0, 4096, 8192).</b> • <b>Default: 32768.</b>	Configuration is not allowed when the root type is configured as primary root or secondary root, except for the following values combination: 1)priority is 0 when root type is 'primary'. 2)priority is 4096 when root type is 'secondary'.
RootType	Root type of the VLAN	N/A	Enumeration: • <b>0</b> —Normal(default). • <b>1</b> —Secondary root. • <b>2</b> —Primary root.	

Column name	Column description	Column type	Data type and restrictions	Remarks
BridgeTimes	The bridge timers currently used	N/A	Struct, include members: <ul style="list-style-type: none"> <li>HelloTime.</li> <li>MaxAge.</li> <li>ForwardDelay.</li> </ul>	
HelloTime	Hello timer in seconds	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:1-10.</b></li> <li><b>Default: 2.</b></li> </ul>	
MaxAge	Maximum of message age	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:6-40.</b></li> <li><b>Default: 20.</b></li> </ul>	
ForwardDelay	Forwarding delay timer in seconds	N/A	Unsigned integer. <ul style="list-style-type: none"> <li><b>Value range:4-30.</b></li> <li><b>Default: 15.</b></li> </ul>	

## STP/VlanInterfaces

This table contains information about interface-level PVST functions for a VLAN.

### XML structure

```

<STP>
  <VlanInterfaces>
    <VlanInterface>
      <VlanId></VlanId>
      <IfIndex></IfIndex>
      <Priority></Priority>
      <PathCost></PathCost>
    </VlanInterface>
  </VlanInterfaces>
</STP>

```

### Table description

Item	Description
Feature name	STP
Table name	VlanInterfaces
Table type	Multi-instance table
Row name	VlanInterface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
VlanId	VLAN index	Index	Unsigned integer. • <b>Value range: 1-4094.</b>
IfIndex	Interface index	Index	Unsigned integer.
Priority	Spanning tree priority of an interface	N/A	Unsigned integer. • <b>Value range: 0-240, in increments of 16 (as in 0, 16, 32).</b> • <b>Default: 128.</b>
PathCost	Spanning tree path cost of an interface	N/A	Unsigned integer. • <b>Legacy value range: 0-200000.</b> • <b>802.1D-1998 value range: 0-65535.</b> • <b>802.1t value range: 0-200000000.</b> • <b>Default: 0. The actual cost will be automatically calculated according to the calculation method configured in STP Base table.</b>

# Contents

STP.....	1
STP/Base.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
STP/Region.....	2
XML structure.....	2
Table description.....	3
Columns.....	3
STP/StiVlans .....	3
XML structure.....	3
Table description.....	4
Columns.....	4
STP/STIs .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
STP/Interfaces .....	6
XML structure.....	6
Table description.....	7
Columns.....	8
STP/StiInterfaces.....	10
XML structure.....	10
Table description.....	10
Columns.....	11
STP/Vlans .....	12
XML structure.....	12
Table description.....	13
Columns.....	13
STP/VlanInterfaces .....	15
XML structure.....	15
Table description.....	16
Columns.....	16

# STP

## STP/Base

This table contains global STP information.

### XML structure

```
<STP>
  <Base>
    <Enable></Enable>
    <BPDUProtect></BPDUProtect>
    <Mode></Mode>
    <TcProtect></TcProtect>
    <TcThreshold></TcThreshold>
    <PathCostMethod></PathCostMethod>
    <HelloTime></HelloTime>
    <MaxHops></MaxHops>
    <MaxAge></MaxAge>
    <ForwardDelay></ForwardDelay>
    <TcSnooping></TcSnooping>
    <DigestSnooping></DigestSnooping>
  </Base>
</STP>
```

### Table description

Item	Description
Feature name	STP
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations.

### Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Global STP feature	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>
BPDUProtect	Global BPDU guard function	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>

Column name	Column description	Column type	Data type and restrictions
Mode	Working mode of the spanning tree protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—STP.</li> <li>• <b>2</b>—RSTP.</li> <li>• <b>3</b>—MSTP.</li> <li>• <b>4</b>—PVST.</li> </ul>
TcProtect	Global TC-BPDU guard function	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Enabled.</li> <li>• <b>false</b>—Disabled.</li> </ul>
TcThreshold	Maximum number of TC-BPDUs that can be processed within an interval	N/A	Unsigned integer. Value range: 1 to 255.
PathCostMethod	Path cost calculation method	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Legacy.</li> <li>• <b>1</b>—802.1D-1998.</li> <li>• <b>2</b>—802.1t.</li> </ul>
HelloTime	Hello timer in seconds	N/A	Unsigned integer. Value range: 1 to 10.
MaxHops	Maximum hops of the MST region scope	N/A	Unsigned integer. Value range: 1 to 40.
MaxAge	Maximum of message aging timer	N/A	Unsigned integer. Value range: 6 to 40.
ForwardDelay	Forwarding delay timer in seconds	N/A	Unsigned integer. Value range: 4 to 30.
TcSnooping	TC snooping function	N/A	<b>Boolean:</b> <ul style="list-style-type: none"> <li>• <b>true</b>—Enables TC snooping.</li> <li>• <b>false</b>—Disables TC snooping.</li> </ul>
DigestSnooping	Global MST digest snooping function	N/A	<b>Boolean:</b> <ul style="list-style-type: none"> <li>• <b>true</b>—Enables digest snooping.</li> <li>• <b>false</b>—Disables digest snooping.</li> </ul>

## STP/Region

This table contains MST region configuration information.

## XML structure

```

<STP>
  <Region>
    <Name></Name>
    <RevisionLevel></RevisionLevel>
    <FormatSelector></FormatSelector>

```

```

    <ConfigDigest></ConfigDigest>
  </Region>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	Region
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global configurations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	The active MST region name	N/A	String. Length: 1 to 32 characters.	N/A
RevisionLevel	The active revision level of the MST region	N/A	Unsigned integer Value range: 0 to 65535.	N/A
FormatSelector	The configuration Identifier Format selector	N/A	Enumeration: <b>0</b> —Indicates the format specified in 802.1Q.	N/A
ConfigDigest	Digest of VLAN-to-instance mappings for the MST region	N/A	Octet string. Length: 34 octets.	It's a hex-string with a prefix of 0x.

## STP/StiVlans

This table contains information about the VLAN allocation of an MST region.

## XML structure

```

<STP>
  <StiVlans>
    <StiVlan>
      <StiId></StiId>
      <VlanList></VlanList>
    </StiVlan>
  </StiVlans>
</STP>

```



## Table description

Item	Description
Feature name	STP
Table name	StiVlans
Table type	Multi-instance table
Row name	StiVlan
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Stild	Spanning tree index	Index	Unsigned integer. <b>Value range: 0 to 4094.</b>	N/A
VlanList	List of VLANs allocated to the MST instance	N/A	Number string. It is a comma-separated list of VLAN items. The string must not end with a comma or hyphen, or include any whitespace characters.	<ul style="list-style-type: none"><li>Each VLAN can only be allocated to one MST instance.</li><li>Each item can be an individual VLAN ID or a VLAN ID range. A hyphen (-) indicates a VLAN range from the start VLAN ID to the end VLAN ID. For example: 1, 2, 3, 5-8, and 10-20.</li><li>VLAN ID range: 1 to 4094.</li></ul>

## STP/STIs

This table contains information about STP functions for a spanning tree.

## XML structure

```
<STP>
  <STIs>
    <STI>
      <StiId></StiId>
      <Priority></Priority>
      <RootType></RootType>
      <BridgeId></BridgeId>
      <TCs>
        <ReceiveTcOrTcn></ReceiveTcOrTcn>
        <LastTcTime></LastTcTime>
      </TCs>
    </STI>
  </STIs>
</STP>
```

```

<RootVector>
  <RootId></RootId>
  <ExtPathCost></ExtPathCost>
  <RegionRootId></RegionRootId>
  <IntPathCost></IntPathCost>
  <DesignateBridgeId></DesignateBridgeId>
  <DesignatePortId></DesignatePortId>
  <RootPort></RootPort>
</RootVector>
</STI>
</STIs>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	STIs
Table type	Multi-instance table
Row name	STI
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Stild	Spanning tree index	Index	Unsigned integer. <b>Value range: 0 to 4094.</b>	If an instance is not in running state, and the values of the Priority and RootType columns are the default, the instance is not created, and data cannot be got.
Priority	Bridge priority of the spanning tree	N/A	Unsigned integer. <b>Value range: 0 to 61440</b>	N/A
RootType	Root type of the bridge	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Normal.</li> <li>1—Secondary root.</li> <li>2—Primary root.</li> </ul>	N/A
Bridgeld	Spanning tree bridge Identifier	N/A	Octet string. Length: 18 octets.	It's a hex-string with a prefix of 0x. The first hex-character indicates a bridge priority of 4 bits, and the 2-4 hex-character s indicates the system ID, the other hex-string indicates the bridge MAC address.

Column name	Column description	Column type	Data type and restrictions	Remarks
TCs	Topology change information	N/A	Struct, include members: <ul style="list-style-type: none"> <li><b>ReceiveTcOrTcn.</b></li> <li><b>LastTcTime.</b></li> </ul>	N/A
ReceiveTcOrTcn	Count of received TC or TCN	N/A	Unsigned integer. Length: 32 bits.	N/A
LastTcTime	Time of last received TC or detected TC, in 10ms	N/A	Unsigned integer. Length: 64 bits.	N/A
RootVector	Root priority vector	N/A	Struct, include members: <ul style="list-style-type: none"> <li><b>RootBridgeld.</b></li> <li><b>ExtPathCost.</b></li> <li><b>DesignateBridgeld.</b></li> <li><b>IntPathCost.</b></li> <li><b>RootPort.</b></li> </ul>	N/A
RootId	Root bridge Identifier	N/A	Octet string. Length: 18 octets. Not used by MSTIs.	As the remark of Bridgeld above.
ExtPathCost	External path cost.	N/A	Unsigned integer. Length: 32 bits. Not used by MSTIs.	N/A
RegionRootId	Region root bridge Identifier	N/A	Octet string. Length: 18 octets.	As the remark of Bridgeld above.
IntPathCost	Internal path cost	N/A	Unsigned integer. Length: 32 bits.	N/A
DesignateBridgeld	Designated bridge Identifier	N/A	Octet string. Length: 18 octets.	As the remark of Bridgeld above.
DesignatePortId	The transmitting Port identifier	N/A	Octet string. Length: 8 octets.	It's a hex-string with a prefix of 0x, and the first 2 hex-characters indicate a port priority, and the other hex-string indicates a port number.
RootPort	Interface index of root port	N/A	Unsigned integer. Length: 32 bits.	N/A

## STP/Interfaces

This table contains interface-level STP information.

## XML structure

```
<STP>
  <Interfaces>
    <Interface>
```

```

<IfIndex></IfIndex>
<Enable></Enable>
<EdgedPort></EdgedPort>
<OperEdgedPort></OperEdgedPort>
<PointToPoint></PointToPoint>
<OperPointToPoint></OperPointToPoint>
<RootProtect></RootProtect>
<LoopProtect></LoopProtect>
<RoleRestrict></RoleRestrict>
<TcRestrict></TcRestrict>
<ProtectDown></ProtectDown>
<DigestSnooping></DigestSnooping>
<TransmitHoldCount></TransmitHoldCount>
<PortTimes>
  <HelloTime></HelloTime>
  <ForwardDelay></ForwardDelay>
  <MaxAge></MaxAge>
  <MessageAge></MessageAge>
</PortTimes>
<PortBpduCount>
  <TxMstBpdu></TxMstBpdu>
  <RxMstBpdu></RxMstBpdu>
  <TxRstBpdu></TxRstBpdu>
  <RxRstBpdu></RxRstBpdu>
  <TxConfigBpdu></TxConfigBpdu>
  <RxConfigBpdu></RxConfigBpdu>
  <TxTcn></TxTcn>
  <RxTcn></RxTcn>
  <RxInvalidBpdu></RxInvalidBpdu>
  <LastInvalidBpduTime></LastInvalidBpduTime>
</PortBpduCount>
</Interface>
</Interfaces>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.

# Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
Enable	Interface STP feature	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
EdgedPort	Interface edge port configuration	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Edge port.</li> <li><b>false</b>—Non-edge port.</li> </ul>
OperEdgedPort	Interface operational edge port status	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Edge port.</li> <li><b>false</b>—Non-edge port.</li> </ul>
PointToPoint	Interface point-to-point configuration status	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>1</b>—Force-true.</li> <li><b>2</b>—Force-false.</li> <li><b>3</b>—Auto.</li> </ul>
OperPointToPoint	Interface operational point-to-point status	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Point-to-Point.</li> <li><b>false</b>—Not point-to-point.</li> </ul>
RootProtect	Interface root guard function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
LoopProtect	Interface loop guard function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
RoleRestrict	Interface role restriction function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
TcRestrict	Interface TC restriction function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
ProtectDown	Interface protection shutdown status	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Not shutdown.</li> <li><b>1</b>—Edge Port down.</li> <li><b>2</b>—PVST BPDU down.</li> </ul>
DigestSnooping	Interface MST digest snooping function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>
TransmitHoldCount	Interface transmission hold count	N/A	Unsigned integer. Value range: 1 to 255.
PortTimes	Interface protocol timers	N/A	Struct, include the following members: <ul style="list-style-type: none"> <li><b>HelloTime.</b></li> <li><b>ForwardDelay.</b></li> </ul>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>• <b>RemainHops.</b></li> <li>• <b>MaxAge.</b></li> <li>• <b>MessageAge.</b></li> </ul>
HelloTime	Hello timer in seconds	N/A	Unsigned integer. Value range: 1 to 10.
ForwardDelay	Interface forwarding delay timer in seconds	N/A	Unsigned integer. Value range: 4 to 30.
MaxAge	Interface maximum message age	N/A	Unsigned integer. Value range: 6 to 40.
MessageAge	Interface message age	N/A	Unsigned integer. Length: 32 bits.
PortBpduCount	Interface received or transmitted BPDU count per type	N/A	Struct, include the following members: <ul style="list-style-type: none"> <li>• <b>TxMstBpdu.</b></li> <li>• <b>RxMstBpdu.</b></li> <li>• <b>TxRstpBpdu.</b></li> <li>• <b>RxRstpBpdu.</b></li> <li>• <b>TxConfigBpdu.</b></li> <li>• <b>RxConfigBpdu.</b></li> <li>• <b>TxTcn.</b></li> <li>• <b>RxTcn.</b></li> <li>• <b>RxInvalidBpdu.</b></li> <li>• <b>LastInvalidBpduTime.</b></li> </ul>
TxMstBpdu	Count of transmitted MSTP BPDU	N/A	Unsigned integer. Length: 64 bits. Not used by PVST.
RxMstBpdu	Count of received MSTP BPDUs	N/A	Unsigned integer. Length: 64 bits. Not used by PVST.
TxRstBpdu	Count of transmitted RSTP BPDUs	N/A	Unsigned integer. Length: 64 bits.
RxRstBpdu	Count of received RSTP BPDUs	N/A	Unsigned integer. Length: 64 bits.
TxConfigBpdu	Count of transmitted 802.1D configuration BPDUs	N/A	Unsigned integer. Length: 64 bits.
RxConfigBpdu	Count of received 802.1D configuration BPDUs	N/A	Unsigned integer. Length: 64 bits.
TxTcn	Count of transmitted TCN messages	N/A	Unsigned integer. Length: 64 bits.
RxTcn	Count of received TCN messages	N/A	Unsigned integer. Length: 64 bits.
RxInvalidBpdu	Count of received invalid BPDUs	N/A	Unsigned integer. Length: 64 bits.

Column name	Column description	Column type	Data type and restrictions
LastInvalidBpduTime	Last time when an invalid BPDU was received, in seconds	N/A	Unsigned integer. Length: 64 bits.

## STP/StiInterfaces

This table contains information about interface-level STP functions for a spanning tree.

### XML structure

```

<STP>
  <StiInterfaces>
    <StiInterface>
      <StiId></StiId>
      <IfIndex></IfIndex>
      <Priority></Priority>
      <PathCost></PathCost>
      <OperPathCost></OperPathCost>
      <Role></Role>
      <State></State>
      <ProtectBlock></ProtectBlock>
      <RapidTransit></RapidTransit>
      <RemainHops></RemainHops>
      <PortVector>
        <RootId></RootId>
        <ExtPathCost></ExtPathCost>
        <RegionRootId></RegionRootId>
        <IntPathCost></IntPathCost>
        <DesignateBridgeId></DesignateBridgeId>
        <DesignatePortId></DesignatePortId>
        <RcvdPortId></RcvdPortId>
      </PortVector>
    </StiInterface>
  </StiInterfaces>
</STP>

```

### Table description

Item	Description
Feature name	STP
Table name	StiInterfaces
Table type	Multi-instance table
Row name	StiInterface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Stild	Spanning tree index	Index	Unsigned integer. <b>Value range: 0 to 4094.</b>	If an instance is not in running state, and the values of the Priority and PathCost columns are the default, the instance is not created, and data cannot be got.
IfIndex	Interface index	Index	Unsigned integer.	N/A
Priority	Spanning tree priority of an interface	N/A	Unsigned integer. <b>Value range: 0 to 240</b>	N/A
PathCost	Administrative spanning tree path cost of an interface	N/A	Unsigned integer. <b>value range: 0 to 200000000.</b>	N/A
OperPathCost	Operational spanning tree path cost of an interface	N/A	Unsigned integer. <b>value range: 1 to 200000000.</b>	N/A
Role	Port role of a spanning tree	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Disabled port.</li> <li>• <b>1</b>—Alternate port.</li> <li>• <b>2</b>—Backup port.</li> <li>• <b>3</b>—Root port.</li> <li>• <b>4</b>—Designated port.</li> <li>• <b>5</b>—Master port.</li> </ul>	N/A
State	Port state of a spanning tree	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—Discarding.</li> <li>• <b>2</b>—Learning.</li> <li>• <b>3</b>—Forwarding.</li> </ul>	N/A
ProtectBlock	Reason for blocking a protection function	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>• <b>0x01</b>—Root protect.</li> <li>• <b>0x02</b>—Loop protect.</li> <li>• <b>0x04</b>—Loopback protect.</li> <li>• <b>0x08</b>—Dispute protect.</li> <li>• <b>0x10</b>—Port type inconsistent.</li> <li>• <b>0x20</b>—PVID inconsistent.</li> </ul>	N/A
RapidTransit	Forwarding state transition	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Rapid transition.</li> <li>• <b>false</b>—Slow transition.</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
RemainHops	Remaining hops	N/A	Unsigned integer. Length: 32 bits.	N/A
PortVector	Port priority vector	N/A	Struct, include members: <ul style="list-style-type: none"> <li>• <b>RootBridgeId.</b></li> <li>• <b>ExtPathCost.</b></li> <li>• <b>DesignateBridgeId.</b></li> <li>• <b>IntPathCost.</b></li> <li>• <b>RootPort.</b></li> </ul>	N/A
RootId	Root bridge Identifier	N/A	Octet string. Length: 18 octets.	It's a hex-string with a prefix of 0x. The first hex-character indicates a bridge priority of 4 bits, and the 2-4 hex-character s indicates the system ID, the other hex-string indicates the bridge MAC address.
ExtPathCost	External path cost	N/A	Unsigned integer. Length: 32 bits.	N/A
RegionRootId	Region root bridge Identifier	N/A	Octet string. Length: 18 octets.	As the remark of RootId above.
IntPathCost	Internal path cost	N/A	Unsigned integer. Length: 32 bits.	N/A
DesignateBridgeId	Designated bridge Identifier	N/A	Octet string. Length: 18 octets.	As the remark of RootId above.
DesignatePortId	The transmitting Port identifier	N/A	Octet string. Length: 8 octets.	It's a hex-string with a prefix of 0x, and the first hex-character indicates a port priority of 4 bits, the other hex-string indicates a port number.
RcvdPortId	Interface identifier	N/A	Octet string. Length: 8 octets.	As the remark of DesignatePortId above.

## STP/Vlans

This table contains information about PVST functions for a VLAN.

## XML structure

```

<STP>
  <VLANs>
    <VLAN>
      <VlanId></VlanId>
      <Enable></Enable>
    </VLAN>
  </VLANs>
</STP>

```

```

<Priority></Priority>
<RootType></RootType>
<BridgeTimes>
  <HelloTime></HelloTime>
  <MaxAge></MaxAge>
  <ForwardDelay></ForwardDelay>
</BridgeTimes>
<BridgeId></BridgeId>
<TCs>
  <ReceiveTcOrTcn></ReceiveTcOrTcn>
  <LastTcTime></LastTcTime>
</TCs>
<RootVector>
  <RootBridgeId></RootBridgeId>
  <RootPathCost></RootPathCost>
  <DesignateBridgeId></DesignateBridgeId>
  <DesignatePortId></DesignatePortId>
  <RootPort></RootPort>
</RootVector>
</VLAN>
</VLANs>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	VLANs
Table type	Multi-instance table
Row name	VLAN
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VlanId	VLAN index	Index	Unsigned integer. <b>Value range: 1 to 4094.</b>	If a VLAN is not in running state, and the values of the Priority and RootType columns are the default , the VLAN is not created, and data cannot be got.

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	PVST feature status	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enables PVST.</li> <li><b>false</b>—Disables PVST.</li> </ul>	N/A
Priority	Priority of the VLAN	N/A	Unsigned integer. Length: 32 bits.	N/A
RootType	Root type of the VLAN	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Normal.</li> <li><b>1</b>—Secondary root.</li> <li><b>2</b>—Primary root.</li> </ul>	N/A
BridgeTimes	Bridge timers per VLAN	N/A	Struct, include members: <ul style="list-style-type: none"> <li><b>HelloTime.</b></li> <li><b>MaxAge.</b></li> <li><b>ForwardDelay.</b></li> </ul>	N/A
HelloTime	Hello timer per VLAN in seconds	N/A	Unsigned integer. Value range: 1 to 10.	N/A
MaxAge	Maximum of message age per VLAN	N/A	Unsigned integer. Value range: 6 to 40.	N/A
ForwardDelay	Forwarding delay timer per VLAN in seconds	N/A	Unsigned integer. Value range: 4 to 30.	N/A
Bridgeld	Spanning tree bridge identifier	N/A	Octet string. Length: 18 octets.	It's a hex-string with a prefix of 0x. The first hex-character indicates a bridge priority of 4 bits, the second through fourth hex-characters indicate the system ID, and the other hex-characters indicate the bridge MAC address.
TCs	Topology change information	N/A	Struct, include the following members: <ul style="list-style-type: none"> <li><b>ReceiveTcOrTcn.</b></li> <li><b>LastTcTime.</b></li> </ul>	N/A
ReceiveTcOrTcn	Count of received TC or TCN messages	N/A	Unsigned integer. Length: 32 bits.	N/A
LastTcTime	Time when the last TC message was received or detected, in 10 ms	N/A	Unsigned integer. Length: 64 bits.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RootVector	Root priority vector	N/A	Struct, include the following members: <ul style="list-style-type: none"> <li>• <b>RootBridgeId.</b></li> <li>• <b>PathCost.</b></li> <li>• <b>DesignateBridgeId.</b></li> <li>• <b>RootPort.</b></li> </ul>	N/A
RootBridgeId	Root bridge identifier	N/A	Octet string. Length: 18 octets.	Same as the remarks of the BridgeId column.
RootPathCost	Path cost to the root bridge	N/A	Unsigned integer. Length: 32 bits.	N/A
DesignateBridgeId	Designated bridge identifier	N/A	Octet string. Length: 18 octets.	Same as the remarks of the BridgeId column.
DesignatePortId	The transmitting port identifier	N/A	Octet string. Length: 8 octets.	It's a hex-string with a prefix of 0x. The first two hex-characters indicate the port priority, and the other hex-characters indicate the port number.
RootPort	Interface index of the root port	N/A	Unsigned integer. Length: 32 bits.	N/A

## STP/VlanInterfaces

This table contains information about interface-level PVST functions for a VLAN.

### XML structure

```

<STP>
  <VlanInterfaces>
    <VlanInterface>
      <VlanId></VlanId>
      <IfIndex></IfIndex>
      <Priority></Priority>
      <PathCost></PathCost>
      <OperPathCost></OperPathCost>
      <Role></Role>
      <State></State>
      <ProtectBlock></ProtectBlock>
      <RapidTransit></RapidTransit>
      <PortTimes>
        <HelloTime></HelloTime>
        <ForwardDelay></ForwardDelay>
        <MaxAge></MaxAge>
        <MessageAge></MessageAge>
      </PortTimes>
    </VlanInterface>
  </VlanInterfaces>
</STP>

```

```

    <PortVector>
      <RootId></RootId>
      <RootPathCost></RootPathCost>
      <DesignateBridgeId></DesignateBridgeId>
      <DesignatePortId></DesignatePortId>
      <RcvdPortId></RcvdPortId>
    </PortVector>
  </VlanInterface>
</VlanInterfaces>
</STP>

```

## Table description

Item	Description
Feature name	STP
Table name	VlanInterfaces
Table type	Multi-instance table
Row name	VlanInterface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VlanId	VLAN index	Index	Unsigned integer. <b>Value range: 1 to 4094.</b>	If a VLAN is not in running state, and the values of the Priority and PathCost columns are the default, the VLAN is not created, and data cannot be got.
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits	N/A
Priority	Interface priority of a VLAN	N/A	Unsigned integer. <b>Value range: 0 to 240</b>	N/A
PathCost	Interface path cost of a VLAN	N/A	Unsigned integer. <b>value range: 0 to 200000000.</b>	N/A
OperPathCost	Interface path cost of a VLAN	N/A	Unsigned integer. <b>value range: 1 to 200000000.</b>	N/A
Role	Port role of a spanning tree	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Disabled port.</li> <li><b>1</b>—Alternate port.</li> <li><b>2</b>—Backup port.</li> <li><b>3</b>—Root port.</li> <li><b>4</b>—Designated port.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
State	Port state of a spanning tree	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Discarding.</li> <li>2—Learning.</li> <li>3—Forwarding.</li> </ul>	N/A
ProtectBlock	Reason for blocking a protection function	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>0x01—Root protect.</li> <li>0x02—Loop protect.</li> <li>0x04—Loopback protect.</li> <li>0x08—Dispute protect.</li> <li>0x10—Port type inconsistent.</li> <li>0x20—PVID inconsistent.</li> </ul>	N/A
RapidTransit	Forwarding state transition	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Rapid transition.</li> <li>false—Slow transition.</li> </ul>	N/A
PortTimes	Interface protocol timers	N/A	Struct, include members: <ul style="list-style-type: none"> <li>HelloTime.</li> <li>ForwardDelay.</li> <li>MaxAge.</li> <li>MessageAge.</li> </ul>	N/A
HelloTime	Hello timer in seconds	N/A	Unsigned integer. Value range: 1 to 10.	N/A
ForwardDelay	Forwarding delay timer in seconds	N/A	Unsigned integer. Value range: 4 to 30.	N/A
MaxAge	Maximum message age	N/A	Unsigned integer. Value range: 6 to 40.	N/A
MessageAge	Message age	N/A	Unsigned integer. Length: 32 bits.	N/A
PortVector	Port priority vector	N/A	Struct, include members: <ul style="list-style-type: none"> <li>RootBridgeId.</li> <li>RootPathCost.</li> <li>DesignateBridgeId.</li> </ul>	N/A
RootId	Root bridge Identifier	N/A	Octet string. Length: 18 octets.	It's a hex-string with a prefix of 0x. The first hex-character indicates a bridge priority of 4 bits, the other hex-string indicates the bridge MAC address.
RootPathCost	Path cost to the root	N/A	Unsigned integer. Length: 32 bits.	N/A
DesignateBridgeId	Designated bridge Identifier	N/A	Octet string. Length: 18 octets.	As the remark of RootId above.

Column name	Column description	Column type	Data type and restrictions	Remarks
DesignatePortId	The transmitting Port identifier	N/A	Octet string. Length: 8 octets.	It's a hex-string with a prefix of 0x, and the first hex-character indicates a port priority of 4 bits, the other hex-string indicates a port number.
RcvdPortId	Interface identifier	N/A	Octet string. Length: 8 octets.	As the remark of DesignatePortId above.

# Contents

STP.....	1
STP/Base.....	1
STP/StiVlans .....	1
STP/Interfaces .....	1
STP/STIs .....	2
STP/StiInterfaces.....	2
STP/Vlans .....	2
STP/VlanInterfaces .....	3



# STP

## STP/Base

Message	Explanation
"Failed to enable spanning tree protocol, since Tc-Snooping is enabled." "已经开启Tc-Snooping功能，使能生成树协议失败。"	Tc-Snooping 功能与使能生成树协议功能互斥
"Failed to enable Tc-Snooping, since spanning tree protocol is enable." "已经使能生成树协议，开启Tc-Snooping功能失败。"	Tc-Snooping 功能与使能生成树协议功能互斥
"Spanning tree protocol and Tc-snooping can't be enable together." "不能同时使能STP和开启Tc-snooping功能。"	

## STP/StiVlans

Message	Explanation
"Cannot configure the VLAN-to-instance mapping for the CIST." "不能配置CIST的VLAN映射关系。"	CIST的VLAN映射关系不可配置
"Cannot configure the VLAN-to-instance mapping for the CIST." "不能配置CIST的VLAN映射关系。"	CIST的VLAN映射关系不可配置
"Cannot configure the VLAN-to-instance mapping for the CIST." "不能配置CIST的VLAN映射关系。"	CIST的VLAN映射关系不可配置

## STP/Interfaces

Message	Explanation
"The 'LoopProtect' and 'EdgePort' configurations are mutually exclusive." "端口上不能同时配置环路保护和边缘端口。"	端口上不能同时配置环路保护和边缘端口，两条命令互斥。
The 'LoopProtect' and 'RootProtect' configurations are mutually exclusive. "端口上不能同时配置根保护和环路保护。"	端口上不能同时配置根保护和环路保护，两条命令互斥。

# STP/STIs

Message	Explanation
"Configuration Priority is not allowed when the root type is configured as primary root or secondary root." "如果设备是根桥或者备份根桥，优先级和设备之间不能产生冲突。"	设备是根桥或者备份根桥，优先级和设备之间不能产生冲突。 根桥优先级 0，备份根桥优先级4096.
"Configuration Roottype is not replaced when the Priority is empty." "replace操作中，如果设备是根桥或者备份根桥，必须同时配置优先级。"	配置了优先级后，不能再配置与优先级冲突的根桥或备份根桥。 根桥优先级 0，备份根桥优先级4096.
"No enough hardware resources." "硬件资源不足。"	STG 资源不足
"Only 65 instances are supported." "最多只支持65个实例。"	MSTI最多运行65个实例
"The value of device priority must be a multiple of 4096." "设备优先级必须是4096的倍数。"	设备优先级必须是4096的倍数。
"When the create or merge operation is issued, configuration data should be specified." "Create、merge操作中，不能只有索引列，属性列必须有数据。"	Create、merge操作中，不能只有索引列，属性列必须有数据

# STP/StInterfaces

Message	Explanation
"When the create or merge operation is issued, configuration data should be specified." "Create、merge操作中，不能只有索引列，属性列必须有数据。"	Create、merge操作中，不能只有索引列，属性列必须有数据
"The path cost value is out of the valid range." "端口路径开销值不在范围内。"	路径开销范围不合法
"The value of port priority must be a multiple of 16." "端口优先级必须是16的倍数。"	端口优先级必须是16的倍数

# STP/Vlans

Message	Explanation
"Configuration Priority is not allowed when the root type is configured as primary root or secondary root." "如果设备是根桥或者备份根桥，优先级和设备之间不能产生冲突。"	设备是根桥或者备份根桥，优先级和设备之间不能产生冲突。 根桥优先级 0，备份根桥优先级4096.

<p>"Configuration Roottype is not replaced when the Priority is empty."</p> <p>"replace操作中，如果设备是根桥或者备份根桥，必须同时配置优先级。"</p>	<p>配置了优先级后，不能再配置与优先级冲突的根桥或备份根桥。根桥优先级 0，备份根桥优先级4096。</p>
<p>"No enough hardware resources."</p> <p>"硬件资源不足。"</p>	<p>STG 资源不足</p>
<p>"The value of device priority must be a multiple of 4096."</p> <p>"设备优先级必须是4096的倍数。"</p>	<p>设备优先级配置必须是4096的倍数。</p>
<p>"When the create or merge operation is issued, configuration data should be specified."</p> <p>"Create、merge操作中，不能只有索引列，属性列必须有数据。"</p>	<p>Create、merge操作中，不能只有索引列，属性列必须有数据</p>

## STP/VlanInterfaces

Message	Explanation
<p>"When the create or merge operation is issued, configuration data should be specified."</p> <p>"Create、merge操作中，不能只有索引列，属性列必须有数据。"</p>	<p>Create、merge操作中，不能只有索引列，属性列必须有数据</p>
<p>"The path cost value is out of the valid range."</p> <p>"端口路径开销值不在范围内。"</p>	<p>路径开销范围不合法</p>
<p>"The value of port priority must be a multiple of 16."</p> <p>"端口优先级必须是16的倍数。"</p>	<p>端口优先级必须是16的倍数</p>

# Contents

Super .....	1
Super/GlobalConfig .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Super/Passwords .....	2
XML structure .....	2
Table description .....	2
Columns .....	3

# Super

## Super/GlobalConfig

Super global configuration.

### XML structure

```
<Super>
  <GlobalConfig>
    <ModeType></ModeType>
    <DefaultRole></DefaultRole>
  </GlobalConfig>
</Super>
```

### Table description

Item	Description
Feature name	Super
Table name	GlobalConfig
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModeType	Authentication mode for temporary user role authorization	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Local password authentication.</li><li>• <b>1</b>—Remote AAA authentication.</li><li>• <b>2</b>—Local-then-remote authentication mode.</li><li>• <b>3</b>—Remote-then-local authentication mode.</li></ul>	The default is 0.
DefaultRole	The default target user role for temporary user role authorization	N/A	A case-sensitive string of 1 to 63 characters. The user role must exist in the system.	The default is as follows: <ul style="list-style-type: none"><li>• If you log into a device that does not support MDC or Context, the default target user role is network-admin.</li></ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>If you log in to the default MDC, the default target user role is network-admin.</li> <li>If you log in to a non-default MDC, the default target user role is mdc-admin.</li> <li>If you log in to the default Context, the default target user role is network-admin.</li> <li>If you log in to a non-default Context, the default target user role is context-admin.</li> </ul>

## Super/Passwords

Passwords of roles.

### XML structure

```

<Super>
  <Passwords>
    <Password>
      <RoleName></RoleName>
      <Password></Password>
    </Password>
  </Passwords>
</Super>

```

### Table description

Item	Description
Feature name	Super
Table name	Passwords
Table type	Multi-instance table
Row name	Password
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RoleName	User role	Index	A case-sensitive string of 1 to 63 characters. The user role can be predefined or user-defined.	The column must be deployed together with the Password column and does not support a separate index.
Password	Password	N/A	<p>The string is case sensitive.</p> <ul style="list-style-type: none"><li>In non-FIPS mode, the password must be a string of 1 to 63 characters in plain text.</li><li>In FIPS mode, the password must be a string of 15 to 63 characters. The string must contain four character types including digits, uppercase letters, lowercase letters, and special characters.</li></ul>	This column must appear.

# Contents

Super .....	1
Super/GlobalConfig .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Super/Passwords .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
Super/PasswordLimit .....	3
XML structure .....	3
Table description .....	3
Columns .....	3



# Super

## Super/GlobalConfig

Super global configuration.

### XML structure

```
<Super>
  <GlobalConfig>
    <ModeType></ModeType>
    <DefaultRole></DefaultRole>
  </GlobalConfig>
</Super>
```

### Table description

Item	Description
Feature name	Super
Table name	GlobalConfig
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ModeType	Authentication mode for temporary user role authorization	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Local password authentication.</li><li>• <b>1</b>—Remote AAA authentication.</li><li>• <b>2</b>—Local-then-remote authentication mode.</li><li>• <b>3</b>—Remote-then-local authentication mode.</li></ul>	The default is 0.
DefaultRole	The default target user role for temporary user role authorization	N/A	A case-sensitive string of 1 to 63 characters. The user role must exist in the system.	The default is as follows: <ul style="list-style-type: none"><li>• If you log into a device that does not support MDC or Context, the target user role is network-admin.</li><li>• If you log in to the</li></ul>

				<p>default MDC, the default target user role is network-admin.</p> <ul style="list-style-type: none"> <li>• If you log in to a non-default MDC, the default target user role is mdc-admin.</li> <li>• If you log in to the default Context, the default target user role is network-admin.</li> <li>• If you log in to a non-default Context, the default target user role is context-admin.</li> </ul>
--	--	--	--	---

## Super/Passwords

Passwords of roles.

### XML structure

```

<Super>
  <Passwords>
    <Password>
      <RoleName></RoleName>
    </Password>
  </Passwords>
</Super>

```

### Table description

Item	Description
Feature name	Super
Table name	Passwords
Table type	Multi-instance table
Row name	Password
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	
RoleName	User role	Index	A case-sensitive string of 1 to	N/A

Column name	Column description	Column type	Data type and restrictions	
			63 characters. The user role can be predefined or user-defined.	

## Super/PasswordLimit

As described in *Comware V7 Super NETCONF XML API Configuration Reference*, the value range of the Password column in the Super/Passwords table varies in FIPS mode and non-FIPS mode. To configure the Super/Passwords table, first obtain the value range of the Password column from the Super/PasswordLimit table.

## XML structure

```
<Super>
  <PasswordLimit>
    <MinLen></MinLen>
    <MaxLen></MaxLen>
    <MinTypeNum></MinTypeNum>
  </PasswordLimit>
</Super>
```

## Table description

Item	Description
Feature name	Super
Table name	PasswordLimit
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinLen	Minimum password length	N/A	Unsigned integer.	N/A
MaxLen	Maximum password length	N/A	Unsigned integer.	N/A
MinTypeNum	Minimum composition types	N/A	Unsigned integer.	<p>The composition types are as follows:</p> <ul style="list-style-type: none"> <li>Uppercase letters A to Z.</li> <li>Lowercase letters a to z.</li> </ul>

Column name	Column description	Column type	Data type and restrictions	Remarks
				<ul style="list-style-type: none"> <li>• Digits 0 to 9.</li> <li>• Special characters.</li> </ul>

# Contents

- Syslog .....1
  - Syslog/LogBuffer .....1
  - XML structure.....1
  - Table description.....1
  - Columns.....1

# Syslog

## Syslog/LogBuffer

This table describes the actions that can be performed to the log buffer.

### XML structure

```
<Syslog>
  <LogBuffer>
    <Clear/>
  </LogBuffer>
</Syslog>
```

### Table description

Item	Description
Feature name	Syslog
Table name	LogBuffer
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clears logs in the log buffer.	N/A	This column must be empty.

# Contents

Syslog .....	1
Syslog/LogBuffer .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Syslog/LogHosts .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
Syslog/Configuration .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
Syslog/OutputRules .....	4
XML structure .....	4
Table description .....	4
Columns .....	4

# Syslog

## Syslog/LogBuffer

This table contains information about the log buffer.

### XML structure

```
<Syslog>
  <LogBuffer>
    <State></State>
    <BufferSize></BufferSize>
  </LogBuffer>
</Syslog>
```

### Table description

Item	Description
Feature name	Syslog
Table name	LogBuffer
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
State	Status of the log buffer	N/A	Enumeration: <ul style="list-style-type: none"><li>enable <b>(default)</b>.</li><li>disable.</li></ul>
BufferSize	Maximum log buffer size configured by the user	N/A	Unsigned integer. Value range: 0 to 65535.

## Syslog/LogHosts

This table contains information about log hosts.



## XML structure

```
<Syslog>
  <LogHosts>
    <Host>
      <Address></Address>
      <VRF></VRF>
      <Port></Port>
      <Facility></Facility>
    </Host>
  </LogHosts>
</Syslog>
```

## Table description

Item	Description
Feature name	Syslog
Table name	LogHosts
Table type	Multi-instance table
Row name	Host
Restrictions	Up to four log hosts can be configured.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Address of the log host	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. HostName: Case-insensitive string, Length: 1 to 253 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8. HostName example: www.example.com.
VRF	VRF instance name	Index	String. Length: 0 to 31 characters.	If the log host is on the public network, the length of characters is 0.
Port	Port number of the log host	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Facility	Logging facility used by the log host	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>128</b>—local0.</li> <li>• <b>136</b>—local1.</li> <li>• <b>144</b>—local2.</li> <li>• <b>152</b>—local3.</li> <li>• <b>160</b>—local4.</li> <li>• <b>168</b>—local5.</li> <li>• <b>176</b>—local6.</li> <li>• <b>184</b>—local7.</li> </ul>	N/A

## Syslog/Configuration

This table contains information about syslog (the information center).

### XML structure

```

<Syslog>
  <Configuration>
    <State></State>
    <DuplicateLogSuppression></DuplicateLogSuppression>
  </Configuration>
</Syslog>

```

### Table description

Item	Description
Feature name	Syslog
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
State	Status of syslog (the information center)	N/A	Enumeration: <ul style="list-style-type: none"> <li>• enable (<b>default</b>).</li> <li>• disable.</li> </ul>
DuplicateLogSuppression	Status of the duplicate log suppression feature	N/A	Enumeration: <ul style="list-style-type: none"> <li>• enable.</li> <li>• disable (<b>default</b>).</li> </ul>

# Syslog/OutputRules

This table contains information about syslog (the information center) output rules.

## XML structure

```
<Syslog>
  <OutputRules>
    <OutputRule>
      <Destination></Destination>
      <Module Name></Module Name>
      <Rule></Rule>
    </OutputRule>
  </OutputRules>
</Syslog>
```

## Table description

Item	Description
Feature name	Syslog
Table name	OutputRules
Table type	Multi-instance table
Row name	OutputRule
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
<b>Destination</b>	Specifies syslog output destination	Index	Enumeration: <ul style="list-style-type: none"><li>1-Console</li><li>2-Monitor terminal</li><li>3-Log buffer</li><li>4-Log host</li><li>5-Log file</li></ul>	N/A
Module Name	Specifies a module by its name.	Index	A case-insensitive string. Length: 1 to 8 characters.	For instance to output FTP information, specify this argument as FTP (or ftp for case-insensitive). Setting default: Specifies all modules. If you do not set an output rule for a module, the module uses the default output rule or the output rule set by using the default

Column name	Column description	Column type	Data type and restrictions	Remarks
				keyword.
Rule	A log output rule specifies the source modules and severity level of logs that can be output to a destination. Logs matching the output rule are output to the destination.	N/A	<p>Enumeration string:</p> <ul style="list-style-type: none"> <li>• emergency</li> <li>• alert</li> <li>• critical</li> <li>• error</li> <li>• warning</li> <li>• notification</li> <li>• informational</li> <li>• debugging</li> <li>• <b>deny</b></li> </ul>	<p>Set the severity level above which the system suppresses logs to the specified module. Setting the level to errors, for example, allows logs with levels emergencies, alerts, critical and errors to display.</p> <p>alert: Action must be taken immediately (severity=1)</p> <p>critical : Critical conditions (severity=2)</p> <p>debugging: Debug-level messages (severity=7)</p> <p>emergency: System is unusable (severity=0)</p> <p>error: Error conditions (severity=3)</p> <p>informational: Informational messages (severity=6)</p> <p>notification: Normal but significant conditions (severity=5)</p> <p>warning: Warning conditions (severity=4)</p> <p>deny: Disable log output.</p>

# Contents

Syslog .....	1
Syslog/LogBuffer .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
Syslog/LogHosts .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
Syslog/Logs .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
Syslog/Configuration .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
Syslog/OutputRules .....	6
XML structure .....	6
Table description .....	6
Columns .....	7

# Syslog

## Syslog/LogBuffer

This table contains log buffer information.

### XML structure

```
<Syslog>
  <LogBuffer>
    <State></State>
    <BufferSize></BufferSize>
    <BufferSizeLimit></BufferSizeLimit>
    <LogsCount></LogsCount>
    <DroppedLogsCount></DroppedLogsCount>
    <OverwrittenLogsCount></OverwrittenLogsCount>
    <LogsCountPerSeverity>
      <Emergency></Emergency>
      <Alert></Alert>
      <Critical></Critical>
      <Error></Error>
      <Warning></Warning>
      <Notice></Notice>
      <Informational></Informational>
      <Debug></Debug>
    </LogsCountPerSeverity>
  </LogBuffer>
</Syslog>
```

### Table description

Item	Description
Feature name	Syslog
Table name	LogBuffer
Table type	Single-instance table
Row name	None
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
State	Status of the log buffer	N/A	Enumeration: <ul style="list-style-type: none"> <li>enable.</li> <li>disable.</li> </ul>	N/A
BufferSize	Maximum log buffer size configured by the user	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
BufferSizeLimit	Maximum log buffer size supported by the device	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
LogsCount	Number of logs stored in the log buffer	N/A	Unsigned integer.	N/A
DroppedLogsCount	Number of dropped logs	N/A	Unsigned integer.	Number of logs dropped after the buffer size was decreased to a value that is smaller than the number of current logs.
OverwrittenLogsCount	Number of overwritten logs	N/A	Unsigned integer.	When the size of the log buffer exceeds the upper limit, new logs overwrites the earliest logs in the log buffer.
LogsCountPerSeverity	The number of each specified severity logs stored in the log buffer	Data structure	Members include: <ul style="list-style-type: none"> <li>Emergency</li> <li>Alert</li> <li>Critical</li> <li>Error</li> <li>Warning</li> <li>Notice</li> <li>Informational</li> <li>Debug</li> </ul>	N/A
Emergency	The number of emergency logs stored in the log buffer	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Alert	The number of alert logs stored in the log buffer	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Critical	The number of critical logs stored in the log buffer	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Error	The number of error logs stored in the log buffer	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Warning	The number of warning logs stored in the log buffer	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Notice	The number of notice logs stored in the log buffer	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Informational	The number of informational logs stored in the log buffer	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Debug	The number of debug logs stored in the log buffer	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## Syslog/LogHosts

This table contains the log host information.

### XML structure

```

<Syslog>
  <LogHosts>
    <Host>
      <Address></Address>
      <VRF></VRF>
      <Port></Port>
      <Facility></Facility>
    </Host>
  </LogHosts>
</Syslog>

```

### Table description

Item	Description
Feature name	Syslog
Table name	LogHosts
Table type	Multi-instance table
Row name	Host
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Address of the log host	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. HostName: Case-insensitive string, Length: 1 to 253 characters.	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8. HostName example: www. example.com.
VRF	VRF instance name	Index	String. Length: 0 to 31 characters.	If the log host is on the public network, the length of characters is 0.
Port	Port number of the log host	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
Facility	Logging facility used by the log host	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>128</b>—local0.</li> <li>• <b>136</b>—local1.</li> <li>• <b>144</b>—local2.</li> <li>• <b>152</b>—local3.</li> <li>• <b>160</b>—local4.</li> <li>• <b>168</b>—local5.</li> <li>• <b>176</b>—local6.</li> <li>• <b>184</b>—local7.</li> </ul>	N/A

## Syslog/Logs

This table contains information about the logs in the log buffer.

### XML structure

```

<Syslog>
  <Logs>
    <Log>
      <Index></Index>
      <Time></Time>
      <Group></Group>
      <Digest></Digest>
      <Severity></Severity>
      <Content></Content>
    </Log>
  </Logs>
</Syslog>

```

## Table description

Item	Description
Feature name	Syslog
Table name	Logs
Table type	Multi-instance table
Row name	Log
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Index	Serial number of the log	N/A	Unsigned integer. Value range: 0 to 65535.
Time	Time when the log was generated	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.
Group	Module that generated the log	N/A	String. Length: 1 to 8 characters.
Digest	Brief description of the log	N/A	String. Length: 1 to 32 characters.
Severity	Severity level of the log	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Emergency.</li><li>• <b>1</b>—Alert.</li><li>• <b>2</b>—Critical.</li><li>• <b>3</b>—Error.</li><li>• <b>4</b>—Warning.</li><li>• <b>5</b>—Notification.</li><li>• <b>6</b>—Informational.</li><li>• <b>7</b>—Debugging.</li></ul>
Content	Content of the log	N/A	String. Length: 0 to 1023 characters.

## Syslog/Configuration

This table contains information about syslog (the information center).

## XML structure

```
<Syslog>
  <Configuration>
    <State></State>
    <DuplicateLogSuppression></DuplicateLogSuppression>
  </Configuration>
```

</Syslog>

## Table description

Item	Description
Feature name	Syslog
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
State	Status of syslog (the information center)	N/A	Enumeration: <ul style="list-style-type: none"><li>• enable.</li><li>• disable.</li></ul>
DuplicateLogSuppression	Status of the duplicate log suppression feature	N/A	Enumeration: <ul style="list-style-type: none"><li>• enable.</li><li>• disable.</li></ul>

## Syslog/OutputRules

This table contains information about syslog (the information center) output rules.

## XML structure

```
<Syslog>
  <OutputRules>
    <OutputRule>
      <Destination></Destination>
      <Module Name></Module Name>
      <Rule></Rule>
    </OutputRule>
  </OutputRules>
</Syslog>
```

## Table description

Item	Description
Feature name	Syslog
Table name	OutputRules
Table type	Multi-instance table

Row name	OutputRule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
<b>Destination</b>	Specifies syslog output destination	Index	Enumeration: <ul style="list-style-type: none"> <li>1-Console</li> <li>2-Monitor terminal</li> <li>3-Log buffer</li> <li>4-Log host</li> <li>5-Log file</li> </ul>	N/A
ModuleName	Specifies a module by its name.	Index	A case-insensitive string. Length: 1 to 8 characters.	If you do not set an output rule for a module, the module uses the default output rule or the output rule set by using the default keyword.
Rule	A log output rule specifies the source modules and severity level of logs that can be output to a destination. Logs matching the output rule are output to the destination.	N/A	Enumeration string: <ul style="list-style-type: none"> <li>emergency</li> <li>alert</li> <li>critical</li> <li>error</li> <li>warning</li> <li>notification</li> <li>informational</li> <li>debugging</li> <li><b>deny</b></li> </ul>	Set the severity level above which the system suppresses logs to the specified module. Setting the level to errors, for example, allows logs with levels emergencies, alerts, critical and errors to display. alert: Action must be taken immediately (severity=1) critical: Critical conditions (severity=2) debugging: Debug-level messages (severity=7) emergency: System is unusable (severity=0) error: Error conditions (severity=3) informational: Informational messages (severity=6) notification Normal but significant conditions (severity=5) warning: Warning conditions (severity=4) deny: Disable log output

# Contents

Syslog .....2

    Syslog/LogHosts.....2

    Syslog/LogBuffer .....2

# Syslog

## Syslog/LogHosts

Message	Explanation
Maximum number of log hosts already reached. 日志主机数量已经达到最大值。	Create log host failed. 日志主机数量已经达到最大值，创建新日志主机失败。
Invalid address. 无效的地址。	Create log host failed. 请提供正确的日志主机地址。

## Syslog/LogBuffer

Message	Explanation
The value of BufferSize can't exceed %u. 日志缓冲区设置的值不能超过%u。	The buffer size can't exceed the max size. 用户设置日志缓冲区大小不能超过最大值。

# Contents

- Tacacs.....1
  - Tacacs/ClearAllStatistic.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1

# Tacacs

## Tacacs/ClearAllStatistic

Clear all TACACS statistics.

### XML structure

```
<Tacacs>
  <ClearAllStatistic>
    <Clear></Clear>
  </ClearAllStatistic>
</Tacacs>
```

### Table description

Item	Description
Feature name	Tacacs
Table name	ClearAllStatistic
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clear all TACACS statistics.	N/A	This column must be empty.



# Contents

Tacacs.....	1
Tacacs/GlobalNasIps.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Tacacs/Schemes.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
Tacacs/AuthServers.....	4
XML structure.....	4
Table description.....	4
Columns.....	5
Tacacs/AuthorServers.....	6
XML structure.....	6
Table description.....	6
Columns.....	7
Tacacs/AcctServers.....	8
XML structure.....	8
Table description.....	8
Columns.....	8

# Tacacs

## Tacacs/GlobalNasIps

TACACS global NAS IP information table.

### XML structure

```
<Tacacs>
  <GlobalNasIps>
    <GlobalNasIp>
      <VRF></VRF>
      <IpType></IpType>
      <IpAddress></IpAddress>
    </GlobalNasIp>
  </GlobalNasIps>
</Tacacs>
```

### Table description

Item	Description
Feature name	Tacacs
Table name	GlobalNasIps
Table type	Multi-instance table
Row name	GlobalNasIp
Restrictions	The maximum number of global NAS IP addresses is 16.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name	Index	String. Length: 1 to 31 characters.	N/A
IpType	Source IP address type	Index	Enumeration: <ul style="list-style-type: none"><li>0—IPv4.</li><li>1—IPv6.</li></ul>	N/A
IpAddress	Source IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.0.0.1 IPv6 example: 2001:12::1:2

# Tacacs/Schemes

TACACS scheme table.

## XML structure

```
<Tacacs>
  <Schemes>
    <Scheme>
      <SchemeName></SchemeName>
      <RealAcctInterval></RealAcctInterval>
      <TimeOut></TimeOut>
      <QuietTime></QuietTime>
      <UserNameFormat></UserNameFormat>
      <BytesUnit></BytesUnit>
      <PacketsUnit></PacketsUnit>
      <NasIpv4Address></NasIpv4Address>
      <NasIpv6Address></NasIpv6Address>
      <AuthenKey></AuthenKey>
      <AuthorKey></AuthorKey>
      <AcctKey></AcctKey>
      <VRF></VRF>
    </Scheme>
  </Schemes>
</Tacacs>
```

## Table description

Item	Description
Feature name	Tacacs
Table name	Schemes
Table type	Multi-instance table
Row name	Scheme
Restrictions	The maximum number of TACACS schemes is 16.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	TACACS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
RealAcctInterval	Realtime accounting	N/A	Unsigned integer.	Default: 12 minutes.

Column name	Column description	Column type	Data type and restrictions	Remarks
	interval		Value range: 0 to 60, in minutes.	The value of 0 indicates that the device does not send realtime accounting information for online users to TACACS servers.
TimeOut	TACACS server response timeout timer	N/A	Unsigned integer. Value range: 1 to 300, in seconds.	Default: 5 seconds
QuietTime	Quiet timer for the servers specified in the TACACS scheme	N/A	Unsigned integer. Value range: 1 to 255, in minutes.	Default: 5 minutes
UserNameFormat	Format of user names to be sent to TACACS servers	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—keep-original.</li> <li>1—with-domain.</li> <li>2—without-domain.</li> </ul>	Default: 1
BytesUnit	Data flow measurement unit for traffic statistics	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—byte.</li> <li>1—kilo-byte.</li> <li>2—mega-byte.</li> <li>3—giga-byte.</li> </ul>	Default: 0
PacketsUnit	Packet measurement unit for traffic statistics	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—one-packet.</li> <li>1—kilo-packet.</li> <li>2—mega-packet.</li> <li>3—giga-packet.</li> </ul>	Default: 0
NasIpv4Address	Source IPv4 IP address for outgoing TACACS packets	N/A	String in dotted decimal notation.	For example, 10.1.1.1.
NasIpv6Address	Source IPv6 IP address for outgoing TACACS packets	N/A	Hexadecimal string, colon-separated.	For example, 2001:12::22:33.
AuthenKey	Shared key for secure TACACS authentication communication	N/A	In non-FIPS mode, the shared key is a string of 1 to 255 characters.  In FIPS mode, the shared key is a string of 15 to 255 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	N/A
AuthorKey	Shared key for secure HWTACACS	N/A	In non-FIPS mode, the shared key is a string of 1 to 255 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	authorization communication		In FIPS mode, the shared key is a string of 15 to 255 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	
AcctKey	Shared key for secure TACACS accounting communication	N/A	In non-FIPS mode, the shared key is a string of 1 to 255 characters.  In FIPS mode, the shared key is a string of 15 to 255 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	N/A
VRF	VRF name	N/A	String. Length: 1 to 31 characters.	Default: Public network

## Tacacs/AuthServers

TACACS authentication server table.

### XML structure

```

<Tacacs>
  <AuthServers>
    <AuthServer>
      <SchemeName></SchemeName>
      <Priority></Priority>
      <VRF></VRF>
      <IpType></IpType>
      <Host></Host>
      <Port></Port>
      <Key></Key>
      <SingleConn></SingleConn>
    </AuthServer>
  </AuthServers>
</Tacacs>

```

### Table description

Item	Description
Feature name	Tacacs
Table name	AuthServers
Table type	Multi-instance table
Row name	AuthServer

Restrictions	You can configure one primary authentication server and a maximum of 16 secondary authentication servers for backup in each TACACS scheme. To change the primary authentication server, delete the existing primary server, and then configure a new primary server.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	TACACS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Primary authentication server.</li> <li>1—Secondary authentication server.</li> </ul>	N/A
VRF	VRF name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the TACACS authentication server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	TACACS authentication server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	When the IpType value is 0, this column represents the IPv4 address of the server. When the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	Service port number of the TACACS authentication server	Index	Unsigned integer. Value range: 1 to 65535.	Default: 49
Key	Shared key for secure TACACS authentication communication	N/A	In non-FIPS mode, the shared key is a string of 1 to 255 characters. In FIPS mode, the shared key is a string of 15 to 255 characters that must	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			contain digits, uppercase letters, lowercase letters, and special characters.	
SingleConn	Whether to use the same TCP connection for authentication packet exchange for all users	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default: false

## Tacacs/AuthorServers

TACACS authorization server table.

### XML structure

```

<Tacacs>
  <AuthorServers>
    <AuthorServer>
      <SchemeName></SchemeName>
      <Priority></Priority>
      <VRF></VRF>
      <IpType></IpType>
      <Host></Host>
      <Port></Port>
      <Key></Key>
      <SingleConn></SingleConn>
    </AuthorServer>
  </AuthorServers>
</Tacacs>

```

### Table description

Item	Description
Feature name	Tacacs
Table name	AuthorServers
Table type	Multi-instance table
Row name	AuthorServer
Restrictions	You can configure one primary authorization server and a maximum of 16 secondary authorization servers for backup in each TACACS scheme. To change the primary authorization server, delete the existing primary server, and then configure a new primary server.
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	TACACS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Primary authorization server.</li> <li>1—Secondary authorization server.</li> </ul>	N/A
VRF	VRF name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the TACACS authorization server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	TACACS authorization server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	When the IpType value is 0, this column represents the IPv4 address of the server. When the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	Service port number of the TACACS authorization server.	Index	Unsigned integer. Value range: 1 to 65535.	Default: 49
Key	Shared key for secure HWTACACS authentication communication	N/A	In non-FIPS mode, the shared key is a string of 1 to 255 characters. In FIPS mode, the shared key is a string of 15 to 255 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	N/A
SingleConn	Whether to use the same TCP connection for authorization packet exchange for	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default: false



Column name	Column description	Column type	Data type and restrictions	Remarks
	all users			

## Tacacs/AcctServers

TACACS accounting server table.

### XML structure

```

<Tacacs>
  <AcctServers>
    <AcctServer>
      <SchemeName></SchemeName>
      <Priority></Priority>
      <VRF></VRF>
      <IpType></IpType>
      <Host></Host>
      <Port></Port>
      <Key></Key>
      <SingleConn></SingleConn>
    </AcctServer>
  </AcctServers>
</Tacacs>

```

### Table description

Item	Description
Feature name	Tacacs
Table name	AcctServers
Table type	Multi-instance table
Row name	AcctServer
Restrictions	You can configure one primary accounting server and a maximum of 16 backup accounting servers for backup in each TACACS. To change the primary accounting server, delete the existing primary server, and then configure a new primary server.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	TACACS	Index	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	scheme name		Length: 1 to 32 characters.	
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Primary accounting server.</li> <li>1—Secondary accounting server.</li> </ul>	N/A
VRF	VRF name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the TACACS accounting server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	TACACS accounting server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	When the IpType value is 0, this column represents the IPv4 address of the server. When the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	Service port number of the TACACS accounting server	Index	Unsigned integer. Value range: 1 to 65535.	Default: 49
Key	Shared key for secure TACACS accounting communication	N/A	In non-FIPS mode, the shared key is a string of 1 to 255 characters. In FIPS mode, the shared key is a string of 15 to 255 characters that must contain digits, uppercase letters, lowercase letters, and special characters.	N/A
SingleConn	Whether to use the same TCP connection for accounting packet exchange for all users	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default: false

# Contents

Tacacs.....	1
Tacacs/GlobalNasIps.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Tacacs/Schemes.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
Tacacs/AuthServers.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
Tacacs/AuthorServers.....	5
XML structure.....	5
Table description.....	6
Columns.....	6
Tacacs/AcctServers.....	7
XML structure.....	7
Table description.....	7
Columns.....	8
Tacacs/Statistic/AuthServers.....	9
XML structure.....	9
Table description.....	10
Columns.....	10
Tacacs/Statistic/AuthorServers.....	12
XML structure.....	12
Table description.....	13
Columns.....	13
Tacacs/Statistic/AcctServers.....	15
XML structure.....	15
Table description.....	15
Columns.....	16
Tacacs/PasswordLimit.....	17
XML structure.....	17
Table description.....	18
Columns.....	18

# Tacacs

## Tacacs/GlobalNasIps

TACACS global NAS IP information table.

### XML structure

```
<Tacacs>
  <GlobalNasIps>
    <GlobalNasIp>
      <VRF></VRF>
      <IpType></IpType>
      <IpAddress></IpAddress>
    </GlobalNasIp>
  </GlobalNasIps>
</Tacacs>
```

### Table description

Item	Description
Feature name	Tacacs
Table name	GlobalNasIps
Table type	Multi-instance table
Row name	GlobalNasIp
Restrictions	The maximum number of global NAS IP addresses is 16.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name	Index	String. Length: 1 to 31 characters.	N/A
IpType	Source IP address type	Index	Enumeration: <ul style="list-style-type: none"><li>0—IPv4.</li><li>1—IPv6.</li></ul>	N/A
IpAddress	Source IP address	N/A	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated.	IPv4 example: 1.0.0.1 IPv6 example: 2001:12::1:2

# Tacacs/Schemes

TACACS scheme table.

## XML structure

```
<Tacacs>
  <Schemes>
    <Scheme>
      <SchemeName></SchemeName>
      <RealAcctInterval></RealAcctInterval>
      <TimeOut></TimeOut>
      <QuietTime></QuietTime>
      <UserNameFormat></UserNameFormat>
      <BytesUnit></BytesUnit>
      <PacketsUnit></PacketsUnit>
      <NasIpv4Address></NasIpv4Address>
      <NasIpv6Address></NasIpv6Address>
      <VRF></VRF>
    </Scheme>
  </Schemes>
</Tacacs>
```

## Table description

Item	Description
Feature name	Tacacs
Table name	Schemes
Table type	Multi-instance table
Row name	Scheme
Restrictions	The maximum number of TACACS schemes is 16.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	TACACS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
RealAcctInterval	Realtime accounting interval	N/A	Unsigned integer. Value range: 0 to 60, in minutes.	Default: 12 minutes. The value of 0 indicates that the device does not send realtime accounting information for online users to TACACS servers.

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeOut	TACACS server response timeout timer	N/A	Unsigned integer. Value range: 1 to 300, in seconds.	Default: 5 seconds
QuietTime	Quiet timer for the servers specified in the TACACS scheme	N/A	Unsigned integer. Value range: 1 to 255, in minutes.	Default: 5 minutes
UserNameFormat	Format of user names to be sent to TACACS servers	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—keep-original.</li> <li>1—with-domain.</li> <li>2—without-domain.</li> </ul>	Default: 1
BytesUnit	Data flow measurement unit for traffic statistics	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—byte.</li> <li>1—kilo-byte.</li> <li>2—mega-byte.</li> <li>3—giga-byte.</li> </ul>	Default: 0
PacketsUnit	Packet measurement unit for traffic statistics	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—one-packet.</li> <li>1—kilo-packet.</li> <li>2—mega-packet.</li> <li>3—giga-packet.</li> </ul>	Default: 0
NasIpv4Address	Source IPv4 IP address for outgoing TACACS packets	N/A	String in dotted decimal notation.	For example, 10.1.1.1.
NasIpv6Address	Source IPv6 IP address for outgoing TACACS packets	N/A	Hexadecimal string, colon-separated.	For example, 2001:12::22:33.
VRF	VRF name	N/A	String. Length: 1 to 31 characters.	Default: Public network

## Tacacs/AuthServers

TACACS authentication server table

### XML structure

```

<Tacacs>
  <AuthServers>
    <AuthServer>
      <SchemeName></SchemeName>
      <Priority></Priority>
      <VRF></VRF>
    </AuthServer>
  </AuthServers>
</Tacacs>

```

```

    <IpType></IpType>
    <Host></Host>
    <Port></Port>
    <SingleConn></SingleConn>
    <State></State>
  </AuthServer>
</AuthServers>
</Tacacs>

```

## Table description

Item	Description
Feature name	Tacacs
Table name	AuthServers
Table type	Multi-instance table
Row name	AuthServer
Restrictions	You can configure one primary authentication server and a maximum of 16 secondary authentication servers for backup in each TACACS scheme. To change the primary authentication server, delete the existing primary server, and then configure a new primary server.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	TACACS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Primary authentication server.</li> <li>1—Secondary authentication server.</li> </ul>	N/A
VRF	VRF name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the TACACS authentication server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	TACACS authentication server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255	When the IpType value is 0, this column represents the IPv4 address of the server. When the IpType value is 1, this column represents

Column name	Column description	Column type	Data type and restrictions	Remarks
			characters.	the IPv6 address of the server.  The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	Service port number of the TACACS authentication server.	Index	Unsigned integer. Value range: 1 to 65535.	Default: 49
SingleConn	Whether to use the same TCP connection for authentication packet exchange for all users	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default: false
State	Status of the TACACS authentication server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Active.</li> <li>1—Block.</li> </ul>	Default: 0

## Tacacs/AuthorServers

TACACS authorization server table.

### XML structure

```

<Tacacs>
  <AuthorServers>
    <AuthorServer>
      <SchemeName></SchemeName>
      <Priority></Priority>
      <VRF></VRF>
      <IpType></IpType>
      <Host></Host>
      <Port></Port>
      <SingleConn></SingleConn>
      <State></State>
    </AuthorServer>
  </AuthorServers>
</Tacacs>

```



## Table description

Item	Description
Feature name	Tacacs
Table name	AuthorServers
Table type	Multi-instance table
Row name	AuthorServer
Restrictions	You can configure one primary authorization server and a maximum of 16 secondary authorization servers for backup in each TACACS scheme. To change the primary authorization server, delete the existing primary server, and then configure a new primary server.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	TACACS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Primary authorization server..</li> <li>1—Secondary authorization server.</li> </ul>	N/A
VRF	VRF name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the TACACS authorization server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	TACACS authorization server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	When the IpType value is 0, this column represents the IPv4 address of the server. When the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	Service port number of the TACACS	Index	Unsigned integer. Value range: 1 to 65535.	Default: 49

Column name	Column description	Column type	Data type and restrictions	Remarks
	authorization server			
SingleConn	Whether to use the same TCP connection for authorization packet exchange for all users	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default: false
State	Status of the TACACS authorization server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Active.</li> <li>1—Block.</li> </ul>	Default: 0

## Tacacs/AcctServers

TACACS accounting server table.

### XML structure

```

<Tacacs>
  <AcctServers>
    <AcctServer>
      <SchemeName></SchemeName>
      <Priority></Priority>
      <VRF></VRF>
      <IpType></IpType>
      <Host></Host>
      <Port></Port>
      <SingleConn></SingleConn>
      <State></State>
    </AcctServer>
  </AcctServers>
</Tacacs>

```

### Table description

Item	Description
Feature name	Tacacs
Table name	AcctServers
Table type	Multi-instance table
Row name	AcctServer
Restrictions	You can configure one primary accounting server and a maximum of 16 backup accounting servers for backup in each TACACS. To change the primary accounting server, delete the existing primary server, and then

	configure a new primary server.
--	---------------------------------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SchemeName	TACACS scheme name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
Priority	Priority	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Primary TACACS accounting server.</li> <li>1—Secondary TACACS accounting server..</li> </ul>	N/A
VRF	VRF name	Index	String, case-sensitive. Length: 1 to 31 characters.	N/A
IpType	Type of the TACACS accounting server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	TACACS accounting server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	When the IpType value is 0, this column represents the IPv4 address of the server. When the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	Service port number of the TACACS accounting server.	Index	Unsigned integer. Value range: 1 to 65535.	Default: 49
SingleConn	Whether to use the same TCP connection for accounting packet exchange for all users	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default: false

Column name	Column description	Column type	Data type and restrictions	Remarks
State	Status of the TACACS accounting server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Active.</li> <li>1—Block.</li> </ul>	Default: 0

# Tacacs/Statistic/AuthServers

TACACS authentication server statistics table.

## XML structure

```

<Tacacs>
  <Statistic>
    <AuthServers>
      <AuthServer>
        <VRF></VRF>
        <IpType></IpType>
        <Host></Host>
        <Port></Port>
        <LastRoundTripTime></LastRoundTripTime>
        <PendingRequest></PendingRequest>
        <Timeout></Timeout>
        <Request></Request>
        <ReqLogin></ReqLogin>
        <ReqChangePass></ReqChangePass>
        <ReqSendPass></ReqSendPass>
        <ReqSendAuth></ReqSendAuth>
        <Continue></Continue>
        <ContinueAbort></ContinueAbort>
        <Response></Response>
        <RespPass></RespPass>
        <RespFail></RespFail>
        <RespGetData></RespGetData>
        <RespGetUser></RespGetUser>
        <RespGetPass></RespGetPass>
        <RespRestart></RespRestart>
        <RespErr></RespErr>
        <RespFollow></RespFollow>
        <RespMalformed></RespMalformed>
        <RespUnknownType></RespUnknownType>
        <RespDropped></RespDropped>
      </AuthServer>
    </AuthServers>
  </Statistic>
</Tacacs>

```

## Table description

Item	Description
Feature name	Tacacs
Table name	AuthServers
Table type	Multi-instance table
Row name	AuthServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name	Index	String. Length: 1 to 31 characters.	N/A
IpType	Type of the TACACS authentication server address	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> <li>2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	TACACS authentication server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	When the IpType value is 0, this column represents the IPv4 address of the server. When the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	Service port number of the TACACS authentication server	Index	Unsigned integer. Value range: 1 to 65535.	Default: 49
LastRoundTripTime	Time interval between the most recent response and request packets	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	exchanged with the TACACS authentication server			
PendingRequest	Number requests waiting for responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Timeout	Number of requests for which no responses are received due to timeout	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Request	Number of requests sent	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ReqLogin	Number of login requests	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ReqChangePass	Number of password change requests	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ReqSendPass	Number of requests containing plaintext passwords	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ReqSendAuth	Number of requests containing ciphertext passwords	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Continue	Number of Continue packets	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ContinueAbort	Number of Continue-Abort packets	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Response	Number of received responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespPass	Number of Access-Accept messages	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespFail	Number of Access-Reject messages	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespGetData	Number of responses for acquiring data	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespGetUser	Number of responses for acquiring user names	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespGetPass	Number of responses for acquiring passwords	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RespRestart	Number of responses that require reauthentication	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespErr	Number of failure responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespFollow	Number of Follow messages	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespMalformed	Number of invalid responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespUnknownType	Number of unknown types of responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespDropped	Number of discarded responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## Tacacs/Statistic/AuthorServers

TACACS authorization server statistics table,

### XML structure

```

<Tacacs>
  <Statistic>
    <AuthorServers>
      <AuthorServer>
        <VRF></VRF>
        <IpType></IpType>
        <Host></Host>
        <Port></Port>
        <LastRoundTripTime></LastRoundTripTime>
        <PendingRequest></PendingRequest>
        <Timeout></Timeout>
        <Request></Request>
        <Response></Response>
        <RespPassAdd></RespPassAdd>
        <RespPassRepl></RespPassRepl>
        <RespFail></RespFail>
        <RespErr></RespErr>
        <RespFollow></RespFollow>
        <RespMalformed></RespMalformed>
        <RespUnknownType></RespUnknownType>
        <RespDropped></RespDropped>
      </AuthorServer>
    </AuthorServers>
  </Statistic>
</Tacacs>

```

```

    </Statistic>
</Tacacs>

```

## Table description

Item	Description
Feature name	Tacacs
Table name	AuthorServers
Table type	Multi-instance table
Row name	AuthorServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name	Index	String. Length: 1 to 31 characters.	N/A
IpType	Type of the TACACS authorization server address	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—IPv4.</li> <li>• 1—IPv6.</li> <li>• 2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	TACACS authorization server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	When the IpType value is 0, this column represents the IPv4 address of the server. When the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	Service port number of the TACACS authentication server	Index	Unsigned integer. Value range: 1 to 65535.	Default: 49



Column name	Column description	Column type	Data type and restrictions	Remarks
LastRoundTripTime	Time interval between the most recent response and request packets exchanged with the TACACS authentication server	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PendingRequests	Number of requests waiting for responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Timeout	Number of requests for which no responses are received due to timeout	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Request	Number of requests sent	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Response	Number of received responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespPassAdd	Number of received responses that include more authorization attributes than the requests sent	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespPassRepl	Number of received responses with authorization attributes that cannot replace all the authorization attributes in the requests	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespFail	Number of failure responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespErr	Number of error responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespFollow	Number of Follow messages	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespMalformed	Number of invalid responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespUnknownType	Number of unknown types of responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespDropped	Number of discarded responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

# Tacacs/Statistic/AcctServers

TACACS accounting server statistics table.

## XML structure

```
<Tacacs>
  <Statistic>
    <AcctServers>
      <AcctServer>
        <VRF></VRF>
        <IpType></IpType>
        <Host></Host>
        <Port></Port>
        <LastRoundTripTime></LastRoundTripTime>
        <PendingRequest></PendingRequest>
        <Timeout></Timeout>
        <Request></Request>
        <ReqStart></ReqStart>
        <ReqStop></ReqStop>
        <ReqUpdate></ReqUpdate>
        <ReqStartAndUpdate></ReqStartAndUpdate>
        <ReqMore></ReqMore>
        <Response></Response>
        <RespSuccess></RespSuccess>
        <RespErr></RespErr>
        <RespFollow></RespFollow>
        <RespMalformed></RespMalformed>
        <RespUnknownType></RespUnknownType>
        <RespDropped></RespDropped>
      </AcctServer>
    </AcctServers>
  </Statistic>
</Tacacs>
```

## Table description

Item	Description
Feature name	Tacacs
Table name	AcctServers
Table type	Multi-instance table
Row name	AcctServer
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF name	Index	String. Length: 1 to 31 characters.	N/A
IpType	Type of the TACACS accounting server address	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—IPv4.</li> <li>• 1—IPv6.</li> <li>• 2—FQDN.</li> </ul>	The value 2 for IpType is not supported currently. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Host	TACACS accounting server	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. FQDN: String of 1 to 255 characters.	When the IpType value is 0, this column represents the IPv4 address of the server. When the IpType value is 1, this column represents the IPv6 address of the server. The value in this column is valid only when the IpType value is available. If either the IpType value or the Host value is unavailable, the system reports an error.
Port	Service port number of the TACACS accounting server.	Index	Unsigned integer. Value range: 1 to 65535.	Default: 49
LastRoundTripTime	Time interval between the most recent response and request packets exchanged with the TACACS accounting server	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
PendingRequests	Number of requests waiting for responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Timeout	Number of requests for which no responses are received due to timeout	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Request	Number of requests sent	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ReqStart	Number of account-start packets sent	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ReqStop	Number of accounting-stop packets sent	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ReqUpdate	Number of accounting-update packets sent	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
ReqStartAndUpdate	Number of accounting-start packets containing assigned values	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
Response	Number of received responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespSuccess	Number of success responses received	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespErr	Number of error responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespFollow	Number of Follow messages	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespMalformed	Number of invalid responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespUnknownType	Number of unknown types of responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
RespDropped	Number of discarded responses	N/A	Unsigned integer. Value range: 0 to 65535.	N/A

## Tacacs/PasswordLimit

Requirements to meet when you configure passwords for the TACACS module.

### XML structure

```

<Tacacs>
  <PasswordLimit>
    <MinLen></MinLen>
    <MaxLen></MaxLen>
    <MinTypeNum></MinTypeNum>
  </PasswordLimit>
</Tacacs>

```

## Table description

Item	Description
Feature name	Tacacs
Table name	PasswordLimit
Table type	Single-instance table
Row name	None
Restrictions	<ul style="list-style-type: none"> <li>The configuration takes effect on the following items: <ul style="list-style-type: none"> <li>Tacacs/Schemes table  <code>&lt;AuthenKey&gt;&lt;/AuthenKey&gt;</code>  <code>&lt;AuthorKey&gt;&lt;/AuthorKey&gt;</code>  <code>&lt;AcctKey&gt;&lt;/AcctKey&gt;</code></li> <li>Tacacs/AuthServers table  <code>&lt;Key&gt;&lt;/Key&gt;</code></li> <li>Tacacs/AuthorServers table  <code>&lt;Key&gt;&lt;/Key&gt;</code></li> <li>Tacacs/AcctServers table  <code>&lt;Key&gt;&lt;/Key&gt;</code></li> </ul> </li> <li>Data restrictions acquired in FIPS mode are different from the data restrictions acquired in non-FIPS mode.</li> </ul>

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinLen	The minimum password length	N/A	Unsigned integer.	N/A
MaxLen	The maximum password length	N/A	Unsigned integer.	N/A
MinTypeNum	Minimum number of character types that the password must contain	N/A	Unsigned integer.	Character types include digit, uppercase letter, lowercase letter, and special character. For example, if the value is set to 3, the password string must include three or more character types.

# Contents

Tacacs.....2

    Tacacs/GlobalNasIps.....2

    Tacacs/Schemes .....2

    Tacacs/AuthServers .....2

    Tacacs/AuthorServers.....3

    Tacacs/AcctServers.....3

# Tacacs

## Tacacs/GlobalNasIps

Message	Explanation
Maximum number of NAS-IP addresses already reached. nas-ip的数目已经达到最大值。	Maximum number of NAS-IP addresses already reached. nas-ip的数目已经达到最大值。
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。

## Tacacs/Schemes

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。
The number of HWTACACS schemes has reached the maximum. TACACS方案的数目已经达到上限。	The number of HWTACACS schemes has reached the maximum. TACACS方案的数目已经达到上限。
The HWTACACS scheme does not exist. 指定的TACACS方案不存在。	The HWTACACS scheme does not exist. 指定的TACACS方案不存在。

## Tacacs/AuthServers

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。
The server doesn't exist. 指定的TACACS服务器不存在。	The server doesn't exist. 指定的TACACS服务器不存在。
The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。	The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。
Maximum number of TACACS servers already reached. TACACS服务器的数目已经达到上限。	Maximum number of TACACS servers already reached. TACACS服务器的数目已经达到上限。

# Tacacs/AuthorServers

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。
The server doesn't exist. 指定的TACACS服务器不存在。	The server doesn't exist. 指定的TACACS服务器不存在。
The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。	The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。
Maximum number of TACACS servers already reached. TACACS服务器的数目已经达到上限。	Maximum number of TACACS servers already reached. TACACS服务器的数目已经达到上限。

# Tacacs/AcctServers

Message	Explanation
Invalid IP address. 无效IP地址。	Invalid IP address. 无效IP地址。
The server doesn't exist. 指定的TACACS服务器不存在。	The server doesn't exist. 指定的TACACS服务器不存在。
The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。	The IP addresses of the primary and secondary servers must be different. 主服务器和备份服务器的IP地址必须不同。
Maximum number of TACACS servers already reached. TACACS服务器的数目已经达到上限。	Maximum number of TACACS servers already reached. TACACS服务器的数目已经达到上限。



# Contents

TE.....	1
TE/Tunnels.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
TE/TunnelBundles.....	2
XML structure.....	2
Table description.....	2
Columns.....	3
TE/TunnelBundleMembers.....	3
XML structure.....	3
Table description.....	3
Columns.....	4

# TE

## TE/Tunnels

This table contains TE Tunnel information.

### XML structure

```
<TE>
  <Tunnels>
    <Tunnel>
      <TunnelID></TunnelID>
      <SignalingType></SignalingType>
      <SRLspName></SRLspName>
      <BackupSRLspName></BackupSRLspName>
      <ServiceClass></ServiceClass>
      <IGPShortcut></IGPShortcut>
      <Statistic></Statistic>
      <ServiceClassStatistic></ServiceClassStatistic>
    </Tunnel>
  </Tunnels>
</TE>
```

### Table description

Item	Description
Feature name	TE
Table name	Tunnels
Table type	Multi-instance table
Row name	Tunnel
Restrictions	Applicable to only MPLS TE tunnel interfaces.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID.	Index	Unsigned integer.	N/A
SignalingType	The signaling protocol for an MPLS TE tunnel interface.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—STATIC.</li><li>1—RSVP-TE(default).</li></ul>	N/A
SRLspName	The static SRLSP name for	N/A	String. Length: 1 to 15 characters.	Case-sensitive

Column name	Column description	Column type	Data type and restrictions	Remarks
	an MPLS TE tunnel interface.			
BackupSRLSPName	The static Backup SRLSP name for an MPLS TE tunnel interface.	N/A	String. Length: 1 to 15 characters.	Case-sensitive
ServiceClass	The service class for an MPLS TE tunnel interface.	N/A	Unsigned integer. The value range varies by device model.	N/A
IGPShortcut	IGP that uses the MPLS TE tunnel in its enhanced SPF calculation.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—ALL</li> <li>1—OSPF</li> <li>2—ISIS</li> </ul>	N/A
Statistic	Enable statistic for TE tunnel.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default).</li> </ul>	N/A
ServiceClassStatistic	Enable statistic for TE tunnel based on service class.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default).</li> </ul>	N/A

## TE/TunnelBundles

This table contains TE Bundle Signaling information.

### XML structure

```

<TE>
  <TunnelBundles>
    <TunnelBundle>
      <BundleID></BundleID>
      <ProtType></ProtType>
      <DstAddr></DstAddr>
    </TunnelBundle>
  </TunnelBundles>
</TE>

```

### Table description

Item	Description
Feature name	TE
Table name	TunnelBundles
Table type	Multi-instance table
Row name	TunnelBundle

Restrictions	NA
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BundleID	Tunnel-bundle ID.	Index	Unsigned integer.	N/A
ProtType	Tunnel protection switching mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—balance(default).</li> <li>1—onetoone protection.</li> <li>2—oneplusone protection.</li> </ul>	N/A
DstAddr	Tunnel destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 2.2.2.2.

## TE/TunnelBundleMembers

This table contains TE Bundle Signaling information.

## XML structure

```

<TE>
  <TunnelBundleMembers>
    <TunnelBundleMember>
      <BundleID></BundleID>
      <TunnelID></TunnelID>
      <Membership></Membership>
      <LoadShare></LoadShare>
    </TunnelBundleMember>
  </TunnelBundleMembers>
</TE>

```

## Table description

Item	Description
Feature name	TE
Table name	TunnelBundleMembers
Table type	Multi-instance table
Row name	TunnelBundleMember
Restrictions	The member must be MPLS TE tunnel interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BundleID	Tunnel-bundle ID.	Index	Unsigned integer.	N/A
TunnelID	Tunnel ID.	Index	Unsigned integer.	N/A
Membership	The Protection Type of Member interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—primary member interface(default).</li> <li>1—backup member interface.</li> </ul>	N/A
LoadShare	The weight for a member tunnel interface.	N/A	Unsigned integer. The range is 1 to 65535.	N/A

# Contents

TE.....	1
TE/Tunnels .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
TE/TunnelBundleCapabilities .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
TE/TunnelBundles.....	3
XML structure .....	3
Table description .....	3
Columns .....	4
TE/TunnelBundleMembers .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
TE/Interfaces.....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# TE

## TE/Tunnels

This table contains TE Tunnel information.

### XML structure

```
<TE>
  <Tunnels>
    <Tunnel>
      <TunnelID></TunnelID>
      <SignalingType></SignalingType>
      <SRLspName></SRLspName>
      <BackupSRLspName></BackupSRLspName>
      <ServiceClass></ServiceClass>
      <IGPS shortcut></IGPS shortcut>
      <Statistic></Statistic>
      <ServiceClassStatistic></ServiceClassStatistic>
    </Tunnel>
  </Tunnels>
</TE>
```

### Table description

Item	Description
Feature name	TE
Table name	Tunnels
Table type	Multi-instance table
Row name	Tunnel
Restrictions	Applicable to only MPLS TE tunnel interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	Tunnel ID.	Index	Unsigned integer.	N/A
SignalingType	The signaling protocol for an MPLS TE tunnel interface.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—STATIC.</li><li>1—RSVP-TE(default).</li></ul>	N/A
SRLspName	The static SRLSP name for an MPLS TE	N/A	String. Length: 1 to 15 characters.	Case-sensitive

Column name	Column description	Column type	Data type and restrictions	Remarks
	tunnel interface.			
BackupSRLSPName	The static Backup SRLSP name for an MPLS TE tunnel interface.	N/A	String. Length: 1 to 15 characters.	Case-sensitive
ServiceClass	The service class for an MPLS TE tunnel interface.	N/A	Unsigned integer. The value range varies by device model.	N/A
IGPShortcut	IGP that uses the MPLS TE tunnel in its enhanced SPF calculation.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—ALL</li> <li>1—OSPF</li> <li>2—ISIS</li> </ul>	N/A
Statistic	Enable statistic for TE tunnel.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
ServiceClassStatistic	Enable statistic for TE tunnel based on service class.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## TE/TunnelBundleCapabilities

This table contains TE Bundle Signaling information.

### XML structure

```

<TE>
  <TunnelBundleCapabilities>
    <MaxBndNum></MaxBndNum>
    <MaxMembNum></MaxMembNum>
    <LoadBalancing></LoadBalancing>
    <ProtectionOnetoone></ProtectionOnetoone>
    <ProtectionOneplusone></ProtectionOneplusone>
  </TunnelBundleCapabilities>
</TE>

```

### Table description

Item	Description
Feature name	TE
Table name	TunnelBundleCapabilities
Table type	Single-instance table
Row name	N/A
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxBndNum	Support for the maximum Bundle interface.	Index	Unsigned integer.	N/A
MaxMembNum	Support for the maximum tunnel interface can be add to the same Tunnel-bundle interface.	N/A	Unsigned integer.	N/A
LoadBalancing	Support for load sharing mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Supported.</li> <li>false—Not supported</li> </ul>	N/A
ProtectionOnetoone	Support for onetoone protection mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Supported.</li> <li>false—Not supported</li> </ul>	N/A
ProtectionOnplusone	Support for onepusone protection mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Supported.</li> <li>false—Not supported</li> </ul>	N/A

## TE/TunnelBundles

This table contains TE Bundle Signaling information.

### XML structure

```

<TE>
  <TunnelBundles>
    <TunnelBundle>
      <BundleID></BundleID>
      <ProtType></ProtType>
      <DstAddr></DstAddr>
    </TunnelBundle>
  </TunnelBundles>
</TE>

```

### Table description

Item	Description
Feature name	TE
Table name	TunnelBundles
Table type	Multi-instance table
Row name	TunnelBundle
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BundleID	Tunnel-bundle ID.	Index	Unsigned integer.	N/A
ProtType	Tunnel protection switching mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—balance.</li><li>1—onetoone protection.</li><li>2—oneplusone protection.</li></ul>	N/A
DstAddr	Tunnel destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 2.2.2.2.

## TE/TunnelBundleMembers

This table contains TE Bundle Signaling information.

## XML structure

```
<TE>
  <TunnelBundleMembers>
    <TunnelBundleMember>
      <BundleID></BundleID>
      <TunnelID></TunnelID>
      <Membership></Membership>
      <LoadShare></LoadShare>
    </TunnelBundleMember>
  </TunnelBundleMembers>
</TE>
```

## Table description

Item	Description
Feature name	TE
Table name	TunnelBundleMembers
Table type	Multi-instance table
Row name	TunnelBundleMember
Restrictions	The member must be MPLS TE tunnel interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
BundleID	Tunnel-bundle ID.	Index	Unsigned integer.	N/A
TunnelID	Tunnel ID.	N/A	Unsigned integer.	N/A
Membership	The Protection Type of Member interface	N/A	Enumeration: <ul style="list-style-type: none"><li>0—primary member interface.</li><li>1—backup member interface.</li></ul>	N/A
LoadShare	The weight for a member tunnel interface.	N/A	Unsigned integer. The range is 1 to 65535.	N/A

## TE/Interfaces

This table contains TE interface information.

## XML structure

```
<TE>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <Metric></Metric>
      <MaxLinkBandwidth></MaxLinkBandwidth>
    </Interface>
  </Interfaces>
</TE>
```

## Table description

Item	Description
Feature name	TE
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	Applicable to only L3 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Enable	Enabling status of TE for the interface	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	N/A
Metric	Metric of the interface	N/A	Unsigned integer. The range is 1 to 4294967295.	N/A
MaxLinkBandwidth	Maximum link bandwidth for MPLS TE traffic	N/A	Unsigned integer. The range is 1 to 4294967295.	N/A

# Contents

- IfChange event ..... 1
  - XML structure for event subscription ..... 1
  - XML structure for event report ..... 2

# IfChange event

This event is used to report mpls te metric and max-link-bandwidth change information.

## XML structure for event subscription

```
<IfChangeEvent>
  <Interface>
    <IfIndex></IfIndex>
  </Interface>
</IfChangeEvent>
```

Example:

```
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <create-subscription xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
    <stream>TE_STREAM</stream>
    <filter type="subtree">
      <IfChangeEvent xmlns="http://www.h3c.com/netconf/event:1.0/te:1.0">
        <Interface>
          <IfIndex>2</IfIndex>
        </Interface>
      </IfChangeEvent>
    </filter>
  </create-subscription>
</rpc>]]>]]>
```

## Table description

Item	Description
Event stream name	TE_STREAM
Event name	IfChangeEvent
Event namespace	http://www.h3c.com/netconf/event:1.0/te:1.0
Support for extended query	No

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
IfIndex	Interface ifIndex	Unsigned integer	Interface name is not supported.
Metric	Te metric for the interface.	Unsigned integer. The range is 1 to 4294967295.	N/A
MaxLinkBandWidth	Maximum ratio of the MPLS TE link bandwidth to the total link bandwidth.	Unsigned integer. The range is 1 to 4294967295.	N/A

# XML structure for event report

```
<IfChangeEvent>
  <Interface>
    <IfIndex></IfIndex>
    <Metric></Metric>
    <MaxLinkBandWidth></MaxLinkBandWidth>
  </Interface>
</IfChangeEvent>
```

## Example:

```
<?xml version="1.0" encoding="UTF-8"?><notification
xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
<eventTime>2019-01-04T07:23:20</eventTime>
  <IfChangeEvent xmlns="te:1.0">
    <Interface>
      <IfIndex>2</IfIndex>
      <Metric>1000</Metric>
      <MaxLinkBandWidth>1000</MaxLinkBandWidth>
    </Interface>
  </IfChangeEvent>
</notification>]]>]]>
```

## Columns

Column name	Column description	Data type and restrictions	Support for extended queries
IfIndex	Interface ifIndex	Unsigned integer	Interface name is not supported.
Metric	Te metric for the interface.	Unsigned integer. The range is 1 to 4294967295.	N/A
MaxLinkBandWidth	Maximum ratio of the MPLS TE link bandwidth to the total link bandwidth.	Unsigned integer. The range is 1 to 4294967295.	N/A

# Contents

TelemetryPBSR .....	1
TelemetryPBSR/PBSRConfiguration .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
TelemetryPBSR/PortPbsrConfigurations .....	2
XML structure .....	2
Table description .....	2
Columns .....	3



# TelemetryPBSR

## TelemetryPBSR/PBSRConfiguration

This table is used to configure the global configurations for the protobuf buffer status report (PBSR) function.

Caution: The columns "SourceIpv4Address", "SourcePort", "DestIpv4Address", and "DestPort" must be created or deleted together.

### XML structure

```
<TelemetryPBSR>
  <PBSRConfiguration>
    <PortCount></PortCount>
    <Interval></Interval>
    <SourceIpv4Address></SourceIpv4Address>
    <SourcePort></SourcePort>
    <DestIpv4Address></DestIpv4Address>
    <DestPort></DestPort>
    <VlanID></VlanID>
  </PBSRConfiguration>
</TelemetryPBSR>
```

### Table description

Item	Description
Feature name	TelemetryPBSR
Table name	PBSRConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortCount	Number of ports	N/A	Unsigned integer.	N/A
Interval	Interval for sending the PBSR to the server	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SourceIPv4Address	Source IP address	N/A	String. IPv4 address string or IPv6 address string.	N/A
SourcePort	Source port number	N/A	Unsigned integer.	N/A
DestIPv4Address	Destination IP address	N/A	String. IPv4 address string or IPv6 address string.	N/A
DestPort	Destination port number	N/A	Unsigned integer.	N/A
VlanID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A

## TelemetryPBSR/PortPbsrConfigurations

This table is used to configure the interface for the PBSR function.

### XML structure

```

<TelemetryPBSR>
  <PortPbsrConfigurations>
    <PortPbsrConfiguration>
      <IfIndex></IfIndex>
      <State></State>
    </PortPbsrConfiguration>
  </PortPbsrConfigurations>
</TelemetryPBSR>

```

### Table description

Item	Description
Feature name	TelemetryPBSR
Table name	PortPbsrConfigurations
Table type	Multi-instance table
Row name	PortPbsrConfiguration
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.
State	Active PBSR function	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A

# Contents

TelemetryPBSR .....	1
TelemetryPBSR/PBSRConfiguration .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
TelemetryPBSR/PortPbsrConfigurations .....	2
XML structure .....	2
Table description .....	2
Columns .....	2

# TelemetryPBSR

## TelemetryPBSR/PBSRConfiguration

This table is used to get the global telemetry PBSR configuration.

### XML structure

```
<TelemetryPBSR>
  <PBSRConfiguration>
    <PortCount></PortCount>
    <Interval></Interval>
    <SourceIpv4Address></SourceIpv4Address>
    <SourcePort></SourcePort>
    <DestIpv4Address></DestIpv4Address>
    <DestPort></DestPort>
    <VlanID></VlanID>
  </PBSRConfiguration>
</TelemetryPBSR>
```

### Table description

Item	Description
Feature name	TelemetryPBSR
Table name	PBSRConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PortCount	Number of ports	N/A	Unsigned integer.	N/A
Interval	Interval for sending the PBSR to the server	N/A	Unsigned integer.	Interval of the sending timer.
SourceIpv4Address	Source IP address	N/A	String. IPv4 address string or IPv6 address string.	Example: 1.1.1.1
SourcePort	Source port	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DestIpv4Address	Destination IP address	N/A	String. IPv4 address string or IPv6 address string.	Example: 1.1.1.1
DestPort	Destination port	N/A	Unsigned integer.	N/A
VlanID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A

## TelemetryPBSR/PortPbsrConfigurations

This table is used to configure the interface for the telemetry PBSR function.

### XML structure

```

<TelemetryPBSR>
  <PortPbsrConfigurations>
    <PortPbsrConfiguration>
      <IfIndex></IfIndex>
      <State></State>
    </PortPbsrConfiguration>
  </PortPbsrConfigurations>
</TelemetryPBSR>

```

### Table description

Item	Description
Feature name	TelemetryPBSR
Table name	PortPbsrConfigurations
Table type	Multi-instance table
Row name	PortPbsrConfiguration
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration

Column name	Column description	Column type	Data type and restrictions	Remarks
				Reference.
State	Active PBSR function	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	N/A

# Contents

- TELNET .....1
  - TELNET/Server .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1



# TELNET

## TELNET/Server

This table contains information about global TELNET Server functions.

### XML structure

```
<TELNET>
  <Server>
    <State></State>
    <Ipv4DSCP></Ipv4DSCP>
    <Ipv6DSCP></Ipv6DSCP>
    <Ipv4ACLNum></Ipv4ACLNum>
    <Ipv6ACLNum></Ipv6ACLNum>
    <Ipv4Port></Ipv4Port>
    <Ipv6Port></Ipv6Port>
  </Server>
</TELNET>
```

### Table description

Item	Description
Feature name	TELNET
Table name	Server
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global TELNET Server functions.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
State	Global TELNET Server feature	N/A	EnableState: <ul style="list-style-type: none"><li>enable Enable TELNET Server</li><li>disable Disable TELNET Server(default)</li></ul>
Ipv4DSCP	Set the IPv4 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:48

Column name	Column description	Column type	Data type and restrictions
Ipv6DSCP	Set the IPv6 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:48.
Ipv4ACLNum	Specify an IPv4 ACL used to control the TELNET clients' access	N/A	Unsigned integer. Value range: 2000 to 4999.
Ipv6ACLNum	Specify an IPv6 ACL used to control the TELNET clients' access	N/A	Unsigned integer. Value range: 2000 to 4999.
Ipv4Port	Set the IPv4 Server Port value	N/A	Unsigned integer. Value range: 23, 1025 to 65535. Default value: 23
Ipv6Port	Set the IPv6 Server Port value	N/A	Unsigned integer. Value range: 23, 1025 to 65535. Default value: 23.

# Contents

- TELNET .....1
  - TELNET/Capabilities .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - TELNET/Server .....1
    - XML structure .....1
    - Table description .....2
    - Columns .....2

# TELNET

## TELNET/Capabilities

This table contains the capabilities information of the TELNET.

### XML structure

```
<TELNET>
  <Capabilities>
    <TelnetServerSupport></TelnetServerSupport>
  </Capabilities>
</TELNET>
```

### Table description

Item	Description
Feature name	TELNET
Table name	Capabilities
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
TelnetServerSupport	Whether The TELNET Server capability is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>

## TELNET/Server

This table contains global TELNET Server information.

### XML structure

```
<TELNET>
  <Server>
    <State></State>
    <Ipv4DSCP></Ipv4DSCP>
    <Ipv6DSCP></Ipv6DSCP>
    <Ipv4ACLNum></Ipv4ACLNum>
  </Server>
</TELNET>
```

```

    <Ipv6ACLNum></Ipv6ACLNum>
    <Ipv4Port></Ipv4Port>
    <Ipv6Port></Ipv6Port>
  </Server>
</TELNET>

```

## Table description

Item	Description
Feature name	TELNET
Table name	Server
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global TELNET Server functions.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
State	Global TELNET Server feature	N/A	EnableState: <ul style="list-style-type: none"> <li>enable Enable TELNET Server</li> <li>disable Disable TELNET Server(default)</li> </ul>
Ipv4DSCP	Set the IPv4 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:48
Ipv6DSCP	Set the IPv6 Differentiated Services Codepoint (DSCP) value	N/A	Unsigned integer. Value range: 0 to 63. Default value:48.
Ipv4ACLNum	Specify an IPv4 ACL used to control the TELNET clients' access	N/A	Unsigned integer. Value range: 2000 to 4999.
Ipv6ACLNum	Specify an IPv6 ACL used to control the TELNET clients' access	N/A	Unsigned integer. Value range: 2000 to 4999.
Ipv4Port	Set the IPv4 Server Port value	N/A	Unsigned integer. Value range: 23, 1025 to 65535. Default value: 23
Ipv6Port	Set the IPv6 Server Port value	N/A	Unsigned integer. Value range: 23, 1025 to 65535. Default value: 23.

# Contents

TELNET .....1

    TELNET/Server .....1

# TELNET

## TELNET/Server

Message	Explanation
Failed to enable TELNET server. 使能TELNET server失败.	When the telnet service port number has been used by other services, it does not support to enable TELNET server.
Failed to specify ACL. 配置ACL失败.	If the ACL configuration can't be processed by the daemon of Telnet, the specified ACL configuration will fail.
Failed to specify DSCP. 配置DSCP失败.	If the DSCP configuration can't be processed by the daemon of Telnet, the specified DSCP configuration will fail.
Failed to specify port 配置端口失败.	If TELNET server has been enabled, the port number that has been used does not support configuration.

# Contents

TimeRange .....	1
TimeRange/TimeRanges .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
TimeRange/AbsRanges .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
TimeRange/PerRanges .....	3
XML structure .....	3
Table description .....	4
Columns .....	4



# TimeRange

## TimeRange/TimeRanges

This table contains time range information.

### XML structure

```
<TimeRange>
  <TimeRanges>
    <Range>
      <Name></Name>
    </Range>
  </TimeRanges>
</TimeRange>
```

### Table description

Item	Description
Feature name	TimeRange
Table name	TimeRanges
Table type	Multi-instance table
Row name	Range
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Time range name	Index	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	The time range name cannot be <b>all</b> .

## TimeRange/AbsRanges

This table contains information about absolute time range statements.

### XML structure

```
<TimeRange>
```

```

<AbsRanges>
  <AbsRange>
    <TimeRangeName></TimeRangeName>
    <ID></ID>
    <Start>
      <StartTime></StartTime>
      <StartDate></StartDate>
    </Start>
    <End>
      <EndTime></EndTime>
      <EndDate></EndDate>
    </End>
  </AbsRange>
</AbsRanges>
</TimeRange>

```

## Table description

Item	Description
Feature name	TimeRange
Table name	AbsRanges
Table type	Multi-instance table
Row name	AbsRange
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeRangeName	Time range name	Index	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	You must create a time range before you create, merge, or replace statements for it.
ID	Absolute statement ID	Index	Unsigned integer. Value range: 1 to 12.	If you set this column to 0, the system automatically assigns a new statement ID. This statement ID is the smallest available integer in the range of 1 to 12.

Column name	Column description	Column type	Data type and restrictions	Remarks
Start	Start time and date of an absolute statement	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime.</li> <li>StartDate.</li> </ul>	<ul style="list-style-type: none"> <li>You cannot specify a start time and date when you remove or delete a statement.</li> <li>You must specify a start time and date when you create, merge, or replace a statement.</li> </ul>
StartTime	Start time of an absolute statement	N/A	String. Format: hh:mm:ss. Value range: 00:00:00 to 23:59:59.	N/A
StartDate	Start date of an absolute statement	N/A	String. Format: YYYY-MM-DD. Value range: 1970-01-01 to 2100-12-31.	N/A
End	End time and date of an absolute statement	Data structure	Members include: <ul style="list-style-type: none"> <li>EndTime.</li> <li>EndDate.</li> </ul>	<ul style="list-style-type: none"> <li>You cannot specify an end time and date when you remove or delete a statement.</li> <li>You must specify an end time and date when you create, merge, or replace a statement.</li> </ul>
EndTime	End time of an absolute statement	N/A	String. Format: hh:mm:ss. Value range: 00:00:00 to 24:00:00.	N/A
EndDate	End date of an absolute statement	N/A	String. Format: YYYY-MM-DD. Value range: 1970-01-01 to 2100-12-31.	N/A

## TimeRange/PerRanges

This table contains information about periodic time range statements.

### XML structure

```

<TimeRange>
  <PerRanges>
    <PerRange>
      <TimeRangeName></TimeRangeName>
      <ID></ID>
      <StartTime></StartTime>

```

```

    <EndTime></EndTime>
  <DayOfWeek>
    <Sun></Sun>
    <Mon></Mon>
    <Tue></Tue>
    <Wed></Wed>
    <Thu></Thu>
    <Fri></Fri>
    <Sat></Sat>
  </DayOfWeek>
</PerRange>
</PerRanges>
</TimeRange>

```

## Table description

Item	Description
Feature name	TimeRange
Table name	PerRanges
Table type	Multi-instance table
Row name	PerRange
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remark
TimeRangeName	Time range name	Index	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	You must create a time range before you create, merge, or replace statements for it.
ID	Periodic statement ID	Index	Unsigned integer. Value range: 1 to 32.	If you set this column to 0, the system automatically assigns a new statement ID. This statement ID is the smallest available integer in the range of 1 to 32.

Column name	Column description	Column type	Data type and restrictions	Remark
StartTime	Start time of a periodic statement	N/A	String. Format: hh:mm. Value range: 00:00 to 23:59.	<ul style="list-style-type: none"> <li>You cannot specify a start time when you remove or delete a statement.</li> <li>You must specify a start time when you create, merge, or replace a statement.</li> <li>Start time must be smaller than end time.</li> </ul>
EndTime	End time of a periodic statement	N/A	String. Format: hh:mm. Value range: 00:00 to 24:00.	<ul style="list-style-type: none"> <li>You cannot specify an end time when you remove or delete a statement.</li> <li>You must specify an end time when you create, merge, or replace a statement.</li> <li>End time must be greater than start time.</li> </ul>
DayOfWeek	Day of the week	Data structure	Members include: <ul style="list-style-type: none"> <li>Sun.</li> <li>Mon.</li> <li>Tue.</li> <li>Wed.</li> <li>Thu.</li> <li>Fri.</li> <li>Sat.</li> </ul>	<ul style="list-style-type: none"> <li>You cannot specify any day of the week when you remove or delete a statement.</li> <li>You must specify at least one day of the week when you create, merge, or replace a statement.</li> </ul>
Sun	Sunday	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specified.</li> <li><b>false</b>—Not specified (default).</li> </ul>	N/A
Mon	Monday	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specified.</li> <li><b>false</b>—Not specified (default).</li> </ul>	N/A
Tue	Tuesday	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specified.</li> <li><b>false</b>—Not specified (default).</li> </ul>	N/A
Wed	Wednesday	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specified.</li> <li><b>false</b>—Not specified (default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remark
Thu	Thursday	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Specified.</li> <li>• <b>false</b>—Not specified (default).</li> </ul>	N/A
Fri	Friday	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Specified.</li> <li>• <b>false</b>—Not specified (default).</li> </ul>	N/A
Sat	Saturday	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Specified.</li> <li>• <b>false</b>—Not specified (default).</li> </ul>	N/A

# Contents

TimeRange .....	1
TimeRange/TimeRanges .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
TimeRange/AbsRanges .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
TimeRange/PerRanges .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# TimeRange

## TimeRange/TimeRanges

This table contains time range information.

### XML structure

```
<TimeRange>
  <TimeRanges>
    <Range>
      <Name></Name>
      <Status></Status>
      <Inuse></Inuse>
    </Range>
  </TimeRanges>
</TimeRange>
```

### Table description

Item	Description
Feature name	TimeRange
Table name	TimeRanges
Table type	Multi-instance table
Row name	Range
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	Time range name	Index	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.
Status	Time range status	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Active.</li><li>2—Inactive.</li></ul>
Inuse	Application status	N/A	Boolean: <ul style="list-style-type: none"><li>true—In use.</li><li>false—Not in use.</li></ul>



# TimeRange/AbsRanges

This table contains information about absolute time range statements.

## XML structure

```
<TimeRange>
  <AbsRanges>
    <AbsRange>
      <TimeRangeName></TimeRangeName>
      <ID></ID>
      <Start>
        <StartTime></StartTime>
        <StartDate></StartDate>
      </Start>
      <End>
        <EndTime></EndTime>
        <EndDate></EndDate>
      </End>
    </AbsRange>
  </AbsRanges>
</TimeRange>
```

## Table description

Item	Description
Feature name	TimeRange
Table name	AbsRanges
Table type	Multi-instance table
Row name	AbsRange
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TimeRangeName	Time range name	Index	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.	N/A
ID	Absolute statement ID	Index	Unsigned integer. Value range: 1 to 12.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Start	Start time and date of an absolute statement	Data structure	Members include: <ul style="list-style-type: none"> <li>StartTime.</li> <li>StartDate.</li> </ul>	The two members must both be specified.
StartTime	Start time of an absolute statement	N/A	String. Format: hh:mm:ss. Value range: 00:00:00 to 23:59:59.	N/A
StartDate	Start date of an absolute statement.	N/A	String. Format: YYYY-MM-DD. Value range: 1970-01-01 to 2100-12-31.	N/A
End	End time and date of an absolute statement	Data structure	Members include: <ul style="list-style-type: none"> <li>EndTime.</li> <li>EndDate.</li> </ul>	The two members must both be specified.
EndTime	End time of an absolute statement	N/A	String. Format: hh:mm:ss. Value range: 00:00:00 to 24:00:00.	N/A
EndDate	End date of an absolute statement	N/A	String. Format: YYYY-MM-DD. Value range: 1970-01-01 to 2100-12-31.	N/A

## TimeRange/PerRanges

This table contains information about periodic time range statements.

### XML structure

```

<TimeRange>
  <PerRanges>
    <PerRange>
      <TimeRangeName></TimeRangeName>
      <ID></ID>
      <StartTime></StartTime>
      <EndTime></EndTime>
      <DayOfWeek>
        <Sun></Sun>
        <Mon></Mon>
        <Tue></Tue>
        <Wed></Wed>
        <Thu></Thu>
        <Fri></Fri>
        <Sat></Sat>
      </DayOfWeek>
    </PerRange>
  </PerRanges>
</TimeRange>

```

```

    </DayOfWeek>
  </PerRange>
</PerRanges>
</TimeRange>

```

## Table description

Item	Description
Feature name	TimeRange
Table name	PerRanges
Table type	Multi-instance table
Row name	PerRange
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
TimeRangeName	Time range name	Index	String, case-insensitive. Length: 1 to 32 characters. The string must start with an English letter.
ID	Periodic statement ID	Index	Unsigned integer. Value range: 1 to 32.
StartTime	Start time of a periodic statement	N/A	String. Format: hh:mm. Value range: 00:00 to 23:59.
EndTime	End time of a periodic statement	N/A	String. Format: hh:mm. Value range: 00:00 to 24:00.
DayOfWeek	Day of the week	Data structure	Members include: <ul style="list-style-type: none"> <li>• Sun.</li> <li>• Mon.</li> <li>• Tue.</li> <li>• Wed.</li> <li>• Thu.</li> <li>• Fri.</li> <li>• Sat.</li> </ul>
Sun	Sunday	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Specified.</li> <li>• <b>false</b>—Not specified (default).</li> </ul>
Mon	Monday	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Specified.</li> <li>• <b>false</b>—Not specified (default).</li> </ul>

Column name	Column description	Column type	Data type and restrictions
Tue	Tuesday	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specified.</li> <li><b>false</b>—Not specified (default).</li> </ul>
Wed	Wednesday	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specified.</li> <li><b>false</b>—Not specified (default).</li> </ul>
Thu	Thursday	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specified.</li> <li><b>false</b>—Not specified (default).</li> </ul>
Fri	Friday	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specified.</li> <li><b>false</b>—Not specified (default).</li> </ul>
Sat	Saturday	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Specified.</li> <li><b>false</b>—Not specified (default).</li> </ul>

# Contents

TimeRange .....1

    TimeRange.....1

# TimeRange

## TimeRange

Message	Explanation
Invalid date or time settings. 配置中包含无效的日期和时间的设置。	The date or time entered is illegal. 输入的日期或时间是非法的。
The end time must be greater than the start time. 结束时间必须大于开始时间。	The end time entered is less than or equal to the start time. 输入的结束时间小于等于开始时间。
Maximum number of absolute statements already reached. 绝对时间段配置数达到上限。	The absolute number of configured times has reached the upper limit. 指配置的绝对时间数已经达到上限。
Maximum number of periodic statements already reached. 周期时间段配置数达到上限。	The periodic number of configured times has reached the upper limit. 配置的周期时间数已经达到上限。
Maximum number of time ranges already reached. 时间段配置数达到上限。	The configured number of time range names has reached the upper limit. 配置的时间段名称数已经达到上限。
At least one day of the week should be set for a periodic time range. 配置周期时间段时应至少指定一周中的一天。	The configured periodic time does not specify which day of the week. 配置周期时间时没有指定一周中哪天。
A time range with the same statements already exists. 相同的时间段配置已存在。	The same time range content has been configured. 已经配置了相同的时间段内容。

# Contents

- Tracert ..... 1
  - Tracert/IPv4Tracert ..... 1
    - XML structure ..... 1
    - Responded XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 2
    - Responded columns ..... 2

# Tracert

## Tracert/IPv4Tracert

This table contains tracert information. Tracert traces the path that the IPv4 packets traverse from source to destination.

### XML structure

```
<Tracert>
  <IPv4Tracert>
    <TracertTest>
      <Host></Host>
      <VRF></VRF>
      <OutputInterface></OutputInterface>
    </TracertTest>
  </IPv4Tracert>
</Tracert>
```

### Responded XML structure

```
<Tracert>
  <IPv4Tracert>
    <TracertTest>
      <Host></Host>
      <PayloadLength></PayloadLength>
      <Hops></Hops>
      <TracertReply>
        <Sequence></Sequence>
        <PassthroughRouter></PassthroughRouter>
        <ReplyTime></ReplyTime>
      </TracertReply>
      <TestResult></TestResult>
    </TracertTest>
  </IPv4Tracert>
</Tracert>
```

### Table description

Item	Description
Feature name	Tracert
Table name	IPv4Tracert
Table type	Multi-instance table
Row name	TracertTest



Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Host	IPv4 address or host name of a remote system	Index	String. Length: 1 to 253 characters.	Example: 1.1.1.1 or host name.
VRF	VPN instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
OutputInterface	Name of the outgoing interface	N/A	String. Length: 0 to 46 characters.	An empty string indicates that no outgoing interface is specified.

## Responded columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Host	IPv4 address of the remote system	N/A	IPv4: String, dotted decimal notation.	Example: 1.1.1.1.
Hops	Maximum hop limit	N/A	Unsigned integer. Value range: 1 to 255.	N/A
PayloadLength	Payload length	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
TracertReply	Tracert reply information	Data structure	Members include: <ul style="list-style-type: none"> <li>Sequence.</li> <li>PassthroughRouter.</li> <li>ReplyTime.</li> </ul>	N/A
Sequence	Reply sequence	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
PassthroughRouter	Path that the packets pass through	N/A	IPv4: String, dotted decimal notation.	Example: 1.1.1.1.
ReplyTime	Response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If the value is 4294967295, the reply has timed out.
TestResult	Test result	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Successful.</li> <li><b>false</b>—Failed.</li> </ul>	If the tracert operator does not receive a reply within 25 seconds, the tracert operation fails.

# Contents

Tracert .....1

    Tracert/IPv4Tracert ..... 1

# Tracert

## Tracert/IPv4Tracert

Message	Explanation
Unknown host. 未知主机。	The specified host must exist.
The VPN instance doesn't exist. VPN不存在。	The specified VPN instance name must exist.
Invalid destination address. 非法的目的地址。	The specified destination address cannot be a multicast address or a broadcast address or all 0s.
The outgoing interface is invalid. 出接口不合法。	The specified outgoing interface must be valid.

# Contents

- Tracert6 ..... 1
  - Tracert6/IPv6Tracert..... 1
    - XML structure ..... 1
    - Responded XML structure..... 1
    - Table description..... 1
    - Columns ..... 2
    - Responded columns ..... 2

# Tracert6

## Tracert6/IPv6Tracert

This table contains tracert6 information. Tracert6 traces the path that the IPv6 packets traverse from source to destination.

### XML structure

```
<Tracert6>
  <IPv6Tracert>
    <TracertTest>
      <Host></Host>
      <VRF></VRF>
      <OutputInterface></OutputInterface>
    </TracertTest>
  </IPv6Tracert>
</Tracert6>
```

### Responded XML structure

```
<Tracert6>
  <IPv6Tracert>
    <TracertTest>
      <Host></Host>
      <PayloadLength></PayloadLength>
      <Hops></Hops>
      <TracertReply>
        <Sequence></Sequence>
        <PassthroughRouter></PassthroughRouter>
        <ReplyTime></ReplyTime>
      </TracertReply>
      <TestResult></TestResult>
    </TracertTest>
  </IPv6Tracert>
</Tracert6>
```

### Table description

Item	Description
Feature name	Tracert6
Table name	IPv6Tracert
Table type	Multi-instance table
Row name	TracertTest

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Host	IPv6 address or host name of a remote system	Index	String. Length: 1 to 253 characters.	Example: 1::1 or host name.
VRF	VPN instance name	Index	String. Length: 0 to 31 characters.	An empty string indicates the public network.
OutputInterface	Name of the outgoing interface	N/A	String. Length: 0 to 46 characters.	An empty string indicates that no outgoing interface is specified.

## Responded columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Host	IPv6 address of the remote system	N/A	IPv6: Hexadecimal string, colon-separated.	Example: 1::1.
Hops	Maximum hop limit	N/A	Unsigned integer. Value range: 1 to 255.	N/A
PayloadLength	Payload length	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
TracertReply	Tracert6 reply information	Data structure	Members include: <ul style="list-style-type: none"> <li>Sequence.</li> <li>PassthroughRouter.</li> <li>ReplyTime.</li> </ul>	N/A
Sequence	Reply sequence	N/A	Unsigned integer. Value range: 1 to 4294967295.	N/A
PassthroughRouter	Path that the packets pass through	N/A	IPv6: Hexadecimal string, colon-separated.	Example: 1::1.
ReplyTime	Response time	N/A	Unsigned integer. Value range: 0 to 4294967295 microseconds.	If the value is 4294967295, the reply has timed out.
TestResult	Test result	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Successful.</li> <li><b>false</b>—Failed.</li> </ul>	If the tracert operator does not receive any reply within 25 seconds, the tracert operation fails.

# Contents

Tracert6 .....1

    Tracert6/IPv6Tracert..... 1

# Tracert6

## Tracert6/IPv6Tracert

Message	Explanation
Unknown host. 未知主机。	The specified host must exist.
The VPN instance doesn't exist. VPN不存在。	The specified VPN instance name must exist.
The destination address can't be an IPv6 multicast address. 不支持IPv6组播地址。	The specified destination address cannot be an ipv6 multicast address.
The destination address can't be an IPv6 link local address. 不支持IPv6链路本地地址。	The specified destination address cannot be an ipv6 link local address.
The destination IPv6 address can't be all 0s. IPv6目的地址不能为全零。	The specified destination address cannot be all 0s.
The outgoing interface is invalid. 出接口不合法。	The specified outgoing interface must be valid.



# Contents

TRACK .....	1
TRACK/TrackEntries .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
TRACK/TrackObjectList .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
TRACK/ TrackOper .....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# TRACK

## TRACK/TrackEntries

This table contains information about track entries.

### XML structure

```
<TRACK>
  <TrackEntries>
    <TrackEntry>
      <TrackIndex></TrackIndex>
      <TypeInterface>
        <IfIndex></IfIndex>
        <IfStateType></IfStateType>
      </TypeInterface>
      <TypeBfd>
        <EchoIfIndex></EchoIfIndex>
        <RemoteIp></RemoteIp>
        <LocalIp></LocalIp>
      </TypeBfd>
      <TypeCfd>
        <ServiceInstance></ServiceInstance>
        <MepId></MepId>
      </TypeCfd>
      <TypeRoute>
        <VRF></VRF>
        <IpAddress></IpAddress>
        <MaskLength></MaskLength>
      </TypeRoute>
      <TypeNqa>
        <AdminName></AdminName>
        <OperationTag></OperationTag>
        <ReactionNum></ReactionNum>
      </TypeNqa>
      <TypeList>
        <ListType></ListType>
      </TypeList>
      <TypeLldp>
        <IfIndex></IfIndex>
      </TypeLldp>
    </TrackEntry>
  </TrackEntries>
</TRACK>
```

## Table description

Item	Description
Feature name	TRACK
Table name	TrackEntries
Table type	Multi-instance table
Row name	TrackEntry
Restrictions	Only one tracked object type can be specified for a track entry. You cannot modify the settings of the track entry after creating it in this table. If you need to do this, you must delete the track entry and then create it again.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TrackIndex	Index of the track entry.	Index	Unsigned integer. Value range: 1 to 1024.	N/A
TypeInterface	Associates the track entry with an interface.	Data structure	Members include: <ul style="list-style-type: none"> <li>IfIndex.</li> <li>IfStateType.</li> </ul>	All the members must be specified.
IfIndex	Interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IfStateType	Type of the interface state.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Link state.</li> <li>2—Physical state.</li> <li>3—IPv4 protocol state.</li> <li>4—IPv6 protocol state.</li> </ul>	N/A
TypeBfd	Associates the track entry with a BFD session.	Data structure	Members include: <ul style="list-style-type: none"> <li>EchoIfIndex.</li> <li>Remotelp.</li> <li>Locallp.</li> </ul>	All the members must be specified.
EchoIfIndex	Specifies the outgoing interface of the BFD echo packets.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration

				Reference.
Remotelp	Specifies the destination IP address of the BFD echo packets.	N/A	IPv4: String, dotted decimal notation.	N/A
LocalIp	Specifies the source IP address of the BFD echo packets.	N/A	IPv4: String, dotted decimal notation.	N/A
TypeCfd	Associates the track entry with CFD.	Data structure	Members include: <ul style="list-style-type: none"> <li>ServiceInstance.</li> <li>Mepld.</li> </ul>	All the members must be specified.
ServiceInstance	Specifies a service instance ID.	N/A	Unsigned integer. Value range: 1 to 32767.	N/A
Mepld	Specifies a MEP ID.	N/A	Unsigned integer. Value range: 1 to 8191.	N/A
TypeRoute	Associates the track entry with a route entry.	Data structure	Members include: <ul style="list-style-type: none"> <li>VRF.</li> <li>IpAddress.</li> <li>MaskLength.</li> </ul>	The IpAddress member and MaskLength member must be specified.
VRF	VRF instance name.	N/A	String. Length: 1 to 31 characters.	N/A
IpAddress	IP address of the route entry.	N/A	IPv4: String, dotted decimal notation.	N/A
MaskLength	Mask length of the route entry.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
TypeNqa	Associates the track entry with an NQA operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>AdminName.</li> <li>OperationTag.</li> <li>ReactionNum.</li> </ul>	All the members must be specified.
AdminName	Administrator name of the NQA operation.	N/A	String. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag of the NQA operation.	N/A	String. Length: 1 to 32 characters.	N/A
ReactionNum	Reaction entry associated with the NQA entry.	N/A	Unsigned integer. Value range: 1 to 10.	N/A
TypeList	Associates the track entry with a tracked list.	Data structure	Members include: <ul style="list-style-type: none"> <li>ListType.</li> </ul>	The ListType member must be specified.
ListType	Type of the tracked list.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Boolean AND list.</li> <li>2—Boolean OR list.</li> <li>3—Percentage threshold list.</li> </ul>	N/A

			<ul style="list-style-type: none"> <li>4—Weight threshold list.</li> </ul>	
TypeLldp	Associates the track entry with an LLDP neighbour.	Data structure	Members include: <ul style="list-style-type: none"> <li>IfIndex.</li> </ul>	The IfIndex member must be specified.
IfIndex	Interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.

## TRACK/TrackObjectList

This table contains information about objects in tracked lists.

### XML structure

```

<TRACK>
  <ObjectList>
    <Object>
      <TrackIndex></TrackIndex>
      <ObjectIndex></ObjectIndex>
      <ObjectSign></ObjectSign>
      <ObjectWeight></ObjectWeight>
    </Object>
  </ObjectList>
</TRACK>

```

### Table description

Item	Description
Feature name	TRACK
Table name	ObjectList
Table type	Multi-instance table
Row name	Object
Restrictions	You can configure objects for a track entry only when the track entry exists in the TRACKEntries table and has TrackType set to TypeList.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TrackIndex	Index of the track entry.	Index	Unsigned integer. Value range: 1 to 1024.	N/A
ObjectIndex	Object index.	Index	Unsigned integer. Value range: 1 to 1024.	N/A
ObjectSign	Whether or not to negate the state of the object.	N/A	Boolean: <ul style="list-style-type: none"><li>true—Negates the state of the object.</li><li>false—Does not negate the state of the object (default).</li></ul>	This column can be specified only when the track entry is associated with a Boolean list.
ObjectWeight	Weight of the object.	N/A	Unsigned integer. Value range: 1 to 255. Default: 10.	This column can be specified only when the track entry is associated with a weight threshold list.

## TRACK/ TrackOper

This table contains operation information about track entries.

## XML structure

```
<TRACK>
  <TrackOper>
    <Operation>
      <TrackIndex></TrackIndex>
      <PositiveDelay></PositiveDelay>
      <NegativeDelay></NegativeDelay>
      <PositiveThresholdPercent></PositiveThresholdPercent>
      <NegativeThresholdPercent></NegativeThresholdPercent>
      <PositiveThresholdWeight></PositiveThresholdWeight>
      <NegativeThresholdWeight></NegativeThresholdWeight>
    </Operation>
  </TrackOper>
</TRACK>
```

## Table description

Item	Description
Feature name	TRACK
Table name	TrackOper

Table type	Multi-instance table
Row name	Operation
Restrictions	You can configure the operation information for a track entry only when the track entry exists in the TRACKEntries table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TrackIndex	Index of the track entry.	Index	Unsigned integer. Value range: 1 to 1024.	N/A
PositiveDelay	Specifies the positive state notification delay in seconds.	N/A	Unsigned integer. Value range: 0 to 300. Default: 0.	N/A
NegativeDelay	Specifies the negative state notification delay in seconds.	N/A	Unsigned integer. Value range: 0 to 300. Default: 0.	N/A
PositiveThresholdPercent	Specifies the positive state threshold in percentage.	N/A	Unsigned integer. Value range: 1 to 100. Default: 1.	This column can be specified only when the track entry is associated with a percentage threshold list.
NegativeThresholdPercent	Specifies the negative state threshold in percentage.	N/A	Unsigned integer. Value range: 0 to 99. Default: 0.	This column can be specified only when the track entry is associated with a percentage threshold list.
PositiveThresholdWeight	Specifies the positive state threshold in weight.	N/A	Unsigned integer. Value range: 1 to 255. Default: 1.	This column can be specified only when the track entry is associated with a weight threshold list.
NegativeThresholdWeight	Specifies the negative state threshold in weight.	N/A	Unsigned integer. Value range: 0 to 254. Default: 0.	This column can be specified only when the track entry is associated with a weight threshold list.

# Contents

TRACK .....	1
TRACK/TrackEntries .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
TRACK/TrackObjectList .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
TRACK/TrackOper .....	5
XML structure .....	5
Table description .....	5
Columns .....	6



# TRACK

## TRACK/TrackEntries

This table contains information about track entries.

### XML structure

```
<TRACK>
  <TrackEntries>
    <TrackEntry>
      <TrackIndex></TrackIndex>
      <TypeInterface>
        <IfIndex></IfIndex>
        <IfStateType></IfStateType>
      </TypeInterface>
      <TypeBfd>
        <EchoIfIndex></EchoIfIndex>
        <RemoteIp></RemoteIp>
        <LocalIp></LocalIp>
      </TypeBfd>
      <TypeCfd>
        <ServiceInstance></ServiceInstance>
        <MepId></MepId>
      </TypeCfd>
      <TypeRoute>
        <VRF></VRF>
        <IpAddress></IpAddress>
        <MaskLength></MaskLength>
      </TypeRoute>
      <TypeNqa>
        <AdminName></AdminName>
        <OperationTag></OperationTag>
        <ReactionNum></ReactionNum>
      </TypeNqa>
      <TypeList>
        <ListType></ListType>
      </TypeList>
      <TypeLldp>
        <IfIndex></IfIndex>
      </TypeLldp>
    </TrackEntry>
  </TrackEntries>
</TRACK>
```

## Table description

Item	Description
Feature name	TRACK
Table name	TrackEntries
Table type	Multi-instance table
Row name	TrackEntry
Restrictions	Only one tracked object type can be specified for a track entry. You cannot modify the settings of the track entry after creating it in this table. If you need do this, you must delete the track entry and then create it again.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TrackIndex	Index of the track entry.	Index	Unsigned integer. Value range: 1 to 1024.	N/A
TypeInterface	Associates the track entry with an interface.	Data structure	Members include: <ul style="list-style-type: none"> <li>IfIndex.</li> <li>IfStateType.</li> </ul>	All the members must be specified.
IfIndex	Interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
IfStateType	Type of the interface state.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Link state.</li> <li>2—Physical state.</li> <li>3—IPv4 protocol state.</li> <li>4—IPv6 protocol state.</li> </ul>	N/A
TypeBfd	Associates the track entry with a BFD session.	Data structure	Members include: <ul style="list-style-type: none"> <li>EchoIfIndex.</li> <li>Remotelp.</li> <li>Locallp.</li> </ul>	All the members must be specified.
EchoIfIndex	Specifies the outgoing interface of the BFD echo packets.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
Remotelp	Specifies the destination IP address of the BFD echo packets.	N/A	IPv4: String, dotted decimal notation.	N/A
Locallp	Specifies the source IP address of the BFD echo packets.	N/A	IPv4: String, dotted decimal notation.	N/A
TypeCfd	Associates the track entry with CFD.	Data structure	Members include: <ul style="list-style-type: none"> <li>ServiceInstance.</li> <li>Mepld.</li> </ul>	All the members must be specified.
ServiceInstance	Specifies a service instance ID.	N/A	Unsigned integer. Value range: 1 to 32767.	N/A
Mepld	Specifies a MEP ID	N/A	Unsigned integer. Value range: 1 to 8191.	N/A
TypeRoute	Associates the track entry with a route entry.	Data structure	Members include: <ul style="list-style-type: none"> <li>VRF.</li> <li>IpAddress.</li> <li>MaskLength.</li> </ul>	The IpAddress member and MaskLength member must be specified.
VRF	VRF instance name.	N/A	String. Length: 1 to 31 characters.	N/A
IpAddress	IP address of the route entry.	N/A	IPv4: String, dotted decimal notation.	N/A
MaskLength	Mask length of the route entry.	N/A	Unsigned integer. Value range: 0 to 32.	N/A
TypeNqa	Associates the track entry with an NQA operation.	Data structure	Members include: <ul style="list-style-type: none"> <li>AdminName.</li> <li>OperationTag.</li> <li>ReactionNum.</li> </ul>	All the members must be specified.
AdminName	Administrator name of the NQA operation.	N/A	String. Length: 1 to 32 characters.	N/A
OperationTag	Operation tag of the NQA operation.	N/A	String. Length: 1 to 32 characters.	N/A
ReactionNum	Reaction entry associated with the NQA entry.	N/A	Unsigned integer. Value range: 1 to 10.	N/A
TypeList	Associates the track entry with a tracked list.	Data structure	Members include: <ul style="list-style-type: none"> <li>ListType.</li> </ul>	The ListType member must be specified.
ListType	Type of the tracked list.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Boolean AND list.</li> <li>2—Boolean OR list.</li> <li>3—Percentage threshold</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			list. • 4—Weight threshold list.	
TypeLldp	Associates the track entry with an LLDP neighbour.	Data structure	Members include: • IfIndex.	The IfIndex member must be specified.
IfIndex	Interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.

## TRACK/TrackObjectList

This table contains information about objects in tracked lists.

### XML structure

```

<TRACK>
  <ObjectList>
    <Object>
      <TrackIndex></TrackIndex>
      <ObjectIndex></ObjectIndex>
      <ObjectSign></ObjectSign>
      <ObjectWeight></ObjectWeight>
    </Object>
  </ObjectList>
</TRACK>

```

### Table description

Item	Description
Feature name	TRACK
Table name	ObjectList
Table type	Multi-instance table
Row name	Object
Restrictions	You can configure objects for a track entry only when the track entry exists in the TRACKEntries table and has TrackType set to TypeList.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TrackIndex	Index of the track entry.	Index	Unsigned integer. Value range: 1 to 1024.	N/A
ObjectIndex	Object index.	Index	Unsigned integer. Value range: 1 to 1024.	N/A
ObjectSign	Whether or not to negate the state of the object.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Negates the state of the object.</li><li><b>false</b>—Does not negate the state of the object.</li></ul>	This column can be specified only when the track entry is associated with a Boolean list.
ObjectWeight	Weight of the object.	N/A	Unsigned integer. Value range: 1 to 255.	This column can be specified only when the track entry is associated with a weight threshold list.

## TRACK/TrackOper

This table contains operation information about track entries.

## XML structure

```
<TRACK>
  <TrackOper>
    <Operation>
      <TrackIndex></TrackIndex>
      <TrackState></TrackState>
      <PositiveDelay></PositiveDelay>
      <NegativeDelay></NegativeDelay>
      <NotifyDelay></NotifyDelay>
      <PositiveThresholdPercent></PositiveThresholdPercent>
      <NegativeThresholdPercent></NegativeThresholdPercent>
      <PositivePercent></PositivePercent>
      <PositiveThresholdWeight></PositiveThresholdWeight>
      <NegativeThresholdWeight></NegativeThresholdWeight>
      <PositiveWeight></PositiveWeight>
    </Operation>
  </TrackOper>
</TRACK>
```

## Table description

Item	Description
Feature name	TRACK

Table name	TrackOper
Table type	Multi-instance table
Row name	Operation
Restrictions	You can configure the operation information for a track entry only when the track entry exists in the TRACKEntries table.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TrackIndex	Index of the track entry.	Index	Unsigned integer. Value range: 1 to 1024.	N/A
TrackState	State of the track entry.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—NotReady.</li> <li>2—Positive.</li> <li>3—Negative.</li> </ul>	N/A
PositiveDelay	Specifies the positive state notification delay in seconds.	N/A	Unsigned integer. Value range: 0 to 300.	N/A
NegativeDelay	Specifies the negative state notification delay in seconds.	N/A	Unsigned integer. Value range: 0 to 300.	N/A
NotifyDelay	Remaining time of notification delay in seconds.	N/A	Unsigned integer. Value range: 0 to 300.	N/A
PositiveThresholdPercent	Specifies the positive state threshold in percentage.	N/A	Unsigned integer. Value range: 1 to 100.	This column can be specified only when the track entry is associated with a percentage threshold list.
NegativeThresholdPercent	Specifies the negative state threshold in percentage.	N/A	Unsigned integer. Value range: 0 to 99.	This column can be specified only when the track entry is associated with a percentage threshold list.
PositivePercent	Percentage of positive objects in the tracked list.	N/A	Unsigned integer. Value range: 0 to 100.	N/A
PositiveThresholdWeight	Specifies the positive state threshold in weight.	N/A	Unsigned integer. Value range: 1 to 255.	This column can be specified only when the track entry is associated with a weight threshold list.
NegativeThresholdWeight	Specifies the negative state threshold in weight.	N/A	Unsigned integer. Value range: 0 to 254.	This column can be specified only when the track entry is associated with a

Column name	Column description	Column type	Data type and restrictions	Remarks
				weight threshold list.
PositiveWeight	Weight of positive objects in the tracked list.	N/A	Unsigned integer. Value range: 0 to 4080.	N/A

# Contents

- TRACK .....1
  - TRACK/TrackEntries .....1
  - TRACK/ObjectList.....1
  - TRACK/TrackOper .....2



# TRACK

## TRACK/TrackEntries

Message	Explanation
Some required non-index columns are missing for the track entry of the specified type. Track类型中的非索引列不完整。	All the members of tracked object type must be specified
Only one tracked object type can be specified for a track entry. 只能为一个Track项指定一种类型。	Only one tracked object type can be specified for a track entry.
The tracked object type must be specified. 必须为一个Track项指定类型。	The tracked object type must be specified.
The interface doesn't exist or it doesn't support the configuration. 接口不存在或者接口不支持该配置。	The interface doesn't exist or it doesn't support the configuration.
The specified VRF doesn't exist. 指定的VRF不存在。	Please create vpn-instance first.
Invalid IP address. 无效的地址。	Only class A,class B,class C addresses are available.
The specified track entry has already existed." 指定的Track项已存在。	Configuration already exists, when set new configuration.
The specified track entry doesn't exist. 指定的Track项不存在。	The specified configuration doesn't exist, when getting or deleting it.
Failed to apply the configuration. 配置执行失败。	You cannot modify the settings of the track entry after creating it in this table. If you need do this, you must delete the track entry and then create it again.
Track is not configured. 未配置TRACK。	Track service has not been started.
Do not specify the non-index columns. 不能配置非索引列。	Do not specify the non-index columns when deleting it.

## TRACK/ObjectList

Message	Explanation
Failed to apply the configuration. 配置执行失败。	Please create track entry first.

# TRACK/TrackOper

Message	Explanation
A minimum of one non-index column is required. 至少需配置一条非索引列。	Please specify at least one of non-index column.
Failed to apply the configuration. 配置执行失败。	Please create track entry first.

# Contents

TroubleShoot .....	1
TroubleShoot/WebDiagnose.....	1
XML structure.....	1
Response XML structure.....	1
Table description.....	1
Columns.....	2
Response columns .....	2
TroubleShoot/StartPktTrace .....	2
XML structure.....	2
Table description.....	3
Columns.....	3
TroubleShoot/StopPktTrace .....	4
XML structure.....	4
Table description.....	4
Columns.....	4
TroubleShoot/ExportCapture .....	4
XML structure.....	4
Table description.....	5
Columns.....	5

# TroubleShoot

## TroubleShoot/WebDiagnose

This table is used for starting Web diagnosis. All the columns are diagnosis arguments.

### XML structure

```
<TroubleShoot>
  <WebDiagnose>
    <WebDiagnoseItem>
      <ClientIP></ClientIP>
      <WebUrl></WebUrl>
    </WebDiagnoseItem>
  </WebDiagnose>
</TroubleShoot>
```

### Response XML structure

```
<TroubleShoot>
  <WebDiagnose>
    <WebDiagnoseItem>
      <ItemID></ItemID>
      <ItemName></ItemName>
      <Result></Result>
      <Information></Information>
    </WebDiagnoseItem>
  </WebDiagnose>
</TroubleShoot>
```

### Table description

Item	Description
Feature name	TroubleShoot
Table name	WebDiagnose
Table type	Multi-instance table
Row name	WebDiagnoseItem
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientIP	IP address of client	Index	IP address.	Example: 1.1.1.1.
WebUrl	URL of the Web server	Index	String. Length: 1 to 253 characters.	Example: http://www.example.com/index.html.

## Response columns

Column name	Column description	Column type	Data type and restrictions
ItemID	Diagnosis item ID	Index	Unsigned integer.
ItemName	Diagnosis item name	N/A	String. Length: 1 to 63 characters.
Result	Diagnosis result	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Succeeded.</li><li><b>false</b>—Failed.</li></ul>
Information	Detailed diagnosis information	N/A	String. <ul style="list-style-type: none"><li>Length: 1 to 1023 characters.</li></ul>

## TroubleShoot/StartPktTrace

This table is used for starting packet trace diagnosis. All the columns are diagnosis arguments.

## XML structure

```
<TroubleShoot>
  <StartPktTrace>
    <Type></Type>
    <IfIndex></IfIndex>
    <Protocol></Protocol>
    <IPAddrVer></IPAddrVer>
    <SrcIP></SrcIP>
    <DstIP></DstIP>
    <SrcPort></SrcPort>
    <DstPort></DstPort>
    <SrcMAC></SrcMAC>
    <DstMAC></DstMAC>
    <VlanID></VlanID>
    <FileName></FileName>
    <RealFlowDiagTime></RealFlowDiagTime>
```

```

</StartPktTrace>
</TroubleShoot>

```

## Table description

Item	Description
Feature name	TroubleShoot
Table name	StartPktTrace
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Type	Diagnosis type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Construct packet diagnosis.</li> <li>2—Real flow diagnosis.</li> <li>3—Import packet diagnosis.</li> </ul>	Required.
IfIndex	Interface index	N/A	Unsigned integer.	Required when diagnosis type is 1 or 3.
Protocol	Packet protocol type	N/A	Unsigned integer. Value range: 0 to 255.	Required when diagnosis type is 1.
IPAddrVer	IP version	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4.</li> <li>2—IPv6.</li> </ul>	Required.
SrcIP	Source IP address	N/A	IPv4 address or IPv6 address.	Required when diagnosis type is 1.
DstIP	Destination IP address	N/A	IPv4 address or IPv6 address.	Required when diagnosis type is 1.
SrcPort	Source port	N/A	Unsigned integer. Value range: 0 to 65535.	Required when diagnosis type is 1.
DstPort	Destination port	N/A	Unsigned integer. Value range: 0 to 65535.	Required when diagnosis type is 1.
SrcMAC	Source MAC address	N/A	MAC address.	N/A
DstMAC	Destination MAC address	N/A	MAC address.	N/A
VlanID	VLAN ID	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
FileName	Selects a .pcap or .cap file to import	N/A	String. Length: 1 to 253 characters.	Required when diagnosis type is 3.

Column name	Column description	Column type	Data type and restrictions	Remarks
RealFlowDiag Time	Duration for service diagnosis based on real traffic (seconds)	N/A	Unsigned integer. Value range: 5 to 600.	Default value: 10 seconds.

## TroubleShoot/StopPktTrace

This table is used to stop packet trace diagnosis.

### XML structure

```
<TroubleShoot>
  <StopPktTrace>
    <Stop></Stop>
  </StopPktTrace>
</TroubleShoot>
```

### Table description

Item	Description
Feature name	TroubleShoot
Table name	StopPktTrace
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Stop	Stop packet trace diagnosis	N/A	N/A	This column must be empty.

## TroubleShoot/ExportCapture

This table is used to export the captured packet to a file.

### XML structure

```
<TroubleShoot>
  <ExportCapture>
    <Export/>
  </ExportCapture>
</TroubleShoot>
```

```
</ExportCapture>  
</TroubleShoot>
```

## Table description

Item	Description
Feature name	TroubleShoot
Table name	ExportCapture
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Export	Export the captured packet to a file.	N/A	N/A	This column must be empty.



# Contents

- TroubleShoot .....1
  - TroubleShoot/PktTraceInfos .....1
    - XML structure .....1
    - Table description .....1
    - Columns .....1
  - TroubleShoot/PktTraceState .....2
    - XML structure .....2
    - Table description .....2
    - Columns .....2

# TroubleShoot

## TroubleShoot/PktTraceInfos

This table contains packet trace diagnosis information.

### XML structure

```
<TroubleShoot>
  <PktTraceInfos>
    <PktTraceInfo>
      <FlowID></FlowID>
      <PacketID></PacketID>
      <ItemID></ItemID>
      <FlowDescription></FlowDescription>
      <PktDescription></PktDescription>
      <Time></Time>
      <ItemName></ItemName>
      <Result></Result>
      <ResultStr></ResultStr>
    </PktTraceInfo>
  </PktTraceInfos>
</TroubleShoot>
```

### Table description

Item	Description
Feature name	TroubleShoot
Table name	PktTraceInfos
Table type	Multi-instance table
Row name	PktTraceInfo
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
FlowID	Flow ID	Index	Unsigned integer.
PacketID	Packet ID	Index	Unsigned integer.
ItemID	Item ID	Index	Unsigned integer.
FlowDescription	Flow description	N/A	String. Length: 1 to 1023 characters.

Column name	Column description	Column type	Data type and restrictions
PktDescription	Packet description	N/A	String. Length: 1 to 1023 characters.
Time	Time when the diagnosis point is added.	N/A	String. Length: 1 to 31 characters.
ItemName	Diagnosis item name	N/A	String. Length: 1 to 63 characters.
Result	Diagnosis result	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Succeeded.</li> <li><b>false</b>—Failed.</li> </ul>
ResultStr	Diagnosis result description	N/A	String. Length: 1 to 1023 characters.

## TroubleShoot/PktTraceState

This table contains packet trace diagnosis status information.

### XML structure

```

<TroubleShoot>
  <PktTraceState>
    <State></State>
  </PktTraceState>
</TroubleShoot>

```

### Table description

Item	Description
Feature name	TroubleShoot
Table name	PktTraceState
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
State	Diagnosis status	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Diagnosis is not finished yet.</li> <li><b>false</b>—Diagnosis is finished.</li> </ul>

# Contents

Tunnel .....	1
Tunnel/Detect .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Tunnel/ClearAllP2MPTables .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
Tunnel/ClearP2MPTables .....	2
XML structure .....	2
Table description .....	2
Columns .....	3

# Tunnel

## Tunnel/Detect

This table is used to detect if vxlan tunnel is connected.

### XML structure

```
<TUNNEL>
  <Detect>
    <StartDetect>
      <ID></ID>
      <RetryCount></RetryCount>
    </StartDetect>
  </Detect>
</TUNNEL>
```

### Table description

Item	Description
Feature name	TUNNEL
Table name	Detect
Table type	Multi-instance table
Row name	StartDetect
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
ID	Tunnel ID	Index	N/A
RetryCount	Retry count	N/A	<ul style="list-style-type: none"><li>Unsigned integer.</li></ul> Value range: 1 to 5. Default: 3

## Tunnel/ClearAllP2MPTables

This table is used to clear all P2MP dynamic tunnel entries.

### XML structure

```
<TUNNEL>
  <ClearAllP2MPTables>
```

```

    <Clear></Clear>
  </ClearAllP2MPTables>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	ClearAllP2MPTables
Table type	Single-instance table
Row name	Clear
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear all P2MP dynamic tunnel entries	N/A	N/A	This column must be empty.

## Tunnel/ClearP2MPTables

This table is used to clear specified P2MP dynamic tunnel entries.

## XML structure

```

<TUNNEL>
  <ClearP2MPTables>
    <ClearP2MPTable>
      <ID></ID>
      <DestIPv4Addr></DestIPv4Addr>
      <DestIPv6Addr></DestIPv6Addr>
      <TunnelDestIPv4Addr></TunnelDestIPv4Addr>
      <TunnelDestIPv6Addr></TunnelDestIPv6Addr>
      <Clear></Clear>
    </ClearP2MPTable>
  </ClearP2MPTables>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	ClearP2MPTables

Table type	Multi-instance table
Row name	ClearP2MPTable
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Tunnel ID	Index	Unsigned integer.	N/A
DestIPv4Addr	Branch network IPv4 address for a tunnel entry.	N/A	String, dotted decimal notation.	This column is available when the DestIPv6Addr column is empty.
DestIPv6Addr	Branch network IPv6 address for a tunnel entry.	N/A	Hexadecimal string, colon-separated.	This column is available when the DestIPv4Addr column is empty.
TunnelDestIPAddr	Tunnel destination IPv4 address for a tunnel entry	N/A	String, dotted decimal notation.	This column is available when the TunnelDestIPv6Addr column is empty.
TunnelDestIPv6Addr	Tunnel destination IPv6 address for a tunnel entry	N/A	Hexadecimal string, colon-separated.	This column is available when the TunnelDestIPAddr column is empty.
Clear	Clear all P2MP dynamic tunnel entries	N/A	N/A	This column must be empty.

# Contents

- TUNNEL .....1
  - TUNNEL/Tunnels.....1
    - XML structure.....1
    - Table description.....2
    - Columns.....2
  - TUNNEL/GlobalConfig .....7
    - XML structure.....7
    - Table description.....7
    - Columns.....8
  - TUNNEL/GREP2MPTemplates .....8
    - XML structure.....8
    - Table description.....8
    - Columns.....9
  - TUNNEL/GREP2MPTemplateMaps .....9
    - XML structure.....9
    - Table description.....9
    - Columns.....10
  - TUNNEL/IP6GREP2MPTemplates.....10
    - XML structure.....10
    - Table description.....11
    - Columns.....11
  - TUNNEL/IP6GREP2MPTemplateMaps .....11
    - XML structure.....11
    - Table description.....11
    - Columns.....12
  - TUNNEL/VXLANBFDs .....12
    - XML structure.....12
    - Table description.....13
    - Columns.....13
  - TUNNEL/SRv6SIDLists .....13
    - XML structure.....13
    - Table description.....14
    - Columns.....14
  - TUNNEL/SRv6TunnelIngressBfds .....14
    - XML structure.....14
    - Table description.....15
    - Columns.....15



# TUNNEL

## TUNNEL/Tunnels

This table contains basic Tunnel information.

### XML structure

```
<TUNNEL>
  <Tunnels>
    <Tunnel>
      <ID></ID>
      <Mode></Mode>
      <IPv4Addr>
        <SrcAddr></SrcAddr>
        <SrcIfIndex></SrcIfIndex>
        <DstAddr></DstAddr>
      </IPv4Addr>
      <IPv6Addr>
        <SrcAddr></SrcAddr>
        <SrcIfIndex></SrcIfIndex>
        <DstAddr></DstAddr>
      </IPv6Addr>
      <Tos></Tos>
      <Dfbit></Dfbit>
      <Ttl></Ttl>
      <OutIfIndex></OutIfIndex>
      <Keepalive>
        <Interval></Interval>
        <Times></Times>
      </Keepalive>
      <EncapLimit></EncapLimit>
      <VRF></VRF>
      <GRE>
        <Key></Key>
        <Checksum></Checksum>
        <VpcEnable></VpcEnable>
        <P2MPTemplate></P2MPTemplate>
      </GRE>
      <ServiceClass></ServiceClass>
      <P2MP>
        <AgingTime></AgingTime>
        <BackupTunnel></BackupTunnel>
        <BranchIPv4NetMaskLength></BranchIPv4NetMaskLength>
        <BranchIPv6NetMaskLength></BranchIPv6NetMaskLength>
      </P2MP>
    </Tunnel>
  </Tunnels>
</TUNNEL>
```

```

<StaticRoute>
  <Enable></Enable>
  <Preference></Preference>
</StaticRoute>
<SRV6>
  <SRv6SIDListName></SRv6SIDListName>
  <SRv6BackupSIDListName></SRv6BackupSIDListName>
</SRV6>
</Tunnel>
</Tunnels>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	Tunnels
Table type	Multi-instance table
Row name	Tunnel
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Tunnel ID.	Index	Unsigned integer.	N/A
Mode	Tunnel mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—GRE tunnel with the transport protocol being IPv4.</li> <li>2—GRE tunnel with the transport protocol being IPv6.</li> <li>3—IPv4 over IPv4 tunnel.</li> <li>4—IPv6 over IPv4 manually configured tunnel.</li> <li>5—IPv6 over IPv4 automatic tunnel.</li> <li>6—IPv6 over IPv4 6to4 tunnel.</li> <li>7—IPv6 over IPv4 ISATAP tunnel.</li> <li>8—IPv6 tunnel. Encapsulates IPv6 or IPv4 packets in IPv6.</li> <li>9—DVPN tunnel with the passenger protocol being</li> </ul>	Mode must be set when creating a tunnel, and cannot be modified after creating.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<p>UDP and the transport protocol being IPv4.</p> <ul style="list-style-type: none"> <li>• 10—DVPN tunnel with the passenger protocol being GRE and the transport protocol being IPv4.</li> <li>• 11—DVPN tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> <li>• 12—DVPN tunnel with the passenger protocol being GRE and the transport protocol being IPv6.</li> <li>• 13—CRLSP tunnel.</li> <li>• 14—Multicast GRE tunnel with the transport protocol being IPv4.</li> <li>• 15—Multicast GRE tunnel with the transport protocol being IPv6.</li> <li>• 16—IPsec tunnel with the transport protocol being IPv4.</li> <li>• 17—IPsec tunnel with the transport protocol being IPv6.</li> <li>• 18—EVI tunnel with the transport protocol being IPv4.</li> <li>• 19—EVI tunnel with the transport protocol being IPv6.</li> <li>• 20—EVI link with the transport protocol being IPv4.</li> <li>• 21—EVI link with the transport protocol being IPv6.</li> <li>• 22—DS-Lite AFTR tunnel.</li> <li>• 23—CRLSP automatic tunnel.</li> <li>• 24—VXLAN tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>• 25—VXLAN tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> <li>• 26—NVE tunnel with the transport protocol being IPv4.</li> <li>• 27—NVE tunnel with the transport protocol being IPv6.</li> </ul>	

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>28—NVGRE tunnel with the passenger protocol being GRE and the transport protocol being IPv4.</li> <li>29—NVGRE tunnel with the passenger protocol being GRE and the transport protocol being IPv6.</li> <li>30—IPv6 over IPv6 tunnel.</li> <li>31—IPv4 over IPv6 tunnel.</li> <li>32—IPv6 over IPv4 6rd tunnel.</li> <li>33—VXLANDCI tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>34—VXLANDCI tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> <li>35—MGRE tunnel with the passenger protocol being GRE and the transport protocol being IPv4.</li> <li>36—IPv4 GRE P2MP tunnel.</li> <li>37—IPv6 GRE P2MP tunnel.</li> <li>38—TE P2MP tunnel.</li> <li>39—IPv6 SRLSP tunnel.</li> </ul>	
IPv4Addr	IPv4 source and destination address of tunnel.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcAddr</li> <li>SrcIfIndex</li> <li>DstAddr</li> </ul>	This column is available only for tunnels with the transport protocol being IPv4.
SrcAddr	Tunnel source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
SrcIfIndex	Tunnel source interface index.	N/A	Unsigned integer.	This column is available when the SrcAddr column is empty.
DstAddr	Tunnel destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 2.2.2.2.
IPv6Addr	IPv6 source and destination address of tunnel.	Data structure	Members include: <ul style="list-style-type: none"> <li>SrcAddr</li> <li>SrcIfIndex</li> <li>DstAddr</li> </ul>	This column is available only for tunnels with the transport protocol being IPv6.

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcAddr	Tunnel source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
SrcIfIndex	Tunnel source interface index.	N/A	Unsigned integer.	This column is available when the SrcAddr column is empty.
DstAddr	Tunnel destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2:2::2:2.
Tos	ToS value in the IP header of the tunneled packet.	N/A	Unsigned integer. Value range: 0 to 255. Default: 0.	The value 0 indicates that it is copied from the IP header of the inner layer.
Dfbit	Indicates whether to set the DF bit in the IP header of the tunneled packet.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—sets DF bit</li> <li>false—does not set DF bit(default).</li> </ul>	N/A
Ttl	TTL(Time to live) value in the IP header of the tunneled packet.	N/A	Unsigned integer. Value range: 1 to 255. Default: 255.	N/A
OutIfIndex	Tunnel outbound interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Keepalive	Enable keepalive function of tunnel	Data structure	Members include: <ul style="list-style-type: none"> <li>interval.</li> <li>times.</li> </ul>	Currently, only GRE tunnel and EVI tunnel support this function.
Interval	Interval of transmitting keepalive packets	N/A	Unsigned integer. Value range: 1 to 32767(second). For GRE tunnel, default value is 10, for EVI tunnel, default value is 5.	N/A
Times	Maximum times of retransmitting keepalive packets	N/A	Unsigned integer. Value range: 1 to 255. For GRE tunnel, default value is 3, for EVI tunnel, default value is 2.	N/A
EncapLimit	Maximum number of nested encapsulations of a packet allowed on a tunnel interface	N/A	Unsigned integer. Value range: 0 to 10. Default: no limit to the nested encapsulations of a packet	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF to which the tunnel destination belongs.	N/A	String, case-sensitive. Length: 1 to 31 characters.	Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
GRE	Parameters of GRE tunnel	Data structure	Members include: <ul style="list-style-type: none"> <li>key.</li> <li>checksum.</li> </ul>	Only GRE tunnel support these parameters.
Key	Key to check for the validity of packets received on a GRE tunnel interface.	N/A	Unsigned integer. Value range: 0 to 4294967295. Default: no key is set.	N/A
Checksum	Whether to check GRE checksum	N/A	Boolean: <ul style="list-style-type: none"> <li>true—check GRE checksum.</li> <li>false—does not check GRE checksum(default).</li> </ul>	N/A
VpcEnable	Whether to carry VPC information in GRE packets.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Carry.</li> <li>false—Not carry.</li> </ul>	N/A
P2MPTemplate	GRE P2MP tunnel template.	N/A	String. Length: 1 to 31 characters.	N/A
ServiceClass	Service class for a tunnel.	N/A	Unsigned integer. The value range varies by device model.	N/A
P2MP	GRE P2MP tunnel parameters	Data structure	Members include: <ul style="list-style-type: none"> <li>AgingTime.</li> <li>BackupTunnel.</li> <li>BrachIPv4NetMaskLength.</li> <li>BrachIPv6NetMaskLength.</li> </ul>	Only GRE P2MP tunnel support these parameters.
AgingTime	The aging time of the GRE P2MP tunnel	N/A	Unsigned integer. Value range: 1 to 86400. Default: 5s.	N/A
BackupTunnel	The backup tunnel interface for a GRE P2MP tunnel	N/A	Unsigned integer.	N/A
BrachIPv4NetMaskLength	GRE P2MP branch IPv4 mask length	N/A	Unsigned integer. Value range: 0 to 32. Default: 32.	N/A
BrachIPv6NetMaskLength	GRE P2MP branch IPv6	N/A	Unsigned integer. Value range: 0 to 128.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	prefix length		Default: 128.	
StaticRoute	Static routing parameters of tunnel	Data structure	Members include: <ul style="list-style-type: none"> <li>enabel.</li> <li>preference.</li> </ul>	Only TE and P2MP tunnel support these parameters.
Enable	Whether to enable automatic configuration of a static route on the tunnel	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable.</li> <li>false—Disable(default).</li> </ul>	N/A
Preference	Preference of the static route	N/A	Unsigned integer. Value range: 1 to 255.	The default value of preference is 60. This column is configurable only if the enable column has a value of true.
SRV6	IPv6 SR tunnel parameters	Data structure	Members include: <ul style="list-style-type: none"> <li>SRv6SIDListName.</li> <li>SRv6BackupSIDListName.</li> </ul>	Only IPv6 SR tunnel support these parameters.
SRv6SIDListName	SID list name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
SRv6BackupSIDListName	Backup SID list name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A

## TUNNEL/GlobalConfig

This table contains global configuration information.

### XML structure

```

<TUNNEL>
  <GlobalConfig>
    <VxlanUdpPort></VxlanUdpPort>
    <DropInvalidChksumPkt></DropInvalidChksumPkt>
    <DropInvalidVlanTagPkt></DropInvalidVlanTagPkt>
    <VxlanIpForward></VxlanIpForward>
  </GlobalConfig>
</TUNNEL>

```

### Table description

Item	Description
Feature name	TUNNEL
Table name	GlobalConfig
Table type	Single-instance table

Item	Description
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VxlanUdpPort	UDP port on which tunnel receives VXLAN packets	N/A	Unsigned integer. Value range: 1 to 65535. Default: 4789.	N/A
DropInvalidChecksumPkt	Whether to drop VXLAN packets with invalid UDP checksum	N/A	Boolean: <ul style="list-style-type: none"> <li>true—drop</li> <li>false—not drop (default)</li> </ul>	N/A
DropInvalidVlanTagPkt	Whether to drop VXLAN packets with invalid VLAN tag after tunnel de-encapsulation	N/A	Boolean: <ul style="list-style-type: none"> <li>true—drop</li> <li>false—not drop (default)</li> </ul>	N/A
VxlanIpForward	Whether to use the L3 forwarding mode	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Use L3 forwarding mode (default)</li> <li>false—Use L2 forwarding mode</li> </ul>	N/A

## TUNNEL/GREP2MPTemplates

This table contains GRE P2MP tunnel templates.

## XML structure

```

<TUNNEL>
  <GREP2MPTemplates>
    <GREP2MPTemplate>
      <TemplateName></TemplateName>
    </GREP2MPTemplate>
  </GREP2MPTemplates>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	GREP2MPTemplates
Table type	Multi-instance table



Item	Description
Row name	GREP2MPTemplate
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TemplateName	GRE P2MP tunnel template name.	Index	String. Length: 1 to 31 characters.	N/A

## TUNNEL/GREP2MPTemplateMaps

This table contains map information about tunnel mapping entries in GRE P2MP tunnel templates.

## XML structure

```

<TUNNEL>
  <GREP2MPTemplateMaps>
    <GREP2MPTemplateMap>
      <TemplateName></TemplateName>
      <VrfIndex></VrfIndex>
      <VpcId></VpcId>
      <BranchNetworkIPAddr></BranchNetworkIPAddr>
      <BranchNetworkIPAddrMask></BranchNetworkIPAddrMask>
      <TunnelDestIPAddr></TunnelDestIPAddr>
      <ChecksumFill></ChecksumFill>
    </GREP2MPTemplateMap>
  </GREP2MPTemplateMaps>
</TUNNEL>

```

批注 [(1)]: 只有 V7NFVB64D020 分支支持此行

## Table description

Item	Description
Feature name	TUNNEL
Table name	GREP2MPTemplateMaps
Table type	Multi-instance table
Row name	GREP2MPTemplateMap
Restrictions	None
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TemplateName	GRE P2MP tunnel template name.	Index	String. Length: 1 to 31 characters.	N/A
VrfIndex	VPN index for a tunnel mapping.	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
VpcId	VPC ID for a tunnel mapping	N/A	Unsigned integer.	Example: 123.
BranchNetworkIPAddr	Branch network IP address for a tunnel mapping.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
BranchNetworkIPAddrMask	Mask of the branch network IP address.	Index	String, dotted decimal notation.	The member of BranchNetworkIPAddr must also be specified.
TunnelDestIPAddr	Tunnel destination IP address for a tunnel mapping.	Index	String, dotted decimal notation.	Example: 2.2.2.2.
ChecksumFill	Checksum value.	N/A	String, dotted decimal notation.	Example: 3.3.3.3.

批注 [I(2)]: 只有 V7NFVB64D020 分支支持此行

批注 [zK(3)]: NFVB64D020SP 分支

TUNNEL/IP6GREP2MPTemplates

This table contains information about IPv6 GRE P2MP tunnel templates.

XML structure

```
<TUNNEL>
  <IP6GREP2MPTemplates>
    <IP6GREP2MPTemplate>
      <TemplateName></TemplateName>
    </IP6GREP2MPTemplate>
  </IP6GREP2MPTemplates>
</TUNNEL>
```

## Table description

Item	Description
Feature name	TUNNEL
Table name	IP6GREP2MPTemplates
Table type	Multi-instance table
Row name	IP6GREP2MPTemplate
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TemplateName	IPv6 GRE P2MP tunnel template name.	Index	String. Length: 1 to 31 characters.	N/A

## TUNNEL/IP6GREP2MPTemplateMaps

批注 [zK(4): NFVB64D020SP 分支

This table contains information about IPv6 tunnel mapping entries in IPv6 GRE P2MP tunnel templates.

## XML structure

```
<TUNNEL>
  <IP6GREP2MPTemplateMaps>
    <IP6GREP2MPTemplateMap>
      <TemplateName></TemplateName>
      <VrfIndex></VrfIndex>
      <BranchNetworkIPAddr></BranchNetworkIPAddr>
      <BranchNetworkIPAddrMask></BranchNetworkIPAddrMask>
      <TunnelDestIPv6Addr></TunnelDestIPv6Addr>
      <ChecksumFill></ChecksumFill>
    </IP6GREP2MPTemplateMap>
  </IP6GREP2MPTemplateMaps>
</TUNNEL>
```

## Table description

Item	Description
Feature name	TUNNEL
Table name	IP6GREP2MPTemplateMaps
Table type	Multi-instance table

Item	Description
Row name	IP6GREP2MPTemplateMap
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TemplateName	IPv6 GRE P2MP tunnel template name.	Index	String. Length: 1 to 31 characters.	N/A
VrfIndex	VPN index for a tunnel mapping.	Index	Unsigned integer.	Some versions support VRF name (VPN instance name). For more information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in <i>L3vpn NETCONF XML API Data Reference</i> .
BranchNetworkIPAddr	Branch network IPv4 address for a tunnel mapping.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
BranchNetworkIPAddrMask	Mask of the branch network IPv4 address.	Index	String, dotted decimal notation.	BranchNetworkIPAddr must also be specified.
TunnelDestinationIPv6Addr	Tunnel destination IPv6 address for a tunnel mapping.	Index	Hexadecimal string, colon-separated.	Example: 2::2:2:2.
ChecksumFill	Checksum value.	N/A	String, dotted decimal notation.	Example: 3.3.3.3.

## TUNNEL/VXLANBFDs

This table contains VXLAN tunnel BFD information-

## XML structure

```

<TUNNEL>
  <VXLANBFDs>
    <VXLANBFD>
      <ID></ID>
      <Enable></Enable>
      <DMAC></DMAC>
      <MinRx></MinRx>
      <MinTx></MinTx>

```

```

    </VXLANBFD>
  </VXLANBFDs>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	VXLANBFDs
Table type	Multi-instance table
Row name	VXLANBFD
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Tunnel ID	Index	Unsigned integer.	N/A
Enable	Whether BFD is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>	N/A
DMAC	Destination MAC address	N/A	String, six groups of two hexadecimal digits, hyphen-separated. Length: 1 to 17 characters.	N/A
MinRx	The minimum receiving interval of BFD	N/A	Unsigned integer. Unit: ms	Depend on device.
MinTx	The minimum sending interval of BFD	N/A	Unsigned integer. Unit: ms	Depend on device.

## TUNNEL/SRv6SIDLists

This table contains information about IPv6 tunnel mapping entries in GRE P2MP tunnel templates.

## XML structure

```

<TUNNEL>
  <SRv6SIDLists>
    <SRv6SIDList>
      <SIDListName></SIDListName>
      <SIDAttribute>
        <Index></Index>
        <Sid></Sid>
      </SIDAttribute>
    </SRv6SIDList>
  </SRv6SIDLists>
</TUNNEL>

```

```

        </SIDAttribute>
    </SRv6SIDList>
</SRv6SIDLists>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	SRv6SIDLists
Table type	Multi-instance table
Row name	SRv6SIDList
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SIDListName	IPv6 GRE P2MP tunnel template name.	Index	String. Length: 1 to 31 characters.	N/A
SIDAttribute	IPv6 SR SID attribute.	Data structure	Members include: <ul style="list-style-type: none"> <li>Index.</li> <li>Sid.</li> </ul>	N/A
Index	The index of the noe in the IPv6 SR SID list.	N/A	Unsigned integer.	N/A
Sid	IPv6 address of the node.	N/A	Hexadecimal string, colon-separated.	Example: 1::1.

## TUNNEL/SRv6TunnelIngressBfds

This table contains information about IPv6 tunnel mapping entries in GRE P2MP tunnel templates.

## XML structure

```

<TUNNEL>
  <SRv6TunnelIngressBfds>
    <SRv6TunnelIngressBfd>
      <TunnelID></TunnelID>
      <SRv6BfdWorkMode></SRv6BfdWorkMode>
    </SRv6TunnelIngressBfd>
  </SRv6TunnelIngressBfds>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	SRv6TunnelIngressBfds
Table type	Multi-instance table
Row name	SRv6TunnelIngressBfd
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	IPv6 SR tunnel template name.	Index	Unsigned integer.	N/A
SRv6BfdWorkMode	IPv6 SR tunnel work mode.	N/A	Unsigned integer. Value range: 1 to 2.	2-turn on the BFD detection feature.

# Contents

- TUNNEL .....1
  - TUNNEL/Tunnels.....1
    - XML structure.....1
    - Table description.....2
    - Columns.....2
  - TUNNEL/AvailableTunnelID .....7
    - XML structure.....7
    - Table description.....7
    - Columns.....8
  - TUNNEL/GlobalConfig .....8
    - XML structure.....8
    - Table description.....8
    - Columns.....8
  - TUNNEL/TotalNums .....9
    - XML structure.....9
    - Table description.....9
    - Columns.....10
  - TUNNEL/AvailableSrcIfTypes .....12
    - XML structure.....12
    - Table description.....12
    - Columns.....12
  - TUNNEL/GREP2MPTemplates .....13
    - XML structure.....13
    - Table description.....13
    - Columns.....13
  - TUNNEL/GREP2MPTemplateMaps .....13
    - XML structure.....13
    - Table description.....14
    - Columns.....14
  - TUNNEL/IP6GREP2MPTemplates .....15
    - XML structure.....15
    - Table description.....15
    - Columns.....15
  - TUNNEL/IP6GREP2MPTemplateMaps .....15
    - XML structure.....15
    - Table description.....16
    - Columns.....16
  - TUNNEL/VXLANBFDs .....16
    - XML structure.....17
    - Table description.....17
    - Columns.....17
  - TUNNEL/SRv6SIDLists .....17
    - XML structure.....18
    - Table description.....18
    - Columns.....18
  - TUNNEL/SRv6TunnelIngressBfds .....18
    - XML structure.....18
    - Table description.....19
    - Columns.....19



# TUNNEL

## TUNNEL/Tunnels

This table contains basic Tunnel information.

### XML structure

```
<TUNNEL>
  <Tunnels>
    <Tunnel>
      <ID></ID>
      <Mode></Mode>
      <IfIndex></IfIndex>
      <IPv4Addr>
        <SrcAddr></SrcAddr>
        <SrcIfIndex></SrcIfIndex>
        <DstAddr></DstAddr>
      </IPv4Addr>
      <IPv6Addr>
        <SrcAddr></SrcAddr>
        <SrcIfIndex></SrcIfIndex>
        <DstAddr></DstAddr>
      </IPv6Addr>
      <Connectivity></Connectivity>
      <Tos></Tos>
      <Dfbit></Dfbit>
      <Ttl></Ttl>
      <OutIfIndex></OutIfIndex>
      <Keepalive>
        <Interval></Interval>
        <Times></Times>
      </Keepalive>
      <EncapLimit></EncapLimit>
      <VRF></VRF>
      <GRE>
        <Key></Key>
        <Checksum></Checksum>
        <VpcEnable></VpcEnable>
        <P2MPTemplate></P2MPTemplate>
      </GRE>
      <ServiceClass></ServiceClass>
      <P2MP>
        <AgingTime></AgingTime>
        <BackupTunnel></BackupTunnel>
        <BranchIPv4NetMaskLength></BranchIPv4NetMaskLength>
```

```

        <BranchIPv6NetMaskLength></BranchIPv6NetMaskLength>
    </P2MP>
    <StaticRoute>
        <Enable></Enable>
        <Preference></Preference>
    </StaticRoute>
    <SRV6>
        <SRv6SIDListName></SRv6SIDListName>
        <SRv6BackupSIDListName></SRv6BackupSIDListName>
    </SRV6>
</Tunnel>
</Tunnels>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	Tunnels
Table type	Multi-instance table
Row name	Tunnel
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Tunnel ID.	Index	Unsigned integer.	ID
Mode	Tunnel mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—GRE tunnel with the transport protocol being IPv4.</li> <li>2—GRE tunnel with the transport protocol being IPv6.</li> <li>3—IPv4 over IPv4 tunnel.</li> <li>4—IPv6 over IPv4 manually configured tunnel.</li> <li>5—IPv6 over IPv4 automatic tunnel.</li> <li>6—IPv6 over IPv4 6to4 tunnel.</li> <li>7—IPv6 over IPv4 ISATAP tunnel.</li> <li>8—IPv6 tunnel. Encapsulates IPv6 or IPv4 packets in IPv6.</li> </ul>	Mode

			<ul style="list-style-type: none"> <li>• 9—DVPN tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>• 10—DVPN tunnel with the passenger protocol being GRE and the transport protocol being IPv4.</li> <li>• 11—DVPN tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> <li>• 12—DVPN tunnel with the passenger protocol being GRE and the transport protocol being IPv6.</li> <li>• 13—CRLSP tunnel.</li> <li>• 14—Multicast GRE tunnel with the transport protocol being IPv4.</li> <li>• 15—Multicast GRE tunnel with the transport protocol being IPv6.</li> <li>• 16—IPsec tunnel with the transport protocol being IPv4.</li> <li>• 17—IPsec tunnel with the transport protocol being IPv6.</li> <li>• 18—EVI tunnel with the transport protocol being IPv4.</li> <li>• 19—EVI tunnel with the transport protocol being IPv6.</li> <li>• 20—EVI link with the transport protocol being IPv4.</li> <li>• 21—EVI link with the transport protocol being IPv6.</li> <li>• 22—DS-Lite AFTR tunnel.</li> <li>• 23—CRLSP automatic tunnel.</li> <li>• 24—VXLAN tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>• 25—VXLAN tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> </ul>	
--	--	--	--	--

			<ul style="list-style-type: none"> <li>• 26—NVE tunnel with the transport protocol being IPv4.</li> <li>• 27—NVE tunnel with the transport protocol being IPv6.</li> <li>• 28—NVGRE tunnel with the passenger protocol being GRE and the transport protocol being IPv4.</li> <li>• 29—NVGRE tunnel with the passenger protocol being GRE and the transport protocol being IPv6.</li> <li>• 30—IPv6 over IPv6 tunnel.</li> <li>• 31—IPv4 over IPv6 tunnel.</li> <li>• 32—IPv6 over IPv4 6rd tunnel.</li> <li>• 33—VXLANCI tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>• 34—VXLANCI tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> <li>• 35—MGRE tunnel with the passenger protocol being GRE and the transport protocol being IPv4.</li> <li>• 36—IPv4 GRE P2MP tunnel.</li> <li>• 37—IPv6 GRE P2MP tunnel.</li> <li>• 38—TE P2MP tunnel.</li> <li>• 39—IPv6 SRLSP tunnel.</li> </ul>	
IfIndex	Interface index of tunnel	N/A	Unsigned integer.	N/A
IPv4Addr	IPv4 source and destination address of tunnel.	Data structure	Members include: <ul style="list-style-type: none"> <li>• SrcAddr</li> <li>• SrcIfIndex</li> <li>• DstAddr</li> </ul>	This column is available only for tunnels with the transport protocol being IPv4.
SrcAddr	Tunnel source IPv4 address.	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
SrcIfIndex	Tunnel source interface index.	N/A	Unsigned integer.	This column is available when the SrcAddr column is empty.

DstAddr	Tunnel destination IPv4 address.	N/A	String, dotted decimal notation.	Example: 2.2.2.2.
IPv6Addr	IPv6 source and destination address of tunnel.	Data structure	Members include: <ul style="list-style-type: none"> <li>• SrcAddr</li> <li>• SrcIfIndex</li> <li>• DstAddr</li> </ul>	This column is available only for tunnels with the transport protocol being IPv6.
SrcAddr	Tunnel source IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 1:1::1:1.
SrcIfIndex	Tunnel source interface index.	N/A	Unsigned integer.	This column is available when the SrcAddr column is empty.
DstAddr	Tunnel destination IPv6 address.	N/A	Hexadecimal string, colon-separated.	Example: 2:2::2:2.
Connectivity	Tunnel connectivity	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—Connected.</li> <li>• 2—Disconnected.</li> <li>• 3—Detecting.</li> <li>• 4—Unknown.</li> </ul>	Use "ping" to detect if tunnel remote is connected.
Tos	Tos value in the IP header of the tunneled packet.	N/A	Unsigned integer. Value range: 0 to 255.	The value 0 indicates that it is copied from the IP header of the inner layer.
Dfbit	Indicates whether to set the DF bit in the IP header of the tunneled packet.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—sets DF bit</li> <li>• false—does not set DF bit.</li> </ul>	N/A
Ttl	TTL(Time to live) value in the IP header of the tunneled packet.	N/A	Unsigned integer. Value range: 1 to 255.	N/A
OutIfIndex	Tunnel outbound interface index.	N/A	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Keepalive	Enable keepalive function of tunnel	Data structure	Members include: <ul style="list-style-type: none"> <li>• interval.</li> <li>• times.</li> </ul>	Currently, only GRE tunnel and EVI tunnel support this function.
Interval	Interval of transmitting keepalive packets	N/A	Unsigned integer. Value range: 1 to 32767(second).	N/A
Times	Maximum times of retransmitting keepalive packets	N/A	Unsigned integer. Value range: 1 to 255.	N/A
EncapLimit	Maximum number of nested encapsulations of	N/A	Unsigned integer. Value range: 0 to 10.	N/A

	a packet allowed on a tunnel interface			
VRF	VRF to which the tunnel destination belongs.	N/A	String, case-sensitive. Length: 1 to 31 characters.	Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
GRE	Parameters of GRE tunnel	Data structure	Members include: <ul style="list-style-type: none"> <li>key.</li> <li>checksum.</li> </ul>	Only GRE tunnel support these parameters.
Key	Key to check for the validity of packets received on a GRE tunnel interface.	N/A	Unsigned integer. Value range: 0 to 4294967295.	N/A
Checksum	Whether to check GRE checksum	N/A	Boolean: <ul style="list-style-type: none"> <li>true—check GRE checksum.</li> <li>false—does not check GRE checksum.</li> </ul>	N/A
VpcEnable	Whether to carry VPC information in GRE packets.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Carry.</li> <li>false—Not carry.</li> </ul>	N/A
P2MPTemplate	GRE P2MP tunnel template.	N/A	String. Length: 1 to 31 characters.	N/A
ServiceClasses	Service class for a tunnel.	N/A	Unsigned integer. The value range varies by device model.	N/A
P2MP	GRE P2MP tunnel parameters	Data structure	Members include: <ul style="list-style-type: none"> <li>AgingTime.</li> <li>BackupTunnel.</li> <li>BrachIPv4NetMaskLength.</li> <li>BrachIPv6NetMaskLength.</li> </ul>	Only GRE P2MP tunnel support these parameters.
AgingTime	The aging time of the GRE P2MP tunnel	N/A	Unsigned integer. Value range: 1 to 86400. Default: 5s.	N/A
BackupTunnel	The backup tunnel interface for a GRE P2MP tunnel	N/A	Unsigned integer.	N/A
BrachIPv4NetMaskLength	GRE P2MP branch IPv4 mask length	N/A	Unsigned integer. Value range: 0 to 32. Default: 32.	N/A
BrachIPv6NetMaskLength	GRE P2MP branch IPv6 prefix	N/A	Unsigned integer. Value range: 0 to 128.	N/A

th	length		Default: 128.	
StaticRoute	Static routing parameters of tunnel	Data structure	Members include: <ul style="list-style-type: none"> <li>• Enable.</li> <li>• Preference.</li> </ul>	Only TE and P2MP tunnel support these parameters.
Enable	Whether to enable automatic configuration of a static route on the tunnel	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enable.</li> <li>• false—Disable.</li> </ul>	N/A
Preference	Preference of the static route	N/A	Unsigned integer. Value range: 1 to 255.	The default value of preference is 60. This column is configurable only if the enable column has a value of true.
SRV6	IPv6 SR tunnel parameters	Data structure	Members include: <ul style="list-style-type: none"> <li>• SRv6SIDListName.</li> <li>• SRv6BackupSIDListName.</li> </ul>	Only IPv6 SR tunnel support these parameters.
SRv6SIDListName	SID list name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A
SRv6BackupSIDListName	SID list Backup name.	N/A	String, case-sensitive. Length: 1 to 31 characters.	N/A

## TUNNEL/AvailableTunnelID

This table contains the available tunnel ID.

### XML structure

```

<TUNNEL>
  <AvailableTunnelID>
    <ID></ID>
  </AvailableTunnelID>
</TUNNEL>

```

### Table description

Item	Description
Feature name	TUNNEL
Table name	AvailableTunnelID
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Available tunnel ID	N/A	Unsigned integer.	N/A

## TUNNEL/GlobalConfig

This table contains global configuration information.

## XML structure

```
<TUNNEL>
  <GlobalConfig>
    <VxlanUdpPort></VxlanUdpPort>
    <DropInvalidChksumPkt></DropInvalidChksumPkt>
    <DropInvalidVlanTagPkt></DropInvalidVlanTagPkt>
    <VxlanIpForwarding></VxlanIpForwarding>
    <SupportSRv6></SupportSRv6>
    <SRv6MaxSidDepth></SRv6MaxSidDepth>
  </GlobalConfig>
</TUNNEL>
```

## Table description

Item	Description
Feature name	TUNNEL
Table name	GlobalConfig
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VxlanUdpPort	Specifies the UDP port on which tunnel receive VXLAN packets.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
DropInvalidChksumPkt	Specifies the action of whether or not to drop VXLAN	N/A	Boolean: <ul style="list-style-type: none"><li>true—drop</li><li>false—not drop</li></ul>	N/A



	packets with invalid UDP checksum.			
DropInvalidVlanTagPkt	Specifies the action of whether or not to drop VXLAN packets with invalid VLAN tag after tunnel de-encapsulation.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—drop</li> <li>false—not drop</li> </ul>	N/A
VxlanIpForwarding	Specifies the action of whether or not to use the L3 forwarding mode.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—using L3 forwarding mode</li> <li>false—using L2 forwarding mode</li> </ul>	N/A
SupportSRv6	Whether the IPv6 SR is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SRv6MaxSidDepth	IPv6 SR SID list max index.	N/A	Unsigned integer.	N/A

## TUNNEL/TotalNums

This table contains total number of tunnels.

### XML structure

```

<TUNNEL>
  <TotalNums>
    <TotalNum>
      <Mode></Mode>
      <Num></Num>
    </TotalNum>
  </TotalNums>
</TUNNEL>

```

### Table description

Item	Description
Feature name	TUNNEL
Table name	TotalNums
Table type	Multi-instance table
Row name	TotalNum
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Mode	Tunnel mode.	Index	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>1—GRE tunnel with the transport protocol being IPv4.</li> <li>2—GRE tunnel with the transport protocol being IPv6.</li> <li>3—IPv4 over IPv4 tunnel.</li> <li>4—IPv6 over IPv4 manually configured tunnel.</li> <li>5—IPv6 over IPv4 automatic tunnel.</li> <li>6—IPv6 over IPv4 6to4 tunnel.</li> <li>7—IPv6 over IPv4 ISATAP tunnel.</li> <li>8—IPv6 tunnel. Encapsulates IPv6 or IPv4 packets in IPv6.</li> <li>9—DVPN tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>10—DVPN tunnel with the passenger protocol being GRE and the transport protocol being IPv4.</li> <li>11—DVPN tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> <li>12—DVPN tunnel with the passenger protocol being GRE and the transport protocol being IPv6.</li> <li>13—CRLSP tunnel.</li> <li>14—Multicast GRE tunnel with the transport protocol being IPv4.</li> <li>15—Multicast GRE tunnel with the transport protocol being IPv6.</li> <li>16—IPsec tunnel with the transport protocol being IPv4.</li> <li>17—IPsec tunnel with</li> </ul>	N/A

			<p>the transport protocol being IPv6.</p> <ul style="list-style-type: none"> <li>• 18—EVI tunnel with the transport protocol being IPv4.</li> <li>• 19—EVI tunnel with the transport protocol being IPv6.</li> <li>• 20—EVI link with the transport protocol being IPv4.</li> <li>• 21—EVI link with the transport protocol being IPv6.</li> <li>• 22—DS-Lite AFTR tunnel.</li> <li>• 23—CRLSP automatic tunnel.</li> <li>• 24—VXLAN tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>• 25—VXLAN tunnel with the passenger protocol being UDP and the transport protocol being IPv6.</li> <li>• 26—NVE tunnel with the transport protocol being IPv4.</li> <li>• 27—NVE tunnel with the transport protocol being IPv6.</li> <li>• 28—NVGRE tunnel with the passenger protocol being GRE and the transport protocol being IPv4.</li> <li>• 29—NVGRE tunnel with the passenger protocol being GRE and the transport protocol being IPv6.</li> <li>• 30—IPv6 over IPv6 tunnel.</li> <li>• 31—IPv4 over IPv6 tunnel.</li> <li>• 32—IPv6 over IPv4 6rd tunnel.</li> <li>• 33—VXLANDCI tunnel with the passenger protocol being UDP and the transport protocol being IPv4.</li> <li>• 34—VXLANDCI tunnel with the passenger protocol being UDP and the transport protocol</li> </ul>	
--	--	--	--	--

			being IPv6. <ul style="list-style-type: none"> <li>35—MGRE tunnel with the passenger protocol being GRE and the transport protocol being IPv4.</li> <li>36—IPv4 GRE P2MP tunnel.</li> <li>37—IPv6 GRE P2MP tunnel.</li> <li>38—TE P2MP tunnel.</li> <li>39—IPv6 SRLSP tunnel.</li> </ul>	
Num	Number of tunnels.	N/A	Unsigned integer.	N/A

## TUNNEL/AvailableSrcIfTypes

This table contains source interface types of tunnel.

### XML structure

```

<TUNNEL>
  <AvailableSrcIfTypes>
    <AvailableSrcIfType>
      <IfIndex></IfIndex>
      <Name></Name>
      <AbbreviatedName></AbbreviatedName>
    </AvailableSrcIfType>
  </AvailableSrcIfTypes>
</TUNNEL>

```

### Table description

Item	Description
Feature name	TUNNEL
Table name	AvailableSrcIfTypes
Table type	Multi-instance table
Row name	AvailableSrcIfType
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A

Name	Full name of an interface	N/A	String. Length: 2 to 47 characters.	N/A
Abbreviated Name	Abbreviated name of an interface	N/A	String. Length: 2 to 47 characters.	N/A

## TUNNEL/GREP2MPTemplates

This table contains GRE P2MP tunnel templates.

### XML structure

```

<TUNNEL>
  <GREP2MPTemplates>
    <GREP2MPTemplate>
      <TemplateName></TemplateName>
    </GREP2MPTemplate>
  </GREP2MPTemplates>
</TUNNEL>

```

### Table description

Item	Description
Feature name	TUNNEL
Table name	GREP2MPTemplates
Table type	Multi-instance table
Row name	GREP2MPTemplate
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TemplateName	GRE P2MP tunnel template name.	Index	String. Length: 1 to 31 characters.	N/A

## TUNNEL/GREP2MPTemplateMaps

This table contains map information about tunnel mapping entries in GRE P2MP tunnel templates.

### XML structure

```

<TUNNEL>
  <GREP2MPTemplateMaps>
    <GREP2MPTemplateMap>

```

```

<TemplateName></TemplateName>
<VrfIndex></VrfIndex>
<VpcId></VpcId>
<BranchNetworkIPAddr></BranchNetworkIPAddr>
<BranchNetworkIPAddrMask></BranchNetworkIPAddrMask>
<TunnelDestIPAddr></TunnelDestIPAddr>
<ChecksumFill></ChecksumFill>
</GREP2MPTemplateMap>
</GREP2MPTemplateMaps>
</TUNNEL>

```

批注 [1]: 只有 V7NFVB64D020 分支支持此行

## Table description

Item	Description
Feature name	TUNNEL
Table name	GREP2MPTemplateMaps
Table type	Multi-instance table
Row name	GREP2MPTemplateMap
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TemplateName	GRE P2MP tunnel template name.	Index	String. Length: 1 to 31 characters.	N/A
VrfIndex	VPN index for a tunnel map.	Index	Unsigned integer.	Some versions support VRF name. For relevant information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in L3vpn NETCONF XML API Data Reference.
VpcId	VPC ID for a tunnel mapping	N/A	Unsigned integer.	Example: 123.
BranchNetworkIPAddr	Branch network IP address for a tunnel map.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
BranchNetworkIPAddrMask	Mask of the branch network IP address.	Index	String, dotted decimal notation.	The member of BranchNetworkIPAddr must also be specified.
TunnelDestIPAddr	Tunnel destination IP address for a tunnel map.	Index	String, dotted decimal notation.	Example: 2.2.2.2.
ChecksumFill	Checksum value.	N/A	String, dotted decimal notation.	Example: 3.3.3.3.

批注 [2]: 只有 V7NFVB64D020 分支支持此行

批注 [zK(3)]: NFVB64D020SP 分支

## TUNNEL/IP6GREP2MPTemplates

This table contains information about IPv6 GRE P2MP tunnel templates.

### XML structure

```
<TUNNEL>
  <IP6GREP2MPTemplates>
    <IP6GREP2MPTemplate>
      <TemplateName></TemplateName>
    </IP6GREP2MPTemplate>
  </IP6GREP2MPTemplates>
</TUNNEL>
```

### Table description

Item	Description
Feature name	TUNNEL
Table name	IP6GREP2MPTemplates
Table type	Multi-instance table
Row name	IP6GREP2MPTemplate
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TemplateName	IPv6 GRE P2MP tunnel template name.	Index	String. Length: 1 to 31 characters.	N/A

批注 [zK(4)]: NFVB64D020SP 分支

## TUNNEL/IP6GREP2MPTemplateMaps

This table contains information about IPv6 tunnel mapping entries in GRE P2MP tunnel templates.

### XML structure

```
<TUNNEL>
  <IP6GREP2MPTemplateMaps>
    <IP6GREP2MPTemplateMap>
      <TemplateName></TemplateName>
      <VrfIndex></VrfIndex>
      <BranchNetworkIPAddr></BranchNetworkIPAddr>
      <BranchNetworkIPAddrMask></BranchNetworkIPAddrMask>
    </IP6GREP2MPTemplateMap>
  </IP6GREP2MPTemplateMaps>
</TUNNEL>
```

```

    <TunnelDestIPv6Addr></TunnelDestIPv6Addr>
    <ChecksumFill></ChecksumFill>
  </IP6GREP2MPTemplateMap>
</IP6GREP2MPTemplateMaps>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	IP6GREP2MPTemplateMaps
Table type	Multi-instance table
Row name	IP6GREP2MPTemplateMap
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TemplateName	IPv6 GRE P2MP tunnel template name.	Index	String. Length: 1 to 31 characters.	N/A
VrfIndex	VPN index for a tunnel mapping.	Index	Unsigned integer.	Some versions support VRF name (VPN instance name). For more information, see the XSD document of your product. For information about VRFIndex, see "Appendix" in <i>L3vpn NETCONF XML API Data Reference</i> .
BranchNetworkIPAddr	Branch network IPv4 address for a tunnel mapping.	Index	String, dotted decimal notation.	Example: 1.1.1.1.
BranchNetworkIPAddrMask	Mask of the branch network IPv4 address.	Index	String, dotted decimal notation.	The member of BranchNetworkIPAddr must also be specified.
TunnelDestIPv6Addr	Tunnel destination IPv6 address for a tunnel mapping.	Index	Hexadecimal string, colon-separated.	Example: 2:2::2:2.
ChecksumFill	Checksum value.	N/A	String, dotted decimal notation.	Example: 3.3.3.3.

## TUNNEL/VXLANBFDs

This table contains VXLAN tunnel BFD information-



## XML structure

```
<TUNNEL>
  <VXLANBFDs>
    <VXLANBFD>
      <ID></ID>
      <Enable></Enable>
      <DMAC></DMAC>
      <MinRx></MinRx>
      <MinTx></MinTx>
    </VXLANBFD>
  </VXLANBFDs>
</TUNNEL>
```

## Table description

Item	Description
Feature name	TUNNEL
Table name	VXLANBFDs
Table type	Multi-instance table
Row name	VXLANBFD
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	Tunnel ID	Index	Unsigned integer.	N/A
Enable	Whether BFD is enabled	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled</li><li>false—Disabled</li></ul>	N/A
DMAC	Destination MAC address	N/A	String, six groups of two hexadecimal digits, hyphen-separated. Length: 1 to 17 characters.	N/A
MinRx	The minimum receiving interval of BFD	N/A	Unsigned integer. Unit: ms	Depend on device.
MinTx	The minimum sending interval of BFD	N/A	Unsigned integer. Unit: ms	Depend on device.

## TUNNEL/SRv6SIDLists

This table contains SID list node information of IPv6 SR tunnel.

## XML structure

```
<TUNNEL>
  <SRv6SIDLists>
    <SRv6SIDList>
      <SIDListName></SIDListName>
      <SIDAttribute>
        <Index></Index>
        <Sid></Sid>
      </SIDAttribute>
    </SRv6SIDList>
  </SRv6SIDLists>
</TUNNEL>
```

## Table description

Item	Description
Feature name	TUNNEL
Table name	SRv6SIDLists
Table type	Multi-instance table
Row name	SRv6SIDList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SIDListName	IPv6 SR SID list name.	Index	String. Length: 1 to 31 characters.	N/A
SIDAttribute	IPv6 SR SID attribute.	Data structure	Members include: <ul style="list-style-type: none"><li>Index.</li><li>Sid.</li></ul>	N/A
Index	The index of the node in the IPv6 SR SID list.	N/A	Unsigned integer.	N/A
Sid	IPv6 address of the node.	N/A	Hexadecimal string, colon-separated.	Example: 1::1.

## TUNNEL/SRv6TunnelIngressBfds

This table contains ingress information of the IPv6 SR tunnel.

## XML structure

```
<TUNNEL>
```

```

<SRv6TunnelIngressBfds>
  <SRv6TunnelIngressBfd>
    <TunnelID></TunnelID>
    <SRv6BfdWorkMode></SRv6BfdWorkMode>
  </SRv6TunnelIngressBfd>
</SRv6TunnelIngressBfds>
</TUNNEL>

```

## Table description

Item	Description
Feature name	TUNNEL
Table name	SRv6TunnelIngressBfds
Table type	Multi-instance table
Row name	SRv6TunnelIngressBfd
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TunnelID	IPv6 SR tunnel template name.	Index	Unsigned integer.	N/A
SRv6BfdWorkMode	IPv6 SR tunnel work mode.	N/A	Unsigned integer. Value range: 1 to 2.	2-turn on the BFD detection feature.

# Contents

UFLT .....	1
UFLT/SignatureManualUpgrading .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
UFLT/SignatureRollback .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
UFLT/PolicyCopy .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
UFLT/PolicyRename .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
UFLT/CategoryRename .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
UFLT/StatisticReset .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
UFLT/SignatureAutoUpgradeNow .....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# UFLT

## UFLT/SignatureManualUpgrading

This table is used to update signature manually.

### XML structure

```
<UFLT>
  <SignatureManualUpgrading>
    <URL></URL>
  </SignatureManualUpgrading>
</UFLT>
```

### Table description

Item	Description
Feature name	UrlFilter
Table name	SignatureManualUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
URL	URL	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## UFLT/SignatureRollback

This table is used to rollback signature file.

### XML structure

```
<UFLT>
  <SignatureRollback>
    <Rollback></Rollback>
  </SignatureRollback>
</UFLT>
```

## Table description

Item	Description
Feature name	UrlFilter
Table name	SignatureRollback
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Rollback	Rollback flag	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Roll back to the original version</li><li>1—Roll back to the last version</li></ul>	N/A

## UFLT/PolicyCopy

This table is used to copy a policy to create a new policy

## XML structure

```
<UFLT>
  <PolicyCopy>
    <Policy>
      <SrcPolicy></SrcPolicy>
      <DstPolicy></DstPolicy>
    </Policy>
  </PolicyCopy>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	PolicyCopy
Table type	Single-instance table
Row name	Policy

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcPolicy	Source policy name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
DstPolicy	Destination policy name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A

## UFLT/PolicyRename

This table is used to rename a policy.

## XML structure

```

<UFLT>
  <PolicyRename>
    <Policy>
      <PolicyOldName></PolicyOldName>
      <PolicyNewName></PolicyNewName>
    </Policy>
  </PolicyRename>
</UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	PolicyRename
Table type	Single-instance table
Row name	Policy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyOldName	Old name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
PolicyNewName	New name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A

# UFLT/CategoryRename

This table is used to rename a category.

## XML structure

```
<UFLT>
  <CategoryRename>
    <Category>
      <CategoryOldName></CategoryOldName>
      <CategoryNewName></CategoryNewName>
    </Category>
  </CategoryRename>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	CategoryRename
Table type	Single-instance table
Row name	Category
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CategoryOldName	Old name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
CategoryNewName	New name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A

# UFLT/StatisticReset

This table is used to reset URL filter statistics

## XML structure

```
<UFLT>
  <StatisticReset>
    <Reset/>
  </StatisticReset>
```



</UFLT>

## Table description

Item	Description
Feature name	URL
Table name	StatisticReset
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Reset	Reset statistics information	N/A	This column must be empty.	N/A

## UFLT/SignatureAutoUpgradeNow

This table is used to update signature automatically now.

## XML structure

```
<UFLT>
  <SignatureAutoUpgradeNow>
    <AutoUpgradeNow></AutoUpgradeNow>
  </SignatureAutoUpgradeNow>
</UFLT>
```

## Table description

Item	Description
Feature name	UrlFilter
Table name	SignatureAutoUpgradeNow
Table type	Single-instance table
Row name	None
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoUpgradeNow	Immediate auto upgrade	N/A	This column must be empty.	N/A

# Contents

UFLT .....	1
UFLT/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
UFLT/PolicyFilter .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
UFLT/PolicyInProfile .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
UFLT/Categories .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
UFLT/RuleInCategory .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
UFLT/BlackWhiteList .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
UFLT/SignatureAutoUpgrading .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
UFLT/CacheConfig .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
UFLT/ActionInstance .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
UFLT/CloudQueryConfig .....	10
XML structure .....	10
Table description .....	11
Columns .....	11

# UFLT

## UFLT/Policies

This table contains URL filter policy information

### XML structure

```
<UFLT>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <DefaultAction></DefaultAction>
      <DefaultActInstance></DefaultActInstance>
      <DefaultActLoggingEnable></DefaultActLoggingEnable>
      <DefaultActLogging></DefaultActLogging>
      <CloudQuery></CloudQuery>
    </Policy>
  </Policies>
</UFLT>
```

### Table description

Item	Description
Feature name	UFLT
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the URL filter policy	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
DefaultAction	Default action	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Permit.</li><li>• 1—Drop.</li><li>• 2—Reset.</li><li>• 3—Redirect.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>4—Block.</li> </ul>	
DefaultActInstance	Default action Instance	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
DefaultActLoggingEnable	Default action logging switch	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
DefaultActLogging	Default action logging instance	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
CloudQuery	CloudQuering	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Enable.</li> <li>1—Disable.</li> </ul>	N/A

## UFLT/PolicyFilter

This table contains information about URL filter category in a policy

### XML structure

```

<UFLT>
  <PolicyFilter>
    <Filter>
      <PolicyName></PolicyName>
      <CategoryName></CategoryName>
      <Action></Action>
      <Instance></Instance>
      <LoggingEnable></LoggingEnable>
      <Logging></Logging>
    </Filter>
  </PolicyFilter>
</UFLT>

```

### Table description

Item	Description
Feature name	UFLT
Table name	PolicyFilter
Table type	Multi-instance table
Row name	Filter
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the URL filter policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
CategoryName	Name of the URL filter category	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Action	Action type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Permit.</li><li>• 1—Drop.</li><li>• 2—Reset.</li><li>• 3—Redirect.</li><li>• 4—Block.</li></ul>	N/A
Instance	Instance name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
LoggingEnable	Whether logging is enabled or disabled	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Disable.</li><li>• 1—Enable.</li></ul>	N/A
Logging	Logging instance	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## UFLT/PolicyInProfile

This table contains information about a URL filter policy used by an APP profile.

## XML structure

```
<UFLT>
  <PolicyInProfile>
    <Policy>
      <ProfileName></ProfileName>
      <PolicyName></PolicyName>
    </Policy>
  </PolicyInProfile>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	PolicyInProfile
Table type	Single-instance table
Row name	Policy

Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the profile	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
PolicyName	Name of the URL filter policy	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## UFLT/Categories

This table contains information about the URL filter category.

## XML structure

```

<UFLT>
  <Categories>
    <Category>
      <CategoryName></CategoryName>
      <Critical></Critical>
      <CategoryType></CategoryType>
      <Description></Description>
      <PreCategoryReferred></PreCategoryReferred>
      <PreCategoryID></PreCategoryID>
    </Category>
  </Categories>
</UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	Categories
Table type	Multi-instance table
Row name	Category
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CategoryName	Name of the URL filter category	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Critical	Critical	N/A	Unsigned short.	N/A
CategoryType	Category type	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Pre-define.</li><li>1—User-define.</li></ul>	N/A
Description	Description	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
PreCategoryReferred	Referenced previous defined category	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
PreCategoryID	Previous defined category ID	N/A	Unsigned short.	N/A

## UFLT/RuleInCategory

This table contains information about the URL filter rule in a category.

## XML structure

```
<UFLT>
  <RuleInCategory>
    <Rule>
      <CategoryName></CategoryName>
      <RuleID></RuleID>
      <HostType></HostType>
      <HostName></HostName>
      <URIType></URIType>
      <URIStrng></URIStrng>
    </Rule>
  </RuleInCategory>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	RuleInCategory
Table type	Multi-instance table
Row name	Rule



Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CategoryName	Name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RuleID	RuleID	Index	Unsigned integer. Value range: 1 to 65535.	N/A
HostType	Host type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Text.</li> <li>2—Regex.</li> </ul>	N/A
HostName	Host name	N/A	If host type is text: <ul style="list-style-type: none"> <li>String, case-insensitive.</li> <li>Length: 3 to 224 characters.</li> </ul> If host type is regex: <ul style="list-style-type: none"> <li>OctectString.</li> <li>Length: 3 to 224 characters.</li> </ul>	N/A
URIType	URI type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Text.</li> <li>2—Regex.</li> </ul>	N/A
URIString	URI string	N/A	If URI type is text: <ul style="list-style-type: none"> <li>String, case-insensitive.</li> <li>Length: 3 to 255 characters.</li> </ul> If URI type is regex: <ul style="list-style-type: none"> <li>OctectString.</li> <li>Length: 3 to 253 characters.</li> </ul>	N/A

## UFLT/BlackWhiteList

This table contains information about blacklist and whitelist.

## XML structure

```

<UFLT>
  <BlackWhiteList>
    <PolicyRule>
      <PolicyName></PolicyName>
      <BlackOrWhite></BlackOrWhite>
      <RuleID></RuleID>
      <HostType></HostType>
      <HostName></HostName>
      <URIType></URIType>
      <URIString></URIString>
    </PolicyRule>
  </BlackWhiteList>
</UFLT>

```

```

    </PolicyRule>
  </BlackWhiteList>
</UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	BlackWhiteList
Table type	Multi-instance table
Row name	PolicyRule
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name	Index	String, case-insensitive. Length: 1 to 31 characters.	Case insensitive.
BlackOrWhite	Blacklist or whitelist	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Whitelist.</li> <li>2—Blacklist.</li> </ul>	N/A
RuleID	Rule ID	Index	Unsigned integer. Value range: 1 to 65535.	N/A
HostType	Host type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Text.</li> <li>2—Regex.</li> </ul>	N/A
HostName	Host name	N/A	If host type is text: <ul style="list-style-type: none"> <li>String, case-insensitive.</li> <li>Length: 3 to 224 characters.</li> </ul> If URI type is regex: <ul style="list-style-type: none"> <li>OctectString.</li> <li>Length: 3 to 224 characters.</li> </ul>	N/A
URIType	URI type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Text.</li> <li>2—Regex.</li> </ul>	N/A
URI String	URI string	N/A	If URI type is text: <ul style="list-style-type: none"> <li>String, case-insensitive.</li> <li>Length: 3 to 245 characters.</li> </ul> If URI type is regex: <ul style="list-style-type: none"> <li>OctectString.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Length: 3 to 245 characters.</li> </ul>	

## UFLT/SignatureAutoUpgrading

This table contains information about auto upgrading of URL filter signatures.

### XML structure

```

<UFLT>
  <SignatureAutoUpgrading>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrading>
</UFLT>

```

### Table description

Item	Description
Feature name	UFLT
Table name	SignatureAutoUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Enabled or disabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Default is false.
StartTime	Time when the system performs auto upgrading	N/A	Time. Format: HH:MM:SS.	Default: 02:00:00.
Type	Type of the system auto upgrading	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Week.</li> <li>1—Periodic.</li> </ul>	Default: 1.

Column name	Column description	Column type	Data type and restrictions	Remarks
Day	Days	N/A	Unsigned integer. Value range: 0 to 6.	When Type is <b>0</b> , the value range is 0 to 6. Otherwise, the value is invalid.

## UFLT/CacheConfig

This table contains information about the cache configuration.

### XML structure

```
<UFLT>
  <CacheConfig>
    <DomainName></DomainName>
  </CacheConfig>
</UFLT>
```

### Table description

Item	Description
Feature name	UFLT
Table name	CacheConfig
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## UFLT/ActionInstance

This table contains action instance information.

### XML structure

```
<UFLT>
```

```

<ActionInstance>
  <InstanceConfig>
    <ActionType></ActionType>
    <InstanceName></InstanceName>
  </InstanceConfig>
</ActionInstance>
</UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	ActionInstance
Table type	Multi -instance table
Row name	InstanceConfig
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ActionType	Action	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Logging.</li> <li>2—Redirect.</li> <li>3—Block.</li> </ul>	N/A
InstanceName	Instance name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## UFLT/CloudQueryConfig

This table contains cloud query configuration.

## XML structure

```

<UFLT>
  <CloudQueryConfig>
    <HostName></HostName>
    <CacheSize></CacheSize>
    <CacheTime></CacheTime>
  </CloudQueryConfig>
</UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	CloudQueryConfig
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HostName	Name of the host	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
CacheSize	Size of the cache	N/A	Unsigned integer. Value range: 8192 to 65535.	N/A
CacheTime	Lifetime of the cached entries	N/A	Unsigned integer. Value range: 10 to 720.	N/A

# Contents

UFLT .....	1
UFLT/Policies .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
UFLT/PolicyFilter .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
UFLT/PolicyInProfile .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
UFLT/Categories .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
UFLT/RuleInCategory .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
UFLT/Statistic .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
UFLT/BlackWhiteList .....	7
XML structure .....	8
Table description .....	8
Columns .....	8
UFLT/CacheConfig .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
UFLT/SignatureAutoUpgrading .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
UFLT/UpdatePercentage .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
UFLT/SignatureFileInfos .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
UFLT/ActionInstance .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
UFLT/CloudQueryConfig .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
UFLT/CloudQueryState .....	14
XML structure .....	14
Table description .....	14
Columns .....	14

UFLT/ParentCategories.....	15
XML structure.....	15
Table description.....	15
Columns.....	15



# UFLT

## UFLT/Policies

This table contains URL filter policy information

### XML structure

```
<UFLT>
  <Policies>
    <Policy>
      <PolicyName></PolicyName>
      <DefaultAction></DefaultAction>
      <DefaultActInstance></DefaultActInstance>
      <DefaultActLoggingEnable></DefaultActLoggingEnable>
      <DefaultActLogging></DefaultActLogging>
      <CloudQuery></CloudQuery>
    </Policy>
  </Policies>
</UFLT>
```

### Table description

Item	Description
Feature name	UFLT
Table name	Policies
Table type	Multi-instance table
Row name	Policy
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the URL filter policy	Index	String: case-insensitive. Length: 1 to 31 characters.	N/A
DefaultAction	Default action	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Permit.</li><li>• 1—Drop.</li><li>• 2—Reset.</li><li>• 3—Redirect.</li><li>• 4—Block.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DefaultActInstance	Default action Instance	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
DefaultActLoggingEnable	Default action logging switch	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disable.</li> <li>1—Enable.</li> </ul>	N/A
DefaultActLogging	Default action logging instance	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
CloudQuery	CloudQuering	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Enable.</li> <li>1—Disable.</li> </ul>	N/A

## UFLT/PolicyFilter

This table contains information about URL filter category in a policy

### XML structure

```

<UFLT>
  <PolicyFilter>
    <Filter>
      <PolicyName></PolicyName>
      <CategoryName></CategoryName>
      <Action></Action>
      <Instance></Instance>
      <LoggingEnable></LoggingEnable>
      <Logging></Logging>
    </Filter>
  </PolicyFilter>
</UFLT>

```

### Table description

Item	Description
Feature name	UFLT
Table name	PolicyFilter
Table type	Multi-instance table
Row name	Filter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Name of the URL filter policy	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
CategoryName	Name of the URL filter category	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
Action	Action type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Permit.</li><li>• 1—Drop.</li><li>• 2—Reset.</li><li>• 3—Redirect.</li><li>• 4—Block.</li></ul>	N/A
Instance	Instance name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
LoggingEnable	Whether logging is enabled or disabled	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—Disable.</li><li>• 1—Enable.</li></ul>	N/A
Logging	Logging instance	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## UFLT/PolicyInProfile

This table contains information about a URL filter policy used by an APP profile.

## XML structure

```
<UFLT>
  <PolicyInProfile>
    <Policy>
      <ProfileName></ProfileName>
      <PolicyName></PolicyName>
    </Policy>
  </PolicyInProfile>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	PolicyInProfile
Table type	Single-instance table
Row name	Policy

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Name of the profile	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
PolicyName	Name of the URL filter policy	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## UFLT/Categories

This table contains information about the URL filter category.

## XML structure

```

<UFLT>
  <Categories>
    <Category>
      <CategoryName></CategoryName>
      <Critical></Critical>
      <CategoryType></CategoryType>
      <Description></Description>
      <PreCategoryReferred></PreCategoryReferred>
      <PreCategoryID></PreCategoryID>
    </Category>
  </Categories>
</UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	Categories
Table type	Multi-instance table
Row name	Category
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CategoryName	Name of the URL filter category	Index	String: case-insensitive. Length: 1 to 63 characters.	N/A
Critical	Critical	N/A	Unsigned short.	N/A
CategoryType	Category type	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Pre-define.</li><li>1—User-define.</li></ul>	N/A
Description	Description	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
PreCategoryReferred	Referenced previous defined category	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
PreCategoryID	Previous defined category ID	N/A	Unsigned short.	N/A

## UFLT/RuleInCategory

This table contains information about the URL filter rule in a category.

## XML structure

```
<UFLT>
  <RuleInCategory>
    <Rule>
      <CategoryName></CategoryName>
      <RuleID></RuleID>
      <HostType></HostType>
      <HostName></HostName>
      <URIType></URIType>
      <URIStrng></URIStrng>
    </Rule>
  </RuleInCategory>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	RuleInCategory
Table type	Multi-instance table
Row name	Rule

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
CategoryName	Name	Index	String, case-insensitive. Length: 1 to 63 characters.	N/A
RuleID	RuleID	Index	Unsigned integer. Value range: 1 to 65535.	N/A
HostType	Host type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Text.</li> <li>2—Regex.</li> </ul>	N/A
HostName	Host name	N/A	If host type is text: <ul style="list-style-type: none"> <li>String, case-insensitive.</li> <li>Length: 3 to 224 characters.</li> </ul> If host type is regex: <ul style="list-style-type: none"> <li>OctectString.</li> <li>Length: 3 to 224 characters.</li> </ul>	N/A
URIType	URI type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Text.</li> <li>2—Regex.</li> </ul>	N/A
URIString	URI string	N/A	If URI type is text: <ul style="list-style-type: none"> <li>String, case-insensitive.</li> <li>Length: 3 to 255 characters.</li> </ul> If URI type is regex: <ul style="list-style-type: none"> <li>OctectString.</li> <li>Length: 3 to 253 characters.</li> </ul>	N/A

## UFLT/Statistic

This table contains the information about URL filter statistic.

## XML structure

```

<UFLT>
  <Statistic>
    <TotalRequests></TotalRequests>
    <PermittedRequests></PermittedRequests>
    <DeniedRequests></DeniedRequests>
    <MatchedBlacklist></MatchedBlacklist>
    <MatchedWhitelist></MatchedWhitelist>
    <MatchedUDEFCategory></MatchedUDEFCategory>
    <MatchedPDEFCategory></MatchedPDEFCategory>
    <MatchedCacheAction></MatchedCacheAction>
    <MatchedDefaultAction></MatchedDefaultAction>
  
```

```

    <PDEFURLNumbers></PDEFURLNumbers>
  </Statistic>
</UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	Statistic
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
TotalRequests	Total HTTP Requests	N/A	Unsigned integer64.	N/A
PermittedRequests	Total Permitted Requests	N/A	Unsigned integer64.	N/A
DeniedRequests	Total Denied Requests	N/A	Unsigned integer64.	N/A
MatchedBlacklist	Total Matched Blacklist	N/A	Unsigned integer64.	N/A
MatchedWhitelist	Total Matched Whitelist	N/A	Unsigned integer64.	N/A
MatchedUDEFCategory	Matched User-defined Category	N/A	Unsigned integer64.	N/A
MatchedPDEFCategory	Matched Pre-defined Category	N/A	Unsigned integer64.	N/A
MatchedCacheAction	Matched Cache Action	N/A	Unsigned integer64.	N/A
MatchedDefaultAction	Matched Default Action	N/A	Unsigned integer64.	N/A
PDEFURLNumbers	Pre-defined URL Rule Numbers	N/A	Unsigned integer64.	N/A

## UFLT/BlackWhiteList

This table contains information about blacklist and whitelist.

## XML structure

```
<UFLT>
  <BlackWhiteList>
    <PolicyRule>
      <PolicyName></PolicyName>
      <BlackOrWhite></BlackOrWhite>
      <RuleID></RuleID>
      <HostType></HostType>
      <HostName></HostName>
      <URIType></URIType>
      <URIString></URIString>
    </PolicyRule>
  </BlackWhiteList>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	BlackWhiteList
Table type	Multi-instance table
Row name	PolicyRule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name	Index	String, case-insensitive. Length: 1 to 31 characters.	Case insensitive
BlackOrWhite	Blacklist or whitelist	Index	Enumeration: <ul style="list-style-type: none"><li>1—Whitelist.</li><li>2—Blacklist.</li></ul>	N/A
RuleID	Rule ID	Index	Unsigned integer: Value range: 1 to 65535.	N/A
HostType	Host type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Text.</li><li>2—Regex.</li></ul>	N/A
HostName	Host name	N/A	If host type is text: <ul style="list-style-type: none"><li>String, case-insensitive.</li><li>Length: 3 to 224 characters.</li></ul> If URI type is regex: <ul style="list-style-type: none"><li>OctectString.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>Length: 3 to 224 characters.</li> </ul>	
URIType	URI type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Text.</li> <li>2—Regex.</li> </ul>	N/A
URI String	URI string	N/A	If URI type is text: <ul style="list-style-type: none"> <li>String, case-insensitive.</li> <li>Length: 3 to 245 characters.</li> </ul> If URI type is regex: <ul style="list-style-type: none"> <li>OctectString.</li> <li>Length: 3 to 245 characters.</li> </ul>	N/A

## UFLT/CacheConfig

This table contains information about the cache configuration.

### XML structure

```

<UFLT>
  <CacheConfig>
    <DomainName></DomainName>
  </CacheConfig>
</UFLT>

```

### Table description

Item	Description
Feature name	UFLT
Table name	CacheConfig
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

# UFLT/SignatureAutoUpgrading

This table contains information about auto upgrading of URL filter signatures.

## XML structure

```
<UFLT>
  <SignatureAutoUpgrading>
    <Enabled></Enabled>
    <StartTime></StartTime>
    <Type></Type>
    <Day></Day>
  </SignatureAutoUpgrading>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	SignatureAutoUpgrading
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enabled	Enabled or disabled	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Default is false.
StartTime	Time when the system performs auto upgrading	N/A	Time. Format: HH:MM:SS.	Default: 02:00:00.
Type	Type of the system auto upgrading	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Week.</li><li>1—Periodic.</li></ul>	Default: 1.
Day	Days	N/A	Unsigned integer. Value range: 0 to 6.	When Type is 0, the value range is 0 to 6. Otherwise, the value is invalid.

# UFLT/UpdatePercentage

This table contains the information of the percent of upgrading.

## XML structure

```
<UFLT>
  <UpdatePercentage>
    <Percentage></Percentage>
    <ErrorCode></ErrorCode>
  </UpdatePercentage>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	UpdatePercentage
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Percentage	The percentage of updating	N/A	Unsigned integer. Value range: 0 to 100.	When the value range is 0 to 100, it means in upgrading. Otherwise, means error.
ErrorCode	Error of update	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Success.</li><li>1—License check error.</li><li>2—SigFile check error.</li><li>3—Server connect error.</li></ul>	N/A

# UFLT/SignatureFileInfos

This table contains the signature file information.

## XML structure

```
<UFLT>
  <SignatureFileInfos>
    <FileInfo>
```

```

    <Version></Version>
    <FileName></FileName>
    <PublishedTime></PublishedTime>
    <Updates></Updates>
  </FileInfo>
</SignatureFileInfos>
</UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	SignatureFileInfos
Table type	Multi-instance table
Row name	FileInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Version	Version	Index	Enumeration: <ul style="list-style-type: none"> <li>1—current.</li> <li>2—last.</li> <li>3—factory.</li> </ul>	N/A
FileName	File Name	N/A	String: case-insensitive. Length: 1 to 255 characters.	N/A
PublishedTime	Published Time	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
Updates	Update information	N/A	String: case-insensitive. Length: 1 to 255 characters.	N/A

## UFLT/ActionInstance

This table contains URL filter action instance information.

## XML structure

```

<UFLT>
  <ActionInstance>
    <InstanceConfig>
      <ActionType></ActionType>
      <InstanceName></InstanceName>
    </InstanceConfig>
  </ActionInstance>
</UFLT>

```

```

    </ActionInstance>
  </UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	ActionInstance
Table type	Multi -instance table
Row name	InstanceConfig
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ActionType	Action	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Logging.</li> <li>2—Redirect.</li> <li>3—Block.</li> </ul>	N/A
InstanceName	Instance name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## UFLT/CloudQueryConfig

This table contains cloud query configure information.

## XML structure

```

<UFLT>
  <CloudQueryConfig>
    <HostName></HostName>
    <CacheSize></CacheSize>
    <CacheTime></CacheTime>
  </CloudQueryConfig>
</UFLT>

```

## Table description

Item	Description
Feature name	UFLT
Table name	CloudQueryConfig
Table type	Single-instance table
Row name	None

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HostName	Name of the host	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
CacheSize	Size of the cache	N/A	Unsigned integer. Value range: 8192 to 65535.	N/A
CacheTime	Lifetime of the cached entries	N/A	Unsigned integer. Value range: 10 to 720.	N/A

## UFLT/CloudQueryState

This table contains cloud query status information.

## XML structure

```
<UFLT>
  <CloudQueryState>
    <HostName></HostName>
    <HostState></HostState>
    <HostStateErrCode></HostStateErrCode>
    <VersionState></VersionState>
  </CloudQueryState>
</UFLT>
```

## Table description

Item	Description
Feature name	UFLT
Table name	CloudQueryState
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
HostName	Name of the host	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
HostState	Status of the host	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Available.</li> <li>1—Unavailable.</li> </ul>	N/A
HostStateErrCode	Error code of cloud query	N/A	Unsigned integer. Value range: 0 to 3.	N/A
VersionState	Comparison between the local signature version and cloud query result	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## UFLT/ParentCategories

This table contains information about the URL filter ParentCategory.

### XML structure

```

<UFLT>
  <ParentCategories>
    <ParentCategory>
      <ParentCategoryName></ParentCategoryName>
      <PreCategoryIDs>
        <PreCategoryID></PreCategoryID>
      </PreCategoryIDs>
    </ParentCategory>
  </ParentCategories>
</UFLT>

```

### Table description

Item	Description
Feature name	UFLT
Table name	ParentCategories
Table type	Multi-instance table
Row name	ParentCategory
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ParentCategoryName	Name of the predefined	Index	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	parent category		Length: 1 to 63 characters.	
PreCategoryIDs	List of predefined category ID	Data structure	Members include: <ul style="list-style-type: none"> <li>PreCategoryID</li> </ul>	N/A
PreCategoryID	Predefined category ID	N/A	Unsigned short. Value range: 0 to 255.	N/A



# Contents

- URPF4.....1
  - URPF4/ClearInterfaceStatistics.....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1
  - URPF4/ClearZoneStatistics.....2
    - XML structure.....2
    - Table description.....2
    - Columns.....2

# URPF4

## URPF4/ClearInterfaceStatistics

This table is used to clear uRPF statistics on interfaces.

### XML structure

```
<URPF4>
  <ClearInterfaceStatistics>
    <Statistics>
      <Chassis></Chassis>
      <Slot></Slot>
      <CPUID></CPUID>
      <Clear></Clear>
    </Statistics>
  </ClearInterfaceStatistics>
</URPF4>
```

### Table description

Item	Description
Feature name	URPF4
Table name	ClearInterfaceStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Chassis	ID of the member where the interface resides	Index	Unsigned integer. Value range: 0 to 65535.	N/A
Slot	Slot ID of the interface	Index	Unsigned integer. Value range: 0 to 65535.	N/A
CPUID	CPU ID	Index	Unsigned integer.	N/A
Clear	Clear interface statistics	N/A	Unsigned integer.	This column must be empty.

# URPF4/ClearZoneStatistics

This table is used to clear uRPF statistics on security zones.

## XML structure

```
<URPF4>
  <ClearZoneStatistics>
    <Statistics>
      <ZoneID></ZoneID>
      <Clear></Clear>
    </Statistics>
  </ClearZoneStatistics>
</URPF4>
```

## Table description

Item	Description
Feature name	URPF4
Table name	ClearZoneStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZoneID	Security zone ID	Index	Unsigned integer.	N/A
Clear	Clear security zone statistics	N/A	Unsigned integer.	This column must be empty.

# Contents

URPF4.....	1
URPF4/URPFIPv4.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
URPF4/URPFInterfaces .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
URPF4/URPFZones .....	3
XML structure.....	3
Table description.....	3
Columns.....	3

# URPF4

## URPF4/URPFIPv4

This table is used to configure IPv4 global uRPF policies.

### XML structure

```
<URPF4>
  <URPFIPv4>
    <URPFType></URPFType>
    <AllowDefaultRoute></AllowDefaultRoute>
    <ACLNumber></ACLNumber>
    <LinkCheck></LinkCheck>
  </URPFIPv4>
</URPF4>
```

### Table description

Item	Description
Feature name	URPF4
Table name	URPFIPv4
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
URPFType	Check type of uRPF4	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—strict.</li><li>• <b>1</b>—loose.</li><li>• <b>2</b>—none.</li></ul>	N/A
AllowDefaultRoute	Allow default route switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
LinkCheck	Link check switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>false</li> </ul>	

## URPF4/URPFInterfaces

This table is used to configure IPv4 uRPF policies on interfaces.

### XML structure

```

<URPF4>
  <URPFInterfaces>
    <Apply>
      <IfIndex></IfIndex>
      <URPFType></URPFType>
      <AllowDefaultRoute></AllowDefaultRoute>
      <ACLNumber></ACLNumber>
      <LinkCheck></LinkCheck>
    </Apply>
  </URPFInterfaces>
</URPF4>

```

### Table description

Item	Description
Feature name	URPF4
Table name	URPFInterfaces
Table type	Multi-instance table
Row name	Apply
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
URPFType	Check type of uRPF4	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—strict.</li> <li>1—loose.</li> <li>2—none.</li> </ul>	N/A
AllowDefaultRoute	Allow default route switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
LinkCheck	Link check switch	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## URPF4/URPFZones

This table is used to configure IPv4 uRPF policies on security zones.

### XML structure

```

<URPF4>
  <URPFZones>
    <Apply>
      <ZoneID></ZoneID>
      <URPFType></URPFType>
      <AllowDefaultRoute></AllowDefaultRoute>
      <ACLNumber></ACLNumber>
      <LinkCheck></LinkCheck>
    </Apply>
  </URPFZones>
</URPF4>

```

### Table description

Item	Description
Feature name	URPF4
Table name	URPFZones
Table type	Multi-instance table
Row name	Apply
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZoneID	Security zone ID	Index	Unsigned integer.	N/A
URPFType	Check type of uRPF4	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—strict.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—loose.</li> <li>2—none.</li> </ul>	
AllowDefaultRoute	Allow default route switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
LinkCheck	Link check switch	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A



# Contents

URPF4.....	1
URPF4/URPFIPv4.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
URPF4/URPFInterfaces .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
URPF4/URPFZones .....	3
XML structure.....	3
Table description.....	3
Columns.....	3
URPF4/URPF4Specification.....	4
XML structure.....	4
Table description.....	4
Columns.....	4
URPF4/InterfaceStatistics .....	5
XML structure.....	5
Table description.....	5
Columns.....	6
URPF4/ZoneStatistics.....	6
XML structure.....	6
Table description.....	6
Columns.....	6

# URPF4

## URPF4/URPFIPv4

This table is used to configure IPv4 global uRPF policies.

### XML structure

```
<URPF4>
  <URPFIPv4>
    <URPFType></URPFType>
    <AllowDefaultRoute></AllowDefaultRoute>
    <ACLNumber></ACLNumber>
    <LinkCheck></LinkCheck>
  </URPFIPv4>
</URPF4>
```

### Table description

Item	Description
Feature name	URPF4
Table name	URPFIPv4
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
URPFType	Check type of uRPF4	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—strict.</li><li>• <b>1</b>—loose.</li><li>• <b>2</b>—none.</li></ul>	N/A
AllowDefaultRoute	Allow default route switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
LinkCheck	Link check switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A

# URPF4/URPFInterfaces

This table is used to configure IPv4 uRPF policies on interfaces.

## XML structure

```
<URPF4>
  <URPFInterfaces>
    <Apply>
      <IfIndex></IfIndex>
      <URPFType></URPFType>
      <AllowDefaultRoute></AllowDefaultRoute>
      <ACLNumber></ACLNumber>
      <LinkCheck></LinkCheck>
    </Apply>
  </URPFInterfaces>
</URPF4>
```

## Table description

Item	Description
Feature name	URPF4
Table name	URPFInterfaces
Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
URPFType	Check type of uRPF4	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—strict.</li><li>• <b>1</b>—loose.</li><li>• <b>2</b>—none.</li></ul>	N/A
AllowDefaultRoute	Allow default route switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
LinkCheck	Link check switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A

# URPF4/URPFZones

This table is used to configure IPv4 uRPF policies on security zones.

## XML structure

```
<URPF4>
  <URPFZones>
    <Apply>
      <ZoneID></ZoneID>
      <URPFType></URPFType>
      <AllowDefaultRoute></AllowDefaultRoute>
      <ACLNumber></ACLNumber>
      <LinkCheck></LinkCheck>
    </Apply>
  </URPFZones>
</URPF4>
```

## Table description

Item	Description
Feature name	URPF4
Table name	URPFZones
Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZoneID	Security zone ID	Index	Unsigned integer.	N/A
URPFType	Check type of uRPF4	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—strict.</li><li>• <b>1</b>—loose.</li><li>• <b>2</b>—none.</li></ul>	N/A
AllowDefaultRoute	Allow default route switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
ACLNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 3999.	N/A
LinkCheck	Link check switch	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A

# URPF4/URPF4Specification

This table contains information about support for the attributes on the device.

## XML structure

```
<URPF4>
  <URPF4Specification>
    <SupportGlobal></SupportGlobal>
    <SupportInterface></SupportInterface>
    <SupportZone></SupportZone>
    <SupportLoose></SupportLoose>
    <SupportStrict></SupportStrict>
    <SupportAllowDefaultRoute></SupportAllowDefaultRoute>
    <SupportACL></SupportACL>
    <SupportLinkCheck></SupportLinkCheck>
  </URPF4Specification>
</URPF4>
```

## Table description

Item	Description
Feature name	URPF4
Table name	URPF4Specification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportGlobal	Support for global configuration	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
SupportInterface	Support for configuration on interfaces	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
SupportZone	Support for configuration on the security zone	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
SupportLoose	Support for loose check	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportStrict	Support for strict check	N/A	Boolean: • <b>true</b> • <b>false</b>	N/A
SupportAllowDefaultRoute	Support for default route check	N/A	Boolean: • <b>true</b> • <b>false</b>	N/A
SupportACL	Support for ACL check	N/A	Boolean: • <b>true</b> • <b>false</b>	N/A
SupportLinkCheck	Support for link layer check	N/A	Boolean: • <b>true</b> • <b>false</b>	N/A

## URPF4/InterfaceStatistics

This table contains information about the number of dropped packets and packets that are not dropped due to ACL drop suppression on an interface.

### XML structure

```

<URPF4>
  <InterfaceStatistics>
    <Statistics>
      <IfIndex></IfIndex>
      <DropCnt></DropCnt>
      <SuppressCnt></SuppressCnt>
    </Statistics>
  </InterfaceStatistics>
</URPF4>

```

### Table description

Item	Description
Feature name	URPF4
Table name	InterfaceStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
DropCnt	Number of dropped packets	N/A	Unsigned integer.	N/A
SuppressCnt	Number of packets that are not dropped due to ACL drop suppression	N/A	Unsigned integer.	N/A

## URPF4/ZoneStatistics

This table contains information about the number of dropped packets and packets that are not dropped due to ACL drop suppression on a security zone.

## XML structure

```
<URPF4>
  <ZoneStatistics>
    <Statistics>
      <ZoneID></ZoneID>
      <DropCnt></DropCnt>
      <SuppressCnt></SuppressCnt>
    </Statistics>
  </ZoneStatistics>
</URPF4>
```

## Table description

Item	Description
Feature name	URPF4
Table name	ZoneStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ZoneID	Security zone ID	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
DropCnt	Number of dropped packets	N/A	Unsigned integer.	N/A
SuppressCnt	Number of packets that are not dropped due to ACL drop suppression	N/A	Unsigned integer.	N/A



# Contents

- URPF4.....2
  - URPF4/URPFIPv4.....2
  - URPF4/URPFInterfaces .....2
  - URPF4/URPFZones .....3
  - URPF4/ZoneStatistics.....4

# URPF4

## URPF4/URPFIPv4

Message	Explanation
Failed to enable uRPF on chassis %u slot %u. 在单板编号为%u、槽位号为%u的设备上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF on chassis %u slot %u cpu %u. 在单板编号为%u、槽位号为%u的设备上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF on slot %u. 在槽位号为%u的设备上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF on slot %u cpu %u. 在槽位号为%u的设备的CPU%u上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF. 使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Link layer check can't be configured for loose uRPF. 当uRPF类型为松散方式时，链路信息检测不能配置。	During executing create、merge or replace operation,link layer check can't be configured for loose uRPF. 当执行create、merge、release操作时，uRPF类型为松散方式时，链路信息检测不能配置。
Configuration items don't meet the requirements. 需要首先开启uRPF功能。	During executing create、merge or replace operation, configuration items don't meet the requirements. 当执行create、merge、release操作时，需要首先开启uRPF功能。
The operation is not supported on this the device. 该设备不支持此操作。	During executing create、merge or replace operation, the operation is must supported on this the device 当执行create、merge、release操作时，请确保设备支持该操作。

## URPF4/URPFInterfaces

Message	Explanation
Failed to enable uRPF on chassis %u slot %u. 在单板编号为%u、槽位号为%u的设备上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF on chassis %u slot %u cpu %u. 在单板编号为%u、槽位号为%u的设备上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。

Failed to enable uRPF on slot %u. 在槽位号为%u的设备上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF on slot %u cpu %u. 在槽位号为%u的设备的CPU%u上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF. 使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Link layer check can't be configured for loose uRPF. 当uRPF类型为松散方式时，链路信息检测不能配置。	During executing create、merge or replace operation,link layer check can't be configured for loose uRPF. 当执行create、merge、release操作时，uRPF类型为松散方式时，链路信息检测不能配置。
Configuration items don't meet the requirements. 需要首先开启uRPF功能。	During executing create、merge or replace operation, configuration items don't meet the requirements. 当执行create、merge、release操作时，需要首先开启uRPF功能。
The operation is not supported on this the device. 该设备不支持此操作。	During executing create、merge or replace operation, the operation is must supported on this the device 当执行create、merge、release操作时，请确保设备支持该操作。

## URPF4/URPFZones

Message	Explanation
Failed to enable uRPF on chassis %u slot %u. 在单板编号为%u、槽位号为%u的设备上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF on chassis %u slot %u cpu %u. 在单板编号为%u、槽位号为%u的设备上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF on slot %u. 在槽位号为%u的设备上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF on slot %u cpu %u. 在槽位号为%u的设备的CPU%u上使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Failed to enable uRPF. 使能uRPF功能失败。	During executing create、merge or replace operation,the operation failed when the uRPF feature was enabled. 当执行create、merge、release操作时，设置uRPF时操作失败。
Link layer check can't be configured for loose uRPF. 当uRPF类型为松散方式时，链路信息检测不能配置。	During executing create、merge or replace operation,link layer check can't be configured for loose uRPF. 当执行create、merge、release操作时，uRPF类型为松散方式时，链路信息检测不能配置。
Configuration items don't meet the requirements.	During executing create、merge or replace operation, configuration items don't meet the requirements.

需要首先开启uRPF功能。	当执行create、merge、release操作时，需要首先开启uRPF功能。
The operation is not supported on this the device. 该设备不支持此操作。	During executing create、merge or replace operation, the operation is must supported on this the device 当执行create、merge、release操作时，请确保设备支持该操作。

## URPF4/ZoneStatistics

Message	Explanation
The operation is not supported on Local zone. 该操作不支持Local域。	During executing get operation, The operation is must supported on Local zone. 当执行获取操作时，请确保设备local域支持该操作。

# Contents

UserAccounts .....	1
UserAccounts/ImportGuestAccount .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
UserAccounts/ExportGuestAccount .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
UserAccounts/GenerateGuestAccount .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
UserAccounts/ApproveGuest .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
UserAccounts/ExportGuestTemplet .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
UserAccounts/ImportNetworkUser .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
UserAccounts/ExportNetworkUser .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
UserAccounts/ExportTemplet .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
UserAccounts/OldPasswordCheck .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
UserAccounts/ChangeMyPassword .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
UserAccounts/AutoPassword .....	11
XML structure .....	11
Table description .....	11
Columns .....	12

# UserAccounts

## UserAccounts/ImportGuestAccount

Import guest user accounts.

### XML structure

```
<UserAccounts>
  <ImportGuestAccount>
    <Url></Url>
    <ValidityDateTime>
      <StartValidityDateTime></StartValidityDateTime>
      <EndValidityDateTime></EndValidityDateTime>
    </ValidityDateTime>
    <AutoCreateGroup></AutoCreateGroup>
    <Override></Override>
    <StartLine></StartLine>
  </ImportGuestAccount>
</UserAccounts>
```

### Table description

Item	Description
Feature name	UserAccounts
Table name	ImportGuestAccount
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the source .csv file to import guest account information	N/A	String, case-insensitive. Length: 1 to 255 characters.	The import path depends on the Web service frame. Select the filename on the webpage. The .csv file must use correct data format that complies with the export guest template.

Column name	Column description	Column type	Data type and restrictions	Remarks
ValidityDateTime	Account validity time period	Data structure	Members include: <ul style="list-style-type: none"> <li>StartValidityDateTime</li> <li>EndValidityDateTime</li> </ul>	N/A
StartValidityDateTime	Time from which the account becomes valid	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
EndValidityDateTime	Time at which the account expires	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
AutoCreateGroup	Whether to create groups automatically	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default: false
Override	Whether to override existing guest accounts with the same name	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Default: false
StartLine	Start line to import users	N/A	Unsigned integer. Value range: 1 to 1048576.	Default: 1

## UserAccounts/ExportGuestAccount

Export guest accounts.

### XML structure

```

<UserAccounts>
  <ExportGuestAccount>
    <Url></Url>
  </ExportGuestAccount>
</UserAccounts>

```

### Table description

Item	Description
Feature name	UserAccounts
Table name	ExportGuestAccount
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the destination .csv file to export guest accounts to	N/A	String, case-insensitive. Length: 1 to 255 characters.	The export path depends on the Web service frame. Select the filename on the webpage.

## UserAccounts/GenerateGuestAccount

Create guest accounts in batches.

### XML structure

```
<UserAccounts>
  <GenerateGuestAccount>
    <NamePrefix></NamePrefix>
    <PasswordPrefix></PasswordPrefix>
    <NumberSuffix></NumberSuffix>
    <Count></Count>
    <GroupName></GroupName>
    <ValidityDateTime>
      <StartValidityDateTime></StartValidityDateTime>
      <EndValidityDateTime></EndValidityDateTime>
    </ValidityDateTime>
  </GenerateGuestAccount>
</UserAccounts>
```

### Table description

Item	Description
Feature name	UserAccounts
Table name	GenerateGuestAccount
Table type	Single-instance table
Row name	None
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NamePrefix	Prefix of the guest account name	Column	String. Length: 1 to 45 characters.	The account name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot include a domain name or \   / : * ? < > @, either.
PasswordPrefix	Password prefix	N/A	String. Length: 1 to 53 characters.	N/A
NumberSuffix	Numbering suffix	N/A	String. Length: 1 to 10 characters.	N/A
count	Number of generated guest accounts	N/A	Unsigned integer. Value range: 1 to 255.	N/A
GroupName	Name of the group the guest belongs to	N/A	String. Length: 1 to 32 characters.	N/A
ValidityDateTime	Account validity time period	Data structure	Members include: <ul style="list-style-type: none"><li>StartValidityDateTime</li><li>EndValidityDateTime</li></ul>	N/A
StartValidityDateTime	Time from which the account becomes valid	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
EndValidityDateTime	Time at which the account expires	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A

## UserAccounts/ApproveGuest

Examine and approve guest accounts.

### XML structure

```
<UserAccounts>
  <ApproveGuest>
    <Name></Name>
    <GroupName></GroupName>
    <SponsorFullName></SponsorFullName>
    <SponsorDepartment></SponsorDepartment>
    <SponsorEmail></SponsorEmail>
    <GuestDescription></GuestDescription>
    <ValidityDateTime>
      <StartValidityDateTime></StartValidityDateTime>
      <EndValidityDateTime></EndValidityDateTime>
    </ValidityDateTime>
  </ApproveGuest>
</UserAccounts>
```

```

    </ApproveGuest>
  </UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	ApproveGuest
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Guest account name	N/A	String. Length: 1 to 55 characters.	The account name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot include a domain name or \   / : * ? < > @, either.
GroupName	Name of the group the guest belongs to	N/A	Length: 1 to 32 characters.	N/A
SponsorFullName	Name of the receptionist	N/A	String. Length: 1 to 255 characters.	N/A
SponsorDepartment	Department of the receptionist	N/A	String. Length: 1 to 127 characters.	N/A
SponsorEmail	Email address of the receptionist	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
GuestDescription	Description of the guest	N/A	String. Length: 1 to 255 characters.	N/A
ValidityDateTime	Guest validity time period	Data structure	Members include: <ul style="list-style-type: none"> <li>StartValidityDateTime Pad</li> <li>EndValidtyDateTime</li> </ul>	N/A
StartValidityDateTime	Time from which the account becomes valid	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
EndValidityDateTime	Time at which the account expires	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A

# UserAccounts/ExportGuestTemplet

Template for exporting guest accounts.

## XML structure

```
<UserAccounts>
  <ExportGuestTemplet>
    < Url></Url>
  </ExportGuestTemplet>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	ExportTemplet
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the destination .csv file to export guest accounts to	N/A	String, case-insensitive. Length: 1 to 255 characters.	The export path depends on the Web service frame. Select the filename on the webpage.

# UserAccounts/ImportNetworkUser

Import network user accounts, excluding guest accounts.

## XML structure

```
<UserAccounts>
  <ImportNetworkUser>
    <FileName></FileName>
    <AutoCreateGroup></AutoCreateGroup>
    <Override></Override>
    <StartLine></StartLine>
  </ImportNetworkUser>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	ImportNetworkUser
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the source .csv file to import user account information	N/A	String, case-insensitive. Length: 1 to 255 characters.	The import path depends on the Web service frame. Select the filename on the webpage. The .csv file must use correct data format that complies with the export guest template.
AutoCreateGroup	Whether to create groups automatically	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Default: false
Override	Whether to override existing guest accounts with the same name	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Default: false
StartLine	Start line to import users	N/A	Unsigned integer. Value range: 1 to 1048576.	Default: 1

## UserAccounts/ExportNetworkUser

Export network user accounts, excluding guest accounts.

## XML structure

```
<UserAccounts>
  <ExportNetworkUser>
    <FileName></FileName>
    <GroupName></GroupName>
    <UserName></UserName>
  </ExportNetworkUser>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	ExportNetworkUser
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the destination .csv file to export user accounts to	N/A	String, case-insensitive. Length: 1 to 255 characters.	The export path depends on the Web service frame. Select the filename on the webpage.
GroupName	Name of the group the user belongs to	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	User account name	N/A	String, case-sensitive. Length: 1 to 55 characters.	The user name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot include a domain name or \   / : * ? < > @, either.

## UserAccounts/ExportTemplet

Template for exporting network user accounts.

## XML structure

```
<UserAccounts>
  <ExportTemplet>
    <FileName></FileName>
  </ExportTemplet>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	ExportTemplet
Table type	Single-instance table

Item	Description
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the destination .csv file to export network user accounts to	N/A	String, case-insensitive. Length: 1 to 255 characters.	The export path depends on the Web service frame. Select the filename on the webpage.

## UserAccounts/OldPasswordCheck

Template for checking the old password of a user.

## XML structure

```

<UserAccounts>
  <OldPasswordCheck>
    <UserName></UserName>
    <Password></Password>
  </OldPasswordCheck>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	OldPasswordCheck
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name entered by the user	Index	String in the format of <i>localusername@domain</i> or <i>localusername</i> . Length: 1 to 311 characters. <ul style="list-style-type: none"><li><i>localusername</i>—Local user name, case-sensitive string of 1 to 55 characters.</li><li>@—Domain name delimiter.</li><li><i>domain</i>—Domain name, case-insensitive string of 1 to 255 characters.</li></ul>	The local user name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and it cannot contain any of the following characters: \   / : * ? < > @
Password	Old password	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A

## UserAccounts/ChangeMyPassword

This table changes the password of the current device management user and verifies the old password during the password change process.

## XML structure

```
<UserAccounts>
  <ChangeMyPassword>
    <OldPassword></OldPassword>
    <Password></Password>
  </ChangeMyPassword>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	ChangeMyPassword
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
OldPassword	Old password	N/A	String, case-sensitive. Length: 1 to 63 characters.	If the user has an old password, the old password must be provided.  If the user does not have an old password, do not include the OldPassword column or do not set a value for the OldPassword column.
Password	New password	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A

## UserAccounts/AutoPassword

This table creates a random password for a network user and sends a mail to the user's mailbox.

## XML structure

```
<UserAccounts>
  <AutoPassword>
    <UserName></UserName>
    <EmailAddress></EmailAddress>
  </AutoPassword>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	AutoPassword
Table type	Single-instance table
Row name	None
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name entered by the user	N/A	String. Length: 1 to 311 characters. The username is in the format of <i>localusername@domain</i> or <i>localusername</i> . <ul style="list-style-type: none"> <li><i>localusername</i>—Local user name, case-sensitive string of 1 to 55 characters.</li> <li><i>@</i>—Domain name delimiter.</li> <li><i>domain</i>—Domain name, case-insensitive string of 1 to 255 characters.</li> </ul>	The local user name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and it cannot contain any of the following characters: \   / : * ? < > @
EmailAddress	Email address of the user	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).

# Contents

UserAccounts.....	1
UserAccounts/UserGroups.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
UserAccounts/Management/Accounts.....	3
XML structure.....	4
Table description.....	4
Columns.....	4
UserAccounts/Management/UserRoles.....	6
XML structure.....	6
Table description.....	6
Columns.....	7
UserAccounts/Network/Accounts.....	7
XML structure.....	7
Table description.....	8
Columns.....	8
UserAccounts/Guest/Accounts.....	12
XML structure.....	12
Table description.....	12
Columns.....	13
UserAccounts/GuestConfigure.....	14
XML structure.....	14
Table description.....	14
Columns.....	14
UserAccounts/Identity/Users.....	15
XML structure.....	15
Table description.....	16
Columns.....	16
UserAccounts/Network/IdentityGroups.....	16
XML structure.....	16
Table description.....	17
Columns.....	17
UserAccounts/UserGroup/IdentityMembers.....	17
XML structure.....	17
Table description.....	18
Columns.....	18
UserAccounts/UserGroup/IdentityGroups.....	18
XML structure.....	18
Table description.....	19
Columns.....	19
UserAccounts/IdentityEnable.....	19
XML structure.....	19
Table description.....	19
Columns.....	20
UserAccounts/ChangePasswords.....	20
XML structure.....	20
Table description.....	20
Columns.....	20
UserAccounts/NetworkMailConfigure.....	21
XML structure.....	21
Table description.....	21
Columns.....	22

# UserAccounts

## UserAccounts/UserGroups

User group information table.

### XML structure

```
<UserAccounts>
  <UserGroups>
    <Group>
      <Name></Name>
      <AuthorizationInfo>
        <AclNumber></AclNumber>
        <CallbackNumber></CallbackNumber>
        <FTPHomeDir></FTPHomeDir>
        <IdleTimeout></IdleTimeout>
        <PrimaryDNSServer></PrimaryDNSServer>
        <PrimaryDNSIpv6Server></PrimaryDNSIpv6Server>
        <SecondaryDNSServer></SecondaryDNSServer>
        <SecondaryDNSIpv6Server></SecondaryDNSIpv6Server>
        <URL></URL>
        <UserProfile></UserProfile>
        <VLANID></VLANID>
        <VRF></VRF>
        <IpPool></IpPool>
        <Ipv6Pool></Ipv6Pool>
        <SSLVPNPolicy></SSLVPNPolicy>
        <SessTimeout></SessTimeout>
      </AuthorizationInfo>
      <AuthorizationIpv6PrefixInfo>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </AuthorizationIpv6PrefixInfo>
    </Group>
  </UserGroups>
</UserAccounts>
```

### Table description

Item	Description
Feature name	UserAccounts
Table name	UserGroups
Table type	Multi-instance table
Row name	Group

Item	Description
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Group name	Index	String. Length: 1 to 32 characters.	The system has a predefined group named <b>system</b> .
AuthorizationInfo	Authorization information	Data structure	Members include: <ul style="list-style-type: none"> <li>• AclNumber</li> <li>• CallbackNumber</li> <li>• FTPHomeDir</li> <li>• IdleTimeout</li> <li>• PrimaryDNSServer</li> <li>• SecondaryDNSServer</li> <li>• URL</li> <li>• UserProfile</li> <li>• VLANID</li> <li>• VRF</li> <li>• IpPool</li> <li>• Ipv6Pool</li> <li>• SSLVPNPolicy</li> <li>• SessTimeout</li> </ul>	N/A
AclNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 5999.	N/A
CallbackNumber	Callback number	N/A	String. Length: 1 to 64 characters.	N/A
FTPHomeDir	FTP home directory	N/A	String. Length: 1 to 255 characters.	By default, the user can access the root directory of the device, which varies by device model.
IdleTimeout	Idle time	N/A	Unsigned integer. Value range: 1 to 120, in minutes.	N/A
PrimaryDNSServer	Primary DNS server	N/A	IPv4: String, dotted decimal notation.	N/A
PrimaryDNSIpv6Server	Primary DNS Ipv6 server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
SecondaryDNSServer	Secondary DNS server	N/A	IPv4: String, dotted decimal notation.	N/A
SecondaryDNSIpv6Server	Secondary DNS Ipv6 Server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
URL	URL information	N/A	String. Length: 1 to 255 characters.	N/A
UserProfile	Name of the user profile	N/A	String. Length: 1 to 31 characters.	The name can contain only letters, digits, and underscores, and must begin with a letter.
VLANID	VLAN ID assigned to the local user	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	Name of the VPN instance accessible to the local user	N/A	String. Length: 1 to 31 characters.	N/A
IpPool	Name of the IP address pool available to the local user	N/A	String. Length: 1 to 63 characters.	N/A
Ipv6Pool	Name of the IPv6 address pool available to the local user	N/A	String. Length: 1 to 63 characters.	N/A
SSLVPNPolicy	Name of the SSL VPN policy assigned to the local user	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
SessTimeout	Session timeout	N/A	Unsigned integer. Value range: 1 to 1440, in minutes.	N/A
AuthorizationIpv6PrefixInfo	IPv6 address prefix assigned to the local user	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A
Ipv6Address	IPv6 address prefix	N/A	Hexadecimal string, colon-separated.	For example, 2003:10::1:1.  This column is valid only when the Ipv6PrefixLength column is configured at the same time.
Ipv6PrefixLength	IPv6 address prefix length	N/A	Unsigned integer. Value range: 1 to 128.	This column is valid only when the Ipv6Address column is configured at the same time.

## UserAccounts/Management/Accounts

Management user information table.

# XML structure

```
<UserAccounts>
  <Management>
    <Accounts>
      <Account>
        <Name></Name>
        <Password></Password>
        <GroupName></GroupName>
        <FTP></FTP>
        <HTTP></HTTP>
        <HTTPS></HTTPS>
        <PAD></PAD>
        <SSH></SSH>
        <TELNET></TELNET>
        <Terminal></Terminal>
        <AccessLimit></AccessLimit>
        <FTPHomeDir></FTPHomeDir>
      </Account>
    </Accounts>
  </Management>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	Accounts
Table type	Multi-instance table
Row name	Account
Restrictions	GroupName must be obtained from the UserAccounts/UserGroups table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Local user name	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @

Column name	Column description	Column type	Data type and restrictions	Remarks
Password	Password of the local user	N/A	String, case-sensitive. Length: <ul style="list-style-type: none"> <li>In non-FIPS mode, the password is a plaintext string of 1 to 63 characters.</li> <li>In FIPS mode, the password is a plaintext string of 15 to 63 characters. The string must contain digits, uppercase letters, lowercase letters, and special characters.</li> </ul>	N/A
GroupName	User group to which the local user belongs	N/A	String. Length: 1 to 32 characters.	The default is <b>system</b> .
FTP	Whether the FTP service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
HTTP	Whether the HTTP service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
HTTPS	Whether the HTTPS service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
PAD	Whether the PAD service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
SSH	Whether the SSH service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
TELNET	Whether the telnet service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
Terminal	Whether the Terminal service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
AccessLimit	The maximum number of concurrent online users	N/A	Unsigned integer. Value range: 1 to 1024.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
FTPHomeDir	FTP home directory	N/A	String. Length: 1 to 255 characters.	The directory must already exist. By default, the user can access the root directory of the device, which varies by device model.

## UserAccounts/Management/UserRoles

Management user role information table.

### XML structure

```

<UserAccounts>
  <Management>
    <UserRoles>
      <UserRole>
        <UserName></UserName>
        <RoleName></RoleName>
      </UserRole>
    </UserRoles>
  </Management>
</UserAccounts>

```

### Table description

Item	Description
Feature name	UserAccounts
Table name	UserRoles
Table type	Multi-instance table
Row name	UserRole
Restrictions	UserName must be obtained from the UserAccounts/Management/Accounts table.
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Local user name	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @
RoleName	User role name	Index	String. Length: 1 to 63 characters.	N/A

## UserAccounts/Network/Accounts

Network user information table.

### XML structure

```
<UserAccounts>
  <Network>
    <Accounts>
      <Account>
        <Name></Name>
        <Password></Password>
        <GroupName></GroupName>
        <ADVPN></ADVPN>
        <IPoE></IPoE>
        <LanAccess></LanAccess>
        <Portal></Portal>
        <PPP></PPP>
        <AccessLimit></AccessLimit>
        <AuthorizationInfo>
          <AclNumber></AclNumber>
          <CallbackNumber></CallbackNumber>
          <IdleTimeout></IdleTimeout>
          <PrimaryDNSServer></PrimaryDNSServer>
          <PrimaryDNSIPv6Server></PrimaryDNSIPv6Server>
          <SecondaryDNSServer></SecondaryDNSServer>
          <SecondaryDNSIPv6Server></SecondaryDNSIPv6Server>
          <URL></URL>
          <UserProfile></UserProfile>
          <VLANID></VLANID>
          <VRF></VRF>
          <Ipv4Address></Ipv4Address>
          <Ipv6Address></Ipv6Address>
          <IpPool></IpPool>
          <Ipv6Pool></Ipv6Pool>
```

```

        <SSLVPNPolicy></SSLVPNPolicy>
    </AuthorizationInfo>
    <AuthorizationIpv6PrefixInfo>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
    </AuthorizationIpv6PrefixInfo>
    <BindingInfo>
        <CallNumber></CallNumber>
        <Interface></Interface>
        <Ipv4Address></Ipv4Address>
        <MacAddress></MacAddress>
        <VLANID></VLANID>
    </BindingInfo>
    <ValidityDateTime>
        <StartValidityDateTime></StartValidityDateTime>
        <EndValidityDateTime></EndValidityDateTime>
    </ValidityDateTime>
    <SessTimeout></SessTimeout>
    <Description></Description>
</Account>
</Accounts>
</Network>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	Accounts
Table type	Multi-instance table
Row name	Account
Restrictions	GroupName must be obtained from the UserAccounts/UserGroups table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Local user name	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @

Column name	Column description	Column type	Data type and restrictions	Remarks
Password	Password of the local user	N/A	String, case-sensitive. Length: 1 to 63 characters.	The password is set in plaintext form.
GroupName	User group to which the local user belongs	N/A	String. Length: 1 to 32 characters.	The default is <b>system</b> .
ADVPN	Whether the ADVPN service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
IPoE	Whether the IPoE service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
LanAccess	Whether the LAN access service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
Portal	Whether the portal service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
PPP	Whether the PPP service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
AccessLimit	The maximum number of concurrent online users	N/A	Unsigned integer. Value range: 1 to 1024.	N/A
AuthorizationInfo	Authorization information	Data structure	Members include: <ul style="list-style-type: none"> <li>AcINumber</li> <li>CallbackNumber</li> <li>IdleTimeout</li> <li>PrimaryDNSServer</li> <li>SecondaryDNSServer</li> <li>URL</li> <li>UserProfile</li> <li>VLANID</li> <li>VRF</li> <li>Ipv4Address</li> <li>Ipv6Address</li> <li>IpPool</li> <li>Ipv6Pool</li> <li>SSLVPNPolicy</li> </ul>	N/A
AcINumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 5999.	N/A
CallbackNumber	Callback number	N/A	String. Length: 1 to 64 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IdleTimeout	Idle time	N/A	Unsigned integer. Value range: 1 to 120, in minutes.	N/A
PrimaryDNSServer	Primary DNS server	N/A	IPv4: String, dotted decimal notation.	N/A
PrimaryDNSIpv6Server	Primary DNS Ipv6 server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
SecondaryDNSServer	Secondary DNS server	N/A	IPv4: String, dotted decimal notation.	N/A
SecondaryDNSIpv6Server	Secondary DNS Ipv6 Server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
URL	URL information of the local user	N/A	String. Length: 1 to 255 characters.	N/A
UserProfile	Name of the user profile	N/A	String. Length: 1 to 31 characters.	The name can contain only letters, digits, and underscores, and must begin with a letter.
VLANID	VLAN ID assigned to the local user	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	Name of the VPN instance accessible to the local user	N/A	String. Length: 1 to 31 characters.	N/A
Ipv4Address	IPv4 address of the local user	N/A	String in dotted decimal notation.	For example, 1.1.1.1.
Ipv6Address	IPv6 address of the local user	N/A	Hexadecimal string, colon-separated.	For example, 2003:10::1:1.
IpPool	Name of the IP address pool available to the local user	N/A	String. Length: 1 to 63 characters.	N/A
Ipv6Pool	Name of the IPv6 address pool available to the local user	N/A	String. Length: 1 to 63 characters.	N/A
SSLVPNPolicy	Name of the SSL VPN policy assigned to the local user	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
AuthorizationIpv6PrefixInfo	IPv6 address prefix assigned to the local user	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv6Address	IPv6 address prefix	N/A	Hexadecimal string, colon-separated.	For example, 2003:10::1:1. This column is valid only when the Ipv6PrefixLength column is configured at the same time.
Ipv6PrefixLength	IPv6 address prefix length	N/A	Unsigned integer. Value range: 1 to 128.	This column is valid only when the Ipv6Address column is configured at the same time.
BindingInfo	Binding attributes of the local user	Data structure	Members include: <ul style="list-style-type: none"> <li>• CallNumber</li> <li>• Interface</li> <li>• Ipv4Address</li> <li>• MacAddress</li> <li>• VLANID</li> </ul>	N/A
CallNumber	Calling number of the local user	N/A	String. Length: 1 to 64 characters.	N/A
Interface	Interface of the local user	N/A	String. Length: 1 to 47 characters.	N/A
Ipv4Address	IPv4 address of the local user	N/A	String in dotted decimal notation.	For example, 1.1.1.1.
MacAddress	MAC address of the local user	N/A	String. Length: 17 characters.	For example, FF-FF-FF-FF-FF-FF.
VLANID	VLAN ID assigned to the local user	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
SessTimeout	Session timeout	N/A	Unsigned integer. Value range: 1 to 1440, in minutes.	N/A
ValidityDateTime	Account validity time period	Data structure	Members include: <ul style="list-style-type: none"> <li>• StartValidityDateTime</li> <li>• EndValidityDateTime</li> </ul>	N/A
StartValidityDateTime	Time from which the account becomes valid	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
EndValidityDateTime	Time at which the account expires	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
Description	Description of the local user	N/A	String. Length: 1 to 127 characters.	N/A

# UserAccounts/Guest/Accounts

Table of network access guest information.

## XML structure

```
<UserAccounts>
  <Guest>
    <Accounts>
      <Account>
        <WaitApproval></WaitApproval>
        <Name></Name>
        <Password></Password>
        <GroupName></GroupName>
        <FullName></FullName>
        <Phone></Phone>
        <Email></Email>
        <Company></Company>
        <Description></Description>
        <SponsorFullName></SponsorFullName>
        <SponsorEmail></SponsorEmail>
        <SponsorDepartment></SponsorDepartment>
        <ValidityDateTime>
          <StartValidityDateTime></StartValidityDateTime>
          <EndValidityDateTime></EndValidityDateTime>
        </ValidityDateTime>
      </Account>
    </Accounts>
  </Guest>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	Accounts
Table type	Multi-instance table
Row name	Account
Restrictions	GroupName must be obtained from the UserAccounts/UserGroups table.
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
WaitApproval	Whether the guest is waiting for approval	Index	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Name	User name	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @
Password	User password	N/A	String, case-sensitive Length: 1 to 63 characters.	The password is set in plaintext form.
GroupName	User group to which the guest belongs	N/A	String. Length: 1 to 32 characters.	The default is <b>system</b> .
FullName	Guest name	N/A	String. Length: 1 to 255 characters.	N/A
Phone	Guest phone	N/A	String. Length: 1 to 32 characters.	N/A
Email	Guest email address	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
Company	Guest company	N/A	String. Length: 1 to 255 characters.	N/A
Description	Guest description	N/A	String. Length: 1 to 255 characters.	N/A
SponsorFullName	Sponsor name	N/A	String. Length: 1 to 255 characters.	N/A
SponsorEmail	Sponsor email address	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
SponsorDepartment	Sponsor department	N/A	String. Length: 1 to 127 characters.	N/A
ValidityDateTime	Account validity time period	Data structure	Members include: <ul style="list-style-type: none"> <li>StartValidityDateTime</li> <li>EndValidityDateTime</li> </ul>	N/A
StartValidityDateTime	Time from which the account becomes valid	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
EndValidityDateTime	Time at which the account expires	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A

# UserAccounts/GuestConfigure

Global control of guest accounts table.

## XML structure

```
<UserAccounts>
  <GuestConfigure>
    <AutoDelete></AutoDelete>
    <EmailFormat>
      <GuestSubject></GuestSubject>
      <GuestManagerSubject></GuestManagerSubject>
      <GuestSponsorSubject></GuestSponsorSubject>
      <GuestSponsorBody></GuestSponsorBody>
    </EmailFormat>
    <GuestManagerEmail></GuestManagerEmail>
    <EmailSender></EmailSender>
    <SmtpServer></SmtpServer>
    <WaitApprovalTime></WaitApprovalTime>
  </GuestConfigure>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	GuestConfigure
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoDelete	Whether to enable automatic deletion	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	The default is false.



Column name	Column description	Column type	Data type and restrictions	Remarks
EmailFormat	Email address format	Data structure	Members include: <ul style="list-style-type: none"> <li>GuestSubject</li> <li>GuestBody</li> <li>GuestManagerSubject</li> <li>GuestManagerBody</li> <li>GuestSponsorSubject</li> <li>GuestSponsorBody</li> </ul>	N/A
GuestSubject	Email subject to send to the guest	N/A	String. Length: 1 to 127 characters.	N/A
GuestBody	Email body to send to the guest	N/A	String. Length: 1 to 255 characters.	N/A
GuestManager Subject	Email subject to send to the guest manager	N/A	String. Length: 1 to 127 characters.	N/A
GuestManager Body	Email body to send to the guest manager	N/A	String. Length: 1 to 255 characters.	N/A
GuestSponsorSubject	Email subject to send to the guest sponsor	N/A	String. Length: 1 to 127 characters.	N/A
GuestSponsorBody	Email body to send to the guest sponsor	N/A	String. Length: 1 to 255 characters.	N/A
GuestManager Email	Email address of the guest manager	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
EmailSender	Email address of the addresser	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
SmtpServer	URL of the SMTP server	N/A	String. Length: 1 to 255 characters.	N/A
WaitApprovalTime	The maximum waiting time for account approval	N/A	Unsigned integer. Value range: 1 to 720, in hours.	The default is 24 hours.

## UserAccounts/Identity/Users

Table of static user accounts for user identification.

### XML structure

```

<UserAccounts>
  <Identity>
    <Users>
      <User>

```

```

<Name></Name>
<IpType></IpType>
<IpAddress></IpAddress>
<MacAddress></MacAddress>
</User>
</Users>
</Identity>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	Users
Table type	Multi-instance table
Row name	User
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User name	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @
IpType	IP address type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4</li> <li>1—IPv6</li> </ul>	N/A
IpAddress	IP address of the user	Index	IPv4 or IPv6 address	N/A
MacAddress	MAC address of the user	Index	MAC address format: XX-XX-XX-XX-XX-XX	If the column is empty, the system ignores the user MAC address.

## UserAccounts/Network/IdentityGroups

Table of identity groups associated with a user.

## XML structure

```

<UserAccounts>
  <Network>

```

```

<IdentityGroups>
  <IdentityGroup>
    <UserName></UserName>
    <GroupName></GroupName>
  </IdentityGroup>
</IdentityGroups>
</Network>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	IdentityGroups
Table type	Multi-instance table
Row name	IdentityGroup
Restrictions	The GroupName value must be included in the UserAccounts/UserGroups table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @
GroupName	Group name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## UserAccounts/UserGroup/IdentityMembers

Table of member users in an identity group.

## XML structure

```

<UserAccounts>
  <UserGroup>
    <IdentityMembers>
      <IdentityMember>
        <GroupName></GroupName>
        <UserName></UserName>
      </IdentityMember>
    </IdentityMembers>
  </UserGroup>
</UserAccounts>

```

```

        </IdentityMember>
    </IdentityMembers>
</UserGroup>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	IdentityMembers
Table type	Multi-instance table
Row name	IdentityMember
Restrictions	The GroupName value must be included in the UserAccounts/UserGroups table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the identity group	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Name of the member user	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @

## UserAccounts/UserGroup/IdentityGroups

Table of member groups in an identity group.

## XML structure

```

<UserAccounts>
  <UserGroup>
    <IdentityGroups>
      <IdentityGroup>
        <GroupName></GroupName>
        <IdentityGroup></IdentityGroup>
      </IdentityGroup>
    </IdentityGroups>
  </UserGroup>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	IdentityGroups
Table type	Multi-instance table
Row name	IdentityGroup
Restrictions	The GroupName value must be included in the UserAccounts/UserGroups table.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the identity group	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
IdentityGroup	Name of the member group	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## UserAccounts/IdentityEnable

Enable or disable the user identification feature.

## XML structure

```
<UserAccounts>
  <IdentityEnable>
    <Enable></Enable>
  </IdentityEnable>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	IdentityEnable
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enable or disable the user identification feature	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	The default is false.

## UserAccounts/ChangePasswords

Change user passwords.

### XML structure

```
<UserAccounts>
  <ChangePasswords>
    <ChangePassword>
      <UserName></UserName>
      <Password></Password>
    </ChangePassword>
  </ChangePasswords>
</UserAccounts>
```

### Table description

Item	Description
Feature name	UserAccounts
Table name	ChangePasswords
Table type	Multi-instance table
Row name	ChangePassword
Restrictions	The UserName value must be included in the UserAccounts/ChangePasswords table.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name entered by the user	Index	String in the format of <i>localusername@domain</i> or <i>localusername</i> . Length: 1 to 311 characters.	The local user name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and it cannot contain any of the following characters: \   / : * ? < >

			<ul style="list-style-type: none"> <li><i>localusername</i>—Local user name, case-sensitive string of 1 to 55 characters.</li> <li><i>@</i>—Domain name delimiter.</li> <li><i>domain</i>—Domain name, case-insensitive string of 1 to 255 characters.</li> </ul>	@
Password	New password	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A

## UserAccounts/NetworkMailConfigure

Global mail configuration table of local network access users.

### XML structure

```

<UserAccounts>
  <NetworkMailConfigure>
    <EmailFormat>
      <Subject></Subject>
      <Body></Body>
    </EmailFormat>
    <EmailSender></EmailSender>
    <SmtpServer></SmtpServer>
    <SmtpAuthentication>
      <UserName></UserName>
      <Password></Password>
    </SmtpAuthentication>
  </NetworkMailConfigure>
</UserAccounts>

```

### Table description

Item	Description
Feature name	UserAccounts
Table name	NetworkMailConfigure
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EmailFormat	Email address format	Data structure	Members include: <ul style="list-style-type: none"> <li>Subject.</li> <li>Body.</li> </ul>	N/A
Subject	Email subject to send	N/A	String. Length: 1 to 127 characters.	N/A
Body	Email body to send	N/A	String. Length: 1 to 255 characters.	N/A
EmailSender	Email address of the sender	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
SmtpServer	URL of the SMTP server	N/A	String. Length: 1 to 255 characters.	N/A
SmtpAuthentication	SMTP server authentication configuration	Data structure	Members include: <ul style="list-style-type: none"> <li>UserName.</li> <li>Password.</li> </ul>	N/A
UserName	User name	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
Password	User password	N/A	String, case-sensitive. Length: 1 to 63 characters.	The password is set in plaintext form.



# Contents

UserAccounts.....	1
UserAccounts/UserGroups.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
UserAccounts/Management/Accounts.....	3
XML structure.....	3
Table description.....	4
Columns.....	4
UserAccounts/Management/UserRoles.....	5
XML structure.....	5
Table description.....	6
Columns.....	6
UserAccounts/Network/Accounts.....	6
XML structure.....	6
Table description.....	7
Columns.....	8
UserAccounts/PasswordLimit.....	11
XML structure.....	11
Table description.....	11
Columns.....	11
UserAccounts/Guest/Accounts.....	12
XML structure.....	12
Table description.....	13
Columns.....	13
UserAccounts/GuestConfigure.....	14
XML structure.....	14
Table description.....	14
Columns.....	15
UserAccounts/Identity/Users.....	15
XML structure.....	16
Table description.....	16
Columns.....	16
UserAccounts/Network/IdentityGroups.....	17
XML structure.....	17
Table description.....	17
Columns.....	17
UserAccounts/UserGroup/IdentityMembers.....	17
XML structure.....	18
Table description.....	18
Columns.....	18
UserAccounts/UserGroup/IdentityGroups.....	18
XML structure.....	18
Table description.....	19
Columns.....	19
UserAccounts/IdentityUser.....	19
XML structure.....	19
Table description.....	20
Columns.....	20
UserAccounts/IdentityEnable.....	20
XML structure.....	20
Table description.....	21
Columns.....	21
UserAccounts/ChangePasswords.....	21
XML structure.....	21
Table description.....	21
Columns.....	22

UserAccounts/NetworkMailConfigure .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
UserAccounts/Network/AccountsCount .....	23
XML structure .....	23
Table description .....	23
Columns .....	24

# UserAccounts

## UserAccounts/UserGroups

User group information table.

### XML structure

```
<UserAccounts>
  <UserGroups>
    <Group>
      <Name></Name>
      <AuthorizationInfo>
        <AclNumber></AclNumber>
        <CallbackNumber></CallbackNumber>
        <FTPHomeDir></FTPHomeDir>
        <IdleTimeout></IdleTimeout>
        <PrimaryDNSServer></PrimaryDNSServer>
        <PrimaryDNSIpv6Server></PrimaryDNSIpv6Server>
        <SecondaryDNSServer></SecondaryDNSServer>
        <SecondaryDNSIpv6Server></SecondaryDNSIpv6Server>
        <URL></URL>
        <UserProfile></UserProfile>
        <VLANID></VLANID>
        <VRF></VRF>
        <IpPool></IpPool>
        <Ipv6Pool></Ipv6Pool>
        <SSLVPNPolicy></SSLVPNPolicy>
        <SessTimeout></SessTimeout>
      </AuthorizationInfo>
      <AuthorizationIpv6PrefixInfo>
        <Ipv6Address></Ipv6Address>
        <Ipv6PrefixLength></Ipv6PrefixLength>
      </AuthorizationIpv6PrefixInfo>
    </Group>
  </UserGroups>
</UserAccounts>
```

### Table description

Item	Description
Feature name	UserAccounts
Table name	UserGroups
Table type	Multi-instance table
Row name	Group

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Group name	Index	String. Length: 1 to 32 characters.	N/A
AuthorizationInfo	Authorization information	Data structure	Members include: <ul style="list-style-type: none"> <li>• AclNumber</li> <li>• CallbackNumber</li> <li>• FTPHomeDir</li> <li>• IdleTimeout</li> <li>• PrimaryDNSServer</li> <li>• SecondaryDNSServer</li> <li>• URL</li> <li>• UserProfile</li> <li>• VLANID</li> <li>• VRF</li> <li>• IpPool</li> <li>• Ipv6Pool</li> <li>• SSLVPNPolicy</li> <li>• SessTimeout</li> </ul>	N/A
AclNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 5999.	N/A
CallbackNumber	Callback number	N/A	String. Length: 1 to 64 characters.	N/A
FTPHomeDir	FTP home directory	N/A	String. Length: 1 to 255 characters.	N/A
IdleTimeout	Idle time	N/A	Unsigned integer. Value range: 1 to 120 minutes.	N/A
PrimaryDNSServer	Primary DNS server	N/A	IPv4: String, dotted decimal notation.	N/A
PrimaryDNSIpv6Server	Primary DNS Ipv6 server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
SecondaryDNSServer	Secondary DNS server	N/A	IPv4: String, dotted decimal notation.	N/A
SecondaryDNSIpv6Server	Secondary DNS Ipv6 Server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
URL	URL information	N/A	String. Length: 1 to 255 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
UserProfile	Name of the user profile	N/A	String. Length: 1 to 31 characters.	The name can contain only letters, digits, and underscores, and must begin with a letter.
VLANID	VLAN ID assigned to the local user	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	Name of the VPN instance accessible to the local user	N/A	String. Length: 1 to 31 characters.	N/A
IpPool	Name of the IP address pool available to the local user	N/A	String. Length: 1 to 63 characters.	N/A
Ipv6Pool	Name of the IPv6 address pool available to the local user	N/A	String. Length: 1 to 63 characters.	N/A
SSLVPNPolicy	Name of the SSL VPN policy assigned to the local user	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
SessTimeout	Session timeout	N/A	Unsigned integer. Value range: 1 to 1440, in minutes.	N/A
AuthorizationIpv6PrefixInfo	IPv6 address prefix assigned to the local user	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A
Ipv6Address	IPv6 address prefix	N/A	Hexadecimal string, colon-separated.	For example, 2003:10::.
Ipv6PrefixLength	IPv6 address prefix length	N/A	Unsigned integer. Value range: 1 to 128.	N/A

## UserAccounts/Management/Accounts

Management user information table.

### XML structure

```

<UserAccounts>
  <Management>
    <Accounts>
      <Account>
        <Name></Name>
        <UID></UID>
      </Account>
    </Accounts>
  </Management>
</UserAccounts>

```

```

    <GroupName></GroupName>
    <FTP></FTP>
    <HTTP></HTTP>
    <HTTPS></HTTPS>
    <PAD></PAD>
    <SSH></SSH>
    <TELNET></TELNET>
    <Terminal></Terminal>
    <AccessLimit></AccessLimit>
    <CurrentAccessNum></CurrentAccessNum>
    <FTPHomeDir></FTPHomeDir>
  </Account>
</Accounts>
</Management>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	Accounts
Table type	Multi-instance table
Row name	Account
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Local user name	Index	String. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @
UID	Local user ID	N/A	Unsigned integer. Value range: 1001 to $2^{32} - 1$ .	N/A
GroupName	User group to which the local user belongs	N/A	String. Length: 1 to 32 characters.	The default is <b>system</b> .
FTP	Whether the FTP service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
HTTP	Whether the HTTP service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.

Column name	Column description	Column type	Data type and restrictions	Remarks
HTTPS	Whether the HTTPS service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
PAD	Whether the PAD service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
SSH	Whether the SSH service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
TELNET	Whether the telnet service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
Terminal	Whether the Terminal service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
AccessLimit	The maximum number of concurrent online users	N/A	Unsigned integer. Value range: 1 to 1024.	N/A
CurrentAccess Num	Current number of online users	N/A	Unsigned integer. Value range: 1 to 1024.	N/A
FTPHomeDir	FTP home directory of the local user	N/A	String. Length: 1 to 255 characters.	The directory must already exist. By default, the user can access the root directory of the device, which varies by device model.

## UserAccounts/Management/UserRoles

Management user role information table.

### XML structure

```

<UserAccounts>
  <Management>
    <UserRoles>
      <UserRole>
        <UserName></UserName>
        <RoleName></RoleName>
      </UserRole>
    </UserRoles>
  
```

```

    </Management>
  </UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	UserRoles
Table type	Multi-instance table
Row name	UserRole
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Local user name	Index	String. Length: 1 to 80 characters.	N/A
RoleName	User role name	Index	String. Length: 1 to 63 characters.	N/A

# UserAccounts/Network/Accounts

Network user information table.

## XML structure

```

<UserAccounts>
  <Network>
    <Accounts>
      <Account>
        <Name></Name>
        <UID></UID>
        <GroupName></GroupName>
        <ADVPN></ADVPN>
        <IPoE></IPoE>
        <LanAccess></LanAccess>
        <Portal></Portal>
        <PPP></PPP>
        <AccessLimit></AccessLimit>
        <CurrentAccessNum></CurrentAccessNum>
        <AuthorizationInfo>
          <AclNumber></AclNumber>
          <CallbackNumber></CallbackNumber>

```



```

<IdleTimeout></IdleTimeout>
<PrimaryDNSServer></PrimaryDNSServer>
<PrimaryDNSIPv6Server></PrimaryDNSIPv6Server>
<SecondaryDNSServer></SecondaryDNSServer>
<SecondaryDNSIPv6Server></SecondaryDNSIPv6Server>
<URL></URL>
<UserProfile></UserProfile>
<VLANID></VLANID>
<VRF></VRF>
<IPv4Address></IPv4Address>
<IPv6Address></IPv6Address>
<IpPool></IpPool>
<IPv6Pool></IPv6Pool>
<SSLVPNPolicy></SSLVPNPolicy>
</AuthorizationInfo>
<AuthorizationIPv6PrefixInfo>
  <IPv6Address></IPv6Address>
  <IPv6PrefixLength></IPv6PrefixLength>
</AuthorizationIPv6PrefixInfo>
<BindingInfo>
  <CallNumber></CallNumber>
  <Interface></Interface>
  <IPv4Address></IPv4Address>
  <MacAddress></MacAddress>
  <VLANID></VLANID>
</BindingInfo>
<SessTimeout></SessTimeout>
<ValidityDateTime>
  <StartValidityDateTime></StartValidityDateTime>
  <EndValidityDateTime></EndValidityDateTime>
</ValidityDateTime>
<Description></Description>
</Account>
</Accounts>
</Network>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	Accounts
Table type	Multi-instance table
Row name	Account
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Network user name	Index	String. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @
UID	Network user ID	N/A	Unsigned integer. Value range: 1 to $2^{32} - 1$ .	N/A
GroupName	User group to which the local user belongs	N/A	String. Length: 1 to 32 characters.	The default is <b>system</b> .
ADVPN	Whether the ADVPN service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
IPoE	Whether the IPoE service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
LanAccess	Whether the LAN access service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
Portal	Whether the portal service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
PPP	Whether the PPP service is available to the local user	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
AccessLimit	The maximum number of concurrent online users	N/A	Unsigned integer. Value range: 1 to 1024.	N/A
CurrentAccess Num	Current number of online users	N/A	Unsigned integer. Value range: 1 to 1024.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthorizationInfo	Authorization information of the local user	Data structure	Members include: <ul style="list-style-type: none"> <li>• AclNumber</li> <li>• CallbackNumber</li> <li>• IdleTimeout</li> <li>• PrimaryDNSServer</li> <li>• SecondaryDNSServer</li> <li>• URL</li> <li>• UserProfile</li> <li>• VLANID</li> <li>• VRF</li> <li>• Ipv4Address</li> <li>• Ipv6Address</li> <li>• IpPool</li> <li>• Ipv6Pool</li> <li>• SSLVPNPolicy</li> </ul>	N/A
AclNumber	ACL number	N/A	Unsigned integer. Value range: 2000 to 5999.	N/A
CallbackNumber	Callback number	N/A	String. Length: 1 to 64 characters.	N/A
IdleTimeout	Idle time	N/A	Unsigned integer. Value range: 1 to 120 minutes.	N/A
PrimaryDNSServer	Primary DNS server	N/A	IPv4: String, dotted decimal notation.	N/A
PrimaryDNSIpv6Server	Primary DNS Ipv6 server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
SecondaryDNSServer	Secondary DNS server	N/A	IPv4: String, dotted decimal notation.	N/A
SecondaryDNSIpv6Server	Secondary DNS Ipv6 Server.	N/A	IPv6: Hexadecimal string, colon-separated.	N/A
URL	URL information of the local user	N/A	String. Length: 1 to 255 characters.	N/A
UserProfile	Name of the user profile	N/A	String. Length: 1 to 31 characters.	The name can contain only letters, digits, and underscores, and must begin with a letter.
VLANID	VLAN ID assigned to the local user	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
VRF	Name of the VPN instance accessible to the local user	N/A	String. Length: 1 to 31 characters.	N/A
Ipv4Address	IPv4 address of the local user	N/A	String in dotted decimal notation.	For example, 1.1.1.1.
Ipv6Address	IPv6 address of the local user	N/A	Hexadecimal string, colon-separated.	For example, 2003:10::1:1.

Column name	Column description	Column type	Data type and restrictions	Remarks
IpPool	Name of the IP address pool available to the local user	N/A	String. Length: 1 to 63 characters.	N/A
Ipv6Pool	Name of the IPv6 address pool available to the local user	N/A	String. Length: 1 to 63 characters.	N/A
SSLVPNPolicy	Name of the SSL VPN policy group assigned to the local user	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
AuthorizationIpv6PrefixInfo	IPv6 address prefix assigned to the local user	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv6Address</li> <li>Ipv6PrefixLength</li> </ul>	N/A
Ipv6Address	IPv6 address prefix	N/A	Hexadecimal string, colon-separated.	For example, 2003:10::
Ipv6PrefixLength	IPv6 address prefix length	N/A	Unsigned integer. Value range: 1 to 128.	N/A
BindingInfo	Binding attributes of the local user	Data structure	Members include: <ul style="list-style-type: none"> <li>CallNumber</li> <li>Interface</li> <li>Ipv4Address</li> <li>MacAddress</li> <li>VLANID</li> </ul>	N/A
CallNumber	Calling number of the local user	N/A	String. Length: 1 to 64 characters.	N/A
Interface	Interface of the local user	N/A	String. Length: 1 to 47 characters.	N/A
Ipv4Address	IP address of the local user	N/A	String in the dotted decimal notation.	IPv4 example: 1.1.1.1.
MacAddress	MAC address of the local user	N/A	String. Length: 17 characters.	For example, FF-FF-FF-FF-FF-FF.
VLANID	VLAN ID assigned to the local user	N/A	Unsigned integer. Value range: 1 to 4094.	N/A
SessTimeout	Session timeout	N/A	Unsigned integer. Value range: 1 to 1440, in minutes.	N/A
ValidityDateTime	Account validity time period	Data structure	Members include: <ul style="list-style-type: none"> <li>StartValidityDateTime</li> <li>EndValidityDateTime</li> </ul>	N/A
StartValidityDateTime	Time from which the account becomes valid	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
EndValidityDate Time	Time at which the account expires	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
Description	Description of the local user	N/A	String. Length: 1 to 127 characters.	N/A

## UserAccounts/PasswordLimit

Password limit of the local user module.

### XML structure

```

<UserAccounts>
  <PasswordLimit>
    <MinLen></MinLen>
    <MaxLen></MaxLen>
    <MinTypeNum></MinTypeNum>
  </PasswordLimit>
</UserAccounts>

```

### Table description

Item	Description
Feature name	UserAccounts
Table name	PasswordLimit
Table type	Single-instance table
Row name	UserRole
Restrictions	<ul style="list-style-type: none"> <li>The configuration takes effect on the following items: <ul style="list-style-type: none"> <li>UserAccounts/Management/Accounts table &lt;Password&gt;&lt;/Password&gt;</li> <li>UserAccounts/Network/Accounts table &lt;Password&gt;&lt;/Password&gt;</li> </ul> </li> <li>Data restrictions acquired in FIPS mode are different from the data restrictions acquired in non-FIPS mode.</li> </ul>

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MinLen	The minimum length of a password	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxLen	The maximum length of a password	N/A	Unsigned integer.	N/A
MinTypeNum	The minimum number of character types that a password must contain	N/A	Unsigned integer.	Character types include digits, uppercase letters, lowercase letters, and special characters. For example, if the value is set to 3, the password string must include three or more character types.

## UserAccounts/Guest/Accounts

Table of network access guest information.

### XML structure

```

<UserAccounts>
  <Guest>
    <Accounts>
      <Account>
        <WaitApproval></WaitApproval>
        <Name></Name>
        <GroupName></GroupName>
        <FullName></FullName>
        <Phone></Phone>
        <Email></Email>
        <Company></Company>
        <Description></Description>
        <SponsorFullName></SponsorFullName>
        <SponsorEmail></SponsorEmail>
        <SponsorDepartment></SponsorDepartment>
        <ValidityDateTime>
          <StartValidityDateTime></StartValidityDateTime>
          <EndValidityDateTime></EndValidityDateTime>
        </ValidityDateTime>
      </Account>
    </Accounts>
  </Guest>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	Accounts
Table type	Multi-instance table
Row name	Account
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
WaitApproval	Whether the guest is waiting for approval	Index	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
Name	User name	Index	String. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @
GroupName	User group to which the guest belongs	N/A	String. Length: 1 to 32 characters.	The default setting is <b>system</b> .
FullName	Guest name	N/A	String. Length: 1 to 255 characters.	N/A
Phone	Guest phone	N/A	String. Length: 1 to 32 characters.	N/A
Email	Guest phone	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
Company	Guest company	N/A	String. Length: 1 to 255 characters.	N/A
Description	Guest description	N/A	String. Length: 1 to 255 characters.	N/A
SponsorFullName	Sponsor name	N/A	String. Length: 1 to 255 characters.	N/A
SponsorEmail	Sponsor Email	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
SponsorDepartment	Sponsor department	N/A	String. Length: 1 to 127 characters.	N/A
ValidityDateTime	Account validity time period	Data structure	Members include: <ul style="list-style-type: none"> <li>StartValidityDateTime</li> <li>EndValidityDateTime</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
StartValidityDate	Time from which the account becomes valid	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A
EndValidityDate	Time at which the account expires	N/A	DateTime. Format: YYYY-MM-DDTHH:MM:SS.	N/A

## UserAccounts/GuestConfigure

Global control of guest accounts table.

### XML structure

```

<UserAccounts>
  <GuestConfigure>
    <AutoDelete></AutoDelete>
    <EmailFormat>
      <GuestSubject></GuestSubject>
      <GuestBody></GuestBody>
      <GuestManagerSubject></GuestManagerSubject>
      <GuestManagerBody></GuestManagerBody>
      <GuestSponsorSubject></GuestSponsorSubject>
      <GuestSponsorBody></GuestSponsorBody>
    </EmailFormat>
    <GuestManagerEmail></GuestManagerEmail>
    <EmailSender></EmailSender>
    <SmtServer></SmtServer>
    <WaitApprovalTime></WaitApprovalTime>
  </GuestConfigure>
</UserAccounts>

```

### Table description

Item	Description
Feature name	UserAccounts
Table name	GuestConfigure
Table type	Single-instance table
Row name	None
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AutoDelete	Whether to enable automatic deletion	Column	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	The default is false.
EmailFormat	Email address format	Data structure	Members include: <ul style="list-style-type: none"> <li>GuestSubject</li> <li>GuestBody</li> <li>GuestManagerSubject</li> <li>GuestManagerBody</li> <li>GuestSponsorSubject</li> <li>GuestSponsorBody</li> </ul>	N/A
GuestSubject	Email subject to send to the guest	N/A	String. Length: 1 to 127 characters.	N/A
GuestBody	Email body to send to the guest	N/A	String. Length: 1 to 255 characters.	N/A
GuestManager Subject	Email subject to send to the guest manager	N/A	String. Length: 1 to 127 characters.	N/A
GuestManager Body	Email body to send to the guest manager	N/A	String. Length: 1 to 255 characters.	N/A
GuestSponsorSubject	Email subject to send to the guest sponsor	N/A	String. Length: 1 to 127 characters.	N/A
GuestSponsorBody	Email body to send to the guest sponsor	N/A	String. Length: 1 to 255 characters.	N/A
GuestManager Email	Email address of the guest manager	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
EmailSender	Email address of the addresser	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
SmtpServer	URL of the SMTP server	N/A	String. Length: 1 to 255 characters.	N/A
WaitApprovalTime	The maximum waiting time for account approval	N/A	Unsigned integer. Value range: 1 to 720, in hours.	The default is 24 hours.

## UserAccounts/Identity/Users

Table of static user accounts for user identification.

## XML structure

```
<UserAccounts>
  <Identity>
    <Users>
      <User>
        <Name></Name>
        <IpType></IpType>
        <IpAddress></IpAddress>
        <MacAddress></MacAddress>
      </User>
    </Users>
  </Identity>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	Users
Table type	Multi-instance table
Row name	User
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User name	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @
IpType	IP address family	Index	Enumeration: <ul style="list-style-type: none"><li>0—IPv4</li><li>1—IPv6</li></ul>	N/A
IpAddress	The IP address of user	Index	IPv4 or IPv6 address.	N/A
MacAddress	The MAC address of user	Index	MAC address format: XX-XX-XX-XX-XX-XX	If the column is empty, the system ignores the user MAC address.

# UserAccounts/Network/IdentityGroups

Table of identity groups associated with a user.

## XML structure

```
<UserAccounts>
  <Network>
    <IdentityGroups>
      <IdentityGroup>
        <UserName></UserName>
        <GroupName></GroupName>
      </IdentityGroup>
    </IdentityGroups>
  </Network>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	IdentityGroups
Table type	Multi-instance table
Row name	IdentityGroup
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @
GroupName	Group name	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

# UserAccounts/UserGroup/IdentityMembers

Table of member users in an identity group.

## XML structure

```
<UserAccounts>
  <UserGroup>
    <IdentityMembers>
      <IdentityMember>
        <GroupName></GroupName>
        <UserName></UserName>
      </IdentityMember>
    </IdentityMembers>
  </UserGroup>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	IdentityMembers
Table type	Multi-instance table
Row name	IdentityMember
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the identity group	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
UserName	Name of the member user	Index	String, case-sensitive. Length: 1 to 80 characters.	The name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and cannot contain any of the following characters: \   / : * ? < > @

## UserAccounts/UserGroup/IdentityGroups

Table of member groups in an identity group.

## XML structure

```
<UserAccounts>
  <UserGroup>
    <IdentityGroups>
```

```

    <IdentityGroup>
      <GroupName></GroupName>
    </IdentityGroup></IdentityGroup>
  </IdentityGroups>
</UserGroup>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	IdentityGroups
Table type	Multi-instance table
Row name	IdentityGroup
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	Name of the identity group	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A
IdentityGroup	Name of the member group	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## UserAccounts/IdentityUser

Table of online user information for user identification.

## XML structure

```

<UserAccounts>
  <Identity>
    <IdentityUsers>
      <IdentityUser>
        <UserName></UserName>
        <IpAddress></IpAddress>
        <MacAddress></MacAddress>
        <Type></Type>
      </IdentityUser>
    </IdentityUsers>
  </Identity>
</UserAccounts>

```

```

    </Identity>
  </UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	IdentityUsers
Table type	Multi-instance table
Row name	IdentityUser
Restrictions	N/A
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name	Index	String, case-sensitive. Length: 1 to 80 characters.	N/A
IpAddress	IP address of the user	Index	IPv4 or IPv6 address.	N/A
MacAddress	MAC address of the user	Index	MAC address format: XX-XX-XX-XX-XX-XX	If the column is empty, the system ignores the user MAC address.
Type	User type	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>1—Static.</li> <li>2—Portal.</li> <li>3—IPoE.</li> <li>4—PPP.</li> </ul>	The online user can have various types at the same time. Obtain the value by displacement calculation.

## UserAccounts/IdentityEnable

Enable or disable the user identification feature.

## XML structure

```

<UserAccounts>
  <IdentityEnable>
    <Enable></Enable>
  </IdentityEnable>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	IdentityEnable
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enable or disable the user identification feature	N/A	Boolean: <ul style="list-style-type: none"><li>true</li><li>false</li></ul>	The default is false.

## UserAccounts/ChangePasswords

Change user passwords.

## XML structure

```
<UserAccounts>
  <ChangePasswords>
    <ChangePassword>
      <UserName></UserName>
    </ChangePassword>
  </ChangePasswords>
</UserAccounts>
```

## Table description

Item	Description
Feature name	UserAccounts
Table name	ChangePasswords
Table type	Multi-instance table
Row name	ChangePassword
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	User name entered by the user	Index	<p>String in the format of <i>localusername@domain</i> or <i>localusername</i>.</p> <p>Length: 1 to 311 characters.</p> <ul style="list-style-type: none"> <li><i>localusername</i>—Local user name, case-sensitive string of 1 to 55 characters.</li> <li><i>@</i>—Domain name delimiter.</li> <li><i>domain</i>—Domain name, case-insensitive string of 1 to 255 characters.</li> </ul>	The local user name cannot be <b>a</b> , <b>al</b> , or <b>all</b> , and it cannot contain any of the following characters: \   : * ? < > @

## UserAccounts/NetworkMailConfigure

Global mail configuration table of local network access users.

## XML structure

```

<UserAccounts>
  <NetworkMailConfigure>
    <EmailFormat>
      <Subject></Subject>
      <Body></Body>
    </EmailFormat>
    <EmailSender></EmailSender>
    <SmtpServer></SmtpServer>
    <SmtpAuthentication>
      <UserName></UserName>
    </SmtpAuthentication>
  </NetworkMailConfigure>
</UserAccounts>

```

## Table description

Item	Description
Feature name	UserAccounts
Table name	NetworkMailConfigure
Table type	Single-instance table
Row name	None
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
EmailFormat	Email address format	Data structure	Members include: <ul style="list-style-type: none"><li>Subject.</li><li>Body.</li></ul>	N/A
Subject	Email subject to send	N/A	String. Length: 1 to 127 characters.	N/A
Body	Email body to send	N/A	String. Length: 1 to 255 characters.	N/A
EmailSender	Email address of the sender	N/A	String. Length: 1 to 255 characters.	The email address must include one at sign (@).
SmtpServer	URL of the SMTP server	N/A	String. Length: 1 to 255 characters.	N/A
SmtpAuthentication	SMTP server authentication configuration	Data structure	Members include: <ul style="list-style-type: none"><li>UserName.</li><li>Password.</li></ul>	N/A
UserName	User name	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A

## UserAccounts/Network/AccountsCount

This table contains the number of network access users filtered by user description.

### XML structure

```
<UserAccounts>
  <Network>
    <AccountsCount>
      <Count></Count>
      <DescFilter></DescFilter>
    </AccountsCount>
  </Network>
</UserAccounts>
```

### Table description

Item	Description
Feature name	UserAccounts
Table name	AccountsCount
Table type	Single-instance table
Row name	None

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Count	Number of network access users	N/A	Unsigned integer.	N/A
DescFilter	User description	N/A	String. Length: 0 to 127 characters.	<p>This column supports only the following descriptions:</p> <ul style="list-style-type: none"> <li>• <b>user_from_server</b>—The <b>Count</b> column displays the number of users whose description is <b>user_from_server</b>.</li> <li>• <b>not_user_from_server</b>—The <b>Count</b> column displays the number of users whose description is <b>not_user_from_server</b>.</li> </ul> <p>If you do not specify a description, the <b>Count</b> column displays the total number of network access users.</p>

# Contents

UserAccounts.....	1
UserAccounts/Guest/Accounts.....	1
UserAccounts/Management/Accounts .....	2
UserAccounts/Network/Accounts.....	4
UserAccounts/UserGroup/IdentityMembers .....	6
UserAccounts/ExportNetworkUser.....	6
UserAccounts/Identity/Users .....	6
UserAccounts/Management/UserRoles .....	7
UserAccounts/UserGroups.....	7
UserAccounts/Guest/Accounts.....	8
UserAccounts/ApproveGuest.....	8
UserAccounts/GenerateGuestAccount .....	9
UserAccounts/ChangeMyPassword .....	9
UserAccounts/OldPasswordCheck .....	10
UserAccounts/ImportGuestAccount .....	11
UserAccounts/ImportNetworkUser .....	11
UserAccounts/ExportNetworkUser.....	11
UserAccounts/UserGroup/IdentityGroups.....	12
UserAccounts/UserGroup/IdentityMembers .....	12
UserAccounts/IdentityEnable.....	12
UserAccounts/Network/IdentityGroups .....	12
UserAccounts/IdentityUser.....	13
UserAccounts/ExportTemplet .....	13
UserAccounts/GuestConfigure.....	13
UserAccounts/Network/AccountsCount.....	13

# UserAccounts

## UserAccounts/Guest/Accounts

Message	Explanation
Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。	Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。
Insufficient right to perform the operation. 没有足够的权限。	Insufficient right to perform the operation. 没有足够的权限。
The user doesn't exist. 指定的用户不存在。	The user doesn't exist. 指定的用户不存在。
Maximum number of users already reached. 用户的数目达到上限。	Maximum number of users already reached. 用户的数目达到上限。
Insufficient right to perform the operation. 没有足够的权限执行本操作。	Insufficient right to perform the operation. 没有足够的权限执行本操作。
This user already exists. 该用户已存在。	This user already exists. 该用户已存在。
Invalid Email address. 非法邮箱地址。	Invalid Email address. 非法邮箱地址。
The expiration date and time should be later than the current date and time. 生效结束时间必须晚于当前系统时间。	The expiration date and time should be later than the current date and time. 生效结束时间必须晚于当前系统时间。
The expiration date time should be later than the start date time. 截止时间应比开始时间晚。	The expiration date time should be later than the start date time. 截止时间应比开始时间晚。
Username conflicted. Please change the name configuration. 用户名被占用, 请修改用户名配置。	Username conflicted. Please change the name configuration. 用户名被占用, 请修改用户名配置。
Validity date and time configuration is not complete. 有效期配置不完整。	Validity date and time configuration is not complete. 有效期配置不完整。
Operation not supported. 不支持此项操作。	Operation not supported. 不支持此项操作。
A local user with the same name already exists. 存在一个同名本地来宾用户。	A local user with the same name already exists. 存在一个同名本地来宾用户。
The new password is too short. It must contain at least %u characters. 新密码长度不足, 至少需要包含%u个字符。	The new password is too short. It must contain at least %u characters. 新密码长度不足, 至少需要包含%u个字符。
Invalid password composition. The new password must contain at least %u types and at least %u	Invalid password composition. The new password must contain at least %u types and at least %u characters for each type.

characters for each type. 无效的密码组合，新密码至少包含%u类字符，并且每类字符的个数不能少于%u个。	无效的密码组合，新密码至少包含%u类字符，并且每类字符的个数不能少于%u个。
The new password cannot contain 3 or more repeated characters. 新密码不能包含3个及以上的重复字符。	The new password cannot contain 3 or more repeated characters. 新密码不能包含3个及以上的重复字符。
The new password cannot contain the username or reversed username. 新密码中不能包含与用户名或逆转的用户名一样的字符串。	The new password cannot contain the username or reversed username. 新密码中不能包含与用户名或逆转的用户名一样的字符串。
The new password must contain at least 4 different characters different from any previous password. 新密码中应该至少包含4个不同于之前密码的字符。	The new password must contain at least 4 different characters different from any previous password. 新密码中应该至少包含4个不同于之前密码的字符。
Cannot change password until the update-wait time expires. 在密码更新限制时间内不能修改密码。	Cannot change password until the update-wait time expires. 在密码更新限制时间内不能修改密码。
The new password must contain at least 4 different characters. 新密码必须包含至少4个不同的字符。	The new password must contain at least 4 different characters. 新密码必须包含至少4个不同的字符。
Operation failed. The system resource is not enough. 操作失败，系统资源不足。	Operation failed. The system resource is not enough. 操作失败，系统资源不足。
The new password is too long. It can't contain more than %u characters. 新密码超长，不能超过%u个字符。	The new password is too long. It can't contain more than %u characters. 新密码超长，不能超过%u个字符。
The new password must be different from the old password or any passwords stored in the history records. 新密码不能与旧密码以及所有记录的历史密码相同。	The new password must be different from the old password or any passwords stored in the history records. 新密码不能与旧密码以及所有记录的历史密码相同。
The new password must be different from the old password by a minimum of four different characters. 新密码至少要与旧密码存在4个不同字符的差异。	The new password must be different from the old password by a minimum of four different characters. 新密码至少要与旧密码存在4个不同字符的差异。

## UserAccounts/Management/Accounts

Message	Explanation
Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。	Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。
Can't remove the security-audit user role from the user: This user is the only user with the security-audit user role in the system. 系统中的最后一个安全日志管理员角色不可被取消。	Can't remove the security-audit user role from the user: This user is the only user with the security-audit user role in the system. 系统中的最后一个安全日志管理员角色不可被取消。

<p>Can't delete all users with the security-audit user role in the system.</p> <p>不能将所有安全日志管理员角色的本地用户全部删除。</p>	<p>Can't delete all users with the security-audit user role in the system.</p> <p>不能将所有安全日志管理员角色的本地用户全部删除。</p>
<p>Can't delete the user: This user is the only user with the security-audit user role.</p> <p>系统中的最后一个安全日志管理员角色的本地用户不可被删除。</p>	<p>Can't delete the user: This user is the only user with the security-audit user role.</p> <p>系统中的最后一个安全日志管理员角色的本地用户不可被删除。</p>
<p>The user group doesn't exist.</p> <p>指定的用户组不存在。</p>	<p>The user group doesn't exist.</p> <p>指定的用户组不存在。</p>
<p>Insufficient right to perform the operation.</p> <p>没有足够的权限。</p>	<p>Insufficient right to perform the operation.</p> <p>没有足够的权限。</p>
<p>The user doesn't exist.</p> <p>指定的用户不存在。</p>	<p>The user doesn't exist.</p> <p>指定的用户不存在。</p>
<p>Invalid path or nonexistent directory.</p> <p>错误的路径或者不存在的目录。</p>	<p>Invalid path or nonexistent directory.</p> <p>错误的路径或者不存在的目录。</p>
<p>Maximum number of users already reached.</p> <p>用户的数目达到上限。</p>	<p>Maximum number of users already reached.</p> <p>用户的数目达到上限。</p>
<p>Insufficient right to perform the operation.</p> <p>没有足够的权限执行本操作。</p>	<p>Insufficient right to perform the operation.</p> <p>没有足够的权限执行本操作。</p>
<p>The user role isn't assigned to the user.</p> <p>用户角色未被授权。</p>	<p>The user role isn't assigned to the user.</p> <p>用户角色未被授权。</p>
<p>This user already exists.</p> <p>该用户已存在。</p>	<p>This user already exists.</p> <p>该用户已存在。</p>
<p>The new password is too short. It must contain at least %u characters.</p> <p>新密码长度不足，至少需要包含%u个字符。</p>	<p>The new password is too short. It must contain at least %u characters.</p> <p>新密码长度不足，至少需要包含%u个字符。</p>
<p>Invalid password composition. The new password must contain at least %u types and at least %u characters for each type.</p> <p>无效的密码组合，新密码至少包含%u类字符，并且每类字符的个数不能少于%u个。</p>	<p>Invalid password composition. The new password must contain at least %u types and at least %u characters for each type.</p> <p>无效的密码组合，新密码至少包含%u类字符，并且每类字符的个数不能少于%u个。</p>
<p>The new password cannot contain 3 or more repeated characters.</p> <p>新密码不能包含3个及以上的重复字符。</p>	<p>The new password cannot contain 3 or more repeated characters.</p> <p>新密码不能包含3个及以上的重复字符。</p>
<p>The new password cannot contain the username or reversed username.</p> <p>新密码中不能包含与用户名或逆转的用户名一样的字符串。</p>	<p>The new password cannot contain the username or reversed username.</p> <p>新密码中不能包含与用户名或逆转的用户名一样的字符串。</p>
<p>The new password must contain at least 4 different characters different from any previous password.</p> <p>新密码中应该至少包含4个不同于之前密码的字符。</p>	<p>The new password must contain at least 4 different characters different from any previous password.</p> <p>新密码中应该至少包含4个不同于之前密码的字符。</p>
<p>Cannot change password until the update-wait time expires.</p> <p>在密码更新限制时间内不能修改密码。</p>	<p>Cannot change password until the update-wait time expires.</p> <p>在密码更新限制时间内不能修改密码。</p>

The new password must contain at least 4 different characters. 新密码必须包含至少4个不同的字符。	The new password must contain at least 4 different characters. 新密码必须包含至少4个不同的字符。
Operation failed. The system resource is not enough. 操作失败，系统资源不足。	Operation failed. The system resource is not enough. 操作失败，系统资源不足。
The new password is too long. It can't contain more than %u characters. 新密码超长，不能超过%u个字符。	The new password is too long. It can't contain more than %u characters. 新密码超长，不能超过%u个字符。
The new password must be different from the old password or any passwords stored in the history records. 新密码不能与旧密码以及所有记录的历史密码相同。	The new password must be different from the old password or any passwords stored in the history records. 新密码不能与旧密码以及所有记录的历史密码相同。
The new password must be different from the old password by a minimum of four different characters. 新密码至少要与旧密码存在4个不同字符的差异。	The new password must be different from the old password by a minimum of four different characters. 新密码至少要与旧密码存在4个不同字符的差异。

## UserAccounts/Network/Accounts

Message	Explanation
Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。	Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。
Invalid interface. 无效接口。	Invalid interface. 无效接口。
The user group doesn't exist. 指定的用户组不存在。	The user group doesn't exist. 指定的用户组不存在。
Invalid IP address. 错误的IP地址。	Invalid IP address. 错误的IP地址。
Insufficient right to perform the operation. 没有足够的权限。	Insufficient right to perform the operation. 没有足够的权限。
The user doesn't exist. 指定的用户不存在。	The user doesn't exist. 指定的用户不存在。
Invalid MAC address. 错误的MAC地址。	Invalid MAC address. 错误的MAC地址。
Maximum number of users already reached. 用户的数目达到上限。	Maximum number of users already reached. 用户的数目达到上限。
Insufficient right to perform the operation. 没有足够的权限执行本操作。	Insufficient right to perform the operation. 没有足够的权限执行本操作。
The user role isn't assigned to the user.	The user role isn't assigned to the user.

用户角色未被授权。	用户角色未被授权。
This user already exists. 该用户已存在。	This user already exists. 该用户已存在。
Username conflicted. Please change the name configuration. 用户名被占用，请修改用户名配置。	Username conflicted. Please change the name configuration. 用户名被占用，请修改用户名配置。
A local guest with the same name already exists. 存在一个同名本地用户。	A local guest with the same name already exists. 存在一个同名本地用户。
You must specify both the start date time and expiration date time. 必须同时配置开始时间和结束时间。	You must specify both the start date time and expiration date time. 必须同时配置开始时间和结束时间。
The expiration time must be later than the start time and the current system time. 结束时间必须晚于开始时间以及当前系统时间。	The expiration time must be later than the start time and the current system time. 结束时间必须晚于开始时间以及当前系统时间。
The new password is too short. It must contain at least %u characters. 新密码长度不足，至少需要包含%u个字符。	The new password is too short. It must contain at least %u characters. 新密码长度不足，至少需要包含%u个字符。
Invalid password composition. The new password must contain at least %u types and at least %u characters for each type. 无效的密码组合，新密码至少包含%u类字符，并且每类字符的个数不能少于%u个。	Invalid password composition. The new password must contain at least %u types and at least %u characters for each type. 无效的密码组合，新密码至少包含%u类字符，并且每类字符的个数不能少于%u个。
The new password cannot contain 3 or more repeated characters. 新密码不能包含3个及以上的重复字符。	The new password cannot contain 3 or more repeated characters. 新密码不能包含3个及以上的重复字符。
The new password cannot contain the username or reversed username. 新密码中不能包含与用户名或逆转的用户名一样的字符串。	The new password cannot contain the username or reversed username. 新密码中不能包含与用户名或逆转的用户名一样的字符串。
The new password must contain at least 4 different characters different from any previous password. 新密码中应该至少包含4个不同于之前密码的字符。	The new password must contain at least 4 different characters different from any previous password. 新密码中应该至少包含4个不同于之前密码的字符。
Cannot change password until the update-wait time expires. 在密码更新限制时间内不能修改密码。	Cannot change password until the update-wait time expires. 在密码更新限制时间内不能修改密码。
The new password must contain at least 4 different characters. 新密码必须包含至少4个不同的字符。	The new password must contain at least 4 different characters. 新密码必须包含至少4个不同的字符。
Operation failed. The system resource is not enough. 操作失败，系统资源不足。	Operation failed. The system resource is not enough. 操作失败，系统资源不足。
The new password is too long. It can't contain more than %u characters. 新密码超长，不能超过%u个字符。	The new password is too long. It can't contain more than %u characters. 新密码超长，不能超过%u个字符。
The new password must be different from the old password or any passwords stored in the history	The new password must be different from the old password or any passwords stored in the history records.



records. 新密码不能与旧密码以及所有记录的历史密码相同。	新密码不能与旧密码以及所有记录的历史密码相同。
The new password must be different from the old password by a minimum of four different characters. 新密码至少要与旧密码存在4个不同字符的差异。	The new password must be different from the old password by a minimum of four different characters. 新密码至少要与旧密码存在4个不同字符的差异。

## UserAccounts/UserGroup/IdentityMembers

Message	Explanation
Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。	Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。.

## UserAccounts/ExportNetworkUser

Message	Explanation
Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。	Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。.

## UserAccounts/Identity/Users

Message	Explanation
Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。	Username can't contain characters \   / : * ? < > @ and can't be a, al, or all. 用户名不能包含\,  , /, :, *, ?, <, >, @, 并且不能是a, al, all。
Invalid IP address. 错误的IP地址。	Invalid IP address. 错误的IP地址。
Not enough resources. 没有足够的资源。	Not enough resources. 没有足够的资源。
Invalid MAC address. 错误的MAC地址。	Invalid MAC address. 错误的MAC地址。
Invalid IP type. IP地址类型错误。	Invalid IP type. IP地址类型错误。
The IP or MAC address is already bound to an identity user. IP和MAC地址已经与其他身份识别用户绑定。	The IP or MAC address is already bound to an identity user. IP和MAC地址已经与其他身份识别用户绑定。

Operation failed. 操作失败。	Operation failed. 操作失败。
The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。	The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。

## UserAccounts/Management/UserRoles

Message	Explanation
Can't remove the security-audit user role from the user: This user is the only user with the security-audit user role in the system. 系统中的最后一个安全日志管理员角色不可被取消。	Can't remove the security-audit user role from the user: This user is the only user with the security-audit user role in the system. 系统中的最后一个安全日志管理员角色不可被取消。
Maximum number of user roles for the user already reached. 本地用户的授权用户角色数目已经到达上限。	Maximum number of user roles for the user already reached. 本地用户的授权用户角色数目已经到达上限。
Not enough resources. 没有足够的资源。	Not enough resources. 没有足够的资源。
Insufficient right to perform the operation. 没有足够的权限执行本操作。	Insufficient right to perform the operation. 没有足够的权限执行本操作。
Can't configure the system predefined role. 系统预定义角色不能被配置。	Can't configure the system predefined role. 系统预定义角色不能被配置。
The user role isn't assigned to the user. 用户角色未被授权。	The user role isn't assigned to the user. 用户角色未被授权。

## UserAccounts/UserGroups

Message	Explanation
The user group doesn't exist. 指定的用户组不存在。	The user group doesn't exist. 指定的用户组不存在。
Invalid IP address. 错误的IP地址。	Invalid IP address. 错误的IP地址。
Can't delete the user group: It has one or more local users. 拥有一个或者多个本地用户的用户组不能被删除。	Can't delete the user group: It has one or more local users. 拥有一个或者多个本地用户的用户组不能被删除。
Can't delete the default user group system. 缺省用户组不能被删除。	Can't delete the default user group system. 缺省用户组不能被删除。
Maximum number of users roles for the user group already reached. 用户组下的用户角色的数目已经达到上限。	Maximum number of users roles for the user group already reached. 用户组下的用户角色的数目已经达到上限。
Invalid path or nonexistent directory.	Invalid path or nonexistent directory.

错误的路径或者不存在的目录。	错误的路径或者不存在的目录。
Insufficient right to perform the operation. 没有足够的权限执行本操作。	Insufficient right to perform the operation. 没有足够的权限执行本操作。
Maximum number of user groups already reached. 用户组的数目达到上限。	Maximum number of user groups already reached. 用户组的数目达到上限。
The user role isn't assigned to the user. 用户角色未被授权。	The user role isn't assigned to the user. 用户角色未被授权。

## UserAccounts/Guest/Accounts

Message	Explanation
The user group doesn't exist. 指定的用户组不存在。	The user group doesn't exist. 指定的用户组不存在。

## UserAccounts/ApproveGuest

Message	Explanation
Insufficient right to perform the operation. 没有足够的权限。	Insufficient right to perform the operation. 没有足够的权限。
The user doesn't exist. 指定的用户不存在。	The user doesn't exist. 指定的用户不存在。
Maximum number of users already reached. 用户的数目达到上限。	Maximum number of users already reached. 用户的数目达到上限。
Insufficient right to perform the operation. 没有足够的权限执行本操作。	Insufficient right to perform the operation. 没有足够的权限执行本操作。
This user already exists. 该用户已存在。	This user already exists. 该用户已存在。
Invalid Email address. 非法邮箱地址。	Invalid Email address. 非法邮箱地址。
Username conflicted. Please change the name configuration. 用户名被占用，请修改用户名配置。	Username conflicted. Please change the name configuration. 用户名被占用，请修改用户名配置。
Validity date and time configuration is not complete. 有效期配置不完整。	Validity date and time configuration is not complete. 有效期配置不完整。

# UserAccounts/GenerateGuestAccount

Message	Explanation
Insufficient right to perform the operation. 没有足够的权限。	Insufficient right to perform the operation. 没有足够的权限。
The user doesn't exist. 指定的用户不存在。	The user doesn't exist. 指定的用户不存在。
Maximum number of users already reached. 用户的数目达到上限。	Maximum number of users already reached. 用户的数目达到上限。
Insufficient right to perform the operation. 没有足够的权限执行本操作。	Insufficient right to perform the operation. 没有足够的权限执行本操作。
Insufficient suffixes to assign to users. Please pad the start suffix with leading zeros or reduce the user count. 指定的编号后缀不能满足生成足够数目的用户，请增加编号后缀长度或减少用户数目。	Insufficient suffixes to assign to users. Please pad the start suffix with leading zeros or reduce the user count. 指定的编号后缀不能满足生成足够数目的用户，请增加编号后缀长度或减少用户数目。
The expiration date and time should be later than the current date and time. 生效结束时间必须晚于生效起始时间。	The expiration date and time should be later than the current date and time. 生效结束时间必须晚于生效起始时间。
This user already exists. 该用户已存在。	This user already exists. 该用户已存在。
Username conflicted. Please change the name configuration. 用户名被占用，请修改用户名配置。	Username conflicted. Please change the name configuration. 用户名被占用，请修改用户名配置。
The suffix will exceed the maximum number. Please change the start suffix or the user count. 递增后的编号后缀将会超过最大值，请调整编号后缀或者用户数目。	The suffix will exceed the maximum number. Please change the start suffix or the user count. 递增后的编号后缀将会超过最大值，请调整编号后缀或者用户数目。
Validity date and time configuration is not complete. 有效期配置不完整。	Validity date and time configuration is not complete. 有效期配置不完整。

# UserAccounts/ChangeMyPassword

Message	Explanation
The user doesn't exist. 指定的用户不存在。	The user doesn't exist. 指定的用户不存在。
The new password is not set. 新密码未设置。	The new password is not set. 新密码未设置。
Wrong Password. 密码不正确。	Wrong Password. 密码不正确。
The new password is too short. It must contain at least %u characters.	The new password is too short. It must contain at least %u characters.

新密码长度不足，至少需要包含%u个字符。	新密码长度不足，至少需要包含%u个字符。
Invalid password composition. The new password must contain at least %u types and at least %u characters for each type. 无效的密码组合，新密码至少包含%u类字符，并且每类字符的个数不能少于%u个。	Invalid password composition. The new password must contain at least %u types and at least %u characters for each type. 无效的密码组合，新密码至少包含%u类字符，并且每类字符的个数不能少于%u个。
The new password cannot contain 3 or more repeated characters. 新密码不能包含3个及以上的重复字符。	The new password cannot contain 3 or more repeated characters. 新密码不能包含3个及以上的重复杂符。
The new password cannot contain the username or reversed username. 新密码中不能包含与用户名或逆转的用户名一样的字符串。	The new password cannot contain the username or reversed username. 新密码中不能包含与用户名或逆转的用户名一样的字符串。
The new password must contain at least 4 different characters different from any previous password. 新密码中应该至少包含4个不同于之前密码的字符。	The new password must contain at least 4 different characters different from any previous password. 新密码中应该至少包含4个不同于之前密码的字符。
Cannot change password until the update-wait time expires. 在密码更新限制时间内不能修改密码。	Cannot change password until the update-wait time expires. 在密码更新限制时间内不能修改密码。
The new password must contain at least 4 different characters. 新密码必须包含至少4个不同的字符。	The new password must contain at least 4 different characters. 新密码必须包含至少4个不同的字符。
Operation failed. The system resource is not enough. 操作失败，系统资源不足。	Operation failed. The system resource is not enough. 操作失败，系统资源不足。
The new password is too long. It can't contain more than %u characters. 新密码超长，不能超过%u个字符。	The new password is too long. It can't contain more than %u characters. 新密码超长，不能超过%u个字符。
The new password must be different from the old password or any passwords stored in the history records. 新密码不能与旧密码以及所有记录的历史密码相同。	The new password must be different from the old password or any passwords stored in the history records. 新密码不能与旧密码以及所有记录的历史密码相同。
The new password must be different from the old password by a minimum of four different characters. 新密码至少要与旧密码存在4个不同字符的差异。	The new password must be different from the old password by a minimum of four different characters. 新密码至少要与旧密码存在4个不同字符的差异。

## UserAccounts/OldPasswordCheck

Message	Explanation
The user doesn't exist. 指定的用户不存在。	The user doesn't exist. 指定的用户不存在。
Wrong Password. 密码不正确。	Wrong Password. 密码不正确。

# UserAccounts/ImportGuestAccount

Message	Explanation
Maximum number of users already reached. 用户的数目达到上限。	Maximum number of users already reached. 用户的数目达到上限。
Number of imported users: %d. Failed to import other users because of an error in line %d. 成功导入用户数: %d。因第%d行的错误导致导入中断。	Number of imported users: %d. Failed to import other users because of an error in line %d. 成功导入用户数: %d。因第%d行的错误导致导入中断。
Validity date and time configuration is not complete. 有效期配置不完整。	Validity date and time configuration is not complete. 有效期配置不完整。

# UserAccounts/ImportNetworkUser

Message	Explanation
Maximum number of users already reached. 用户的数目达到上限。	Maximum number of users already reached. 用户的数目达到上限。
Number of imported users: %d. Failed to import other users because of an error in line %d. 成功导入用户数: %d。因第%d行的错误导致导入中断。	Number of imported users: %d. Failed to import other users because of an error in line %d. 成功导入用户数: %d。因第%d行的错误导致导入中断。
Import failed. Please check the configuration. 导入用户操作失败。	Import failed. Please check the configuration. 导入用户操作失败。
The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。	The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。

# UserAccounts/ExportNetworkUser

Message	Explanation
The user account doesn't exist. 用户不存在。	The user account doesn't exist. 用户不存在。
The group doesn't exist. 用户组不存在。	The group doesn't exist. 用户组不存在。
The user and user group columns can't exist at the same time. 用户和用户组不能同时指定。	The user and user group columns can't exist at the same time. 用户和用户组不能同时指定。
The .csv file name must be specified. csv文件名必须指定。	The .csv file name must be specified. csv文件名必须指定。
The device doesn't support the user identification feature.	The device doesn't support the user identification feature.

该设备不支持用户身份识别功能。	该设备不支持用户身份识别功能。
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## UserAccounts/UserGroup/IdentityGroups

Message	Explanation
The group doesn't exist. 用户组不存在。	The group doesn't exist. 用户组不存在。
Failed to add the group because a conflict exists in group hierarchy. 用户组的从属关系发生冲突，添加组失败。	Failed to add the group because a conflict exists in group hierarchy. 用户组的从属关系发生冲突，添加组失败。
The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。	The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。

## UserAccounts/UserGroup/IdentityMembers

Message	Explanation
The group doesn't exist. 用户组不存在。	The group doesn't exist. 用户组不存在。
The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。	The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。

## UserAccounts/IdentityEnable

Message	Explanation
The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。	The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。

## UserAccounts/Network/IdentityGroups

Message	Explanation
The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。	The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。

## UserAccounts/IdentityUser

Message	Explanation
The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。	The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。

## UserAccounts/ExportTemplet

Message	Explanation
The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。	The device doesn't support the user identification feature. 该设备不支持用户身份识别功能。

## UserAccounts/GuestConfigure

Message	Explanation
Invalid SMTP server URL. 非法SMTP服务器地址。	Invalid SMTP server URL. 非法SMTP服务器地址。

## UserAccounts/Network/AccountsCount

Message	Explanation
Invalid description. 非法描述信息	Invalid description. 非法描述信息





# Contents

Identity.....	1
Identity/ResetOnlineUser.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Identity/PolicyImportData.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
Identity/ImportAccountUser.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
Identity/ExportAccountUser.....	4
XML structure.....	4
Table description.....	4
Columns.....	4
Identity/ExportTemplet.....	5
XML structure.....	5
Table description.....	5
Columns.....	5
Identity/ResetConfigGroup.....	5
XML structure.....	6
Table description.....	6
Columns.....	6
Identity/ResetConfigUser.....	6
XML structure.....	7
Table description.....	7
Columns.....	7

# Identity

## Identity/ResetOnlineUser

This table deletes online identity users.

### XML structure

```
<Identity>
  <ResetOnlineUser>
    <ResetType></ResetType>
    <DomainName></DomainName>
    <UserName></UserName>
    <IpAddress></IpAddress>
    <MacAddress></MacAddress>
  </ResetOnlineUser>
</Identity>
```

### Table description

Item	Description
Feature name	Identity
Table name	ResetOnlineUser
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ResetType	Deletion scope.	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Deletes all online identity users.</li><li>• <b>1</b>—Deletes all online identity users in an identity domain.</li><li>• <b>2</b>—Deletes an online identity user with a specific IP or MAC address.</li><li>• <b>3</b>—Deletes an online identity user in an identity domain.</li></ul>	N/A
DomainName	Identity domain name.	Index	String, case-insensitive. Length: 1 to 255 characters.	If the index is empty, the domain is

Column name	Column description	Column type	Data type and restrictions	Remarks
			The domain name cannot contain a question mark (?).	null-domain.
UserName	Username.	Index	String. Length: 1 to 55 characters. The username cannot contain a question mark (?).	N/A
IpAddress	IP address of the user.	Index	IPv4 or IPv6 address.	N/A
MacAddress	MAC address of the user.	Index	MAC address format: ff-ff-ff-ff-ff.	If the index is empty, the system ignores the user MAC address.

## Identity/PolicyImportData

This table imports online identity users or identity user accounts from servers.

### XML structure

```

<Identity>
  <PolicyImportData>
    <PolicyName></PolicyName>
    <ImportDataType></ImportDataType>
  </PolicyImportData>
</Identity>

```

### Table description

Item	Description
Feature name	Identity
Table name	PolicyImportData
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ImportDataType	Type of imported data.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—User accounts.</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—Online users.</li> </ul>	

## Identity/ImportAccountUser

This table imports network access user accounts, excluding guest accounts.

### XML structure

```
<Identity>
  <ImportAccountUser>
    <FileName></FileName>
    <AutoCreateGroup></AutoCreateGroup>
    <Override></Override>
    <StartLine></StartLine>
  </ImportAccountUser>
</Identity>
```

### Table description

Item	Description
Feature name	Identity
Table name	ImportAccountUser
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the source .csv file to import user account information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The import path depends on the Web service frame. Select the filename on the webpage. The .csv file must use correct data format that complies with the export network access user account template.
AutoCreateGroup	Whether to create nonexistent groups automatically.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	The default is false.

Column name	Column description	Column type	Data type and restrictions	Remarks
Override	Whether to override existing accounts with the same name.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	The default is false.
StartLine	Start line to import user accounts.	N/A	Unsigned integer. Value range: 1 to 1048576.	The default is 1.

## Identity/ExportAccountUser

This table exports network access user accounts, excluding guest accounts.

### XML structure

```

<Identity>
  <ExportAccountUser>
    <FileName></FileName>
    <DomainName></DomainName>
    <UserName></UserName>
  </ExportAccountUser>
</Identity>

```

### Table description

Item	Description
Feature name	Identity
Table name	ExportAccountUser
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the destination .csv file to export user accounts to.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The export path depends on the Web service frame. Select the filename on the webpage.
DomainName	Domain name.	N/A	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
UserName	Username.	N/A	String, case-sensitive. Length: 1 to 55 characters. The username cannot contain a question mark (?).	N/A

## Identity/ExportTemplet

This table exports a network access user account template.

### XML structure

```
<Identity>
  <ExportTemplet>
    <FileName></FileName>
  </ExportTemplet>
</Identity>
```

### Table description

Item	Description
Feature name	Identity
Table name	ExportTemplet
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
FileName	Name of the destination .csv file to export network access user accounts to.	N/A	String, case-insensitive. Length: 1 to 255 characters.	The export path depends on the Web service frame. Select the filename on the webpage.

## Identity/ResetConfigGroup

This table deletes identity groups.

## XML structure

```
<Identity>
  <ResetConfigGroup>
    <ResetConfigType></ResetConfigType>
    <DomainName></DomainName>
    <GroupName></GroupName>
  </ResetConfigGroup>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	ResetConfigGroup
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ResetConfigType	Deletion scope.	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Deletes all identity groups.</li><li>• <b>1</b>—Deletes an identity group in an identity domain.</li><li>• <b>2</b>—Deletes all identity groups in an identity domain.</li></ul>	N/A
DomainName	Identity domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	If the index is empty, the domain is null-domain.
GroupName	Identity group name.	Index	String, case-insensitive. Length: 1 to 200 characters. The group name cannot contain a question mark (?).	N/A

## Identity/ResetConfigUser

This table deletes identity user accounts.



## XML structure

```
<Identity>
  <ResetConfigUser>
    <ResetType></ResetType>
    <DomainName></DomainName>
    <UserName></UserName>
  </ResetConfigUser>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	ResetConfigUser
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ResetType	Deletion scope.	Index	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—Deletes all identity user accounts.</li><li>• <b>1</b>—Deletes an identity user account in an identity domain.</li><li>• <b>2</b>—Deletes all identity user accounts in an identity domain.</li></ul>	N/A
DomainName	Identity domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	If the index is empty, the domain is null-domain.
UserName	Identity user account name.	Index	String. Length: 1 to 55 characters. The username cannot contain a question mark (?).	N/A

# Contents

Identity.....	1
Identity/StaticUsers .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
Identity/IdentityEnable.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
Identity/UserImportPolicies.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
Identity/Policies/RestfulPolicies .....	3
XML structure.....	4
Table description.....	4
Columns.....	4
Identity/Policies/LDAPPolicies .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
Identity/RestfulServers .....	5
XML structure.....	5
Table description.....	6
Columns.....	6
Identity/UserAccountsAutoImport .....	7
XML structure.....	7
Table description.....	7
Columns.....	8
Identity/OnlineUserDomFormat .....	8
XML structure.....	8
Table description.....	8
Columns.....	8
Identity/SecManageServers .....	9
XML structure.....	9
Table description.....	9
Columns.....	9
Identity/SecManageIPs .....	10
XML structure.....	10
Table description.....	10
Columns.....	10

# Identity

## Identity/StaticUsers

This table contains static identity user information.

### XML structure

```
<Identity>
  <StaticUsers>
    <StaticUser>
      <DomainName></DomainName>
      <Name></Name>
      <IpType></IpType>
      <IpAddress></IpAddress>
      <MacAddress></MacAddress>
    </StaticUser>
  </StaticUsers>
</Identity>
```

### Table description

Item	Description
Feature name	Identity
Table name	StaticUsers
Table type	Multi-instance table
Row name	StaticUser
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	If the index is empty, the domain is null-domain.
Name	Username.	Index	String. Length: 1 to 55 characters. The username cannot contain a question mark (?).	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IpType	IP address family.	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
IpAddress	IP address of the user.	Index	IPv4 or IPv6 address.	N/A
MacAddress	MAC address of the user.	Index	MAC address format: ff-ff-ff-ff-ff-ff.	If the index is empty, the system ignores the user MAC address.

## Identity/IdentityEnable

This table enables or disables the user identification feature.

### XML structure

```

<Identity>
  <IdentityEnable>
    <Enable></Enable>
  </IdentityEnable>
</Identity>

```

### Table description

Item	Description
Feature name	Identity
Table name	IdentityEnable
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enables or disables the user identification feature.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	The default is false.

# Identity/UserImportPolicies

This table contains identity user import policy information.

## XML structure

```
<Identity>
  <UserImportPolicies>
    <UserImportPolicy>
      <PolicyName></PolicyName>
      <UpdateInterval></UpdateInterval>
      <ImportType></ImportType>
    </UserImportPolicy>
  </UserImportPolicies>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	UserImportPolicies
Table type	Multi-instance table
Row name	UserImportPolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
UpdateInterval	Interval for automatic user account import.	N/A	Unsigned integer. Value range: 1 to 65536 hours.	The default value is 24.
ImportType	Import type for automatic user account import.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—all.</li><li>2—group.</li><li>3—user.</li></ul>	N/A

# Identity/Policies/RestfulPolicies

This table contains Restful server information in the identity user import policy.

## XML structure

```
<Identity>
  <Policies>
    <RestfulPolicies>
      <RestfulPolicy>
        <PolicyName></PolicyName>
        <RestfulServerName></RestfulServerName>
      </RestfulPolicy>
    </RestfulPolicies>
  </Policies>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	RestfulPolicies
Table type	Multi-instance table
Row name	RestfulPolicy
Restrictions	PolicyName can be chosen from Identity/UserImportPolicies.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
RestfulServerName	Restful server name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A

## Identity/Policies/LDAPPolicies

This table contains LDAP server information in the identity user import policy.

## XML structure

```
<Identity>
  <Policies>
    <LDAPPolicies>
      <LDAPPolicy>
        <PolicyName></PolicyName>
        <LDAPSchemeName></LDAPSchemeName>
      </LDAPPolicy>
    </LDAPPolicies>
  </Policies>
</Identity>
```

```

    </LDAPPolicies>
  </Policies>
</Identity>

```

## Table description

Item	Description
Feature name	Identity
Table name	LDAPPolicies
Table type	Multi-instance table
Row name	LDAPPolicy
Restrictions	PolicyName can be chosen from Identity/UserImportPolicies.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
LDAPSchemeName	LDAP scheme name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## Identity/RestfulServers

This table contains information about the Restful server.

## XML structure

```

<Identity>
  <RestfulServers>
    <RestfulServer>
      <ServerName></ServerName>
      <LoginName></LoginName>
      <Password></Password>
      <GetUserDatabase></GetUserDatabase>
      <GetUserGroupDatabase></GetUserGroupDatabase>
      <GetOnlineUser></GetOnlineUser>
      <PutOnlineUser></PutOnlineUser>
      <PutOfflineUser></PutOfflineUser>
      <DetectEnable></DetectEnable>
      <DetectInterval></DetectInterval>
      <DetectMaxCount></DetectMaxCount>
      <VpnName></VpnName>
    </RestfulServer>
  </RestfulServers>
</Identity>

```

```

    </RestfulServers>
  </Identity>

```

## Table description

Item	Description
Feature name	Identity
Table name	RestfulServers
Table type	Multi-instance table
Row name	RestfulServer
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Server name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
LoginName	Login name of the Restful server.	N/A	String. Length: 1 to 55 characters.	N/A
Password	Password of the Restful server.	N/A	Simple: String. Length: 1 to 63 characters. Cipher: String. Length: 1 to 117 characters.	N/A
GetUserDataBase	URI for requesting network access user account information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
GetUserGroup Database	URI for requesting user group information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
GetOnlineUser	URI for requesting online network access user information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
PutOnlineUser	URI for uploading online user information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
PutOfflineUser	URI for uploading	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	offline user information.			
DetectEnable	Enables or disables the connectivity detection feature of the Restful server.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	The default is false.
DetectInterval	Interval for connectivity detection of the Restful server.	N/A	Unsigned integer. Value range: 1 to 10 minutes.	The default time is 5.
DetectMaxCount	Maximum number of probes per detection.	N/A	Unsigned integer. Value range: 1 to 5.	The default maximum number is 3.
VpnName	VPN instance name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## Identity/UserAccountsAutoImport

This table controls whether to automatically import identity user accounts.

### XML structure

```

<Identity>
  <UserAccountsAutoImport>
    <UserAccountAutoImport>
      <PolicyName></PolicyName>
      <Auto></Auto>
    </UserAccountAutoImport>
  </UserAccountsAutoImport>
</Identity>

```

### Table description

Item	Description
Feature name	Identity
Table name	UserAccountsAutoImport
Table type	Multi-instance table
Row name	UserAccountAutoImport
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Auto	Enables or disables automatic user account import.	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	The default is false.

## Identity/OnlineUserDomFormat

This table contains username match mode information for online identity users.

## XML structure

```
<Identity>
  <OnlineUserDomFormat>
    <DomainFormat></DomainFormat>
  </OnlineUserDomFormat>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	OnlineUserDomFormat
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainFormat	Username match mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—With domain.</li><li>2—Without domain.</li><li>3—Keep original.</li></ul>	The default is 3.

# Identity/SecManageServers

This table contains security management server set information.

## XML structure

```
<Identity>
  <SecManageServers>
    <SecManageServer>
      <ServerName></ServerName>
      <ListenPort></ListenPort>
      <EncrypAlgorithm></EncrypAlgorithm>
      <SharedKey></SharedKey>
    </SecManageServer>
  </SecManageServers>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	SecManageServers
Table type	Multi-instance table
Row name	SecManageServer
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Server set name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ListenPort	Port to listen to the security management servers.	N/A	Unsigned integer. Value range: 1 to 65535.	The default value is 8001.
EncrypAlgorithm	Encryption method of the security management server set.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—3DES.</li><li>1—AES128.</li></ul>	N/A
SharedKey	Encryption secret key of the security management	N/A	Simple: String. Length varies by EncrypAlgorithm.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	server set.		<ul style="list-style-type: none"> <li>3DES: 1 to 24 characters,</li> <li>AES128: 1 to 16 characters.</li> </ul>	

## Identity/SecManageIPs

This table contains IP address information for security management servers.

### XML structure

```

<Identity>
  <SecManageIPs>
    <SecManageIP>
      <ServerName></ServerName>
      <Ipv4Address></Ipv4Address>
    </SecManageIP>
  </SecManageIPs>
</Identity>

```

### Table description

Item	Description
Feature name	Identity
Table name	SecManageIPs
Table type	Multi-instance table
Row name	SecManageIP
Restrictions	ServerName can be chosen from Identity/SecManageServers
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Server name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Ipv4Address	IPv4 address of a security management server.	Index	IPv4 address.	N/A

# Contents

Identity.....	1
Identity/StaticUsers .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Identity/OnlineUsers .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
Identity/IdentityEnable .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
Identity/AccountUsers .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
Identity/AccountGroups .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
Identity/UserImportPolicies .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
Identity/Policies/RestfulPolicies .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
Identity/Policies/LDAPPolicies .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
Identity/RestfulServers .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
Identity/UserAccountsAutoImport .....	10
XML structure .....	10
Table description .....	10
Columns .....	10
Identity/OnlineUserDomFormat .....	10
XML structure .....	11
Table description .....	11
Columns .....	11
Identity/SecManageServers .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
Identity/SecManageIPs .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
Identity/TopUsers .....	13
XML structure .....	13
Table description .....	13
Columns .....	14

Identity/TopGroups .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
Identity/ParentGroups .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
Identity/MemberUsers .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
Identity/MemberGroups .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
Identity/Domains .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
Identity/ImportAccountProgress .....	19
XML structure .....	19
Table description .....	19
Columns .....	19
Identity/ImportOnlineUserProgress .....	20
XML structure .....	20
Table description .....	20
Columns .....	20

# Identity

## Identity/StaticUsers

This table contains static identity user information.

### XML structure

```
<Identity>
  <StaticUsers>
    <StaticUser>
      <DomainName></DomainName>
      <Name></Name>
      <IpType></IpType>
      <IpAddress></IpAddress>
      <MacAddress></MacAddress>
    </StaticUser>
  </StaticUsers>
</Identity>
```

### Table description

Item	Description
Feature name	Identity
Table name	StaticUsers
Table type	Multi-instance table
Row name	StaticUser
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters.	If the index is empty, the domain is null-domain.
Name	Username.	Index	String. Length: 1 to 55 characters. The username cannot contain a question mark (?).	N/A
IpType	IP address family.	Index	Enumeration: <ul style="list-style-type: none"><li>0—IPv4.</li><li>1—IPv6.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IpAddress	IP address of the user.	Index	IPv4 or IPv6 address.	N/A
MacAddress	MAC address of the user.	Index	MAC address format: ff-ff-ff-ff-ff.	If the index is empty, the system ignores the user MAC address.

## Identity/OnlineUsers

This table contains online identity user information.

### XML structure

```

<Identity>
  <OnlineUsers>
    <OnlineUser>
      <DomainName></DomainName>
      <UserName></UserName>
      <IpAddress></IpAddress>
      <MacAddress></MacAddress>
      <Type></Type>
    </OnlineUser>
  </OnlineUsers>
</Identity>

```

### Table description

Item	Description
Feature name	Identity
Table name	OnlineUsers
Table type	Multi-instance table
Row name	OnlineUser
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	If the index is empty, the domain is null-domain.
UserName	Username.	Index	String. Length: 1 to 55 characters.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			The username cannot contain a question mark (?).	
IpAddress	IP address.	Index	IPv4 or IPv6 address.	N/A
MacAddress	MAC address.	Index	MAC address format: ff-ff-ff-ff-ff.	If the index is empty, the system ignores the user MAC address.
Type	User type.	N/A	Unsigned integer.	An online identity user can have various types at the same time: <ul style="list-style-type: none"> <li>• 1—Static.</li> <li>• 2—Dynamic.</li> <li>• 3—Static and dynamic.</li> </ul>

## Identity/IdentityEnable

This table enables or disables the user identification feature.

### XML structure

```
<Identity>
  <IdentityEnable>
    <Enable></Enable>
  </IdentityEnable>
</Identity>
```

### Table description

Item	Description
Feature name	Identity
Table name	IdentityEnable
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Enables or disables the user identification feature.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	The default is false.

# Identity/AccountUsers

This table contains identity user account information.

## XML structure

```
<Identity>
  <AccountUsers>
    <AccountUser>
      <DomainName></DomainName>
      <UserName></UserName>
    </AccountUser>
  </AccountUsers>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	AccountUsers
Table type	Multi-instance table
Row name	AccountUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	If the index is empty, the domain is null-domain.
UserName	Username.	Index	String. Length: 1 to 55 characters. The username cannot contain a question mark (?).	N/A

# Identity/AccountGroups

This table contains identity group information.

## XML structure

```
<Identity>
```

```

<AccountGroups>
  <AccountGroup>
    <DomainName></DomainName>
    <GroupName></GroupName>
    <PureGroupName></PureGroupName>
  </AccountGroup>
</AccountGroups>
</Identity>

```

## Table description

Item	Description
Feature name	Identity
Table name	AccountGroups
Table type	Multi-instance table
Row name	AccountGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	If the index is empty, the domain is null-domain.
GroupName	Identity group name.	Index	String, case-insensitive. Length: 1 to 200 characters.	N/A
PureGroupName	Name of the identity group at the lowest level	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A

## Identity/UserImportPolicies

This table contains identity user import policy information.

## XML structure

```

<Identity>
  <UserImportPolicies>
    <UserImportPolicy>
      <PolicyName></PolicyName>
      <UpdateInterval></UpdateInterval>
      <ImportType></ImportType>
    </UserImportPolicy>
  </UserImportPolicies>
</Identity>

```

```

    </UserImportPolicy>
  </UserImportPolicies>
</Identity>

```

## Table description

Item	Description
Feature name	Identity
Table name	UserImportPolicies
Table type	Multi-instance table
Row name	UserImportPolicy
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
UpdateInterval	Interval for automatic user account import.	N/A	Unsigned integer. Value range: 1 to 65536 hours.	The default value is 24.
ImportType	Import type for automatic user account import.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—all.</li> <li>2—group.</li> <li>3—user.</li> </ul>	N/A

## Identity/Policies/RestfulPolicies

This table contains Restful server information in the identity user import policy.

## XML structure

```

<Identity>
  <Policies>
    <RestfulPolicies>
      <RestfulPolicy>
        <PolicyName></PolicyName>
        <RestfulServerName></RestfulServerName>
      </RestfulPolicy>
    </RestfulPolicies>
  </Policies>
</Identity>

```

## Table description

Item	Description
Feature name	Identity
Table name	RestfulPolicies
Table type	Multi-instance table
Row name	RestfulPolicy
Restrictions	PolicyName can be chosen from Identity/UserImportPolicies.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
RestfulServerName	Restful server name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A

## Identity/Policies/LDAPPolicies

This table contains LDAP server information in the identity user import policy.

## XML structure

```
<Identity>
  <Policies>
    <LDAPPolicies>
      <LDAPPolicy>
        <PolicyName></PolicyName>
        <LDAPSchemeName></LDAPSchemeName>
      </LDAPPolicy>
    </LDAPPolicies>
  </Policies>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	LDAPPolicies
Table type	Multi-instance table
Row name	LDAPPolicy

Restrictions	PolicyName can be chosen from Identity/UserImportPolicies.
--------------	--

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
LDAPSchemeName	LDAP scheme name.	Index	String, case-insensitive. Length: 1 to 32 characters.	N/A

## Identity/RestfulServers

This table contains information about the Restful server.

## XML structure

```

<Identity>
  <RestfulServers>
    <RestfulServer>
      <ServerName></ServerName>
      <LoginName></LoginName>
      <GetUserDatabase></GetUserDatabase>
      <GetUserGroupDatabase></GetUserGroupDatabase>
      <GetOnlineUser></GetOnlineUser>
      <PutOnlineUser></PutOnlineUser>
      <PutOfflineUser></PutOfflineUser>
      <DetectEnable></DetectEnable>
      <DetectInterval></DetectInterval>
      <DetectMaxCount></DetectMaxCount>
      <VpnName></VpnName>
      <ConnectState></ConnectState>
    </RestfulServer>
  </RestfulServers>
</Identity>

```

## Table description

Item	Description
Feature name	Identity
Table name	RestfulServers
Table type	Multi-instance table
Row name	RestfulServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Server name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
LoginName	Login name of the Restful server.	N/A	String. Length: 1 to 55 characters.	N/A
GetUserDataBase	URI for requesting network access user account information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
GetUserGroupDatabase	URI for requesting user group information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
GetOnlineUser	URI for requesting online network access user information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
PutOnlineUser	URI for uploading online user information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
PutOfflineUser	URI for uploading offline user information.	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A
DetectEnable	Enables or disables the connectivity detection feature of the Restful server.	N/A	Boolean: <ul style="list-style-type: none"> <li>• true.</li> <li>• false.</li> </ul>	The default is false.
DetectInterval	Interval for connectivity detection of the Restful server.	N/A	Unsigned integer. Value range: 1 to 10 minutes.	The default time is 5.
DetectMaxCount	Maximum number of probes per detection.	N/A	Unsigned integer. Value range: 1 to 5.	The default maximum number is 3.
VpnName	VPN instance name.	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
ConnectState	Connectivity state between the device and	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—Reachable.</li> <li>• <b>false</b>—Unreachable.</li> </ul>	The default is false.

Column name	Column description	Column type	Data type and restrictions	Remarks
	the Restful server.			

## Identity/UserAccountsAutoImport

This table controls whether to automatically import identity user accounts.

### XML structure

```

<Identity>
  <UserAccountsAutoImport>
    <UserAccountAutoImport>
      <PolicyName></PolicyName>
      <Auto></Auto>
    </UserAccountAutoImport>
  </UserAccountsAutoImport>
</Identity>

```

### Table description

Item	Description
Feature name	Identity
Table name	UserAccountsAutoImport
Table type	Multi-instance table
Row name	UserAccountAutoImport
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Policy name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Auto	Enables or disables automatic user account import.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	The default is false.

## Identity/OnlineUserDomFormat

This table contains username match mode information for online identity users.



## XML structure

```
<Identity>
  <OnlineUserDomFormat>
    <DomainFormat></DomainFormat>
  </OnlineUserDomFormat>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	OnlineUserDomFormat
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainFormat	Username match mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—With domain.</li><li>2—Without domain.</li><li>3—Keep original.</li></ul>	The default is 3.

## Identity/SecManageServers

This table contains security management server set information.

## XML structure

```
<Identity>
  <SecManageServers>
    <SecManageServer>
      <ServerName></ServerName>
      <ListenPort></ListenPort>
      <EncrypAlgorithm></EncrypAlgorithm>
    </SecManageServer>
  </SecManageServers>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	SecManageServers
Table type	Multi-instance table
Row name	SecManageServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Server set name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ListenPort	Port to listen to security management servers.	N/A	Unsigned integer. Value range: 1 to 65535.	The default value is 8001.
EncrypAlgorithm	Encryption method of the security management server set.	N/A	Enumeration: <ul style="list-style-type: none"><li>0—3DES.</li><li>1—AES128.</li></ul>	N/A

## Identity/SecManageIPs

This table contains IP address information for security management servers.

## XML structure

```
<Identity>
  <SecManageIPs>
    <SecManageIP>
      <ServerName></ServerName>
      <Ipv4Address></Ipv4Address>
    </SecManageIP>
  </SecManageIPs>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	SecManageIPs

Table type	Multi-instance table
Row name	SecManageIP
Restrictions	ServerName can be chosen from Identity/SecManageServers.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Server set name.	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Ipv4Address	IPv4 address of a security management server.	Index	IPv4 address.	N/A

## Identity/TopUsers

This table contains top user information for user identification. Top users refer to identity users that do not belong to any identity groups.

## XML structure

```

<Identity>
  <TopUsers>
    <TopUser>
      <DomainName></DomainName>
      <UserName></UserName>
    </TopUser>
  </TopUsers>
</Identity>

```

## Table description

Item	Description
Feature name	Identity
Table name	TopUsers
Table type	Multi-instance table
Row name	TopUser
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	If the index is empty, the domain is null-domain.
UserName	Username.	Index	String. Length: 1 to 55 characters. The username cannot contain a question mark (?).	N/A

## Identity/TopGroups

This table contains top user group information for user identification. Top groups refer to identity groups that do not belong to any parent identity groups.

## XML structure

```
<Identity>
  <TopGroups>
    <TopGroup>
      <DomainName></DomainName>
      <GroupName></GroupName>
      <PureGroupName></PureGroupName>
    </TopGroup>
  </TopGroups>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	TopGroups
Table type	Multi-instance table
Row name	TopGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive.	If the index is empty,

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	the domain is null-domain.
GroupName	Identity group name.	Index	String, case-insensitive. Length: 1 to 200 characters.	N/A
PureGroupName	Name of the identity group at the lowest level	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A

## Identity/ParentGroups

This table contains information about identity groups to which an identity user belongs.

### XML structure

```

<Identity>
  <ParentGroups>
    <ParentGroup>
      <DomainName></DomainName>
      <UserName></UserName>
      <GroupName></GroupName>
      <PureGroupName></PureGroupName>
    </ParentGroup>
  </ParentGroups>
</Identity>

```

### Table description

Item	Description
Feature name	Identity
Table name	ParentGroups
Table type	Multi-instance table
Row name	ParentGroup
Restrictions	To perform the get operation, you must enter values for all index columns. To perform the get-bulk operation, you must enter values for at least the first two index columns.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive.	If the index is empty, the domain is

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	null-domain.
UserName	Username.	Index	String. Length: 1 to 55 characters. The username cannot contain a question mark (?).	N/A
GroupName	Identity group name.	Index	String, case-insensitive. Length: 1 to 200 characters.	N/A
PureGroupName	Name of the identity group at the lowest level	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A

## Identity/MemberUsers

This table contains information about member identity users in an identity group.

### XML structure

```

<Identity>
  <MemberUsers>
    <MemberUser>
      <DomainName></DomainName>
      <GroupName></GroupName>
      <UserName></UserName>
    </MemberUser>
  </MemberUsers>
</Identity>

```

### Table description

Item	Description
Feature name	Identity
Table name	MemberUsers
Table type	Multi-instance table
Row name	MemberUser
Restrictions	To perform the get operation, you must enter values for all index columns. To perform the get-bulk operation, you must enter values for at least the first two index columns.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	If the index is empty, the domain is null-domain.
GroupName	Identity group name.	Index	String, case-insensitive. Length: 1 to 200 characters.	N/A
UserName	Username.	Index	String. Length: 1 to 255 characters. The username cannot contain a question mark (?).	N/A

## Identity/MemberGroups

This table contains information about member identity groups in an identity group.

## XML structure

```
<Identity>
  <MemberGroups>
    <MemberGroup>
      <DomainName></DomainName>
      <GroupName></GroupName>
      <MemberGroup></MemberGroup>
      <PureMemGroupName></PureMemGroupName>
    </MemberGroup>
  </MemberGroups>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	MemberGroups
Table type	Multi-instance table
Row name	MemberGroup
Restrictions	To perform the get operation, you must enter values for all index columns. To perform the get-bulk operation, you must enter values for at least the first two index columns.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name.	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	If the index is empty, the domain is null-domain.
GroupName	Identity group name.	Index	String, case-insensitive. Length: 1 to 200 characters.	N/A
MemberGroup	Member group name.	Index	String, case-insensitive. Length: 1 to 200 characters.	N/A
PureMemGroupName	Name of the member identity group at the lowest level	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A

## Identity/Domains

This table contains information about identity domains.

### XML structure

```
<Identity>
  <Domains>
    <Domain>
      <DomainName></DomainName>
    </Domain>
  </Domains>
</Identity>
```

### Table description

Item	Description
Feature name	Identity
Table name	Domains
Table type	Multi-instance table
Row name	Domain
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	Domain name	Index	String, case-insensitive. Length: 1 to 255 characters. The domain name cannot contain a question mark (?).	N/A

## Identity/ImportAccountProgress

This table contains import progress information for identity user accounts and groups when the device is importing identity user accounts from servers.

## XML structure

```
<Identity>
  <ImportAccountProgress>
    <UsersCount></UsersCount>
    <GroupsCount></GroupsCount>
    <ImportState></ImportState>
  </ImportAccountProgress>
</Identity>
```

## Table description

Item	Description
Feature name	Identity
Table name	ImportAccountProgress
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UsersCount	Number of identity user accounts already imported	N/A	Unsigned integer.	N/A
GroupsCount	Number of identity groups already imported	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ImportState	Current import state	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unimported.</li> <li>1—Importing.</li> <li>2—Imported.</li> </ul>	N/A

## Identity/ImportOnlineUserProgress

This table contains import progress information for online identity users when the device is importing online identity users from servers.

### XML structure

```
<Identity>
  <ImportOnlineUserProgress>
    <UsersCount></UsersCount>
    <ImportState></ImportState>
  </ImportOnlineUserProgress>
</Identity>
```

### Table description

Item	Description
Feature name	Identity
Table name	ImportOnlineUserProgress
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UsersCount	Number of online identity users already imported	N/A	Unsigned integer.	N/A
ImportState	Current import state	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unimported.</li> <li>1—Importing.</li> <li>2—Imported.</li> </ul>	N/A

# Contents

UserLog .....	1
UserLog/FlowLog/ClearLogHostStatistics .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
UserLog/FlowLog/ClearAllLogHostsStatistics .....	2
XML structure .....	2
Table description .....	2
Columns .....	2

# UserLog

## UserLog/FlowLog/ClearLogHostStatistics

This table is used to clear statistics of specified flow log host.

### XML structure

```
<UserLog>
  <FlowLog>
    <ClearLogHostStatistics>
      <Host>
        <Address></Address>
        <VRF></VRF>
        <Clear></Clear>
      </Host>
    </ClearLogHostStatistics>
  </FlowLog>
</UserLog>
```

### Table description

Item	Description
Feature name	UserLog
Table name	ClearLogHostStatistics
Table type	Multi-instance table
Row name	Host
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Address of the log host	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. HostName: Case-insensitive string, Length: 1 to 253 characters.	IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8 HostName example: www. example.com
VRF	VRF instance name	Index	String. Length: 0 to 31 characters.	If the log host is on the public network, the length of characters is 0.

Column name	Column description	Column type	Data type and restrictions	Remarks
Clear	Clear statistics of all flow log hosts.	N/A	This column must be empty.	N/A

## UserLog/FlowLog/ClearAllLogHostsStatistics

This table is used to clear statistics of all flow log hosts.

### XML structure

```

<UserLog>
  <FlowLog>
    <ClearAllLogHostsStatistics>
      <Clear/>
    </ClearAllLogHostsStatistics>
  </FlowLog>
</UserLog>

```

### Table description

Item	Description
Feature name	UserLog
Table name	ClearAllLogHostsStatistics
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clear statistics of all flow log hosts.	N/A	This column must be empty.

# Contents

- UserLog ..... 1
  - UserLog/FlowLog/LogHosts ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1
  - UserLog/FlowLog/LogAttribute ..... 2
    - XML structure ..... 2
    - Table description ..... 2
    - Columns ..... 3

# UserLog

## UserLog/FlowLog/LogHosts

This table contains NAT444 flow log hosts information.

### XML structure

```
<UserLog>
  <FlowLog>
    <LogHosts>
      <Host>
        <Address></Address>
        <VRF></VRF>
        <Port></Port>
      </Host>
    </LogHosts>
  </FlowLog>
</UserLog>
```

### Table description

Item	Description
Feature name	UserLog
Table name	LogHosts
Table type	Multi-instance table
Row name	Host
Restrictions	The device supports up to 64 log hosts.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Address of the log host	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. HostName: Case-insensitive string, Length: 1 to 253 characters.	IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8 HostName example: www. example.com

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String. Length: 0 to 31 characters.	If the log host is on the public network, the length of characters is 0.
Port	Port number of the log host	N/A	Unsigned integer. Value range: 1 to 65535. Default: 9002.	N/A

## UserLog/FlowLog/LogAttribute

This table contains global attributes about NAT444 flow log.

### XML structure

```

<UserLog>
  <FlowLog>
    <LogAttribute>
      <Version></Version>
      <SourceIpAddress></SourceIpAddress>
      <SourceIpv6Address></SourceIpv6Address>
      <LoadBalance></LoadBalance>
      <OutputToSyslog></OutputToSyslog>
    </LogAttribute>
  </FlowLog>
</UserLog>

```

### Table description

Item	Description
Feature name	UserLog
Table name	LogAttribute
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Version	The version of NAT444 flow logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Version 1.0(Default).</li> <li>1—Version 3.0.</li> </ul>	N/A
SourceIpAddress	The source IPv4 address for output NAT444 flow logs	N/A	String, dotted decimal notation.	Example: 1.1.1.1
SourceIpv6Address	The source Ipv6 address for output NAT444 flow logs	N/A	String, Hexadecimal string, colon-separated.	Example: 1:2:3:4:5:6:7:8
LoadBalance	The load balance function of log host	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false(Default)</li> </ul>	When the load balance function is disabled, a log UDP packet will be sent to each log host respectively. When the load balance function is enabled, a log UDP packet will only be sent to just one log host instead of all log hosts.
OutputToSyslog	Whether the flow log will be sent as syslog	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false(Default)</li> </ul>	By default, the flow logs will be sent to flow log hosts. When the flow log is sent to syslog, the flow logs will not be sent to flow log host anymore.

# Contents

- UserLog ..... 1
  - UserLog/FlowLog/LogHosts ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1
  - UserLog/FlowLog/LogAttribute ..... 2
    - XML structure ..... 2
    - Table description ..... 2
    - Columns ..... 3

# UserLog

## UserLog/FlowLog/LogHosts

This table contains NAT444 flow log hosts information.

### XML structure

```
<UserLog>
  <FlowLog>
    <LogHosts>
      <Host>
        <Address></Address>
        <VRF></VRF>
        <Port></Port>
        <LogCount></LogCount>
        <LogPacketCount></LogPacketCount>
      </Host>
    </LogHosts>
  </FlowLog>
</UserLog>
```

### Table description

Item	Description
Feature name	UserLog
Table name	LogHosts
Table type	Multi-instance table
Row name	Host
Restrictions	The device supports up to 64 log hosts.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Address of the log host	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated. HostName: Case-insensitive string, Length: 1 to 253 characters.	IPv4 example: 1.1.1.1 IPv6 example: 1:2:3:4:5:6:7:8 HostName example: www. example.com

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VRF instance name	Index	String. Length: 0 to 31 characters.	If the log host is on the public network, the length of characters is 0.
Port	Port number of the log host	N/A	Unsigned integer. Value range: 1 to 65535. Default: 9002.	N/A
LogCount	The logs count sent to current log host	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
LogPacketCount	The UDP packets count of user logs sent to current log host	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## UserLog/FlowLog/LogAttribute

This table contains global attributes about NAT444 flow log.

### XML structure

```

<UserLog>
  <FlowLog>
    <LogAttribute>
      <Version></Version>
      <SourceIpAddress></SourceIpAddress>
      <SourceIpv6Address></SourceIpv6Address>
      <LoadBalance></LoadBalance>
      <OutputToSyslog></OutputToSyslog>
    </LogAttribute>
  </FlowLog>
</UserLog>

```

### Table description

Item	Description
Feature name	UserLog
Table name	LogAttribute
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Version	The version of NAT444 flow logs	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Version 1.0.</li> <li>1—Version 3.0.</li> </ul>	N/A
SourceIpAddress	The source IPv4 address for output NAT444 flow logs	N/A	String, dotted decimal notation.	Example: 1.1.1.1
SourceIpv6Address	The source Ipv6 address for output NAT444 flow logs	N/A	Hexadecimal string, colon-separated.	Example: 1:2:3:4:5:6:7:8
LoadBalance	The load balance function of log host	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	When the load balance function is disabled, a log UDP packet will be sent to each log host respectively. When the load balance function is enabled, a log UDP packet will only be sent to just one log host instead of all log hosts.
OutputToSyslog	Whether the flow log will be sent as syslog	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	By default, the flow logs will be sent to flow log hosts. When the flow log is sent to syslog, the flow logs will not be sent to flow log host anymore.

# Contents

UserProfile.....	1
UserProfile/UserProfiles .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ACL/UserProfilePfilter .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
CAR/UserProfileCAR .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
GTS/UserProfileGTS .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
HardwareQueue/UserProfileQMProfile .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
HardwareQueue/UserProfileQueue .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
MQC/UserProfileQosPolicy .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
USERQOS/SessionIdentify .....	9
XML structure .....	9
Table description .....	9
Columns .....	10

# UserProfile

## UserProfile/UserProfiles

This table contains user profile information.

### XML structure

```
<UserProfile>
  <UserProfiles>
    <Profile>
      <Name></Name>
      <Type></Type>
    </Profile>
  </UserProfiles>
</UserProfile>
```

### Table description

Item	Description
Feature name	UserProfile
Table name	UserProfiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Type	User profile type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—User profile.</li><li>2—Session group profile.</li></ul>	N/A

# ACL/UserProfilePfilter

This table contains information about packet filter application for user profile.

## XML structure

```
<ACL>
  <UserProfilePfilter>
    <Apply>
      <Name></Name>
      <Direction></Direction>
      <AclType></AclType>
      <AclGroup></AclGroup>
    </Apply>
  </UserProfilePfilter>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	UserProfilePfilter
Table type	Multi-instance table
Row name	Apply
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Direction	Application direction.	Index	Enumeration: <ul style="list-style-type: none"><li>0—Inbound.</li><li>1—Outbound.</li></ul>	N/A
AclType	ACL type.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—IPv4 ACL.</li><li>2—IPv6 ACL.</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
AclGroup	ACL name or number.	N/A	<ul style="list-style-type: none"> <li><b>ACL name:</b> Case-insensitive string of 1 to 63 characters.</li> <li><b>ACL number:</b> An unsigned integer in the range of 2000 to 3999.</li> </ul>	<p>An ACL name must start with an English letter and cannot be <b>all</b>.</p> <p>Only Apply an ACL at one direction. If want to change the ACL, must to delete the item and create a new item.</p>

## CAR/UserProfileCAR

This table contains CAR application on user profile.

## XML structure

```

<CAR>
  <UserProfileCAR>
    <Apply>
      <Name></Name>
      <Direction></Direction>
      <Type></Type>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
    </Apply>
  </UserProfileCAR>
</CAR>

```

## Table description

Item	Description
Feature name	CAR
Table name	UserProfileCAR
Table type	Multi-instance table
Row name	Apply
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
Type	Match type	Index	Enumeration: <ul style="list-style-type: none"> <li>4—Any</li> </ul>	N/A
CIR	Committed information rate in kbps	N/A	Unsigned integer.	Required. The value range for CIR varies by device model.
CBS	Committed burst size in bytes	N/A	Unsigned integer.	N/A
EBS	Excess burst size in bytes	N/A	Unsigned integer.	If <b>CBS</b> or PIR is not configured, <b>EBS</b> cannot be configured
PIR	Peak information rate in kbps	N/A	Unsigned integer.	The value range for PIR varies by device model.

## GTS/UserProfileGTS

This table contains GTS application on user profile.

## XML structure

```

<GTS>
  <UserProfileGTS>
    <Apply>
      <Name></Name>
      <Direction></Direction>
      <Type></Type>
      <Value></Value>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <Queue-length></Queue-length>
    </Apply>
  </UserProfileGTS>

```

</GTS>

## Table description

Item	Description
Feature name	GTS
Table name	UserProfileGTS
Table type	Multi-instance table
Row name	Apply
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
Type	Match type	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—Any</li><li>• 4—Queue</li></ul>	N/A
Value	Match type value	Index	Unsigned integer.	When <b>Type</b> is <b>4</b> , the value range is 0 to 7. When <b>Type</b> is <b>1</b> , this column only can be configured as 0.
CIR	Committed information rate in kbps	N/A	Unsigned integer.	Required. The value of this column depends on the device model.
CBS	Committed burst size in bytes	N/A	Unsigned integer.	The value of this column depends on the device model.
EBS	Excess burst size in bytes	N/A	Unsigned integer.	The value of this column depends on the device model. If <b>CBS</b> or <b>PIR</b> is not configured, <b>EBS</b> cannot be configured

Column name	Column description	Column type	Data type and restrictions	Remarks
PIR	Peak information rate in kbps	N/A	Unsigned integer.	The value of this column depends on the device model.
Queue-length	Length of the buffer queue	N/A	Unsigned integer.	The value of this column depends on the device model.

## HardwareQueue/UserProfileQMPProfile

This table contains queue scheduling profile application on user profile.

### XML structure

```

<HardwareQueue>
  <UserProfileQMPProfile>
    <Apply>
      <UserProfileName></UserProfileName>
      <Direction></Direction>
      <SchedulingMode></SchedulingMode>
      <QMPProfileName></QMPProfileName>
    </Apply>
  </UserProfileQMPProfile>
</HardwareQueue>

```

### Table description

Item	Description
Feature name	HardwareQueue
Table name	UserProfileQMPProfile
Table type	Multi-instance table
Row name	Apply
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserProfileName	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and

Column name	Column description	Column type	Data type and restrictions	Remarks
				cannot contain only digits. The name must be unique globally.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Inbound.</li> <li>• <b>1</b>—Outbound.</li> </ul>	N/A
SchedulingMode	Queue scheduling profile type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Eight-queue.</li> <li>• <b>1</b>—<b>Four-queue.</b></li> </ul>	N/A
QMProfileName	Queue scheduling profile name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## HardwareQueue/UserProfileQueue

This table contains queue application on user profile.

### XML structure

```

<HardwareQueue>
  <UserProfileQueue>
    <Apply>
      <Name></Name>
      <QueueID></QueueID>
    </Apply>
  </UserProfileQueue>
</HardwareQueue>

```

### Table description

Item	Description
Feature name	HardwareQueue
Table name	UserProfileQueue
Table type	Multi-instance table
Row name	Apply
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
QueueID	Queue ID	N/A	Unsigned integer	The value of this column depends on the device model.

## MQC/UserProfileQosPolicy

This table contains information about QoS policies applied to user profile.

## XML structure

```
<MQC>
  <UserProfileQosPolicy>
    <Apply>
      <UserProfileName></UserProfileName>
      <Direction></Direction>
      <QoSPolicyName></QoSPolicyName>
    </Apply>
  </UserProfileQosPolicy>
</MQC>
```

## Table description

Item	Description
Feature name	MQC
Table name	UserProfileQosPolicy
Table type	Multi-instance table
Row name	Apply
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserProfileName	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
QoSPolicyName	Qos policy name	N/A	String. Length: 1 to 31 characters.	N/A

## USERQOS/SessionIdentify

This table contains information about identify a session group on an interface.

## XML structure

```
<USERQOS>
  <SessionIdentify>
    <Identify>
      <IfIndex></IfIndex>
      <Type></Type>
    </Identify>
  </SessionIdentify>
</USERQOS>
```

## Table description

Item	Description
Feature name	USERQOS
Table name	SessionIdentify
Table type	Multi-instance table
Row name	Identify
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
Type	Match type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1—Customer-VLAN</b></li> <li>• <b>2—Service-VLAN</b></li> <li>• <b>3—Customer-Service-VLAN</b></li> <li>• <b>4—Subscriber-ID</b></li> </ul>	To configure a session group profile for users, you must first use the operation.



# Contents

UserProfile.....	1
UserProfile/UserProfiles .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ACL/UserProfilePfilter .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
CAR/UserProfileCAR .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
GTS/UserProfileGTS .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
HardwareQueue/UserProfileQMProfile .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
HardwareQueue/UserProfileQueue .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
MQC/UserProfileQosPolicy .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
MQC/QoSPolicyCAR .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
MQC/QoSPolicyAccount .....	13
XML structure .....	13
Table description .....	14
Columns .....	14
USERQOS/SessionIdentify .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
USERQOS/Users .....	15
XML structure .....	15
Table description .....	16
Columns .....	16

# UserProfile

## UserProfile/UserProfiles

This table contains user profile information.

### XML structure

```
<UserProfile>
  <UserProfiles>
    <Profile>
      <Name></Name>
      <Type></Type>
    </Profile>
  </UserProfiles>
</UserProfile>
```

### Table description

Item	Description
Feature name	UserProfile
Table name	UserProfiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Type	User profile type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—User profile.</li><li>2—Session group profile.</li></ul>	N/A

# ACL/UserProfilePfilter

This table contains information about packet filter application for user profile.

## XML structure

```
<ACL>
  <UserProfilePfilter>
    <Apply>
      <Name></Name>
      <Direction></Direction>
      <AclType></AclType>
      <AclGroup></AclGroup>
    </Apply>
  </UserProfilePfilter>
</ACL>
```

## Table description

Item	Description
Feature name	ACL
Table name	UserProfilePfilter
Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Direction	Application direction.	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
AclType	ACL type.	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—IPv4 ACL.</li><li>• 2—IPv6 ACL.</li></ul>	N/A
AclGroup	ACL name or	N/A	<ul style="list-style-type: none"><li>• <b>ACL name:</b> Case-insensitive string of</li></ul>	An ACL name must start with an English letter and

Column name	Column description	Column type	Data type and restrictions	Remarks
	number.		1 to 63 characters. <ul style="list-style-type: none"> <li><b>ACL number:</b> An unsigned integer in the range of 2000 to 3999.</li> </ul>	cannot be <b>all</b> .

## CAR/UserProfileCAR

This table contains information about user profile CAR.

## XML structure

```

<CAR>
  <UserProfileCAR>
    <Apply>
      <Name></Name>
      <Direction></Direction>
      <Type></Type>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
    </Apply>
  </UserProfileCAR>
</CAR>

```

## Table description

Item	Description
Feature name	CAR
Table name	UserProfileCAR
Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and

Column name	Column description	Column type	Data type and restrictions	Remarks
				cannot contain only digits. The name must be unique globally.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
Type	Match type	Index	Enumeration: <ul style="list-style-type: none"> <li>Any</li> </ul>	N/A
CIR	Committed information rate in kbps	N/A	Unsigned integer.	N/A
CBS	Committed burst size in bytes	N/A	Unsigned integer.	N/A
EBS	Excess burst size in bytes	N/A	Unsigned integer.	N/A
PIR	Peak information rate in kbps	N/A	Unsigned integer.	N/A

## GTS/UserProfileGTS

This table contains information about user profile GTS.

## XML structure

```

<GTS>
  <UserProfileGTS>
    <Apply>
      <Name></Name>
      <Direction></Direction>
      <Type></Type>
      <Value></Value>
      <CIR></CIR>
      <CBS></CBS>
      <EBS></EBS>
      <PIR></PIR>
      <Queue-length></Queue-length>
    </Apply>
  </UserProfileGTS>
</GTS>

```

## Table description

Item	Description
Feature name	GTS
Table name	UserProfileGTS

Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
Type	Match type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Any</li> <li>4—Queue</li> </ul>	N/A
Value	Match type value	Index	Unsigned integer.	N/A
CIR	Committed information rate in kbps	N/A	Unsigned integer.	The value of this column depends on the device model.
CBS	Committed burst size in bytes	N/A	Unsigned integer.	The value of this column depends on the device model.
EBS	Excess burst size in bytes	N/A	Unsigned integer.	The value of this column depends on the device model.
PIR	Peak information rate in kbps	N/A	Unsigned integer.	The value of this column depends on the device model.
Queue-length	Length of the buffer queue	N/A	Unsigned integer.	The value of this column depends on the device model.

## HardwareQueue/UserProfileQMProfile

This table contains queue scheduling profile application on user profile.

## XML structure

```

<HardwareQueue>
  <UserProfileQMProfile>
    <Apply>

```

```

    <UserProfileName></UserProfileName>
    <Direction></Direction>
    <SchedulingMode></SchedulingMode>
    <QMProfileName></QMProfileName>
  </Apply>
</UserProfileQMProfile>
</HardwareQueue>

```

## Table description

Item	Description
Feature name	HardwareQueue
Table name	UserProfileQMProfile
Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserProfileName	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
SchedulingMode	Queue scheduling profile type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Eight-queue.</li> <li>1—Four-queue.</li> </ul>	N/A
QMProfileName	Queue scheduling profile name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A

## HardwareQueue/UserProfileQueue

This table contains user profile queue information.

## XML structure

```
<HardwareQueue>
```

```

<UserProfileQueue>
  <Apply>
    <Name></Name>
    <QueueID></QueueID>
  </Apply>
</UserProfileQueue>
</HardwareQueue>

```

## Table description

Item	Description
Feature name	HardwareQueue
Table name	UserProfileQueue
Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
QueueID	Queue ID	N/A	Unsigned integer	N/A

## MQC/UserProfileQosPolicy

This table contains information about QoS policies applied to user profile.

## XML structure

```

<MQC>
  <UserProfileQosPolicy>
    <Apply>
      <UserProfileName></UserProfileName>
      <Direction></Direction>
      <QoSPolicyName></QoSPolicyName>
    </Apply>
  </UserProfileQosPolicy>
</MQC>

```



## Table description

Item	Description
Feature name	MQC
Table name	UserProfileQosPolicy
Table type	Multi-instance table
Row name	Apply
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserProfileName	User profile name	Index	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
QoSPolicyName	Qos policy name	N/A	String. Length: 1 to 31 characters.	N/A

## MQC/QoSPolicyCAR

This table contains information about CAR association running information applied to users.

## XML structure

```
<MQC>
  <QoSPolicyCAR>
    <UserCar>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <AuthType></AuthType>
      <UserID></UserID>
      <Direction></Direction>
      <ClassName></ClassName>
```

```

<CIR></CIR>
<CBS></CBS>
<EBS></EBS>
<PIR></PIR>
<GreenAction>
  <GreenActionType></GreenActionType>
  <GreenActionValue></GreenActionValue>
</GreenAction>
<YellowAction>
  <YellowActionType></YellowActionType>
  <YellowActionValue></YellowActionValue>
</YellowAction>
<RedAction>
  <RedActionType></RedActionType>
  <RedActionValue></RedActionValue>
</RedAction>
<GreenPkts></GreenPkts>
<GreenBytes></GreenBytes>
<YellowPkts></YellowPkts>
<YellowBytes></YellowBytes>
<RedPkts></RedPkts>
<RedBytes></RedBytes>
</UserCar>
</QoSPolicyCAR>
</MQC>

```

## Table description

Item	Description
Feature name	MQC
Table name	QoSPolicyCAR
Table type	Multi-instance table
Row name	UserCar
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Device station	Index	Struct include: Chassis. Slot. CPUID	N/A
Chassis	Chassis number	Index	Unsigned integer.	N/A
Slot	Slot number	Index	Unsigned integer.	N/A
CPUID	CPUID number	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthType	Authentication type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Dot1x</li> <li>1—Portal</li> <li>2—ppp</li> <li>3—IPOE</li> <li>4—IPOE6</li> <li>5—MACA</li> <li>6—WLAN</li> </ul>	N/A
UserID	UserID	Index	Unsigned integer.	N/A
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"> <li>0—Inbound.</li> <li>1—Outbound.</li> </ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
CIR	Committed information rate	N/A	Unsigned integer.	N/A
CBS	Committed burst size	N/A	Unsigned integer.	N/A
EBS	Excess burst size	N/A	Unsigned integer.	N/A
PIR	Peak information rate	N/A	Unsigned integer.	N/A
GreenAction	Specify behavior for green packets	Data structure	Members include: <ul style="list-style-type: none"> <li>GreenActionType.</li> <li>GreenActionValue.</li> </ul>	
GreenActionType	Green action type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—pass.</li> <li>2—remark-dscp-pass.</li> <li>3—remark-prec-pass.</li> <li>4—remark-mpls-exp-pass.</li> <li>5—remark-dot1p-pass.</li> <li>6—remark-atm-clp-pass.</li> <li>7—remark-frde-pass.</li> <li>8—remark-local-prec-pass.</li> <li>10—discard.</li> <li>19—continue.</li> </ul>	<p>When <b>GreenActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>GreenActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>GreenActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>GreenActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>GreenActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>GreenActionType</b> is <b>8</b>, remark local precedence of the packet</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				and send it. When <b>GreenActionType</b> is <b>10</b> , drop the packet. When <b>GreenActionType</b> is <b>19</b> , continue to process the packet.
GreenActionValue	Green action value	N/A	Unsigned integer.	When <b>GreenActionType</b> is <b>1</b> , <b>10</b> or <b>19</b> , <b>GreenActionValue</b> is invisible. When <b>GreenActionType</b> is <b>6</b> or <b>7</b> , <b>GreenActionValue</b> is <b>0</b> to <b>1</b> . When <b>GreenActionType</b> is <b>2</b> , <b>GreenActionValue</b> is <b>0</b> to <b>63</b> . When <b>GreenActionType</b> is <b>3</b> , <b>4</b> , <b>5</b> , <b>8</b> , <b>GreenActionValue</b> is <b>0</b> to <b>7</b> .
YellowAction	Specify behavior for yellow packets	Data structure	Members include: <ul style="list-style-type: none"> <li>• <b>YellowActionType</b>.</li> <li>• <b>YellowActionValue</b>.</li> </ul>	
YellowActionType	Yellow Action Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>1</b>—pass.</li> <li>• <b>2</b>—remark-dscp-pass.</li> <li>• <b>3</b>—remark-prec-pass.</li> <li>• <b>4</b>—remark-mpls-exp-pass.</li> <li>• <b>5</b>—remark-dot1p-pass.</li> <li>• <b>6</b>—remark-atm-clp-pass.</li> <li>• <b>7</b>—remark-frde-pass.</li> <li>• <b>8</b>—remark-local-prec-pass.</li> <li>• <b>10</b>—discard.</li> <li>• <b>19</b>—continue.</li> </ul>	When <b>YellowActionType</b> is <b>1</b> , send the packet. When <b>YellowActionType</b> is <b>2</b> , remark DSCP value of the packet and send it. When <b>YellowActionType</b> is <b>3</b> , remark IP precedence of the packet and send it. When <b>YellowActionType</b> is <b>4</b> , remark EXP of the MPLS packet and send it. When <b>YellowActionType</b> is <b>5</b> , remark 802.1p priority value of the packet and send it. When <b>YellowActionType</b> is <b>6</b> , remark CLP bit of the ATM packet and send it. When <b>YellowActionType</b> is <b>7</b> , remark DE bit of the FR packet and send it. When <b>YellowActionType</b> is <b>8</b> , remark local precedence of the packet and send it. When <b>YellowActionType</b> is <b>10</b> , drop the packet. When <b>GreenActionType</b> is <b>19</b> , continue to process

Column name	Column description	Column type	Data type and restrictions	Remarks
				the packet.
YellowActionValue	Yellow Action Value	N/A	Unsigned integer.	<p>When <b>YellowActionType</b> is <b>1, 10</b> or <b>19</b>, <b>YellowActionValue</b> is invisible.</p> <p>When <b>YellowActionType</b> is <b>6</b> or <b>7</b>, <b>YellowActionValue</b> is <b>0</b> to <b>1</b>.</p> <p>When <b>YellowActionType</b> is <b>2</b>, <b>YellowActionValue</b> is <b>0</b> to <b>63</b>.</p> <p>When <b>YellowActionType</b> is <b>3, 4, 5, 8</b>, <b>YellowActionValue</b> is <b>0</b> to <b>7</b>.</p>
RedAction	Specify behavior for red packets	Data structure	<p>Members include:</p> <ul style="list-style-type: none"> <li>• <b>RedActionType.</b></li> <li>• <b>RedActionValue.</b></li> </ul>	
RedActionType	Red Action Type	N/A	<p>Enumeration:</p> <ul style="list-style-type: none"> <li>• <b>1</b>—pass.</li> <li>• <b>2</b>—remark-dscp-pass.</li> <li>• <b>3</b>—remark-prec-pass.</li> <li>• <b>4</b>—remark-mpls-exp-pass.</li> <li>• <b>5</b>—remark-dot1p-pass.</li> <li>• <b>6</b>—remark-atm-clp-pass.</li> <li>• <b>7</b>—remark-frde-pass.</li> <li>• <b>8</b>—remark-local-prec-pass.</li> <li>• <b>10</b>—discard.</li> <li>• <b>19</b>—continue.</li> </ul>	<p>When <b>RedActionType</b> is <b>1</b>, send the packet.</p> <p>When <b>RedActionType</b> is <b>2</b>, remark DSCP value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>3</b>, remark IP precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>4</b>, remark EXP of the MPLS packet and send it.</p> <p>When <b>RedActionType</b> is <b>5</b>, remark 802.1p priority value of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>6</b>, remark CLP bit of the ATM packet and send it.</p> <p>When <b>RedActionType</b> is <b>7</b>, remark DE bit of the FR packet and send it.</p> <p>When <b>RedActionType</b> is <b>8</b>, remark local precedence of the packet and send it.</p> <p>When <b>RedActionType</b> is <b>10</b>, drop the packet.</p> <p>When <b>GreenActionType</b> is <b>19</b>, continue to process the packet.</p>
RedActionValue	Red Action Value	N/A	Unsigned integer.	<p>When <b>RedActionType</b> is <b>1, 10</b> or <b>19</b>, <b>RedActionValue</b> is invisible.</p> <p>When <b>RedActionType</b> is</p>

Column name	Column description	Column type	Data type and restrictions	Remarks
				6 or 7, <b>RedActionValue</b> is 0 to 1. When <b>RedActionType</b> is <b>2</b> , <b>RedActionValue</b> is 0 to 63. When <b>RedActionType</b> is <b>3, 4, 5, 8</b> , <b>RedActionValue</b> is 0 to 7.
GreenPkts	Number of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
GreenBytes	Bytes of green packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowPkts	Number of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
YellowBytes	Bytes of yellow packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedPkts	Number of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
RedBytes	Bytes of red packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

## MQC/QoSPolicyAccount

This table contains information about accounting running information applied to user.

### XML structure

```

<MQC>
  <QoSPolicyAccount>
    <UserAccount>
      <DeviceNode>
        <Chassis></Chassis>
        <Slot></Slot>
        <CPUID></CPUID>
      </DeviceNode>
      <AuthType></AuthType>
      <UserID></UserID>
      <Direction></Direction>
      <ClassName></ClassName>
      <Packets></Packets>
      <Bytes></Bytes>
      <pps></pps>
      <bps></bps>
    </UserAccount>
  </QoSPolicyAccount>

```

</MQC>

## Table description

Item	Description
Feature name	MQC
Table name	QoSPolicyAccount
Table type	Multi-instance table
Row name	UserAccount
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Device station	Index	Struct include: Chassis. Slot. CPUID	N/A
Chassis	Chassis number	Index	Unsigned integer.	N/A
Slot	Slot number	Index	Unsigned integer.	N/A
CPUID	CPUID number	Index	Unsigned integer.	N/A
AuthType	AuthType	Index	Enumeration : <ul style="list-style-type: none"><li>• 0—Dot1x</li><li>• 1—Portal</li><li>• 2—ppp</li><li>• 3—IPOE</li><li>• 4—IPOE6</li><li>• 5—MACA</li><li>• 6—WLAN</li></ul>	N/A
UserID	UserID	Index	Unsigned integer.	N/A
Direction	Application direction	Index	Enumeration: <ul style="list-style-type: none"><li>• 0—Inbound.</li><li>• 1—Outbound.</li></ul>	N/A
ClassName	Classifier name	Index	String. Length: 1 to 31 characters.	N/A
Packets	Accounting Packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
Bytes	Accounting Bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
pps	Accounting packets per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
bps	Accounting bits per second	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A

# USERQOS/SessionIdentify

This table contains information about identify a session group on an interface.

## XML structure

```
<USERQOS>
  <SessionIdentify>
    <Identify>
      <IfIndex></IfIndex>
      <Type></Type>
    </Identify>
  </SessionIdentify>
</USERQOS>
```

## Table description

Item	Description
Feature name	USERQOS
Table name	SessionIdentify
Table type	Multi-instance table
Row name	Identify
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
Type	Match type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Customer-VLAN</li><li>• 2—Service-VLAN</li><li>• 3—Customer-Service-VLAN</li><li>• 4—Subscriber-ID</li></ul>	To configure a session group profile for users, you must first use the operation.

# USERQOS/Users

This table contains information about the status of QOS on user.

## XML structure

```
<USERQOS>
  <Users>
```



```

<User>
  <DeviceNode>
    <Chassis></Chassis>
    <Slot></Slot>
    <CPUID></CPUID>
  </DeviceNode>
  <AuthType></AuthType>
  <UserID></UserID>
  <UserProfileName></UserProfileName>
  <InUserCAR></InUserCAR>
  <OutUserCAR></OutUserCAR>
  <InUserQoSPolicy></InUserQoSPolicy>
  <OutUserQoSPolicy></OutUserQoSPolicy>
  <InUserGTS></InUserGTS>
  <OutUserGTS></OutUserGTS>
  <InUserPfilter></InUserPfilter>
  <OutUserPfilter></OutUserPfilter>
  <OutUserQueue></OutUserQueue>
  <SessionGroupProfileName></SessionGroupProfileName>
  <InGroupCAR></InGroupCAR>
  <OutGroupCAR></OutGroupCAR>
  <InGroupQmpprofile></InGroupQmpprofile>
  <OutGroupQmpprofile></OutGroupQmpprofile>
  <InGroupGTS></InGroupGTS>
  <OutGroupGTS></OutGroupGTS>
</User>
</Users>
</USERQOS>

```

## Table description

Item	Description
Feature name	USERQOS
Table name	Users
Table type	Multi-instance table
Row name	User
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DeviceNode	Device station	Index	Struct include: Chassis. Slot. CPUID	N/A
Chassis	Chassis number	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Slot	Slot number	Index	Unsigned integer.	N/A
CPUID	CPUID number	Index	Unsigned integer.	N/A
AuthType	AuthType	Index	Enumeration : <ul style="list-style-type: none"> <li>• 0—Dot1x</li> <li>• 1—Portal</li> <li>• 2—ppp</li> <li>• 3—IPOE</li> <li>• 4—IPOE6</li> <li>• 5—MACA</li> <li>• 6—WLAN</li> <li>• 7—VPN-PEER</li> <li>• 8—WEB</li> <li>• 9—MPLSTE</li> <li>• 10—UCM</li> </ul>	N/A
UserID	UserID	Index	Unsigned integer.	N/A
UserProfileName	User profile name	N/A	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
InUserCAR	The status of inbound CAR on user profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>• 1—no configuration</li> <li>• 2—active</li> <li>• 3—inactive</li> </ul>	N/A
OutUserCAR	The status of outbound CAR on user profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>• 1—no configuration</li> <li>• 2—active</li> <li>• 3—inactive</li> </ul>	N/A
InUserQoSPolicy	The status of inbound Policy on user profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>• 1—no configuration</li> <li>• 2—active</li> <li>• 3—inactive</li> </ul>	N/A
OutUserQoS Policy	The status of outbound Policy on user profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>• 1—no configuration</li> <li>• 2—active</li> <li>• 3—inactive</li> </ul>	N/A
InUserGTS	The status of inbound GTS on user profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>• 1—no configuration</li> <li>• 2—active</li> <li>• 3—inactive</li> </ul>	N/A
OutUserGTS	The status of outbound GTS on user profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>• 1—no configuration</li> <li>• 2—active</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>3—inactive</li> </ul>	
InUserPfilter	The status of inbound packter filter on user profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—no configuration</li> <li>2—active</li> <li>3—inactive</li> </ul>	N/A
OutUserPfilter	The status of outbound packter filter on user profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—no configuration</li> <li>2—active</li> <li>3—inactive</li> </ul>	N/A
OutUserQueue	The status of queue on user profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—no configuration</li> <li>2—active</li> <li>3—inactive</li> </ul>	N/A
SessionGroupProfileName	Session group profile name	N/A	String, case-insensitive. Length: 1 to 31 characters.	The string can only contain English letters, digits, underscores (_), minus(-), and dots (.). The name can start with an English letter or digit, and cannot contain only digits. The name must be unique globally.
InGroupCAR	The status of inbound CAR on session group profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—no configuration</li> <li>2—active</li> <li>3—inactive</li> </ul>	N/A
OutGroupCAR	The status of outbound CAR on session group profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—no configuration</li> <li>2—active</li> <li>3—inactive</li> </ul>	N/A
InGroupQmprofile	The status of inbound qmprofile on session group profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—no configuration</li> <li>2—active</li> <li>3—inactive</li> </ul>	N/A
OutGroupQmprofile	The status of outbound qmprofile on session group profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—no configuration</li> <li>2—active</li> <li>3—inactive</li> </ul>	N/A
InGroupGTS	The status of inbound GTS on session group profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—no configuration</li> <li>2—active</li> <li>3—inactive</li> </ul>	N/A
OutGroupGTS	The status of outbound GTS on session group profile	N/A	Enumeration : <ul style="list-style-type: none"> <li>1—no configuration</li> <li>2—active</li> <li>3—inactive</li> </ul>	N/A

# Contents

- UserProfile.....1
  - UserProfile/Base.....1
  - UserProfile/Gts.....1

# UserProfile

## UserProfile/Base

Message	Explanation
Number of user profiles and session group profiles exceeded the limit. User Profile 数和Session Group Profile 数已经达到上限。	When create, the number of user profiles and session group profiles exceeded the limit. 配置 User Profile 和 Session Group Profile 时 User Profile 数和 Session Group Profile 数已经达到上限
The profile name has been used by another type of profile. 该配置模板名已经被另一类型的配置模板引用。	When create, the profile name has been used by another type of profile. 创建模板时，模板名称已被占用。
The session group profile not support. 不支持Session Group Profile。	The session group profile not support. 不支持配置Session Group Profile。

## UserProfile/Gts

Message	Explanation
The operation conflicts with some existing configurations. 该操作与已经存在的配置发生冲突。	The operation conflicts with some existing configurations, such as GTS. 配置 GTS 与队列调度策略冲突。
PIR should not be smaller than CIR. PIR不能小于CIR.	PIR should not be smaller than CIR. 流量整形动作峰值速率不能小于承诺信息速率。

# Contents

V2VTunnel.....	1
V2VTunnel/Tunnel .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
V2VTunnel/FrameType .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
V2VTunnel/SpecIfMode.....	2
XML structure.....	3
Table description.....	3
Columns.....	3

# V2VTunnel

## V2VTunnel/Tunnel

This table contains information about V2V tunnels.

### XML structure

```
<V2VTunnel>
  <Tunnel>
    <Tunnels>
      <VsiName></VsiName>
      <ClientID></ClientID>
      <MacAddress></MacAddress>
      <ServerID></ServerID>
      <ServerDescription></ServerDescription>
    </Tunnels>
  </Tunnel>
</V2VTunnel>
```

### Table description

Item	Description
Feature name	V2VTunnel
Table name	Tunnel
Table type	Multi-instance table
Row name	Tunnels
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ClientID	V2V virtual terminal access ID	N/A	Unsigned integer. Value range:1 to 99999.	N/A
MacAddress	V2V virtual terminal MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example:00-0c-af-e3-5d-c0.
ServerID	V2V virtual	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	terminal convergence ID		Value range:1 to 99999.	
ServerDescription	Service name	N/A	String. Length: 1 to 31 characters.	N/A

## V2VTunnel/FrameType

This table contains information about the V2V tunnel frame type.

### XML structure

```
<V2VTunnel>
  <FrameType>
    <IsArpFrameType></IsArpFrameType>
  </FrameType>
</V2VTunnel>
```

### Table description

Item	Description
Feature name	V2VTunnel
Table name	FrameType
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IsArpFrameType	V2V tunnel frame type	N/A	Boolean: <ul style="list-style-type: none"> <li>true—ARP</li> <li>false—IP (default)</li> </ul>	N/A

## V2VTunnel/SpecIfMode

This table contains information about the interface link type.



## XML structure

```
<V2VTunnel>
  <SpecIfMode>
    <SpecIfModes>
      <IfIndex></IfIndex>
      <Direction></Direction>
    </SpecIfModes>
  </SpecIfMode>
</V2VTunnel>
```

## Table description

Item	Description
Feature name	V2VTunnel
Table name	SpecIfMode
Table type	Multi-instance table
Row name	SpecIfModes
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document for your product. For information about IfIndex, see the Appendix in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
LinkMode	Interface link type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Uplink interface.</li><li>2—Downlink interface.</li></ul>	N/A

# Contents

V2VTunnel.....	1
V2VTunnel/Tunnel .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
V2VTunnel/FrameType .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
V2VTunnel/SpecIfMode.....	2
XML structure.....	3
Table description.....	3
Columns.....	3

# V2VTunnel

## V2VTunnel/Tunnel

This table contains information about V2V tunnels.

### XML structure

```
<V2VTunnel>
  <Tunnel>
    <Tunnels>
      <VsiName></VsiName>
      <ClientID></ClientID>
      <MacAddress></MacAddress>
      <ServerID></ServerID>
      <ServerDescription></ServerDescription>
      <LinkStatus></LinkStatus>
    </Tunnels>
  </Tunnel>
</V2VTunnel>
```

### Table description

Item	Description
Feature name	V2VTunnel
Table name	Tunnel
Table type	Multi-instance table
Row name	Tunnels
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ClientID	V2V virtual terminal access ID	N/A	Unsigned integer. Value range: 1 to 99999.	N/A
MacAddress	V2V virtual terminal MAC address	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example:00-0c-af-e3-5d-c0.
ServerID	V2V virtual terminal	N/A	Unsigned integer. Value range: 1 to 99999.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	convergence ID			
ServerDescription	Service name	N/A	String. Length: 1 to 31 characters.	N/A
LinkStatus	Link status	N/A	Boolean: <ul style="list-style-type: none"> <li>true—connected.</li> <li>false—disconnected.</li> </ul>	N/A

## V2VTunnel/FrameType

This table contains information about V2Vtunnel frame type.

### XML structure

```
<V2VTunnel>
  <FrameType>
    <IsArpFrameType></IsArpFrameType>
  </FrameType>
</V2VTunnel>
```

### Table description

Item	Description
Feature name	V2VTunnel
Table name	FrameType
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IsArpFrameType	V2V tunnel frame type	N/A	Boolean: <ul style="list-style-type: none"> <li>true—ARP.</li> <li>false—IP.</li> </ul>	N/A

## V2VTunnel/SpecIfMode

This table contains information about the interface link type.

## XML structure

```
<V2VTunnel>
  <SpecIfMode>
    <SpecIfModes>
      <IfIndex></IfIndex>
      <LinkMode></LinkMode>
    </SpecIfModes>
  </SpecIfMode>
</V2VTunnel>
```

## Table description

Item	Description
Feature name	V2VTunnel
Table name	SpecIfMode
Table type	Multi-instance table
Row name	SpecIfModes
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
LinkMode	Link type	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Uplink interface.</li><li>2—Downlink interface.</li></ul>	N/A

# Contents

AVC .....	1
AVC/TrafficPolicyRules .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AVC/RuleOptions .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
AVC/TrafficPolicyProfiles .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
AVC/ RuleJsonOptions .....	6
XML structure .....	6
Table description .....	7
Columns .....	7

# AVC

## AVC/TrafficPolicyRules

This table contains information about the AVC's rule information.

### XML structure

```
<AVC>
  <TrafficPolicyRules>
    <Rule>
      <RuleNumber></RuleNumber>
      <ParentRuleNumber></ParentRuleNumber>
      <RuleName></RuleName>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <Action>
        <ProfileName></ProfileName>
      </Action>
      <ModelId></ModelId>
    </Rule>
  </TrafficPolicyRules>
</AVC>
```

### Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
ParentRuleNumber	Parent Rule's rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	Optional

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleName	name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Name cannot be same with its siblings. Mandatory
Enable	Set this value to true to disable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	Optional
TimeRange	Time Range Name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Optional, Single value
ProfileName	TrafficPolify profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Optional
ModelId	Model rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	Optional

## AVC/RuleOptions

This table contains some multiple information about the AVC's rule option.

### XML structure

```

<AVC>
  <RuleOptions>
    <Option>
      <RuleNumber></RuleNumber>
      <OptionType></OptionType>
      <OptionVal></OptionVal>
    </Option>
  </RuleOptions>
</AVC>

```

### Table description

Item	Description
Feature name	AVC
Table name	RuleOptions
Table type	Multi-instance table
Row name	Option
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
OptionType	Type of the configuration	Index	Enumeration: <ul style="list-style-type: none"> <li>1—SourceZones.</li> <li>2—DestZones.</li> <li>3—SourceAddressSets.</li> <li>4—DestAddressSets.</li> <li>5—Users.</li> <li>6—UserGroups.</li> <li>7—Applications.</li> <li>8—AppGroups.</li> <li>9—Services.</li> <li>10—Dscp.</li> </ul>	N/A
OptionVal	Value of the special type configuration	Index	String, case-insensitive. Length: 1 to 63 characters (for OptionTypes 7 and 8). Length: 1 to 31 characters ( for OptionTypes 1 through 4, and OptionType 9). Length: 1 to 100 characters (for OptionType 10). Length: 1 to 480 characters (for OptionTypes 5 and 6).	Values of OptionTypes 5 and 6 are in Json format.

## AVC/TrafficPolicyProfiles

This table contains information about the AVC traffic policy's Control profiles.

### XML structure

```

<AVC>
  <TrafficPolicyProfiles>
    <Profile>
      <ProfileNumber></ProfileNumber>
      <ProfileName></ProfileName>
      <ReferenceMode></ReferenceMode>
      <IpAverageEnable></IpAverageEnable>
      <TotalMaxKbps></TotalMaxKbps>
      <TotalGuaranteedKbps></TotalGuaranteedKbps>
      <TotalGuaranteedKbpsPerIP></TotalGuaranteedKbpsPerIP>
      <TotalGuaranteedKbpsPerUser></TotalGuaranteedKbpsPerUser>
      <TotalMaxKbpsPerIP></TotalMaxKbpsPerIP>
      <TotalMaxKbpsPerUser></TotalMaxKbpsPerUser>
      <DnGuaranteedKbpsPerIP></DnGuaranteedKbpsPerIP>
    </Profile>
  </TrafficPolicyProfiles>
</AVC>

```

```

<UpGuaranteedKbpsPerIP></UpGuaranteedKbpsPerIP>
<DnGuaranteedKbpsPerUser></DnGuaranteedKbpsPerUser>
<UpGuaranteedKbpsPerUser></UpGuaranteedKbpsPerUser>
<DnMaxKbps></DnMaxKbps>
<UpMaxKbps></UpMaxKbps>
<DnGuaranteedKbps></DnGuaranteedKbps>
<UpGuaranteedKbps></UpGuaranteedKbps>
<DnMaxKbpsPerIP></DnMaxKbpsPerIP>
<UpMaxKbpsPerIP></UpMaxKbpsPerIP>
<DnMaxKbpsPerUser></DnMaxKbpsPerUser>
<UpMaxKbpsPerUser></UpMaxKbpsPerUser>
<Priority></Priority>
<RemarkDSCP></RemarkDSCP>
<MaxConnNum></MaxConnNum>
<MaxConnNumPerIP></MaxConnNumPerIP>
<MaxConnNumPerUser></MaxConnNumPerUser>
<MaxConnRate></MaxConnRate>
<MaxConnRatePerIP></MaxConnRatePerIP>
<MaxConnRatePerUser></MaxConnRatePerUser>
<TCPMSS><TCPMSS>
</Profile>
</TrafficPolicyProfiles>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyProfiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileNumber	Profile number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule option is the match order.
ProfileName	Profile Name, cannot be same with other profiles	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ReferenceMode	Rule shared mode	N/A	Unsigned integer: • 0—per-rule.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>1—rule-shared.</li> </ul>	
IpAverageEnable	Ip average enable	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TotalMaxKbps	Total max kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbps	Total guaranteed kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerIP	Total guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerUser	Total guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalMaxKbpsPerIP	Total max kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalMaxKbpsPerUser	Total max kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbpsPerIP	Down guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbpsPerIP	Up guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbpsPerUser	Down guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbpsPerUser	Up guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbps	Downstream Guaranteed bandwidth	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
UpGuaranteedKbps	Upstream guaranteed Kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
DnMaxKbps	Downstream Max Kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
UpMaxKbps	Upstream Max Kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
DnMaxKbpsPerIP	Downstream Max Kbps per iP	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
UpMaxKbpsPerIP	Upstream Max Kbps Per IP	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional. Per-IP and Per-User are exclusive.
DnMaxKbpsPerUser	Downstream Max Kbps per	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional

Column name	Column description	Column type	Data type and restrictions	Remarks
	User			
UpMaxKbpsPerUser	Upstream Max Kbps PerUser	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Optional
Priority	Stream Priority level	N/A	Unsigned integer: Value range: 1 to 7.	When the outbound bandwidth is limited, the priority of the stream is higher, the stream is prior to pass the interface.
RemarkDSCP	Dscp value	N/A	Unsigned integer: Value range: 0 to 63.	Optional
MaxConnNum	Max up connections	N/A	Unsigned integer: Value range: 1 to 12,000,000.	Optional
MaxConnNumPerIP	Max up connections per IP	N/A	Unsigned integer: Value range: 1 to 12,000,000.	Optional Per-IP and Per-User are exclusive.
MaxConnNumPerUser	Max up connections per User	N/A	Unsigned integer: Value range: 1 to 12,000,000.	Optional
MaxConnRate	Max up connections rate	N/A	Unsigned integer: Value range: 1 to 12,000,000 times per second.	Optional
MaxConnRatePerIP	Max up connections rate per IP	N/A	Unsigned integer: Value range: 1 to 12,000,000 times per second.	Optional Per-IP and Per-User are exclusive.
MaxConnRatePerUser	Max up connections rate per user	N/A	Unsigned integer: Value range: 1 to 12,000,000 times per second.	Optional
TCPMSS	TCP MSS value	N/A	Unsigned integer: Value range: 128 to 9158.	Optional

## AVC/ RuleJsonOptions

This table contains information about the AVC's rule options information.

### XML structure

```

<AVC>
  <RuleJsonOptions>
    </OptionJson>
    <RuleJsonNumber></RuleJsonNumber>
    <OptionJsonType></OptionJsonType>
    <OptionJsonVal></OptionJsonVal>
  </OptionJson>
</RuleJsonOptions>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	RuleJsonOptions
Table type	Multi-instance table
Row name	OptionJson
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleJsonNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
OptionJsonType	Type of the configuration	Index	Enumeration: <ul style="list-style-type: none"> <li>1—SourceZones.</li> <li>2—DestZones.</li> <li>3—SourceAddressSets.</li> <li>4—DestAddressSets.</li> <li>5—Users.</li> <li>6—UserGroups.</li> <li>7—Applications.</li> <li>8—AppGroups.</li> <li>9—Services.</li> <li>10—Dscp.</li> </ul>	N/A
OptionJsonVal	Json values of the special type configurations	Index	String, case-insensitive. Length: 1 to 65535 characters.	N/A

# Contents

AVC .....	1
AVC/TrafficParentRules .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AVC/TrafficPolicyChildRules .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
AVC/AvcRuleOptions .....	4
XML structure .....	4
Table description .....	4
Columns .....	4
AVC/TrafficPolicyQuery .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
AVC/TrafficQueParentRule .....	7
XML structure .....	8
Table description .....	8
Columns .....	8
AVC/TrafficPolicyRules .....	9
XML structure .....	9
Table description .....	9
Columns .....	10
AVC/RuleOptions .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
AVC/TrafficPolicyProfiles .....	11
XML structure .....	11
Table description .....	12
Columns .....	12
AVC/AVCSpecification .....	14
XML structure .....	14
Table description .....	15
Columns .....	15

# AVC

## AVC/TrafficParentRules

This table contains information about parent traffic rules.

### XML structure

```
<AVC>
  <TrafficParentRules>
    <Rule>
      <Position></Position>
      <RuleNumber></RuleNumber>
      <RuleName></RuleName>
      <OptionContent></OptionContent>
      <TotalCount></TotalCount>
      <FirstSonRuleNum></FirstSonRuleNum>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <ProfileName></ProfileName>
    </Rule>
  </TrafficParentRules>
</AVC>
```

### Table description

Item	Description
Feature name	AVC
Table name	TrafficParentRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Position	Record the Number	Index	Unsigned integer: Value range: 0 to 200.	N/A
RuleNumber	Rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 65535 characters. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.
TotalCount	Total number of rules	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
FirstSonRuleNum	Return the number of the first child rule	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## AVC/TrafficPolicyChildRules

This table contains information about child traffic rules.

### XML structure

```

<AVC>
  <TrafficPolicyChildRules>
    <Rule>
      <RuleNumber></RuleNumber>
      <ParentRuleNumber></ParentRuleNumber>
      <RuleName></RuleName>
      <FirstSonRuleNum></FirstSonRuleNum>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <ProfileName></ProfileName>
      <OptionContent></OptionContent>
    </Rule>
  </TrafficPolicyChildRules>

```



< /AVC>

## Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyChildRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
ParentRuleNumber	Number of the parent rule	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
FirstSonRuleNum	Return the number of the first child rule	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 10240. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.

# AVC/AvcRuleOptions

This table contains match criterion types.

## XML structure

```
<AVC>
  <AvcRuleOptions>
    <AvcOption>
      <AvcRuleNumber></AvcRuleNumber>
      <AvcSeqNum></AvcSeqNum>
      <AvcOptionType></AvcOptionType>
      <AvcOptionVal></AvcOptionVal>
    </AvcOption>
  </AvcRuleOptions>
</AVC>
```

## Table description

Item	Description
Feature name	AVC
Table name	AvcRuleOptions
Table type	Multi-instance table
Row name	AvcOption
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AvcRuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
AvcSeqNum	Sequence numbers for values of a match criterion	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
AvcOptionType	Match criterion type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—SourceZones.</li><li>• 2—DestZones.</li><li>• 3—SourceAddressSets.</li><li>• 4—DestAddressSets.</li><li>• 5—Users.</li><li>• 6—UserGroups.</li><li>• 7—Applications.</li><li>• 8—AppGroups.</li><li>• 9—Services.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>10—Dscp.</li> </ul>	
AvcOptionVal	Match criterion value	N/A	String, case-insensitive. Length: 1 to 65535 characters . Content: JSON array. Such as: [Optionval1,optionval2,...].	A JSON array contains strings of 1 to 64 characters.

## AVC/TrafficPolicyQuery

This table contains information about each match criterion type.

### XML structure

```

<AVC>
  <TrafficPolicyQuery>
    <RuleQuery>
      <UserID></UserID>
      <Position></Position>
      <RuleNameFilter></RuleNameFilter>
      <EnableFilter></EnableFilter>
      <ProfileNameFilter></ProfileNameFilter>
      <TimeRangeFilter></TimeRangeFilter>
      <SrcZoneFilter></SrcZoneFilter>
      <DestZoneFilter></DestZoneFilter>
      <SrcAddrSetFilter></SrcAddrSetFilter>
      <DestAddrSetFilter></DestAddrSetFilter>
      <UserFilter></UserFilter>
      <UserGroupFilter></UserGroupFilter>
      <ApplicationFilter></ApplicationFilter>
      <AppGroupFilter></AppGroupFilter>
      <ServiceFilter></ServiceFilter>
      <DscpFilter></DscpFilter>
      <ParentRuleNumber></ParentRuleNumber>
      <RuleNumber></RuleNumber>
      <RuleName></RuleName>
      <OptionContent></OptionContent>
      <TotalCount></TotalCount>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <ProfileName></ProfileName>
      <IsExistSonFlag></IsExistSonFlag>
      <DomainFilter></DomainFilter>
    </RuleQuery>
  </TrafficPolicyQuery>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyQuery
Table type	Multi-instance table
Row name	RuleQuery
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
UserID	Record the user ID	Index	Unsigned integer: Value range: 1 to 65535.	N/A
Position	Record the last query position	Index	Unsigned integer: Value range: 0 to 200.	N/A
RuleNameFilter	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
EnableFilter	Set this value to true to enable the rule	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>0—Invalid.</li> <li>1—disable.</li> <li>2—enable.</li> </ul>	N/A
TimeRangeFilter	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileNameFilter	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
SrcZoneFilter	Source zone name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DestZoneFilter	Destination zone name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
SrcAddrSetFilter	Source address object name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DestAddrSetFilter	Destination address object name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
UserFilter	Username	N/A	String, case-insensitive. Length: 1 to 55 characters.	N/A
UserGroupFilter	User group name	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A
ApplicationFilter	Application name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
AppGroupFilter	Application	N/A	String, case-insensitive.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceFilter	Service name	N/A	String, case-insensitive. Length: 1 to 3 characters.	N/A
DscpFilter	DSCP value	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
ParentRuleNumber	Parent rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleNumber	Child rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 65535. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.
TotalCount	Total number of rules	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IsExistSonFlag	Set this value to son traffic id to sign if this traffic has sons	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
DomainFilter	Domain value	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## AVC/TrafficQueueParentRule

This table contains information about the parent rule for a child rule.

# XML structure

```
<AVC>
  <TrafficQueParentRule>
    <QueRule>
      <RuleNumber></RuleNumber>
      <PRuleNumber></PRuleNumber>
      <RuleName></RuleName>
      <OptionContent></OptionContent>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <ProfileName></ProfileName>
    </QueRule>
  </TrafficQueParentRule>
</AVC>
```

## Table description

Item	Description
Feature name	AVC
Table name	TrafficQueParentRule
Table type	Multi-instance table
Row name	QueRule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Child rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
PRuleNumber	Parent rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 10240. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON

Column name	Column description	Column type	Data type and restrictions	Remarks
				object contains a maximum of 64 characters.
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## AVC/TrafficPolicyRules

This table contains information about the AVC's rule information.

### XML structure

```

<AVC>
  <TrafficPolicyRules>
    <Rule>
      <RuleNumber></RuleNumber>
      <ParentRuleNumber></ParentRuleNumber>
      <RuleName></RuleName>
      <Enable></Enable>
      <TimeRange></TimeRange>
      <Action>
        <ProfileName></ProfileName>
      </Action>
      <ModelId></ModelId>
    </Rule>
  </TrafficPolicyRules>
</AVC>

```

### Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
ParentRuleNumber	Parent Rule's rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Name cannot be same with its siblings. Mandatory
Enable	Set this value to true to disable the rule	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
TimeRange	Time Range Name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ProfileName	TrafficPolify profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ModelId	Model rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A

## AVC/RuleOptions

This table contains some multiple information about the AVC's rule option.

## XML structure

```
<AVC>
  <RuleOptions>
    <Option>
      <RuleNumber></RuleNumber>
      <OptionType></OptionType>
      <OptionVal></OptionVal>
    </Option>
  </RuleOptions>
</AVC>
<AVC>
```

## Table description

Item	Description
Feature name	AVC
Table name	RuleOptions
Table type	Multi-instance table



Row name	Option
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
OptionType	Type of the configuration	Index	Enumeration: <ul style="list-style-type: none"> <li>1—SourceZones.</li> <li>2—DestZones.</li> <li>3—SourceAddressSets.</li> <li>4—DestAddressSets.</li> <li>5—Users.</li> <li>6—UserGroups.</li> <li>7—Applications.</li> <li>8—AppGroups.</li> <li>9—Services.</li> <li>10—Dscp.</li> </ul>	N/A
OptionVal	Value of the special type configuration	Index	String, case-insensitive. Length: 1 to 63 characters (for OptionTypes 7 and 8). Length: 1 to 31 characters (for OptionTypes 1 through 4, and OptionType 9). Length: 1 to 100 characters (for OptionType 10). Length: 1 to 480 characters (for OptionTypes 5 and 6).	Values of OptionTypes 5 and 6 are in Json format.

## AVC/TrafficPolicyProfiles

This table contains information about the AVC traffic policy's Control profiles.

## XML structure

```

<AVC>
  <TrafficPolicyProfiles>
    <Profile>
      <ProfileNumber></ProfileNumber>
      <ProfileName></ProfileName>
      <ReferenceMode></ReferenceMode>
      <IpAverageEnable></IpAverageEnable>
      <TotalMaxKbps></TotalMaxKbps>
      <TotalGuaranteedKbps></TotalGuaranteedKbps>
      <TotalGuaranteedKbpsPerIP></TotalGuaranteedKbpsPerIP>
      <TotalGuaranteedKbpsPerUser></TotalGuaranteedKbpsPerUser>
    </Profile>
  </TrafficPolicyProfiles>
</AVC>

```

```

<TotalMaxKbpsPerIP></TotalMaxKbpsPerIP>
<TotalMaxKbpsPerUser></TotalMaxKbpsPerUser>
<DnGuaranteedKbpsPerIP></DnGuaranteedKbpsPerIP>
<UpGuaranteedKbpsPerIP></UpGuaranteedKbpsPerIP>
<DnGuaranteedKbpsPerUser></DnGuaranteedKbpsPerUser>
<UpGuaranteedKbpsPerUser></UpGuaranteedKbpsPerUser>
<DnMaxKbps></DnMaxKbps>
<UpMaxKbps></UpMaxKbps>
<DnGuaranteedKbps></DnGuaranteedKbps>
<UpGuaranteedKbps></UpGuaranteedKbps>
<DnMaxKbpsPerIP></DnMaxKbpsPerIP>
<UpMaxKbpsPerIP></UpMaxKbpsPerIP>
<DnMaxKbpsPerUser></DnMaxKbpsPerUser>
<UpMaxKbpsPerUser></UpMaxKbpsPerUser>
<Priority></Priority>
<RemarkDSCP></RemarkDSCP>
<MaxConnNum></MaxConnNum>
<MaxConnNumPerIP></MaxConnNumPerIP>
<MaxConnNumPerUser></MaxConnNumPerUser>
<MaxConnRate></MaxConnRate>
<MaxConnRatePerIP></MaxConnRatePerIP>
<MaxConnRatePerUser></MaxConnRatePerUser>
<TCPMSS></TCPMSS>
</Profile>
</TrafficPolicyProfiles>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	TrafficPolicyProfiles
Table type	Multi-instance table
Row name	Profile
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileNumber	Profile number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule option is the match order.
ProfileName	Profile Name, cannot be same with other profiles	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ReferenceMode	Rule shared mode	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>0—per-rule.</li> <li>1—rule-shared.</li> </ul>	N/A
IpAverageEnable	Ip average enable	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TotalMaxKbps	Total max kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbps	Total guaranteed kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerIP	Total guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerUser	Total guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalMaxKbpsPerIP	Total max kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
TotalMaxKbpsPerUser	Total max kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbpsPerIP	Down guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbpsPerIP	Up guaranteed kbps per ip	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbpsPerUser	Down guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbpsPerUser	Up guaranteed kbps per user	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnGuaranteedKbps	Downstream Guaranteed bandwidth	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpGuaranteedKbps	Upstream guaranteed kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnMaxKbps	Downstream Max kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpMaxKbps	Upstream Max kbps	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
DnMaxKbpsPerIP	Downstream Max kbps per iP	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
UpMaxKbpsPerIP	Upstream Max kbps Per IP	N/A	Unsigned integer: Value range: 8 to 100,000,000.	Per-IP and Per-User are exclusive.
DnMaxKbpsP	Downstream	N/A	Unsigned integer:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
erUser	Max kbps per User		Value range: 8 to 100,000,000.	
UpMaxKbpsPerUser	Upstream Max kbps PerUser	N/A	Unsigned integer: Value range: 8 to 100,000,000.	N/A
Priority	Stream Priority level	N/A	Unsigned integer: Value range: 1 to 7.	When the outbound bandwidth is limited, the priority of the stream is higher, the stream is prior to pass the interface.
RemarkDSCP	Dscp value	N/A	Unsigned integer: Value range: 0 to 63.	N/A
MaxConnNum	Max up connections	N/A	Unsigned integer: Value range: 1 to 12,000,000.	N/A
MaxConnNumPerIP	Max up connections per IP	N/A	Unsigned integer: Value range: 1 to 12,000,000.	Per-IP and Per-User are exclusive
MaxConnNumPerUser	Max up connections per User	N/A	Unsigned integer: Value range: 1 to 12,000,000.	N/A
MaxConnRate	Max up connections rate	N/A	Unsigned integer: Value range:1 to 12,000,000 times per second.	N/A
MaxConnRatePerIP	Max up connections rate per IP	N/A	Unsigned integer: Value range:1 to 12,000,000 times per second.	Per-IP and Per-User are exclusive
MaxConnRatePerUser	Max up connections rate per user	N/A	Unsigned integer: Value range:1 to 12,000,000 times per second.	N/A
TCPMSS	TCP MSS value	N/A	Unsigned integer: Value range: 128 to 9158.	N/A

## AVC/AVCSpecification

This table contains the AVC specification information.

### XML structure

```

<AVC>
  <AVCSpecification>
    <SupportDomain></SupportDomain>
  </AVCSpecification>
</AVC>

```

## Table description

Item	Description
Feature name	AVC
Table name	AVCSpecification
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportDomain	Whether the function of AVC domain is supported.	N/A	Boolean: <ul style="list-style-type: none"><li>• true.</li><li>• false.</li></ul>	N/A

# Contents

Resource Summary for AVC.....	1
AVC .....	1
TrafficParentRules .....	1
Properties .....	1
Example .....	2
TrafficPolicyChildRules .....	3
Properties .....	3
Example .....	4
AvcRuleOptions.....	5
Properties .....	5
Example .....	6
TrafficPolicyQuery.....	6
Properties .....	6
Example .....	8
TrafficQueueParentRule .....	9
Properties .....	10
Example .....	10
MoveTrafficPolicyRule .....	11
Properties .....	11
Example .....	12
TrafficPolicyRules .....	12
Properties .....	12
Example .....	12
RuleOptions .....	14
Properties .....	14
Example .....	15
TrafficPolicyProfiles .....	16
Properties .....	16
Example .....	18
RuleJsonOptions .....	20
Properties .....	20
Example .....	20
AVCSpecification .....	21
Properties .....	21
Example .....	21

# Resource Summary for AVC

Resource(Table)	Base URL	HTTP Method			
		GET	POST	PUT	DELETE
TrafficParentRules	/api/v2/AVC/TrafficParentRules	Y	N	N	N
TrafficPolicyChildRules	/api/v2/AVC/TrafficPolicyChildRules	Y	N	N	N
AvcRuleOptions	/api/v2/AVC/AvcRuleOptions	Y	N	N	N
TrafficPolicyQuery	/api/v2/AVC/TrafficPolicyQuery	Y	N	N	N
TrafficQueParentRule	/api/v2/AVC/TrafficQueParentRule	Y	N	N	N
MoveTrafficPolicyRule	/api/v2/AVC/MoveTrafficPolicyRule	N	N	Y	N
TrafficPolicyRules	/api/v3/AVC/TrafficPolicyRules	Y	Y	Y	Y
RuleOptions	/api/v3/AVC/RuleOptions	Y	Y	N	Y
TrafficPolicyProfiles	/api/v3/AVC/TrafficPolicyProfiles	Y	Y	Y	Y
RuleJsonOptions	/api/v3/AVC/RuleJsonOptions	N	Y	N	N
AVCSpecification	/api/v3/AVC/AVCSpecification	Y	N	N	N

## AVC

### TrafficParentRules

This table contains information about parent rules.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
Position	Record the Number	Index	Unsigned integer: Value range: 0 to 200.	N/A
RuleNumber	Rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 65535 characters. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A

Column name	Column description	Column type	Data type and restrictions	Remarks
				JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.
TotalCount	Total number of rules	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
FirstSonRuleNum	Return the number of the first child rule	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## Example

Example 1: Get data from resource TrafficParentRules.

### Json Request

GET /api/v2/AVC/TrafficParentRules

### Json Response

200 OK

```
{
  TrafficParentRules:
  [{
    "RuleNumber" : 1,
    "RuleName" : "rlName",
    "Position" : 1,
    "OptionContent": "[
      {
        "optionType" : 1,
        "optionVal" : ["DMZ", "Local", "Management"]
      }
    ]"
```



```

    },
    {
        "optionType" : 2,
        "optionVal" : ["10","102","104"]
    },
    .
    .
    .
    ,{
        "optionType" : 10,
        "optionVal" : ["18","22"]
    }],
    "TotalCount" : 986,
    "Enable" : "true",
    "TimeRange" : "time1",
    "ProfileName" : "ftp"
}
}
}

```

## TrafficPolicyChildRules

This table contains information about child traffic rule.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
ParentRuleNumber	Number of the parent rule	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
FirstSonRuleNum	Return the number of the first child rule	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 10240 characters. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.

## Example

Example 1: Get data from resource TrafficPolicyChildRules.

### Json Request

GET /api/v2/AVC/TrafficPolicyChildRules

### Json Response

200 OK

```
{
  TrafficPolicyChildRules:
  [{
    "RuleNumber" : 1,
    "ParentRuleNumber" : 2
    "RuleName" : "rlName",
    "Enable" : "true",
    "TimeRange" : "time1",
    "ProfileName" : "ftp",
    "OptionContent" : "[
      {
        "optionType" : 1,
        "optionVal" : ["DMZ","Local","Management"]
      },
      {
        "optionType" : 2,
```

```

        "optionVal" : ["10","102","104"]
    },
    .
    .
    .
    ,{
        "optionType" : 10,
        "optionVal" : ["18","22"]
    }],
    }
}

```

## AvcRuleOptions

This table contains match criterion types.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
AvcRuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
AvcSeqNum	Sequence numbers for values of a match criterion	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
AvcOptionType	Match criterion type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—SourceZones.</li> <li>• 2—DestZones.</li> <li>• 3—SourceAddressSets.</li> <li>• 4—DestAddressSets.</li> <li>• 5—Users.</li> <li>• 6—UserGroups.</li> <li>• 7—Applications.</li> <li>• 8—AppGroups.</li> <li>• 9—Services.</li> <li>• 10—Dscp.</li> </ul>	N/A
AvcOptionVal	Match criterion value	N/A	String, case-insensitive. Length: 1 to 65535 characters. Content: JSON array. Such as: [Optionval1,optionval2,...].	N/A

## Example

Example 1: Get data from resource AvcRuleOptions.

### Json Request

GET /api/v2/AVC/AvcRuleOptions

### Json Response

200 OK

```
{
  AvcRuleOptions:
  [{
    "AvcRuleNumber" : 1,
    "AvcSeqNum" : 8
    "AvcOptionType" : 7,
    "AvcOptionVal" : ["南阳网","051 健康","07073 游戏网","10010","中国移动官网","圣才学习网","1024 商务网"]
  }]
}
```

## TrafficPolicyQuery

This table contains information about each match criterion type.

## Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
UserID	Record the user ID	Index	Unsigned integer: Value range: 1 to 65535.	N/A
Position	Record the last query position	Index	Unsigned integer: Value range: 0 to 200.	N/A
RuleNameFilter	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
EnableFilter	Set this value to true to enable the rule	N/A	Unsigned integer: <ul style="list-style-type: none"><li>0—Invalid.</li><li>1—disbale.</li><li>2—enable.</li></ul>	N/A
TimeRangeFilter	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileNameFilter	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SrcZoneFilter	Source zone name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DestZoneFilter	Destination zone name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
SrcAddrSetFilter	Source address object name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DestAddrSetFilter	Destination address object name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
UserFilter	User name	N/A	String, case-insensitive. Length: 1 to 55 characters.	N/A
UserGroupFilter	User group name	N/A	String, case-insensitive. Length: 1 to 200 characters.	N/A
ApplicationFilter	Application name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
AppGroupFilter	Application group name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ServiceFilter	Service name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
DscpFilter	DSCP value	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
ParentRuleNumber	Parent rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleNumber	Child rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 65535 characters. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.
TotalCount	Total number of rules	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
Enable	Set this value to	N/A	Boolean:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	true to enable the rule		<ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
IsExistSonFlag	Set this value to the first son traffic ID to sign if this traffic has sons	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
DomainFilter	Domain value	N/A	String, case-insensitive. Length: 1 to 255 characters.	N/A

## Example

Example 1: Get data from resource TrafficPolicyQuery.

### Json Request

GET /api/v2/AVC/TrafficPolicyQuery

### Json Response

200 OK

```
{
  TrafficPolicyQuery:
  [{
    "UserID" : 2,
    "Position" : 1,
    "ApplicationFilter" : "南阳网",
    "RuleNumber" : 2,
    "RuleName" : "rlName",
    "OptionContent" : [
      {
        "OptionType" : 1,
        "OptionVal" : ["DMZ","Local","Management"]
      },
      {
        "OptionType" : 2,
        "OptionVal" : ["10","102","104"]
      }
    ]
  }
]
```

```

    .
    .
    .
    {
        "OptionType" : 5,
        "OptionVal" : [{"name":"xxx","domain":"xxx"}, {"name":"xxx"}]
    }
    ,{
        "OptionType" : 6,
        "OptionVal" : [{"name":"xxx","domain":"xxx"}, {"name":"xxx"}]
    }
    ,{
        "OptionType" : 7,
        "OptionVal" : ["南阳网","051 健康","07073 游戏网","10010","中国移动官网","圣才学习
网","1024 商务网"]
    }
    .
    .
    .
    ,{
        "OptionType" : 10,
        "OptionVal" : ["18","22"]
    }
    },
    "TotalCount" : 999,
    "Enable" : "true",
    "TimeRange" : "time1",
    "ProfileName" : "ftp"
    "IsExistSonFlag" : 5
    }}
}

```

## TrafficQueueParentRule

This table contains information about the parent rule for a child rule.

# Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Child rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
PRuleNumber	Parent rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	N/A
RuleName	Rule name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
OptionContent	Match criterion content	N/A	String, case-insensitive. Length: 1 to 10240 characters. Content: JSON array.	This column stores all match criteria of a parent traffic rule in the JSON array format. A JSON array is made up of JSON objects. A JSON object describes information about one match criterion type by using optionType and optionVal. The optionVal is a set of values for the match criterion. A JSON object contains a maximum of 64 characters.
Enable	Set this value to true to enable the rule	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 32 characters.	N/A
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A

## Example

Example 1: Get data from resource TrafficQueParentRule.

### Json Request

GET /api/v2/AVC/TrafficQueParentRule

### Json Response

200 OK

```
{
  TrafficQueParentRule:
  [{
    "RuleNumber" : 2,
    "PRuleNumber" : 0
```



```

"RuleName" : "rlName",
"OptionContent" : [
{
"optionType" : 1,
"optionVal" : ["DMZ","Local","Management"]
},
.
.
.
{
"optionType" : 7,
"optionVal" : ["051 健康","07073 游戏网","10010","中国移动官网","圣才学习网","1024
商务网"]
},
.
.
.
{
"optionType" : 10,
"optionVal" : ["18","22"]
}},
"Enable" : "true",
"TimeRange" : "time1",
"ProfileName" : "ftp"
}]
}

```

## MoveTrafficPolicyRule

This table contains information about the AVC's rule number information.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
NextRuleNumber	Next rule's rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	Singel value

## Example

Example 1: Change data for the assigned instance.

### Json Request

PUT /api/v2/AVC/MoveTrafficPolicyRule

```
{
  "RuleNumber" : 2
  "NextRuleNumber" : 1
}
```

### Json Response

204 No Content

## TrafficPolicyRules

This table contains information about the AVC's rule information.

## Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
ParentRuleNumber	Parent rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	Optional
RuleName	name	N/A	String, case-insensitive. Length: 1 to 63 characters.	The name cannot be the same with its siblings. Mandatory
Enable	Set this value to true to disable the rule	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	Optional
TimeRange	Time range name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Optional, Single value
ProfileName	Traffic profile name	N/A	String, case-insensitive. Length: 1 to 63 characters.	Optional
ModelId	Model rule number	N/A	Unsigned integer: Value range: 1 to 4294967295.	Optional

## Example

Example 1: Get data from resource TrafficPolicyRules.

### Json Request

GET /api/v3/AVC/TrafficPolicyRules

### Json Response

200 OK

```
{TrafficPolicyRules:[{
  "RuleNumber" : "7",
  "RuleName" : "test4",
  "Enable" : "true",
  "TimeRange" : "timer1",
  "Action" : {
    "ProfileName" : "profile1"
  }
}]}
```

Example 2: Add new instance for resource table

### Json Request

POST /api/v3/AVC/TrafficPolicyRules

```
{
  "RuleName" : test4,
  "TimeRange" : timer1,
  "ProfileName" : profile1
}
```

### Json Response

201 Created

Example 3: Change data for the assigned instance.

### Json Request

PUT /api/v3/AVC/TrafficPolicyRules

```
{
  "RuleNumber" : 7,
  "RuleName" : "test4",
  "TimeRange" : "timer2",
  "ProfileName" : "profile2"
}
```

### Json Response

204 No Content

Example 4: Delete the assigned instance from resource table.

### Json Request

DELETE /api/v3/AVC/TrafficPolicyRules

```
{  
  "RuleNumber" : 7  
}
```

### Json Response

204 No Content

## RuleOptions

This table contains some multiple information about the AVC's rule option.

## Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	N/A
OptionType	Type of the configuration	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—SourceZones.</li><li>• 2—DestZones.</li><li>• 3—SourceAddressSets.</li><li>• 4—DestAddressSets.</li><li>• 5—Users.</li><li>• 6—UserGroups.</li><li>• 7—Applications.</li><li>• 8—AppGroups.</li><li>• 9—Services.</li><li>• 10—Dscp.</li></ul>	N/A
OptionVal	Value of the special type configuration	Index	String, case-insensitive. Length: 1 to 63 characters(for OptionTypes 7 and 8). Length: 1 to 31 characters (for OptionTypes 1 through 4, and OptionType 9). Length: 1 to 100 characters (for OptionType 10). Length: 1 to 480 characters (for OptionTypes 5 and 6).	Values of OptionTypes 5 and 6 are in Json format.

# Example

Example 1: Get data from resource RuleOptions.

## Json Request

GET /api/v3/AVC/RuleOptions

## Json Response

200 OK

```
{"RuleOptions":[{"RuleNumber":1,"OptionType":3,"OptionVal":"scrip1"},{"RuleNumber":1,"OptionType":5,"OptionVal":{"name":"xxx","domain":"xxx"}},{"RuleNumber":1,"OptionType":6,"OptionVal":{"name":"xxx","domain":"xxx"}}]}
```

Example 2: Add new instance for resource table

## Json Request

POST /api/v3/AVC/RuleOptions

```
{  "RuleNumber":1,  "OptionType":5,  "OptionVal":{"name":"xxx","domain":"xxx"}}
```

## Json Response

201 Created

Example 3: Delete the assigned instance from resource table.

### Json Request

DELETE /api/v3/AVC/RuleOptions

```
{  
  "RuleNumber" : 1,  
  "OptionType" : 5,  
  "OptionVal" : {"name":"xxx","domain":"xxx"}  
}
```

### Json Response

204 No Content

## TrafficPolicyProfiles

This table contains information about the AVC traffic policy's Control profiles.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
ProfileNumber	Profile number	Index	Unsigned integer: Value range:1 to 4294967295.	Rule option is the match order.
ProfileName	Profile name, which must be unique	N/A	String, case-insensitive. Length: 1 to 63 characters.	N/A
ReferenceMode	Rule shared mode	N/A	Unsigned integer: <ul style="list-style-type: none"><li>0—per-rule.</li><li>1—rule-shared.</li></ul>	N/A
IpAverageEnable	Ip average enable	N/A	Boolean: <ul style="list-style-type: none"><li>true.</li><li>false.</li></ul>	N/A
TotalMaxKbps	Total max kbps	N/A	Unsigned integer: Value range:8 to 100,000,000.	N/A
TotalGuaranteedKbps	Total guaranteed kbps	N/A	Unsigned integer: Value range:8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerIP	Total guaranteed kbps per IP	N/A	Unsigned integer: Value range:8 to 100,000,000.	N/A
TotalGuaranteedKbpsPerUser	Total guaranteed kbps per user	N/A	Unsigned integer: Value range:8 to 100,000,000.	N/A
TotalMaxKbpsPerIP	Total max kbps per IP	N/A	Unsigned integer: Value range:8 to 100,000,000.	N/A
TotalMaxKbpsPerUser	Total max kbps per user	N/A	Unsigned integer:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range:8 to 100,000,000.	
DnGuaranteedKbpsPerIP	Down guaranteed kbps per IP	N/A	Unsigned integer: Value range:8 to 100,000,000.	N/A
UpGuaranteedKbpsPerIP	Up guaranteed kbps per IP	N/A	Unsigned integer: Value range:8 to 100,000,000.	N/A
DnGuaranteedKbpsPerUser	Down guaranteed kbps per user	N/A	Unsigned integer: Value range:8 to 100,000,000.	N/A
UpGuaranteedKbpsPerUser	Up guaranteed kbps per user	N/A	Unsigned integer: Value range:8 to 100,000,000.	N/A
DnGuaranteedKbps	Downstream Guaranteed bandwidth	N/A	Unsigned integer: Value range:8 to 100,000,000.	Optional
UpGuaranteedKbps	Upstream guaranteed Kbps	N/A	Unsigned integer: Value range:8 to 100,000,000.	Optional
DnMaxKbps	Downstream Max Kbps	N/A	Unsigned integer: Value range:8 to 100,000,000.	Optional
UpMaxKbps	Upstream Max Kbps	N/A	Unsigned integer: Value range:8 to 100,000,000.	Optional
DnMaxKbpsPerIP	Downstream Max Kbps per IP	N/A	Unsigned integer: Value range:8 to 100,000,000.	Optional
UpMaxKbpsPerIP	Upstream Max Kbps Per IP	N/A	Unsigned integer: Value range:8 to 100,000,000.	Optional. Per-IP and Per-User are exclusive.
DnMaxKbpsPerUser	Downstream Max Kbps per User	N/A	Unsigned integer: Value range:8 to 100,000,000.	Optional
UpMaxKbpsPerUser	Upstream Max Kbps PerUser	N/A	Unsigned integer: Value range:8 to 100,000,000.	Optional
Priority	Stream Priority	N/A	Unsigned integer: Value range:1 to 7.	When the outbound bandwidth is limited, the priority of the stream is higher, the stream is prior to pass the interface.
RemarkDSCP	Dscp value	N/A	Unsigned integer: Value range:0 to 63.	Optional
MaxConnNum	Max up connections	N/A	Unsigned integer: Value range:1 to 12,000,000.	Optional
MaxConnNumPerIP	Max up connections per IP	N/A	Unsigned integer: Value range:1 to 12,000,000.	Optional Per-IP and Per-User are exclusive
MaxConnRate	Max up connections rate	N/A	Unsigned integer: Value range:1 to 12,000,000	Optional

Column name	Column description	Column type	Data type and restrictions	Remarks
			times per second.	
MaxConnRatePerIP	Max up connections rate per IP	N/A	Unsigned integer: Value range:1 to 12,000,000 times per second.	Optional Per-IP and Per-User are exclusive
MaxConnRatePerUser	Max up connections rate per user	N/A	Unsigned integer: Value range:1 to 12,000,000 times per second.	Optional
TCPMSS	TCP MSS value	N/A	Unsigned integer: Value range: 128 to 9158.	Optional

## Example

Example 1: Get data from resource TrafficPolicyProfile.

### Json Request

GET /api/v3/AVC/TrafficPolicyProfile

### Json Response

200 OK

```
{
  "TrafficPolicyProfiles": [
    {
      "ProfileNumber": "1",
      "ProfileName": "profile1",
      "DnMaxKbps": "10000",
      "UpMaxKbps": "10000",
      "DnGuaranteedKbps": "10000",
      "UpGuaranteedKbps": "10000",
      "DnMaxKbpsPerIP": "10000",
      "UpMaxKbpsPerIP": "10000",
      "RemarkDSCP": "30",
      "MaxConnNum": "1000",
      "MaxConnNumPerIP": "100",
      "MaxConnRate": "1000",
      "MaxConnRatePerIP": "100",
      "TCPMSS": "128"
    }
  ]
}
```

Example 2: Add new instance for resource table

### Json Request



POST /api/v3/AVC/TrafficPolicyProfile

```
{
  "ProfileName" : "profile1",
  "DnGuaranteedKbps" : 10000,
  "UpGuaranteedKbps" : 10000,
  "DnMaxKbps" : 10000,
  "UpMaxKbps" : 10000,
  "DnMaxKbpsPerIP" : 10000,
  "UpMaxKbpsPerIP" : 10000
  "MaxConnNum" : 1000,
  "MaxConnNumPerIP" : 100,
  "MaxConnRate" : 1000,
  "MaxConnRatePerIP" : 100
  "RemarkDSCP" : 30,
  "Priority" : 1,
  "TCPMSS" : "128"
}
```

### Json Response

201 Created

Example 3: Change data for the assigned instance.

### Json Request

PUT /api/v3/AVC/TrafficPolicyProfile

```
{
  "ProfileNumber" : 5
  "DnMaxKbpsPerIP" : 10000,
  "UpMaxKbpsPerIP" : 10000
  "MaxConnNum" : 1000,
  "MaxConnNumPerIP" : 100,
  "MaxConnRate" : 1000,
  "MaxConnRatePerIP" : 100
  "RemarkDSCP" : 30,
  "Priority" : 1,
  "TCPMSS" : "128"
}
```

### Json Response

204 No Content

Example 4: Delete the assigned instance from resource table.

#### Json Request

DELETE /api/v3/AVC/TrafficPolicyProfile

```
{
  "ProfileNumber" : 5
}
```

#### Json Response

204 No Content

## RuleJsonOptions

This table contains information about the AVC's rule options information.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleJsonNumber	Rule number	Index	Unsigned integer: Value range: 1 to 4294967295.	Rule number is the match order.
OptionJsonType	Type of the configuration	Index	Enumeration: <ul style="list-style-type: none"><li>• 1—SourceZones.</li><li>• 2—DestZones.</li><li>• 3—SourceAddressSets.</li><li>• 4—DestAddressSets.</li><li>• 5—Users.</li><li>• 6—UserGroups.</li><li>• 7—Applications.</li><li>• 8—AppGroups.</li><li>• 9—Services.</li><li>• 10—Dscp.</li></ul>	N/A
OptionJsonVal	Json values of the special type configurations	Index	String, case-insensitive. Length: 1 to 65535 characters.	N/A

### Example

Example 1: Add new instance for resource table

#### Json Request

POST /api/v3/AVC/RuleJsonOptions

```
{
  RuleJsonNumber : 1,
```

```

OptionJsonType : 5,
OptionJsonVal : {"aaa": [{"name":"xxx","domain":"xxx"}, {"name":"xxx"}]}
}

```

### Json Response

201 Created

## AVCSpecification

This table contains the AVC specification information.

### Properties

Column name	Column description	Column type	Data type and restrictions	Remarks
SupportDomain	Whether the function of AVC domain is supported.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	N/A

### Example

Example 1: Get AVC specification information.

#### Json Request

GET /api/v3/AVC/ AVCSpecification

#### Json Response

200 OK

```

{
  AVCSpecification:
  [{
    "SupportDomain" : "true"
  }]
}

```

# Contents

CFD .....	1
CFD/Y1731Statistics.....	1
XML structure .....	1
Table description.....	2
Columns.....	2
CFD/Y1731Statistics/DmTwoways .....	3
XML structure .....	3
Table description.....	3
Columns.....	3
CFD/Y1731Statistics/DmTwoways/MepIDs .....	3
XML structure .....	3
Table description.....	3
Columns.....	4
CFD/Y1731Statistics/Slms .....	4
XML structure .....	4
Table description.....	4
Columns.....	5
CFD/Y1731Statistics/Slms/MepIDs.....	5
XML structure .....	5
Table description.....	5
Columns.....	5
CFD/Y1731Statistics/Dlms .....	6
XML structure .....	6
Table description.....	6
Columns.....	6
CFD/Y1731Statistics/Dlms/MepIDs .....	7
XML structure .....	7
Table description.....	7
Columns.....	7

# CFD

## CFD/Y1731Statistics

This table contains CFD Statistics information.

### XML structure

```
<CFD>
  <Y1731Statistics>
    <DmTwoways>
      <DmTowway>
        <ServiceInstance></ServiceInstance>
        <MepIDs>
          <MepID>
            <MepID></MepID>
            <DelayStatistics>
              <TestIndex></TestIndex>
              <Delay></Delay>
              <DelayVar></DelayVar>
            </DelayStatistics>
            <AverageDelay></AverageDelay>
            <AverageDelayVar></AverageDelayVar>
          </MepID>
        </MepIDs>
      </DmTowway>
    </DmTwoways>
    <Slms>
      <Slm>
        <ServiceInstance></ServiceInstance>
        <MepIDs>
          <MepID>
            <MepID></MepID>
            <LossStatistics>
              <TestIndex></TestIndex>
              <FarEndLoss></FarEndLoss>
              <FarEndLossRate></FarEndLossRate>
              <NearEndLoss></NearEndLoss>
              <NearEndLossRate></NearEndLossRate>
            </LossStatistics>
            <FarEndLossAverage></FarEndLossAverage>
            <FarEndLossAverageRate></FarEndLossAverageRate>
            <NearEndLossAverage></NearEndLossAverage>
            <NearEndLossAverageRate></NearEndLossAverageRate>
          </MepID>
        </MepIDs>
      </Slm>
    </Slms>
  </Y1731Statistics>
</CFD>
```

```

    </Slm>
  </Slms>
  <Dlms>
    <Dlm>
      <ServiceInstance></ServiceInstance>
      <MepIDs>
        <MepID>
          <MepID></MepID>
          <LossStatistics>
            <TestIndex></TestIndex>
            <FarEndLoss></FarEndLoss>
            <FarEndLossRate></FarEndLossRate>
            <NearEndLoss></NearEndLoss>
            <NearEndLossRate></NearEndLossRate>
          </LossStatistics>
          <FarEndLossAverage></FarEndLossAverage>
          <FarEndLossAverageRate></FarEndLossAverageRate>
          <NearEndLossAverage></NearEndLossAverage>
          <NearEndLossAverageRate></NearEndLossAverageRate>
        </MepID>
      </MepIDs>
    </Dlm>
  </Dlms>
</Y1731Statistics>
</CFD>

```

## Table description

Item	Description
Feature name	CFD
Table name	Y1731Statistics
Table type	Single-instance table
Row name	N/A
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
DmTwoways	DmTwoways table	Sublist	N / A
Slms	Slms table	Sublist	N / A
Dlms	Dlms table	Sublist	N / A

# CFD/Y1731Statistics/DmTwoways

This table contains two-way DM information.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	DmTwoways
Table type	Multi-instance table
Row name	DmTwoway
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceInstance	Specify a service instance	index	Unsigned integer: <b>Value range:1 to 32767</b>
MepIDs	MEP ID	Sublist	N/A

# CFD/Y1731Statistics/DmTwoways/MepIDs

This table contains two-way DM information for a MEP.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	MepIDs
Table type	Multi-instance table
Row name	MepID
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
MepID	Specify a MEP	Index	Unsigned short. <b>Value range:1 to 8191.</b>
DelayStatistics	N/A	Data structure	Members include: <ul style="list-style-type: none"><li>• TestIndex.</li><li>• Delay.</li><li>• DelayVar.</li></ul>
TestIndex	Specify a test index	N/A	Unsigned integer: <b>Length:32bits</b>
Delay	Specify delay time in us	N/A	Unsigned integer: <b>Length: 64 bits.</b>
DelayVar	Specify delay time variation in us	N/A	Unsigned integer: <b>Length: 64 bits.</b>
AverageDelay	Specify average delay time in us	N/A	Unsigned integer: <b>Length: 64 bits.</b>
AverageDelayVar	Specify average delay time variation in us	N/A	Unsigned integer: <b>Length: 64 bits.</b>

## CFD/Y1731Statistics/SImS

This table contains SLM information.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	SImS
Table type	Multi-instance table
Row name	SIm
Restrictions	NO



## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceInstance	Specify a service instance	index	Unsigned integer: <b>Value range:1 to 32767</b>
MepIDs	MEP ID	Sublist	N/A

## CFD/Y1731Statistics/Slms/MepIDs

This table contains SLM information for a MEP.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	MepIDs
Table type	Multi-instance table
Row name	MepID
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
MepID	Specify a MEP	Index	Unsigned short. <b>Value range:1 to 8191.</b>
LossStatistics	N/A	Data structure	Members include: <ul style="list-style-type: none"><li>• TestIndex.</li><li>• FarEndLoss</li><li>• NearEndLoss</li><li>• FarEndLossRate</li><li>• NearEndLossRate</li></ul>
TestIndex	Specify a test index	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLoss	Specify packet loss on the target MEP	N/A	Unsigned integer: <b>Length: 32 bits</b>
NearEndLoss	Specify packet loss on the source MEP	N/A	Unsigned integer: <b>Length:32bits</b>

Column name	Column description	Column type	Data type and restrictions
FarEndLossRate	Specify packet loss rate on the target MEP	N/A	String
NearEndLossRate	Specify packet loss rate on the source MEP	N/A	String
FarEndLossAverage	Specify average packet loss on the target MEP	N/A	Unsigned integer: <b>Length:32bits</b>
NearEndLossAverage	Specify average packet loss on the source MEP	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLossAverageRate	Specify average packet loss rate on the target MEP	N/A	String
NearEndLossAverageRate	Specify average packet loss rate on the source MEP	N/A	String

## CFD/Y1731Statistics/Dlms

This table contains DLM information.

### XML structure

Please refer to the XML structure of Y1731Statistics.

### Table description

Item	Description
Feature name	CFD
Table name	Dlms
Table type	Multi-instance table
Row name	Dlm
Restrictions	NO

### Columns

Column name	Column description	Column type	Data type and restrictions
ServiceInstance	Specify a service instance	index	Unsigned integer: <b>Value range:1 to 32767</b>
MepIDs	MEP ID	Sublist	N/A

# CFD/Y1731Statistics/Dlms/MepIDs

This table contains DLM information for a MEP.

## XML structure

Please refer to the XML structure of Y1731Statistics.

## Table description

Item	Description
Feature name	CFD
Table name	MepIDs
Table type	Multi-instance table
Row name	MepID
Restrictions	NO

## Columns

Column name	Column description	Column type	Data type and restrictions
MepID	Specify a MEP	index	Unsigned short. <b>Value range:1 to 8191.</b>
LossStatistics	N/A	Data structure	Members include: <ul style="list-style-type: none"><li>• TestIndex.</li><li>• FarEndLoss</li><li>• NearEndLoss</li><li>• FarEndLossRate</li><li>• NearEndLossRate</li></ul>
TestIndex	Specify a test index	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLoss	Specify packet loss on the target MEP	N/A	Unsigned integer: <b>Length:32bits</b>
NearEndLoss	Specify packet loss on the source MEP	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLossRate	Specify packet loss rate on the target MEP	N/A	String
NearEndLossRate	Specify packet loss rate on the source MEP	N/A	String
FarEndLossAverage	Specify average packet loss on the target MEP	N/A	Unsigned integer: <b>Length:32bits</b>

Column name	Column description	Column type	Data type and restrictions
NearEndLossAverage	Specify average packet loss on the source MEP	N/A	Unsigned integer: <b>Length:32bits</b>
FarEndLossAverageRate	Specify average packet loss rate on the target MEP	N/A	String
NearEndLossAverageRate	Specify average packet loss rate on the source MEP	N/A	String

# Contents

- RBM ..... 1
  - RBM/SyncConfiguration ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1

# RBM

## RBM/SyncConfiguration

Synchronized configuration.

### XML structure

```
<RBM>
  <SyncConfiguration>
    <Sync></Sync>
  </SyncConfiguration>
</RBM>
```

### Table description

Item	Description
Feature name	RBM
Table name	SyncConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Sync	Synchronized configuration.	N/A	This column must be empty.	N/A

# Contents

- RBM.....1
  - RBM/RemoteBackupGroup .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....2

# RBM

## RBM/RemoteBackupGroup

This table contains information about the remote-backup group.

### XML structure

```
<RBM>
  <RemoteBackupGroup>
    <RemoteBackupGrpEnable></RemoteBackupGrpEnable>
    <BackupEnable></BackupEnable>
    <BackupMode></BackupMode>
    <BackupRole></BackupRole>
    <DelayUpTimer></DelayUpTimer>
    <AutoSynEnable></AutoSynEnable>
    <ConfigCheckEnable></ConfigCheckEnable>
    <ConfigCheckTimer></ConfigCheckTimer>
    <BackupDataChannel>
      <BackupInterface></BackupInterface>
    </BackupDataChannel>
    <SourceIp></SourceIp>
    <PeerIp></PeerIp>
    <PeerPort></PeerPort>
  </RemoteBackupGroup>
</RBM>
```

### Table description

Item	Description
Feature name	RBM
Table name	RemoteBackupGroup
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RemoteBackupGrpEnable	Whether enable the remote-backup group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
BackupEnable	Whether enable hot backup.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
BackupMode	Remote-backup group mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—active/standby(default)</li> <li>1—dual/active.</li> </ul>	N/A
BackupRole	Remote-backup group role.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—master(default)</li> <li>1—standby.</li> </ul>	N/A
DelayUpTime	Device delay up	N/A	Unsigned integer. Value range: 0 to 50. Default: 1.	The unit is minutes.
AutoSynEnable	Whether enable the switch of auto-synchronized configuration.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
ConfigCheckEnable	Whether enable the switch of checking configuration.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO(default).</li> </ul>	N/A
ConfigCheckTimer	Check configuration timer	N/A	Unsigned integer. Value range: 1 to 168. Default: 24.	The unit is hours.
BackupChannel	Backup channel	N/A	Members include: <ul style="list-style-type: none"> <li>BackupInterface.</li> </ul>	N/A
BackupInterface	Interface index or interface name	N/A	String. case-sensitive. Length: 1 to 99 characters.	This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
BackupDataChannel	Backup data channel	N/A	Members include: <ul style="list-style-type: none"> <li>BackupInterface.</li> </ul>	N/A
BackupInterface	Interface index or interface name	N/A	String, case-sensitive. Length: 1 to 99 characters.	<p>This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.</p> <p>Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.</p>
SourceIp	Source ip address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
PeerIp	Peer ip address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
PeerPort	Peer Port	N/A	Unsigned integer. Value range: 1024 to 65535.	NA

# Contents

- RBM.....1
  - RBM/RemoteBackupGroup .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....2

# RBM

## RBM/RemoteBackupGroup

This table contains information about the remote-backup group.

### XML structure

```
<RBM>
  <RemoteBackupGroup>
    <RemoteBackupGrpEnable></RemoteBackupGrpEnable>
    <BackupEnable></BackupEnable>
    <BackupMode></BackupMode>
    <BackupRole></BackupRole>
    <DelayUpTimer></DelayUpTimer>
    <AutoSynEnable></AutoSynEnable>
    <ConfigCheckEnable></ConfigCheckEnable>
    <ConfigCheckTimer></ConfigCheckTimer>
    <BackupChannel>
      <BackupInterface></BackupInterface>
    </BackupChannel>
    <BackupDataChannel>
      <BackupInterface></BackupInterface>
    </BackupDataChannel>
    <SourceIp></SourceIp>
    <PeerIp></PeerIp>
    <PeerPort></PeerPort>
  </RemoteBackupGroup>
</RBM>
```

### Table description

Item	Description
Feature name	RBM
Table name	RemoteBackupGroup
Table type	Single-instance table
Row name	N/A
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RemoteBackupGrpEnable	Whether enable the remote-backup group.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
BackupEnable	Whether enable hot backup	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
BackupMode	Remote-backup group mode.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—active/standby</li> <li>1—dual/active.</li> </ul>	N/A
BackupRole	Remote-backup group role.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—master</li> <li>1—standby.</li> </ul>	N/A
DelayUpTime	Device delay up	N/A	Unsigned integer. Value range: 0 to 50. Default: 1.	The unit is minutes.
AutoSynEnable	Whether enable the switch of auto-synchronized configuration.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
ConfigCheckEnable	Whether enable the switch of checking configuration.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—YES</li> <li>false—NO.</li> </ul>	N/A
ConfigCheckTimer	Check configuration timer	N/A	Unsigned integer. Value range: 1 to 168. Default: 24.	The unit is hours.
BackupDataChannel	Backup data channel	N/A	Members include: <ul style="list-style-type: none"> <li>BackupInterface.</li> <li>PeerIp.</li> </ul>	N/A
BackupInterface	Interface index or interface name	N/A	String. case-sensitive. Length: 1 to 99 characters.	This column can only be the index of local VA, global VA or Layer 3 interfaces except loopback, NULL, FC, FCB and encrypt interfaces.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see “Appendix” in Ifmgr NETCONF XML API Configuration

Column name	Column description	Column type	Data type and restrictions	Remarks
				Reference.
Sourcelp	Source ip address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
PeerIp	Peer ip address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
PeerPort	Peer Port	N/A	Unsigned integer. Value range: 1024 to 65535.	NA

# Contents

Vtunnel .....	1
Vtunnel/TunnelServer .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Vtunnel/IPv4Address .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
Vtunnel/Nat .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
Vtunnel/ClientMap .....	3
XML structure .....	3
Table description .....	4
Columns .....	4

# Vtunnel

## Vtunnel/TunnelServer

This table contains Vtunnel server configuration information.

### XML structure

```
<Vtunnel>
  <TunnelServer>
    <Port></Port>
    <SrcAddr></SrcAddr>
  </TunnelServer>
</Vtunnel>
```

### Table description

Item	Description
Feature name	Vtunnel
Table name	TunnelServer
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Port	TCP port of Vtunnel	N/A	Unsigned integer. Value range: 1 to 65535.	Example:8000
SrcAddr	The source IPv4address of the Vtunnel	N/A	String, dotted decimal notation.	IPv4 example: 1.1.1.1.



# Vtunnel/IPv4Address

This table contains Vtunnel IPv4Address configuration information.

## XML structure

```
<Vtunnel>
  <IPv4Address>
    <IPv4Addr></IPv4Addr>
    <IPv4AddrMask></IPv4AddrMask>
  </IPv4Address>
</Vtunnel>
```

## Table description

Item	Description
Feature name	Vtunnel
Table name	IPv4Address
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Addr	The IPv4address of the vtunnel interface	N/A	String, dotted decimal notation.	IPv4 example: 1.1.1.1.
IPv4AddrMask	The IPv4address Mask	N/A	String, dotted decimal notation.	IPv4 netmask: 255.255.255.0.

# Vtunnel/Nat

This table contains Vtunnel Nat configuration information.

## XML structure

```
<Vtunnel>
  <Nat>
    <NatEnable></NatEnable>
  </Nat>
</Vtunnel>
```

## Table description

Item	Description
Feature name	Vtunnel
Table name	Nat
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NatEnable	Nat enable	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable(default).</li></ul>	N/A

## Vtunnel/ClientMap

This table contains Vtunnel ClientMap configuration information.

## XML structure

```
<Vtunnel>
  <ClientMap>
    <Map>
```

```

    <DstAddr></DstAddr>
    <DstAddrMask></DstAddrMask>
    <ClientAddr></ClientAddr>
  </Map>
</ClientMap>
</Vtunnel>

```

## Table description

Item	Description
Feature name	Vtunnel
Table name	ClientMap
Table type	Multi-instance table
Row name	Map
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DstAddr	The Destination IPv4address of the tunnel	Index	String, dotted decimal notation.	IPv4 example: 1.1.1.1.
DstAddrMask	The Destination IPv4address mask	Index	String, dotted decimal notation.	IPv4 netmask: 255.255.255.0. The Destination address is the value of DstAddr and DstAddrMask.
ClientAddr	The Destination IPv4address of the tunnel	Index	String, dotted decimal notation.	IPv4 example: 1.1.1.1.

# Contents

Vtunnel .....	1
Vtunnel/TunnelServer .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
Vtunnel/IPv4Address .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
Vtunnel/Nat .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
Vtunnel/ClientMap .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
Vtunnel/TunnelSessions .....	4
XML structure .....	4
Table description .....	5
Columns .....	5

# Vtunnel

## Vtunnel/TunnelServer

This table contains Vtunnel server configuration information.

### XML structure

```
<Vtunnel>
  <TunnelServer>
    <Port></Port>
    <SrcAddr></SrcAddr>
  </TunnelServer>
</Vtunnel>
```

### Table description

Item	Description
Feature name	Vtunnel
Table name	TunnelServer
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Port	TCP port of Vtunnel	N/A	Unsigned integer. Value range: 1 to 65535.	Example:8000
SrcAddr	The source IPv4address of the Vtunnel	N/A	String, dotted decimal notation.	IPv4 example: 1.1.1.1.

# Vtunnel/IPv4Address

This table contains Vtunnel IPv4Address configuration information.

## XML structure

```
<Vtunnel>
  <IPv4Address>
    <IPv4Addr></IPv4Addr>
    <IPv4AddrMask></IPv4AddrMask>
  </IPv4Address>
</Vtunnel>
```

## Table description

Item	Description
Feature name	Vtunnel
Table name	IPv4Address
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Addr	The IPv4address of the Vtunnel interface	N/A	String, dotted decimal notation.	IPv4 example: 1.1.1.1.
IPv4AddrMask	The IPv4address Mask	N/A	String, dotted decimal notation.	IPv4 netmask: 255.255.255.0.

# Vtunnel/Nat

This table contains Vtunnel Nat configuration information.

## XML structure

```
<Vtunnel>
  <Nat>
    <NatEnable></NatEnable>
  </Nat>
</Vtunnel>
```

## Table description

Item	Description
Feature name	Vtunnel
Table name	Nat
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
NatEnable	Nat enable	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable.</li><li>false—Disable.</li></ul>	N/A

## Vtunnel/ClientMap

This table contains Vtunnel ClientMap configuration information.

## XML structure

```
<Vtunnel>
  <ClientMap>
    <Map>
      <DstAddr></DstAddr>
      <DstAddrMask></DstAddrMask>
      <ClientAddr></ClientAddr>
    </Map>
  </ClientMap>
</Vtunnel>
```

```

    </Map>
  </ClientMap>
</Vtunnel>

```

## Table description

Item	Description
Feature name	Vtunnel
Table name	ClientMap
Table type	Multi-instance table
Row name	Map
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DstAddr	The Destination IPv4address of the tunnel	Index	String, dotted decimal notation.	IPv4 example: 1.1.1.1.
DstAddrMask	The Destination IPv4address mask	Index	String, dotted decimal notation.	IPv4 netmask: 255.255.255.0.
ClientAddr	The Destination IPv4address of the tunnel	Index	String, dotted decimal notation.	IPv4 example: 1.1.1.2.

## Vtunnel/TunnelSessions

This table contains Vtunnel Sessions information.

## XML structure

```

<Vtunnel>
  <TunnelSessions>
    <TunnelSession>

```



```

    <ClientIPAddr></ClientIPAddr>
    <ClientSerial></ClientSerial>
  </TunnelSession>
</TunnelSessions>
</Vtunnel>

```

## Table description

Item	Description
Feature name	Vtunnel
Table name	TunnelSessions
Table type	Multi-instance table
Row name	TunnelSession
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientIPAddr	The Client IPv4address of the vtunnel	Index	String, dotted decimal notation.	IPv4 example: 1.1.1.1.
ClientSerial	The equipment serial number of the client	N/A	String. Length: 1 to 128 characters	example: NXM59CN013411009EA 7600.

# Contents

VAMC.....	1
EnableAllClient.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
ResetClientFsm.....	1
XML structure.....	1
Table description.....	2
Columns.....	2
ResetAllClientFsm.....	2
XML structure.....	2
Table description.....	2
Columns.....	3
ResetClientStats.....	3
XML structure.....	3
Table description.....	3
Columns.....	3
ResetAllClientStats.....	3
XML structure.....	4
Table description.....	4
Columns.....	4

# VAMC

## EnableAllClient

This table is used to enable all VAM clients.

### XML structure

```
<ADVPN>
  <EnableAllClient>
    <Enable></Enable>
  </EnableAllClient>
</ADVPN>
```

### Table description

Item	Description
Feature name	VAMC
Table name	EnableAllClient
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable all VAM clients	NA	Boolean: <ul style="list-style-type: none"><li>true—Enable</li><li>false—Disable</li></ul>	Must not be empty.

## ResetClientFsm

This table is used to reset FSMs for VAM clients.

### XML structure

```
<ADVPN>
  <ResetClientFsm>
    <Reset>
      <IPVersion></IPVersion>
      <ClientName></ClientName>
    </Reset>
  </ResetClientFsm>
</ADVPN>
```

</ADVPN>

## Table description

Item	Description
Feature name	VAMC
Table name	ResetClientFsm
Table type	Multi-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPVersion	The type of the VAM client	Index	Enumeration: <ul style="list-style-type: none"><li>4—IPv4</li><li>6—IPv6</li></ul>	N/A
ClientName	The name of the VAM client	Index	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).

## ResetAllClientFsm

This table is used to reset all VAM clients.

## XML structure

```
<ADVPN>
  <ResetAllClientFsm>
    <Reset>
      <IPVersion></IPVersion>
    </Reset>
  </ResetAllClientFsm>
</ADVPN>
```

## Table description

Item	Description
Feature name	VAMC
Table name	ResetAllClientFsm
Table type	Single-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPVersion	The version of the IP protocol	Index	Enumeration: <ul style="list-style-type: none"><li>• 4—IPv4</li><li>• 6—IPv6</li></ul>	Must not be empty.

## ResetClientStats

This table is used to clear statistics of a VAM client.

## XML structure

```
<ADVPN>
  <ResetClientStats>
    <Reset>
      <ClientName></ClientName>
    </Reset>
  </ResetClientStats>
</ADVPN>
```

## Table description

Item	Description
Feature name	VAMC
Table name	ResetClientStats
Table type	Multi-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	The name of the VAM client	Index	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).

## ResetAllClientStats

This table is used to clear all client statistics.

## XML structure

```
<ADVPN>
  <ResetAllClientStats>
    <Reset></Reset>
  </ResetAllClientStats>
</ADVPN>
```

## Table description

Item	Description
Feature name	VAMC
Table name	ResetAllClientStats
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Reset	Clear all client statistics	NA	Must be empty.

# Contents

VAMC.....	1
VamcClients .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
VamcServerCfg .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# VAMC

## VamcClients

This table is used to configure VAM clients.

### XML structure

```
<ADVPN>
  <VamcClients>
    <VamcClient>
      <ClientName></ClientName>
      <AdvpnDomain></AdvpnDomain>
      <Enable></Enable>
      <DumbTime></DumbTime>
      <PreSharedKey>
        <Type></Type>
        <Value></Value>
      </PreSharedKey>
      <Retry>
        <Interval></Interval>
        <Count></Count>
      </Retry>
      <Authentication>
        <UserName></UserName>
        <PasswordType></PasswordType>
        <Password></Password>
      </Authentication>
    </VamcClient>
  </VamcClients>
</ADVPN>
```

### Table description

Item	Description
Feature name	VAMC
Table name	VamcClients
Table type	Multi-instance table
Row name	VamcClient
Restrictions	None
Support for row creation and deletion	Yes



# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	VAM client name	Index	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
AdvpnDomain	ADVPN domain for a VAM client	N/A	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
Enable	Whether the VAM client is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>	N/A
DumbTime	The dumb time interval	N/A	Unsigned integer Value range: 10 to 600 The default value is 120	N/A
PreSharedKey	The pre-shared key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The form of pre-shared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple</li> <li>2—cipher</li> </ul>	N/A
Value	The pre-shared key	N/A	String	The plaintext key is a case-sensitive string of 1 to 31 characters. The ciphertext key is a case-sensitive string of 1 to 73 characters.
Retry	The parameters for resending request packet	Data structure	Members include: <ul style="list-style-type: none"> <li>Interval</li> <li>Count</li> </ul>	N/A
Interval	The time interval of resending packets	N/A	Unsigned integer Value range: 3 to 30 The default is 5 seconds	N/A
Count	The number of resent packets	N/A	Unsigned integer Value range: 1 to 6 The default is 3	N/A
Authentication	The parameters for authentication	Data structure	Members include: <ul style="list-style-type: none"> <li>Username</li> <li>PasswordType</li> <li>Password</li> </ul>	N/A
Username	The user name	N/A	String Length: 1 to 253	Cannot contains slashes (/), back slashes (\), colons (:), asterisks (*), question marks (?), left angle brackets (<), right angle brackets (>), quotation marks ("),

Column name	Column description	Column type	Data type and restrictions	Remarks
				vertical bars ( ), and at signs (@).
PasswordType	The type of the password	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple</li> <li>2—cipher</li> </ul>	N/A
Password	The value of the password	N/A	String	The plaintext password is a case-sensitive string of 0 to 63 characters. The ciphertext password is a case-sensitive string of 0 to 117 characters.

## VamcServerCfg

This table is used to configure the VAM servers with which VAM clients register.

### XML structure

```

<ADVPN>
  <VamcServerCfg>
    <VamcServer>
      <ClientName></ClientName>
      <PriServer>
        <AddressType></AddressType>
        <Address></Address>
        <Port></Port>
      </PriServer>
      <SecServer>
        <AddressType></AddressType>
        <Address></Address>
        <Port></Port>
      </SecServer>
    </VamcServer>
  </VamcServerCfg>
</ADVPN>

```

### Table description

Item	Description
Feature name	VMAC
Table name	VamcServerCfg
Table type	Multi-instance table
Row name	VamcServer

Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	The client name	Index	String. Length: 1 to 63 characters.	Case-insensitive and contains only letters, digits, and dots (.).
PriServer	The primary server	Data structure	Members include: <ul style="list-style-type: none"> <li>• AddressType</li> <li>• Address</li> <li>• Port</li> </ul>	N/A
AddressType	The type of the primary server address	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4</li> <li>• 2—IPv6</li> <li>• 3—Host</li> </ul>	Must not be empty.
Address	The host name or IP address of the primary VAM server.	N/A	String	IPv4 address. IPv6 address. Hostname can contains letters, digits, hyphens (-), and underscores (_).
Port	The listening port of the server	N/A	Unsigned integer Value range: 1025 to 65535 The default value is 18000	N/A
SecServer	The secondary server	Data structure	Members include: <ul style="list-style-type: none"> <li>• AddressType</li> <li>• Address</li> <li>• Port</li> </ul>	N/A
AddressType	The type of the secondary server address	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—IPv4</li> <li>• 2—IPv6</li> <li>• 3—Host</li> </ul>	Must not be empty.
Address	The host name or IP address of the secondary VAM server.	N/A	String	IPv4 address. IPv6 address. Hostname can contains letters, digits, hyphens (-), and underscores (_).
Port	The listening port of the server	N/A	Unsigned integer Value range: 1025 to 65535 The default value is 18000	N/A

# Contents

VAMC.....	1
VamcClients .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
VamcServerCfg .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
ClientFsms .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
IPv4ShortcutStats .....	7
XML structure .....	8
Table description .....	8
Columns .....	8
IPv6ShortcutStats .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
IPv4ShortcutRules .....	10
XML structure .....	10
Table description .....	10
Columns .....	11
IPv6ShortcutRules .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
ClientStats .....	15
XML structure .....	15
Table description .....	16
Columns .....	16

# VAMC

## VamcClients

This table displays VAM clients configuration.

### XML structure

```
<ADVPN>
  <VamcClients>
    <VamcClient>
      <ClientName></ClientName>
      <AdvpnDomain></AdvpnDomain>
      <Enable></Enable>
      <DumbTime></DumbTime>
      <Retry>
        <Interval></Interval>
        <Count></Count>
      </Retry>
      <Authentication>
        <UserName></UserName>
      </Authentication>
    </VamcClient>
  </VamcClients>
</ADVPN>
```

### Table description

Item	Description
Feature name	VAMC
Table name	VamcClients
Table type	Multi-instance table
Row name	VamcClient
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	VAM client	Index	String	Case-insensitive and

	name		Length: 1 to 63 characters	contains only letters, digits, and dots (.).
AdvpnDomain	ADVPN domain for a VAM client	N/A	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
Enable	Whether the VAM client is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>	N/A
DumbTime	The dumb time interval	N/A	Unsigned integer Value range: 10 to 600 The default value is 120	N/A
Retry	The parameters for resending request packet	Data structure	Members include: <ul style="list-style-type: none"> <li>Interval</li> <li>Count</li> </ul>	N/A
Interval	The time interval of resending packets	N/A	Unsigned integer Value range: 3 to 30 The default is 5 seconds	N/A
Count	The number of resent packets	N/A	Unsigned integer Value range: 1 to 6 The default is 3	N/A
Authentication	The parameters for authentication	Data structure	Members include: <ul style="list-style-type: none"> <li>Username</li> </ul>	N/A
Username	The user name	N/A	String Length: 1 to 253	Cannot contains slashes (/), back slashes (\), colons (:), asterisks (*), question marks (?), left angle brackets (<), right angle brackets (>), quotation marks ("), vertical bars ( ), and at signs (@).

## VamcServerCfg

This table displays the VAM servers with which VAM clients register.

## XML structure

```
<ADVPN>
  <VamcServerCfg>
    <VamcServer>
      <ClientName></ClientName>
      <PriServer>
        <AddressType></AddressType>
        <Address></Address>
        <Port></Port>
      </PriServer>
      <SecServer>
        <AddressType></AddressType>
        <Address></Address>
        <Port></Port>
      </SecServer>
    </VamcServer>
  </VamcServerCfg>
</ADVPN>
```

## Table description

Item	Description
Feature name	VMAC
Table name	VamcServerCfg
Table type	Multi-instance table
Row name	VamcServer
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	The client name	Index	String. Length: 1 to 63 characters.	Case-insensitive and contains only letters, digits, and dots (.).
PriServer	The primary server	Data structure	Members include: <ul style="list-style-type: none"><li>AddressType</li><li>Address</li><li>Port</li></ul>	N/A
AddressType	The type of the	N/A	Enumeration:	Must not be empty.

Column name	Column description	Column type	Data type and restrictions	Remarks
	primary server address		<ul style="list-style-type: none"> <li>1—IPv4</li> <li>2—IPv6</li> <li>3—Host</li> </ul>	
Address	The host name or IP address of the primary VAM server.	N/A	String	IPv4 address. IPv6 address. Hostname can contains letters, digits, hyphens (-), and underscores (_).
Port	The listening port of the server	N/A	Unsigned integer Value range: 1025 to 65535 The default value is 18000	N/A
SecServer	The secondary server	Data structure	Members include: <ul style="list-style-type: none"> <li>AddressType</li> <li>Address</li> <li>Port</li> </ul>	N/A
AddressType	The type of the secondary server address	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—IPv4</li> <li>2—IPv6</li> <li>3—Host</li> </ul>	Must not be empty.
Address	The host name or IP address of the secondary VAM server.	N/A	String	IPv4 address. IPv6 address. Hostname can contains letters, digits, hyphens (-), and underscores (_).
Port	The listening port of the server	N/A	Unsigned integer Value range: 1025 to 65535 The default value is 18000	N/A

## ClientFsms

This table display FSM information for VAM clients.



## XML structure

```
<ADVPN>
  <ClientFsms>
    <Fsm>
      <ClientName></ClientName>
      <ServerType></ServerType>
      <IPVersion></IPVersion>
      <EnableStatus></EnableStatus>
      <DomainName></DomainName>
      <ServerHost></ServerHost>
      <ServerAddress></ServerAddress>
      <PrivateAddress></PrivateAddress>
      <TunnelID></TunnelID>
      <FsmState></FsmState>
      <FsmActive></FsmActive>
      <ClientType></ClientType>
      <HoldingTime></HoldingTime>
      <EncryptionAlg></EncryptionAlg>
      <AuthenticationAlg></AuthenticationAlg>
      <KeepaliveInterval></KeepaliveInterval>
      <KeepaliveCount></KeepaliveCount>
      <HubsNum></HubsNum>
    </Fsm>
  </ClientFsms>
</ADVPN>
```

## Table description

Item	Description
Feature name	VMAC
Table name	ClientFsms
Table type	Multi-instance table
Row name	Fsm
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	VAM client name	Index	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerType	The type of the server	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—Primary server</li> <li>• 1—Secondary server</li> </ul>	N/A
IPVersion	The type of the private address under the ADVPN tunnel	Index	Enumeration: <ul style="list-style-type: none"> <li>• 0—IPv4</li> <li>• 1—IPv6</li> </ul>	N/A
EnableStatus	Whether the VAM client is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>• true—Enabled</li> <li>• false—Disabled</li> </ul>	N/A
DomainName	ADVPN domain for a VAM client	N/A	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
ServerHost	The host name of VAM server	N/A	String Length: 1 to 253 characters	Hostname can contain letters, digits, hyphens (-), and underscores (_).
ServerAddress	The VAM server host	N/A	String.	IPv4 address IPv6 address
PrivateAddress	Private address that the VAM client has registered with the VAM server.	N/A	String.	IPv4 address IPv6 address
TunnelID	Tunnel ID	N/A	Unsigned integer	N/A
FsmState	Current state of the VAM client FSM	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Offline</li> <li>• 1—Init1</li> <li>• 2—Init2</li> <li>• 3—Reg</li> <li>• 4—Online1</li> <li>• 5—Online2</li> <li>• 6—Dumb</li> </ul>	N/A
ClientType	VAM client type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—Unknown</li> <li>• 1—Spoke</li> <li>• 2—Hub</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
HoldingTime	Duration that the VAM client has been in the current state	N/A	Unsigned integer	Unit: seconds
EncryptionAlg	Negotiated encryption algorithm	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> <li>1—None</li> <li>2—DES</li> <li>3—3DES</li> <li>4—AES-CBC-128</li> <li>5—AES-CBC-192</li> <li>6—AES-CBC-256</li> <li>7—AES-CTR-128</li> <li>8—AES-CTR-192</li> <li>9—AES-CTR-256</li> </ul>	N/A
AuthenticationAlg	Negotiated authentication algorithm	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> <li>1—None</li> <li>2—HMAC-MD5-96</li> <li>3—HMAC-MD5</li> <li>4—HMAC-SHA1-96</li> <li>5—HMAC-SHA1</li> <li>6—HMAC-SHA2-256</li> <li>7—HMAC-AES-XCBC-MAC</li> </ul>	N/A
KeepaliveInterval	The keepalive interval	N/A	Unsigned integer Value range: 5 to 65535	Unit: second
KeepaliveCount	The maximum number of keepalive retries	N/A	Unsigned integer Value range: 1 to 6	N/A
HubsNum	Number of hubs on the VAM server	N/A	Unsigned integer	N/A

## IPv4ShortcutStats

This table displays IPv4 spoke-to-spoke tunnel establishment rule statistics for VAM clients.

## XML structure

```
<ADVPN>
  <IPv4ShortcutStats>
    <IPv4Shortcut>
      <ClientName></ClientName>
      <DomainName></DomainName>
      <ClientType></ClientType>
      <RuleNumber></RuleNumber>
    </IPv4Shortcut>
  </IPv4ShortcutStats>
</ADVPN>
```

## Table description

Item	Description
Feature name	VMAC
Table name	IPv4ShortcutStats
Table type	Multi-instance table
Row name	IPv4Shortcut
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	VAM client name	Index	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
DomainName	ADVPN domain for a VAM client	N/A	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
ClientType	VAM client type	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Unknown</li><li>1—Spoke</li><li>2—Hub</li></ul>	N/A
RuleNumber	The number of IPv4 ACL rule received by the VAM client	N/A	Unsigned integer	N/A

# IPv6ShortcutStats

This table displays IPv6 spoke-to-spoke tunnel establishment rule statistics for VAM clients.

## XML structure

```
<ADVPN>
  <IPv6ShortcutStats>
    <IPv6Shortcut>
      <ClientName></ClientName>
      <DomainName></DomainName>
      <ClientType></ClientType>
      <RuleNumber></RuleNumber>
    </IPv6Shortcut>
  </IPv6ShortcutStats>
</ADVPN>
```

## Table description

Item	Description
Feature name	VMAC
Table name	IPv6ShortcutStats
Table type	Multi-instance table
Row name	IPv6Shortcut
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	VAM client name	Index	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
DomainName	ADVPN domain for a VAM client	N/A	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
ClientType	VAM client type	N/A	Enumeration: <ul style="list-style-type: none"><li>0—Unknown</li><li>1—Spoke</li><li>2—Hub</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RuleNumber	IPv6 ACL rule number received by the VAM client	N/A	Unsigned integer	N/A

## IPv4ShortcutRules

This table displays spoke-to-spoke tunnel establishment rules for VAM clients.

## XML structure

```

<ADVPN>
  <IPv4ShortcutRules>
    <Rule>
      <ClientName></ClientName>
      <RuleNumber></RuleNumber>
      <Operation></Operation>
      <Protocol></Protocol>
      <Source>
        <StartAddr></StartAddr>
        <EndAddr></EndAddr>
        <StartPort></StartPort>
        <EndPort></EndPort>
      </Source>
      <Destination>
        <StartAddr></StartAddr>
        <EndAddr></EndAddr>
        <StartPort></StartPort>
        <EndPort></EndPort>
      </Destination>
    </Rule>
  </IPv4ShortcutRules>
</ADVPN>

```

## Table description

Item	Description
Feature name	VMAC
Table name	IPv4ShortcutRules
Table type	Multi-instance table
Row name	Rule

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	VAM client name	Index	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
RuleNumber	ACL rule number	Index	Unsigned integer	N/A
Operation	The operation of a rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Permit.</li> <li>2—Deny</li> <li>3—Discard</li> </ul>	N/A
Protocol	Matching IP protocol number	N/A	Unsigned integer	Protocols common to RFC 1700, POSIX, and X/Open
Source	Matching source IP address range and port number range.	Data structure	Members include: <ul style="list-style-type: none"> <li>StartAddr</li> <li>EndAddr</li> <li>StartPort</li> <li>EndPort</li> </ul>	N/A
StartAddr	Matching start address of the source IPv6 address range	N/A	String.	IPv4 address.
EndAddr	Matching end address of the source IPv6 address range	N/A	String.	IPv4 address.
StartPort	Matching start port number of the source port number range	N/A	Unsigned integer	N/A
EndPort	Matching end port number of the source port number range	N/A	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Destination	Matching destination IP address range and port number range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartAddr</li> <li>EndAddr</li> <li>StartPort</li> <li>EndPort</li> </ul>	N/A
StartAddr	Matching start address of the destination IPv6 address range	N/A	String.	IPv4 address
EndAddr	Matching end address of the destination IPv6 address range	N/A	String.	IPv4 address.
StartPort	Matching start port number of the destination port number range	N/A	Unsigned integer	N/A
EndPort	Matching end port number of the destination port number range	N/A	Unsigned integer	N/A

## IPv6ShortcutRules

This table displays spoke-to-spoke tunnel establishment rules for VAM clients.

## XML structure

```

<ADVPN>
  <IPv6ShortcutRules>
    <Rule>
      <ClientName></ClientName>
      <RuleNumber></RuleNumber>
      <Operation></Operation>
      <Protocol></Protocol>
      <Source>

```



```

    <StartAddr></StartAddr>
    <EndAddr></EndAddr>
    <StartPort></StartPort>
    <EndPort></EndPort>
  </Source>
  <Destination>
    <StartAddr></StartAddr>
    <EndAddr></EndAddr>
    <StartPort></StartPort>
    <EndPort></EndPort>
  </Destination>
</Rule>
</IPv6ShortcutRules>
</ADVPN>

```

## Table description

Item	Description
Feature name	VMAC
Table name	IPv6ShortcutRules
Table type	Multi-instance table
Row name	Rule
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	VAM client name	Index	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
RuleNumber	ACL rule number	Index	Unsigned integer	N/A
Operation	The operation of a rule	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Permit.</li> <li>2—Deny</li> <li>3—Discard</li> </ul>	N/A
Protocol	Matching IP protocol number	N/A	Unsigned integer	Protocols common to RFC 1700, POSIX, and X/Open

Column name	Column description	Column type	Data type and restrictions	Remarks
Source	Matching source IP address range and port number range.	Data structure	Members include: <ul style="list-style-type: none"> <li>StartAddr</li> <li>EndAddr</li> <li>StartPort</li> <li>EndPort</li> </ul>	N/A
StartAddr	Matching start address of the source IPv6 address range	N/A	String.	IPv6 address.
EndAddr	Matching end address of the source IPv6 address range	N/A	String.	IPv6 address.
StartPort	Matching start port number of the source port number range	N/A	Unsigned integer	N/A
EndPort	Matching end port number of the source port number range	N/A	Unsigned integer	N/A
Destination	Matching destination IP address range and port number range	Data structure	Members include: <ul style="list-style-type: none"> <li>StartAddr</li> <li>EndAddr</li> <li>StartPort</li> <li>EndPort</li> </ul>	N/A
StartAddr	Matching start address of the destination IPv6 address range	N/A	String.	IPv6 address.
EndAddr	Matching end address of the destination IPv6 address range	N/A	String.	IPv6 address.
StartPort	Matching start port number of	N/A	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the destination port number range			
EndPort	Matching end port number of the destination port number range	N/A	Unsigned integer	N/A

## ClientStats

This table displays VAM client statistics.

## XML structure

```

<ADVPN>
  <ClientStats>
    <ClientStat>
      <ClientName></ClientName>
      <ServerType></ServerType>
      <ServerAddress></ServerAddress>
      <EnableStatus></EnableStatus>
      <PacketSent>
        <InitReqNum></InitReqNum>
        <SentInitFinNum></SentInitFinNum>
        <RegReqNum></RegReqNum>
        <AuthenResNum></AuthenResNum>
        <AddrReqNum></AddrReqNum>
        <NetworkRegReqNum></NetworkRegReqNum>
        <UpdateReqNum></UpdateReqNum>
        <LogoutReqNum></LogoutReqNum>
        <HubInfoResNum></HubInfoResNum>
        <DataFlowInfoResNum></DataFlowInfoResNum>
        <SentKeepaliveNum></SentKeepaliveNum>
        <SentErrorNum></SentErrorNum>
      </PacketSent>
      <PacketReceived>
        <InitResNum></InitResNum>
        <RecvInitFinNum></RecvInitFinNum>
        <AuthenReqNum></AuthenReqNum>
        <RegResNum></RegResNum>
        <AddrResNum></AddrResNum>
        <NetworkRegResNum></NetworkRegResNum>
        <UpdateResNum></UpdateResNum>
        <HubInfoReqNum></HubInfoReqNum>
      </PacketReceived>
    </ClientStat>
  </ClientStats>
</ADVPN>

```

```

        <DataFlowInfoReqNum></DataFlowInfoReqNum>
        <LogoutResNum></LogoutResNum>
        <RecvKeepaliveNum></RecvKeepaliveNum>
        <RecvErrorNum></RecvErrorNum>
        <RecvUnkonwnNum></RecvUnkonwnNum>
    </PacketReceived>
</ClientStat>
</ClientStats>
</ADVPN>

```

## Table description

Item	Description
Feature name	VMAC
Table name	ClientStats
Table type	Multi-instance table
Row name	ClientStat
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientName	VAM client name	Index	String Length: 1 to 63 characters	Case-insensitive and contains only letters, digits, and dots (.).
ServerType	The type of the server	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Primary server</li> <li>2—Secondary server</li> </ul>	N/A
ServerAddress	The host name of the VAM server	N/A	String Length: 1 to 253 characters	Hostname can contain letters, digits, hyphens (-), and underscores (_).
EnableStatus	Whether the VAM client is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>	N/A
PacketSent	The number of packets sent to the VAM server	Data structure	Members include: <ul style="list-style-type: none"> <li>InitReqNum</li> <li>SentInitFinNum</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>RegReqNum</li> <li>AuthenResNum</li> <li>AddrReqNum</li> <li>NetworkRegReqNum</li> <li>UpdateReqNum</li> <li>LogoutReqNum</li> <li>HubInfoResNum</li> <li>DataFlowInfoResNum</li> <li>SentKeepaliveNum</li> <li>SentErrorNum</li> </ul>	
InitReqNum	The number of Initialization request	N/A	Unsigned integer	N/A
SentInitFinNum	The number of Initialization complete	N/A	Unsigned integer	N/A
RegReqNum	The number of Register request	N/A	Unsigned integer	N/A
AuthenResNum	The number of Authentication information	N/A	Unsigned integer	N/A
AddrReqNum	The number of Address resolution request	N/A	Unsigned integer	N/A
NetworkRegReqNum	The number of Network registration request	N/A	Unsigned integer	N/A
UpdateReqNum	The number of Update request	N/A	Unsigned integer	N/A
LogoutReqNum	The number of Logout request	N/A	Unsigned integer	N/A
HubInfoResNum	The number of Hub information response	N/A	Unsigned integer	N/A
DataFlowInfoResNum	The number of Data flow information	N/A	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	response			
SentKeepaliveNum	The number of Keepalive	N/A	Unsigned integer	N/A
SentErrorNum	The number of Error notification	N/A	Unsigned integer	N/A
PacketReceived	The number of packets received from VAM server	Data structure	Members include: <ul style="list-style-type: none"> <li>• InitResNum</li> <li>• RecvInitFinNum</li> <li>• AuthenReqNum</li> <li>• RegResNum</li> <li>• AddrResNum</li> <li>• NetworkRegResNum</li> <li>• UpdateResNum</li> <li>• HubInfoReqNum</li> <li>• DataFlowInfoReqNum</li> <li>• LogoutResNum</li> <li>• RecvKeepaliveNum</li> <li>• RecvErrorNum</li> <li>• RecvUnkonwnNum</li> </ul>	N/A
InitResNum	The number of Initialization response	N/A	Unsigned integer	N/A
RecvInitFinNum	The number of Initialization complete	N/A	Unsigned integer	N/A
AuthenReqNum	The number of Register response	N/A	Unsigned integer	N/A
RegResNum	The number of Authentication request	N/A	Unsigned integer	N/A
AddrResNum	The number of Address resolution response	N/A	Unsigned integer	N/A
NetworkRegResNum	The number of Network registration response	N/A	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
UpdateResNum	The number of Update response	N/A	Unsigned integer	N/A
HubInfoReqNum	The number of Logout response	N/A	Unsigned integer	N/A
DataFlowInfoReqNum	The number of Hub information request	N/A	Unsigned integer	N/A
LogoutResNum	The number of Data flow information request	N/A	Unsigned integer	N/A
RecvKeepaliveNum	The number of Keepalive	N/A	Unsigned integer	N/A
RecvErrorNum	The number of Error notification	N/A	Unsigned integer	N/A
RecvUnkonwnNum	The number of Unkonwn	N/A	Unsigned integer	N/A

# Contents

VAMS .....	1
EnableAllDomains .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
ResetAllAddressMapInfo .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
ResetAddressMapInfo .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
ResetAllDomainsStats .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
ResetDomainStats .....	4
XML structure .....	4
Table description .....	4
Columns .....	4



# VAMS

## EnableAllDomains

This table is used to enable the VAM server for all ADVPN domains.

### XML structure

```
<VAMS>
  <EnableAllDomains>
    <Enable></Enable>
  </EnableAllDomains>
</VAMS>
```

### Table description

Item	Description
Feature name	VAMS
Table name	EnableAllDomains
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Enable	Whether to enable the VAM server for all ADVPN domains	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enable</li><li>false—Disable</li></ul>	Must not be empty.

## ResetAllAddressMapInfo

This table is used to clear all private-public address mapping information registered by VAM clients on the VAM server, by specifying the IP version of private addresses.

### XML structure

```
<VAMS>
  <ResetAllAddressMapInfo>
    <Reset>
      <IPVersion></IPVersion>
    </Reset>
  </ResetAllAddressMapInfo>
</VAMS>
```

```

    </Reset>
  </ResetAllAddressMapInfo>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	ResetAllAddressMapInfo
Table type	Single-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPVersion	The IP version of private addresses	N/A	Enumeration: <ul style="list-style-type: none"> <li>4—IPv4</li> <li>6—IPv6</li> </ul>	Must not be empty.

## ResetAddressMapInfo

This table is used to clear IPv4 private-public address mapping information registered by VAM clients on the VAM server.

## XML structure

```

<VAMS>
  <ResetAddressMapInfo>
    <Reset>
      <IPVersion></IPVersion>
      <AdvpnDomainName></AdvpnDomainName>
      <PrivateAddress></PrivateAddress>
    </Reset>
  </ResetAddressMapInfo>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	ResetAddressMapInfo

Item	Description
Table type	Multi-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPVersion	The IP version of private addresses	Index	Enumeration: <ul style="list-style-type: none"> <li>4—IPv4</li> <li>6—IPv6</li> </ul>	Must not be empty.
AdvpnDomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
PrivateAddress	Private address	N/A	String	If this column is not specified, all map information of the specified ADVPN domain will be deleted.

## ResetAllDomainsStats

This table is used to clear statistics about all ADVPN domains on the VAM server.

## XML structure

```
<VAMS>
  <ResetAllDomainsStats>
    <Reset></Reset>
  </ResetAllDomainsStats>
</VAMS>
```

## Table description

Item	Description
Feature name	VAMS
Table name	ResetAllDomainsStats
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Reset	Clear all domain statistics on the VAM server	N/A	Must be empty

## ResetDomainStats

This table is used to clear statistics about the specified ADVPN domain on the VAM server.

## XML structure

```
<VAMS>
  <ResetDomainStats>
    <Reset>
      <AdvpnDomainName></AdvpnDomainName>
    </Reset>
  </ResetDomainStats>
</VAMS>
```

## Table description

Item	Description
Feature name	VAMS
Table name	ResetDomainStats
Table type	Multi-instance table
Row name	Reset
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AdvpnDomainName	The ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).

# Contents

VAMS .....	1
ServerGlobalCfg .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
AdvpnDomains .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
HubGroups .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
IPv4Hubs .....	6
XML structure .....	6
Table description .....	7
Columns .....	7
IPv6Hubs .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
IPv4Spokes .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
IPv6Spokes .....	10
XML structure .....	10
Table description .....	11
Columns .....	11

# VAMS

## ServerGlobalCfg

This table is used to configure the global configuration of VAM server.

### XML structure

```
<VAMS>
  <ServerGlobalCfg>
    <ListenPort></ListenPort>
  </ServerGlobalCfg>
</VAMS>
```

### Table description

Item	Description
Feature name	VAMS
Table name	ServerGlobalCfg
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
ListenPort	The UDP port number for receiving VAM packets	N/A	Unsigned integer Value range: 1025 to 65535 The default value is 18000

## AdvpnDomains

This table is used to configure ADVPN domains on the VAM server.

### XML structure

```
<VAMS>
  <AdvpnDomains>
    <AdvpnDomain>
      <DomainName></DomainName>
    </AdvpnDomain>
  </AdvpnDomains>
</VAMS>
```

```

    <DomainID></DomainID>
    <AuthenAlgList>
      <AuthenAlgItem></AuthenAlgItem>
    </AuthenAlgList>
    <AuthenMethod>
      <Method></Method>
      <ISpname></ISpname>
    </AuthenMethod>
    <EncryptAlgList>
      <EncryptAlgItem></EncryptAlgItem>
    </EncryptAlgList>
    <Keepalive>
      <Interval></Interval>
      <RetryTime></RetryTime>
    </Keepalive>
    <RetryInterval></RetryInterval>
    <PreSharedKey>
      <Type></Type>
      <Value></Value>
    </PreSharedKey>
    <Enable></Enable>
  </AdvpnDomain>
</AdvpnDomains>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	AdvpnDomains
Table type	Multi-instance table
Row name	AdvpnDomain
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name.	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when you create an ADVPN domain.

Column name	Column description	Column type	Data type and restrictions	Remarks
AuthenAlgList	The algorithms for VAM protocol packet authentication	Data structure	Members include: <ul style="list-style-type: none"> <li>AuthenAlgItem</li> </ul>	AuthenAlgItem: the maxOccurs is 5.
AuthenAlgItem	The algorithm for VAM protocol packet authentication	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—NONE</li> <li>3—MD5</li> <li>5—SHA-1</li> <li>6—SHA-256</li> <li>7—AES-XCBC-MAC</li> </ul>	N/A
AuthenMethod	Authentication mode that the VAM server uses to authenticate clients	N/A	Members include: <ul style="list-style-type: none"> <li>Method</li> <li>ISPName</li> </ul>	N/A
Method	Authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—None</li> <li>2—PAP</li> <li>3—CHAP</li> </ul>	The default value is 3. If the value is 1, the ISPName will be ignored.
ISPName	ISP domain for authentication	N/A	String Length: 1 to 24 characters The default is empty	Case-insensitive and can't contain \,  , /, :, *, ?, ", <, > and @.
EncryptAlgList	The algorithms for VAM protocol packet encryption	Data structure	Members include: <ul style="list-style-type: none"> <li>EncryptAlgItem</li> </ul>	EncryptAlgItem: the maxOccurs is 9.
EncryptAlgItem	The algorithm for VAM protocol packet encryption	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—NONE</li> <li>2—DES-CBC</li> <li>3—3DES-CBC</li> <li>4—AES-CBC-128</li> <li>5—AES-CBC-192</li> <li>6—AES-CBC-256</li> <li>7—AES-CTR-128</li> <li>8—AES-CTR-192</li> <li>9—AES-CTR-256</li> </ul>	N/A
Keepalive	The parameters of keep-alive packet	Data structure	Members include: <ul style="list-style-type: none"> <li>Interval</li> <li>Retry</li> </ul>	N/A
Interval	The keepalive interval	N/A	Unsigned integer Value range: 5 to 65535 The default value is 180	Unit: second.
RetryTime	The maximum number of keepalive retries	N/A	Unsigned integer Value range: 1 to 6 The default value is 3	N/A
RetryInterval	The time interval for the server	N/A	Unsigned integer Value range: 3 to 30	Unit: second.



Column name	Column description	Column type	Data type and restrictions	Remarks
	resending request packet		The default value is 5	
PreSharedKey	The pre-shared key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The form of pre-shared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple</li> <li>2—cipher</li> </ul>	If the Value is empty, the Type will be ignored.
Value	The pre-shared key	N/A	String The default value is empty	The plaintext key is a case-sensitive string of 1 to 31 characters. The ciphertext key is a case-sensitive string of 1 to 73 characters.
Enable	Whether the ADVPN domain is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enable</li> <li>false—Disable</li> </ul>	The default value is false.

## HubGroups

This table is used to configure hub groups on the VAM server.

## XML structure

```

<VAMS>
  <HubGroups>
    <HubGroup>
      <DomainName></DomainName>
      <HubGroupName></HubGroupName>
      <DomainID></DomainID>
      <IPv4Shortcut>
        <AclMode></AclMode>
        <AclNum></AclNum>
        <AclName></AclName>
      </IPv4Shortcut>
      <IPv6Shortcut>
        <AclMode></AclMode>
        <AclNum></AclNum>
        <AclName></AclName>
      </IPv6Shortcut>
    </HubGroup>
  </HubGroups>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	HubGroups
Table type	Multi-instance table
Row name	HubGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains only letters, digits, and dots (.).
HubGroupName	Hub group name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains only letters, digits, and dots (.).
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when you create an ADVPN domain.
IPv4Shortcut	ACL to control establishing IPv4 spoke-to-spoke tunnels	Data structure	Members include: <ul style="list-style-type: none"> <li>• AclMode</li> <li>• AclNum</li> <li>• AclName</li> </ul>	N/A
AclMode	ACL mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None</li> <li>• 1—ByNumber</li> <li>• 2—ByName</li> <li>• 3—All</li> </ul>	The default value is 0, which means not specifying the IPv4 shortcut interest. If the value is 3, the AclRule will be ignored. If the value is 1, AclNum works, AclName will be ignored. If the value is 2, AclName works, AclNum will be ignored.
AclNum	ACL number	N/A	Unsigned integer Value range: 2000 to 3999	2000 to 2999 for IPv4 basic ACLs. 3000 to 3999 for IPv4 advanced ACLs.
AclName	ACL Name	N/A	String. The default is empty.	Name: It must start with an English letter and to avoid confusion, it cannot be "all".

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv6Shortcut	ACL to control establishing IPv6 spoke-to-spoke tunnels	Data structure	Members include: <ul style="list-style-type: none"> <li>• AclMode</li> <li>• AclNum</li> <li>• AclName</li> </ul>	N/A
AclMode	ACL mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None</li> <li>• 1—Number</li> <li>• 2—Name</li> <li>• 3—All</li> </ul>	The default value is 0, which means not specifying the IPv4 shortcut interest. If the value is 3, the AclRule will be ignored. If the value is 1, AclNum works, AclName will be ignored. If the value is 2, AclName works, AclNum will be ignored.
AclNum	ACL number	N/A	Unsigned integer Value range: 2000 to 3999	2000 to 2999 for IPv6 basic ACLs. 3000 to 3999 for IPv6 advanced ACLs.
AclName	ACL Name	N/A	String. The default is empty.	Name: It must start with an English letter and to avoid confusion, it cannot be "all".

## IPv4Hubs

This table is used to configure the private IPv4 address of hubs on the VAM server.

## XML structure

```

<VAMS>
  <IPv4Hubs>
    <IPv4Hub>
      <DomainName></DomainName>
      <HubGroupName></HubGroupName>
      <PrivateAddress></PrivateAddress>
      <DomainID></DomainID>
      <PublicAddress>
        <IPVersion></IPVersion>
        <IPAddress></IPAddress>
      </PublicAddress>
      <AdvpnPort></AdvpnPort>
    </IPv4Hub>
  </IPv4Hubs>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv4Hubs
Table type	Multi-instance table
Row name	IPv4Hub
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
HubGroupName	Hub group name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
PrivateAddresses	The private IPv4 address of the hub	Index	IPv4 address	Must be an unicast address.
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when you create an ADVPN domain.
PublicAddress	The public IPv4 address of the hub	Data structure	Members include: <ul style="list-style-type: none"> <li>IPVersion</li> <li>IPAddress</li> </ul>	Use IPVersion to specify the IP version of the public address: IPv4, IPv6. Use IPAddress to store the public address. If you are not specify the public address, you can not specify the "PublicAddress" tag , the sub-tag "IPVersion" and "IPAddress".
IPVersion	IP version of the public address	N/A	Enumeration: <ul style="list-style-type: none"> <li>4—IPv4</li> <li>6—IPv6</li> </ul>	If IPVersion is 4, the IPAddress is an IPv4 address If IPVersion is 6, the IPAddress is an IPv6 address.
IPAddress	Public IP address	N/A	String. The default is empty.	IPv4 Address IPv6 Address
AdvpnPort	The ADVPN port number of the	N/A	Unsigned integer	If you are not specify the ADVPN port

Column name	Column description	Column type	Data type and restrictions	Remarks
	hub		Value range: 1025 to 65535	number, you can not specify the "AdvpnPort" tag.

## IPv6Hubs

This table is used to configure the private IPv6 address of hubs on the VAM server.

## XML structure

```

<VAMS>
  <IPv6Hubs>
    <IPv6Hub>
      <DomainName></DomainName>
      <HubGroupName></HubGroupName>
      <PrivateAddress></PrivateAddress>
      <DomainID></DomainID>
      <PublicAddress>
        <IPVersion></IPVersion>
        <IPAddress></IPAddress>
      </PublicAddress>
      <AdvpnPort></AdvpnPort>
    </IPv6Hub>
  </IPv6Hubs>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv6Hubs
Table type	Multi-instance table
Row name	IPv6Hub
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).

Column name	Column description	Column type	Data type and restrictions	Remarks
HubGroupName	Hub group name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
PrivateAddresses	The private IPv6 address of the hub	Index	IPv6 address	Must be a global unicast address.
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when create an ADVPN domain.
PublicAddress	The public IPv4 address of the hub	Data structure	Members include: <ul style="list-style-type: none"> <li>IPVersion</li> <li>IPAddress</li> </ul>	Use IPVersion to specify the IP version of the public address: IPv4, IPv6. Use IPAddress to store the public address. If users are not specify the public address, you can not specify the "PublicAddress" tag , the sub-tag "IPVersion" and "IPAddress".
IPVersion	IP version of public address	N/A	Enumeration: <ul style="list-style-type: none"> <li>4—IPv4</li> <li>6—IPv6</li> </ul>	If IPVersion is 4, the IPAddress is an IPv4 address If IPVersion is 6, the IPAddress is an IPv6 address.
IPAddress	Public IP address	N/A	String. The default is empty.	IPv4 Address IPv6 Address
AdvpnPort	The ADVPN port number of the hub	N/A	Unsigned integer Value range: 1025 to 65535	If you are not specify the ADVPN port number, you can not specify the "AdvpnPort" tag.

## IPv4Spokes

This table is used to configure the private IPv4 address range of spokes on the VAM server.

## XML structure

```

<VAMS>
  <IPv4Spokes>
    <IPv4Spoke>
      <DomainName></DomainName>
      <HubGroupName></HubGroupName>
      <StartIPv4Address></StartIPv4Address>
      <EndIPv4Address></EndIPv4Address>
    </IPv4Spoke>
  </IPv4Spokes>
</VAMS>

```

```

    <DomainID></DomainID>
  </IPv4Spoke>
</IPv4Spokes>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv4Spokes
Table type	Multi-instance table
Row name	IPv4Spoke
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
HubGroupName	Hub group name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
StartIPv4Address	The start IPv4 address	Index	IPv4 address.	IPv4 address example: 1.1.1.1.
EndIPv4Address	The end IPv4 address	Index	IPv4 address.	IPv4 address example: 1.1.1.100.
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when you create an ADVPN domain.

## IPv6Spokes

This table is used to configure the private IPv6 address range of spokes on the VAM server.

## XML structure

```

<VAMS>
  <IPv6Spokes>
    <IPv6Spoke>
      <DomainName></DomainName>
      <HubGroupName></HubGroupName>
      <StartIPv6Address></StartIPv6Address>
    </IPv6Spoke>
  </IPv6Spokes>
</VAMS>

```

```

    <EndIPv6Address></EndIPv6Address>
    <DomainID></DomainID>
  </IPv6Spoke>
</IPv6Spokes>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv6Spokes
Table type	Multi-instance table
Row name	IPv6Spoke
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
HubGroupName	Hub group name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
StartIPv6Address	The start IPv6 address	Index	IPv6 address	IPv6 address example: 1:1::1:1.
EndIPv6Address	The end IPv6 address	Index	IPv6 address	IPv6 address example: 1:1::1:100.
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when you create an ADVPN domain.



# Contents

VAMS .....	2
VamsGlbStats .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
ServerGlobalCfg .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
AdvpnDomains .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
DomainStats .....	6
XML structure .....	6
Table description .....	7
Columns .....	8
HubGroups .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
IPv4Hubs .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
IPv6Hubs .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
IPv4Spokes .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
IPv6Spokes .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
IPv4AddressMaps .....	20
XML structure .....	20
Table description .....	21
Columns .....	21
IPv6AddressMaps .....	22
XML structure .....	23
Table description .....	23
Columns .....	23
IPv4NetworkRoutes .....	25
XML structure .....	25
Table description .....	25
Columns .....	26
IPv6NetworkRoutes .....	26
XML structure .....	26
Table description .....	27
Columns .....	27

# VAMS

## VamsGlbStats

This table displays the global configuration of VAM server.

### XML structure

```
<VAMS>
  <VamsGlbStats>
    <TotalAdvpnNum></TotalAdvpnNum>
    <TotalSpokeNum></TotalSpokeNum>
    <TotalHubNum></TotalHubNum>
  </VamsGlbStats>
</VAMS>
```

### Table description

Item	Description
Feature name	VAMS
Table name	VamsGlbStats
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
TotalAdvpnNum	Total number of configured ADVPN domains	N/A	Unsigned integer Value range: 0 to 65535
TotalSpokeNum	Total number of configured spokes	N/A	Unsigned integer Value range: 0 to 65535
TotalHubNum	Total number of configured hubs	N/A	Unsigned integer Value range: 0 to 65535

# ServerGlobalCfg

This table displays the global configuration of the VAM server.

## XML structure

```
<VAMS>
  <ServerGlobalCfg>
    <ListenPort></ListenPort>
  </ServerGlobalCfg>
</VAMS>
```

## Table description

Item	Description
Feature name	VAMS
Table name	ServerGlobalCfg
Table type	Multi -instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ListenPort	The UDP port number for receiving VAM packets	N/A	Unsigned integer Value range: 1025 to 65535 The default value is 18000	N/A

# AdvpnDomains

This table displays ADVPN domains configuration on the VAM server.

## XML structure

```
<VAMS>
  <AdvpnDomains>
    <AdvpnDomain>
```

```

    <DomainName></DomainName>
    <DomainID></DomainID>
    <AuthenAlgList>
        <AuthenAlgItem></AuthenAlgItem>
    </AuthenAlgList>
    <AuthenMethod>
        <Method></Method>
        <ISPName></ISPName>
    </AuthenMethod>
    <EncryptAlgList>
        <EncryptAlgItem></EncryptAlgItem>
    </EncryptAlgList>
    <Keepalive>
        <Interval></Interval>
        <RetryTime></RetryTime>
    </Keepalive>
    <RetryInterval></RetryInterval>
    <PreSharedKey>
        <Type></Type>
        <Value></Value>
    </PreSharedKey>
    <Enable></Enable>
</AdvpnDomain>
</AdvpnDomains>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	AdvpnDomains
Table type	Multi-instance table
Row name	AdvpnDomain
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name.	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer	An unique ID must be specified when you

Column name	Column description	Column type	Data type and restrictions	Remarks
			Value range: 1 to 65535	create an ADVPN domain.
AuthenAlgList	The algorithms for VAM protocol packet authentication	Data structure	Members include: <ul style="list-style-type: none"> <li>AuthenAlgItem</li> </ul>	AuthenAlgItem: the maxOccurs is 5.
AuthenAlgItem	The algorithm for VAM protocol packet authentication	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—NONE</li> <li>3—MD5</li> <li>5—SHA-1</li> <li>6—SHA-256</li> <li>7—AES-XCBC-MAC</li> </ul>	N/A
AuthenMethod	Authentication mode that the VAM server uses to authenticate clients	N/A	Members include: <ul style="list-style-type: none"> <li>Method</li> <li>ISPName</li> </ul>	N/A
Method	Authentication method	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—None</li> <li>2—PAP</li> <li>3—CHAP</li> </ul>	The default value is 3. If the value is 1, the ISPName will be ignored.
ISPName	ISP domain for authentication	N/A	String Length: 1 to 24 characters The default is empty.	Case-insensitive and cannot contain \,  , /, :, *, ?, ", <, > and @.
EncryptAlgList	The algorithms for VAM protocol packet encryption	Data structure	Members include: <ul style="list-style-type: none"> <li>EncryptAlgItem</li> </ul>	EncryptAlgItem: the maxOccurs is 9.
EncryptAlgItem	The algorithm for VAM protocol packet encryption	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—NONE</li> <li>2—DES-CBC</li> <li>3—3DES-CBC</li> <li>4—AES-CBC-128</li> <li>5—AES-CBC-192</li> <li>6—AES-CBC-256</li> <li>7—AES-CTR-128</li> <li>8—AES-CTR-192</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>9—AES-CTR-256</li> </ul>	
Keepalive	The parameters of keep-alive packet	Data structure	Members include: <ul style="list-style-type: none"> <li>Interval</li> <li>Retry</li> </ul>	N/A
Interval	The keepalive interval	N/A	Unsigned integer Value range: 5 to 65535 The default value is 180	Unit: second.
RetryTime	The maximum number of keepalive retries	N/A	Unsigned integer Value range: 1 to 6 The default value is 3	N/A
RetryInterval	The time interval for the server resending request packet	N/A	Unsigned integer Value range: 3 to 30 The default value is 5	Unit: second.
PreSharedKey	The pre-shared key	Data structure	Members include: <ul style="list-style-type: none"> <li>Type</li> <li>Value</li> </ul>	N/A
Type	The form of pre-shared key	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—simple</li> <li>2—cipher</li> </ul>	This column will not return to user.
Value	The pre-shared key	N/A	String	This column will not return to user.
Enable	The status of advpn domain	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>	The default value is false.

## DomainStats

This table displays the ADVPN domain statistics.

## XML structure

```

<VAMS>
  <AdvpnDomainStats>
    <DomainStats>
      <DomainName></DomainName>
      <ServerStatus></ServerStatus>
    </DomainStats>
  </AdvpnDomainStats>
</VAMS>

```

```

<HoldingTime></HoldingTime>
<RegSpokeNumber></RegSpokeNumber>
<RegHubNumber></RegHubNumber>
<RegIPv4AddrMapNum></RegIPv4AddrMapNum>
<RegIPv6AddrMapNum></RegIPv6AddrMapNum>
<RegIPv4NetworkNum></RegIPv4NetworkNum>
<RegIPv6NetworkNum></RegIPv6NetworkNum>
<PacketsReceived>
  <InitReqTimes></InitReqTimes>
  <InitFinReqTimes></InitFinReqTimes>
  <RegReqTimes></RegReqTimes>
  <AuthenInfoTimes></AuthenInfoTimes>
  <AddrResolveReqTimes></AddrResolveReqTimes>
  <NetworkRegReqTimes></NetworkRegReqTimes>
  <UpdateReqTimes></UpdateReqTimes>
  <LogoutReqTimes></LogoutReqTimes>
  <HubInfoResTimes></HubInfoResTimes>
  <DataFlowInfoResTimes></DataFlowInfoResTimes>
  <RecvKeepReqTimes></RecvKeepReqTimes>
  <RecvErrNoticeTimes></RecvErrNoticeTimes>
  <RecvUnkonwnTimes></RecvUnkonwnTimes>
</PacketsReceived>
<PacketsSend>
  <InitResTimes></InitResTimes>
  <InitFinResTimes></InitFinResTimes>
  <AuthenReqTimes></AuthenReqTimes>
  <RegResTimes></RegResTimes>
  <AddrResolveResTimes></AddrResolveResTimes>
  <NetworkRegResTimes></NetworkRegResTimes>
  <UpdateResTimes></UpdateResTimes>
  <HubInfoReqTimes></HubInfoReqTimes>
  <DataFlowInfoReqTimes></DataFlowInfoReqTimes>
  <LogoutResTimes></LogoutResTimes>
  <SendKeepResTimes></SendKeepResTimes>
  <SendErrNoticeTimes></SendErrNoticeTimes>
</PacketsSend>
</DomainStats>
</AdvpnDomainStats>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	DomainStats
Table type	Multi-instance table
Row name	Domain

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
ServerStatus	Whether the VAM server is enabled	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled</li> </ul>	N/A
HoldingTime	Duration time that elapses after the VAM service is enabled	N/A	Unsigned integer	Unit: second
RegSpokeNumber	The number of spoke registered in a ADVPN domain	N/A	Unsigned integer	N/A
RegHubNumber	The number of hub registered in a ADVPN domain	N/A	Unsigned integer	N/A
RegIPv4AddressMapNumber	Total number of IPv4 private address mappings	N/A	Unsigned integer	N/A
RegIPv6AddressMapNumber	Total number of IPv6 private address mappings	N/A	Unsigned integer	N/A
RegIPv4NetworkNumber	Total number of IPv4 private networks	N/A	Unsigned integer	N/A
RegIPv6NetworkNumber	Total number of IPv6 private networks	N/A	Unsigned integer	N/A
PacketsReceived	The number of	Data	Members include:	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
ved	received packets	structure	<ul style="list-style-type: none"> <li>InitReqTimes</li> <li>InitFinReqTimes</li> <li>RegReqTimes</li> <li>AuthenInfoTimes</li> <li>AddrResolveReqTimes</li> <li>NetworkRegReqTimes</li> <li>UpdateReqTimes</li> <li>LogoutReqTimes</li> <li>HubInfoResTimes</li> <li>DataFlowInfoResTimes</li> <li>RecvKeepReqTimes</li> <li>RecvErrNoticeTimes</li> <li>RecvUnkonwnTimes</li> </ul>	
InitReqTimes	The number of initialization request packets	N/A	Unsigned integer	N/A
InitFinReqTimes	The number of initialization complete packets	N/A	Unsigned integer	N/A
RegReqTimes	The number of register request packets	N/A	Unsigned integer	N/A
AuthenInfoTimes	The number of authentication information request packets	N/A	Unsigned integer	N/A
AddrResolveReqTimes	The number of address resolution request packets	N/A	Unsigned integer	N/A
NetworkRegReqTimes	The number of network registration request packets	N/A	Unsigned integer	N/A
UpdateReqTimes	The number of update request packets	N/A	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
LogoutReqTimes	The number of logout request packets	N/A	Unsigned integer	N/A
HubInfoResTimes	The number of hub information response packets	N/A	Unsigned integer	N/A
DataFlowInfoResTimes	The number of data flow information response packets	N/A	Unsigned integer	N/A
RecvKeepReqTimes	The number of received keepalive packets	N/A	Unsigned integer	N/A
RecvErrNoticeTimes	The number of received error notification packets	N/A	Unsigned integer	N/A
RecvUnknownTimes	The number of received unknown packets	N/A	Unsigned integer	N/A
PacketsSend	The number of sent packets	Data structure	Members include: <ul style="list-style-type: none"> <li>• InitResTimes</li> <li>• InitFinResTimes</li> <li>• AuthenReqTimes</li> <li>• RegResTimes</li> <li>• AddrResolveResTimes</li> <li>• NetworkRegResTimes</li> <li>• UpdateResTimes</li> <li>• HubInfoReqTimes</li> <li>• DataFlowInfoReqTimes</li> <li>• LogoutResTimes</li> <li>• SendKeepResTimes</li> <li>• SendErrNoticeTimes</li> </ul>	N/A
InitResTimes	The number of initialization	N/A	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	response packets			
InitFinResTimes	The number of initialization complete packets	N/A	Unsigned integer	N/A
AuthenReqTimes	The number of authentication request packets	N/A	Unsigned integer	N/A
RegResTimes	The number of register response packets	N/A	Unsigned integer	N/A
AddrResolveResTimes	The number of address resolution response packets	N/A	Unsigned integer	N/A
NetworkRegResTimes	The number of network registration response packets	N/A	Unsigned integer	N/A
UpdateResTimes	The number of update response packets	N/A	Unsigned integer	N/A
HubInfoReqTimes	The number of hub information request packets	N/A	Unsigned integer	N/A
DataFlowInfoReqTimes	The number of data flow information request packets	N/A	Unsigned integer	N/A
LogoutResTimes	The number of logout response packets	N/A	Unsigned integer	N/A
SendKeepResTimes	The number of send keepalive packets	N/A	Unsigned integer	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
SendErrNoticeTimes	The number of send error notification packets	N/A	Unsigned integer	N/A

## HubGroups

This table displays hub groups configuration on the VAM server.

## XML structure

```

<VAMS>
  <HubGroups>
    <HubGroup>
      <DomainName></DomainName>
      <HubGroupName></HubGroupName>
      <DomainID></DomainID>
      <IPv4Shortcut>
        <AclMode></AclMode>
        <AclNum></AclNum>
        <AclName></AclName>
      </IPv4Shortcut>
      <IPv6Shortcut>
        <AclMode></AclMode>
        <AclNum></AclNum>
        <AclName></AclName>
      </IPv6Shortcut>
    </HubGroup>
  </HubGroups>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	HubGroups
Table type	Multi-instance table
Row name	HubGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains only letters, digits, and dots (.).
HubGroupName	Hub group name	Index	String. Length: 1 to 31 characters.	Case-insensitive and contains only letters, digits, and dots (.).
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when you create an ADVPN domain.
IPv4Shortcut	ACL to control establishing IPv4 spoke-to-spoke tunnels	Data structure	Members include: <ul style="list-style-type: none"> <li>• AclMode</li> <li>• AclNum</li> <li>• AclName</li> </ul>	N/A
AclMode	ACL mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None</li> <li>• 1—ByNumber</li> <li>• 2—ByName</li> <li>• 3—All</li> </ul>	The default value is 0, which means not specifying the IPv4 shortcut interest. If the value is 3, the AclRule will be ignored. If the value is 1, AclNum works, AclName will be ignored. If the value is 2, AclName works, AclNum will be ignored.
AclNum	ACL number	N/A	Unsigned integer Value range: 2000 to 3999	2000 to 2999 for IPv4 basic ACLs. 3000 to 3999 for IPv4 advanced ACLs.
AclName	ACL name	N/A	String. The default is empty.	Name: It must start with an English letter and to avoid confusion, it cannot be "all".
IPv6Shortcut	ACL to control	Data	Members include:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	establishing IPv6 spoke-to-spoke tunnels	structure	<ul style="list-style-type: none"> <li>• AclMode</li> <li>• AclNum</li> <li>• AclName</li> </ul>	
AclMode	ACL mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 0—None</li> <li>• 1—Number</li> <li>• 2—Name</li> <li>• 3—All</li> </ul>	The default value is 0, which means not specifying the IPv6 shortcut interest. If the value is 3, the AclRule will be ignored. If the value is 1, AclNum works, AclName will be ignored. If the value is 2, AclName works, AclNum will be ignored.
AclNum	ACL number	N/A	Unsigned integer Value range: 2000 to 3999	2000 to 2999 for IPv6 basic ACLs. 3000 to 3999 for IPv6 advanced ACLs.
AclName	ACL name	N/A	String. The default is empty.	Name: It must start with an English letter and to avoid confusion, it cannot be "all".

## IPv4Hubs

This table displays the private IPv4 address configuration of hubs on the VAM server.

## XML structure

```

<VAMS>
  <IPv4Hubs>
    <IPv4Hub>
      <DomainName></DomainName>
      <HubGroupName></HubGroupName>
      <PrivateAddress></PrivateAddress>
      <DomainID></DomainID>
      <PublicAddress>
        <IPVersion></IPVersion>
      </PublicAddress>
    </IPv4Hub>
  </IPv4Hubs>
</VAMS>

```

```

        <IPAddress></IPAddress>
    </PublicAddress>
    <AdvpnPort></AdvpnPort>
</IPv4Hub>
</IPv4Hubs>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv4Hubs
Table type	Multi-instance table
Row name	IPv4Hub
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
HubGroupName	Hub group name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
PrivateAddresses	The private IPv4 address of the hub	Index	IPv4 address	Must be an unicast address.
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when create an ADVPN domain.
PublicAddress	The public IPv4 address of the hub	Data structure	Members include: <ul style="list-style-type: none"> <li>IPVersion</li> <li>IPAddress</li> </ul>	If users are not specify the public address, this tag and its sub-tags will not display to user.
IPVersion	IP version of public address	N/A	Enumeration: <ul style="list-style-type: none"> <li>4—IPv4</li> <li>6—IPv6</li> </ul>	Use IPVersion to display the IP version of the public address.

Column name	Column description	Column type	Data type and restrictions	Remarks
				If IPVersion is 4, the IPAddress is an IPv4 address. If IPVersion is 6, the IPAddress is an IPv6 address.
IPAddress	Public IP address	N/A	String. The default is empty.	IPv4 Address IPv6 Address
AdvpnPort	The ADVPN port number of the hub	N/A	Unsigned integer Value range: 1025 to 65535	If users are not specify the ADVPN port number, the VAM server uses the port number registered by the hub.

## IPv6Hubs

This table displays the private IPv6 address configuration of hubs on the VAM server.

## XML structure

```

<VAMS>
<IPv6Hubs>
  <IPv6Hub>
    <DomainName></DomainName>
    <HubGroupName></HubGroupName>
    <PrivateAddress></PrivateAddress>
    <DomainID></DomainID>
    <PublicAddress>
      <IPVersion></IPVersion>
      <IPAddress></IPAddress>
    </PublicAddress>
    <AdvpnPort></AdvpnPort>
  </IPv6Hub>
</IPv6Hubs>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv6Hubs



Table type	Multi-instance table
Row name	IPv6Hub
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
HubGroupName	Hub group name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
PrivateAddresses	The private IPv6 address of the hub	Index	IPv6 address	Must be a global unicast address.
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when create an ADVPN domain.
PublicAddress	The public IPv4 address of the hub	Data structure	Members include: <ul style="list-style-type: none"> <li>IPVersion</li> <li>IPAddress</li> </ul>	If users are not specify the public address, this tag and its sub-tags will not display to user.
IPVersion	IP version of public address	N/A	Enumeration: <ul style="list-style-type: none"> <li>4—IPv4</li> <li>6—IPv6</li> </ul>	Use IPVersion to display the IP version of the public address. If IPVersion is 4, the IPAddress is an IPv4 address. If IPVersion is 6, the IPAddress is an IPv6 address.
IPAddress	Public IP address	N/A	String. The default is empty.	IPv4 Address IPv6 Address
AdvpnPort	The ADVPN port number of the hub	N/A	Unsigned integer Value range: 1025 to 65535	If users are not specify the ADVPN port number, the VAM server uses the port

Column name	Column description	Column type	Data type and restrictions	Remarks
				number registered by the hub.

## IPv4Spokes

This table displays the private IPv4 address range configuration of spokes on the VAM server.

## XML structure

```

<VAMS>
  <IPv4Spokes>
    <IPv4Spoke>
      <DomainName></DomainName>
      <HubGroupName></HubGroupName>
      <StartIPv4Address></StartIPv4Address>
      <EndIPv4Address></EndIPv4Address>
      <DomainID></DomainID>
    </IPv4Spoke>
  </IPv4Spokes>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv4Spokes
Table type	Multi-instance table
Row name	IPv4Spoke
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
HubGroupName	Hub group	Index	String	Case-insensitive and

ame	name		Length: 1 to 31 characters	contains only letters, digits, and dots (.).
StartIPv4Address	The start IPv4 address	Index	IPv4 address.	IPv4 address example: 1.1.1.1.
EndIPv4Address	The end IPv4 address	Index	IPv4 address.	IPv4 address example: 1.1.1.100.
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when you create an ADVPN domain.

## IPv6Spokes

This table displays the private IPv6 address range of spokes on the VAM server.

## XML structure

```

<VAMS>
<IPv6Spokes>
  <IPv6Spoke>
    <DomainName></DomainName>
    <HubGroupName></HubGroupName>
    <StartIPv6Address></StartIPv6Address>
    <EndIPv6Address></EndIPv6Address>
    <DomainID></DomainID>
  </IPv6Spoke>
</IPv6Spokes>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv6Spokes
Table type	Multi-instance table
Row name	IPv6Spoke
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
HubGroupName	Hub group name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
StartIPv6Address	The start IPv6 address	Index	IPv6 address	IPv6 address example: 1:1::1:1.
EndIPv6Address	The end IPv6 address	Index	IPv6 address	IPv6 address example: 1:1::1:100.
DomainID	The ID of an ADVPN domain.	N/A	Unsigned integer Value range: 1 to 65535	An unique ID must be specified when you create an ADVPN domain.

## IPv4AddressMaps

This table displays IPv4 private-public address mapping information

## XML structure

```

<VAMS>
  <IPv4AddressMaps>
    <IPv4AddressMap>
      <DomainName></DomainName>
      <PrivateAddress></PrivateAddress>
      <ClientType></ClientType>
      <HubGroupName></HubGroupName>
      <HoldingTime></HoldingTime>
      <LinkProtocol></LinkProtocol>
      <PublicAddress></PublicAddress>
      <PublicPort></PublicPort>
      <RegisteredAddress></RegisteredAddress>
      <RegisteredPort></RegisteredPort>
      <IPsecAddress></IPsecAddress>
      <IPsecPort></IPsecPort>
      <BehindNAT></BehindNAT>
    </IPv4AddressMap>
  </IPv4AddressMaps>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv4AddressMaps
Table type	Multi-instance table
Row name	IPv4AddressMap
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name.	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
PrivateAddress	Private IPv4 address that the VAM client has registered with the VAM server	Index	IPv4 address	N/A
ClientType	VAM client type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> <li>1—Spoke</li> <li>2—Hub</li> </ul>	N/A
HubGroupName	Hub group to which the VAM client belongs	N/A	String Length: 1 to 31 characters	N/A
HoldingTime	Duration time that elapses since the VAM client successfully registered with the server	N/A	Unsigned integer The default value is 0	Unit: second
LinkProtocol	Link layer protocol used by	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the VAM client for ADVPN tunnel establishment		<ul style="list-style-type: none"> <li>1—GRE</li> <li>2—UDP</li> <li>3—IPsec-GRE</li> <li>4—IPsec-UDP</li> </ul>	
PublicAddresses	VAM client's public IP address that has been NATed	N/A	String	N/A
PublicPort	VAM client's ADVPN port number that has been NATed	N/A	Unsigned integer Value range: 1025 to 65535	This field is displayed when the Link protocol is UDP or IPsec-UDP.
RegisteredAddress	Public address that the VAM client has registered with the VAM server	N/A	String	N/A
RegisteredPort	ADVPN port number that the VAM client has registered with the VAM server	N/A	Unsigned integer. Value range: 1025 to 65535	This field is displayed when the Link protocol is UDP or IPsec-UDP.
IPsecAddress	IP address used by the VAM client for IPsec tunnel establishment	N/A	String	This field is displayed when the Link protocol is IPsec-UDP or IPsec-GRE.
IPsecPort	UDP port number used by the VAM client for IPsec tunnel establishment	N/A	Unsigned integer. Value range: 1025 to 65535	This field is displayed when the Link protocol is IPsec-UDP or IPsec-GRE.
BehindNAT	Whether the registered client is behind a NAT	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A

## IPv6AddressMaps

This table displays IPv6 private-public address mapping information.

## XML structure

```
<VAMS>
  <IPv6AddressMaps>
    <IPv6AddressMap>
      <DomainName></DomainName>
      <PrivateAddress></PrivateAddress>
      <HubGroupName></HubGroupName>
      <ClientType></ClientType>
      <HoldingTime></HoldingTime>
      <LinkProtocol></LinkProtocol>
      <PublicAddress></PublicAddress>
      <PublicPort></PublicPort>
      <RegisteredAddress></RegisteredAddress>
      <RegisteredPort></RegisteredPort>
      <IPsecAddress></IPsecAddress>
      <IPsecPort></IPsecPort>
      <BehindNAT></BehindNAT>
    </IPv6AddressMap>
  </IPv6AddressMaps>
</VAMS>
```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv6AddressMaps
Table type	Multi-instance table
Row name	IPv6AddressMap
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
PrivateAddress	Private IPv6 address that the VAM client has registered with	Index	IPv6 address	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the VAM server			
HubGroupName	Hub group to which the VAM client belongs	N/A	String. Length: 1 to 31 characters	N/A
ClientType	VAM client type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Spoke</li> <li>2—Hub</li> </ul>	N/A
HoldingTime	Duration time that elapses since the VAM client successfully registered with the server	N/A	Unsigned integer The default value is 0	Unit: seconds
LinkProtocol	Link layer protocol used by the VAM client for ADVPN tunnel establishment	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—GRE</li> <li>2—UDP</li> <li>3—IPsec-GRE</li> <li>4—IPsec-UDP</li> </ul>	N/A
PublicAddresses	VAM client's public IP address that has been NATed	N/A	String	N/A
PublicPort	VAM client's ADVPN port number that has been NATed	N/A	Unsigned integer Value range: 1025 to 65535	This field is displayed when the Link protocol is UDP or IPsec-UDP.
RegisteredAddress	Public address that the VAM client has registered with the VAM server	N/A	String	N/A
RegisteredPort	ADVPN port number that the VAM client has registered with the VAM server	N/A	Unsigned integer Value range: 1025 to 65535	This field is displayed when the Link protocol is UDP or IPsec-UDP.
IPsecAddress	IP address used	N/A	String	This field is displayed



Column name	Column description	Column type	Data type and restrictions	Remarks
	by the VAM client for IPsec tunnel establishment			when the Link protocol is IPsec-UDP or IPsec-GRE.
IPsecPort	UDP port number used by the VAM client for IPsec tunnel establishment	N/A	Unsigned integer Value range: 1025 to 65535	This field is displayed when the Link protocol is IPsec-UDP or IPsec-GRE.
BehindNAT	Whether the registered client is behind a NAT	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Yes</li> <li>false—No</li> </ul>	N/A

## IPv4NetworkRoutes

This table displays the IPv4 private networks for VAM clients registered with the VAM server.

## XML structure

```

<VAMS>
  <IPv4NetworkRoutes>
    <IPv4NetworkRoute>
      <DomainName></DomainName>
      <NetworkAddress></NetworkAddress>
      <MaskLength></MaskLength>
      <PrivateAddress></PrivateAddress>
      <Preference></Preference>
    </IPv4NetworkRoute>
  </IPv4NetworkRoutes>
</VAMS>

```

## Table description

Item	Description
Feature name	VAMS
Table name	IPv4NetworkRoutes
Table type	Multi-instance table
Row name	IPv4NetworkRoute
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
NetworkAddress	Private IPv4 network address for an ADVPN tunnel interface	Index	IPv4 address	N/A
MaskLength	Private IPv4 network mask length for an ADVPN tunnel interface	Index	Unsigned integer Value range: 0 to 32	N/A
PrivateAddress	Private IPv4 address that the VAM client has registered with the VAM server	Index	IPv4 address	N/A
Preference	Preference of the private route that the VAM client has registered with the VAM server	N/A	Unsigned integer Value range: 1 to 255  The default is 8	N/A

## IPv6NetworkRoutes

This table displays the IPv6 private networks for VAM clients registered with the VAM server.

## XML structure

```
<VAMS>
  <IPv6NetworkRoutes>
    <IPv6NetworkRoute>
      <DomainName></DomainName>
      <NetworkAddress></NetworkAddress>
      <MaskLength></MaskLength>
      <PrivateAddress></PrivateAddress>
```

```

    <Preference></Preference>
  </IPv6NetworkRoute>
</IPv6NetworkRoutes>
</VAMS>

```

## Table description

Item	Description
Feature name	VAM
Table name	IPv6NetworkRoutes
Table type	Multi-instance table
Row name	IPv6NetworkRoute
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
DomainName	ADVPN domain name	Index	String Length: 1 to 31 characters	Case-insensitive and contains only letters, digits, and dots (.).
NetworkAddress	Private IPv6 network address for an ADVPN tunnel interface	Index	IPv6 address.	N/A
MaskLength	Private IPv6 network prefix length for an ADVPN tunnel interface.	Index	Unsigned integer Value range: 0 to 128	N/A
PrivateAddress	Private IPv6 address that the VAM client has registered with the VAM server	N/A	IPv6 address	N/A
Preference	Preference of the private route that the VAM client has registered with the VAM	N/A	Unsigned integer Value range: 1 to 255 The default is 8	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	server			

# Contents

VBR .....	1
VBR/PE/SetConfiguration .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
VBR/PE/Configuration .....	1
XML structure .....	2
Responded XML structure .....	2
Table description .....	2
Columns .....	2
Responded columns .....	3
VBR/CB/UpgradePEXs .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# VBR

## VBR/PE/SetConfiguration

This table contains PEX local forwarding capability information on a PEX.

### XML structure

```
<VBR>
  <PE>
    <SetConfiguration>
      <LocalForwarding></LocalForwarding>
      <ShutdownIfWhenOffline></ShutdownIfWhenOffline>
    </SetConfiguration>
  </PE>
</VBR>
```

### Table description

Item	Description
Feature name	VBR
Table name	SetConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalForwarding	Whether PEX local forwarding capability is enabled	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>.</li><li><b>false</b> (default).</li></ul>	N/A
ShutdownIfWhenOffline	Whether all user-side ports will be shut down when the PEX is offline	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>.</li><li><b>false</b> (default).</li></ul>	N/A

## VBR/PE/Configuration

This table manages configuration for PEXs.

## XML structure

```
<VBR>
  <PE>
    <Configuration>
      <Save/>
      <Recover>
        <Associate></Associate>
        <Name></Name>
      </Recover>
    </Configuration>
  </PE>
</VBR>
```

## Response XML structure

```
<VBR>
  <PE>
    <Configuration>
      <Name></Name>
    </Configuration>
  </PE>
</VBR>
```

## Table description

Item	Description
Feature name	VBR
Table name	Configuration
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Associate	Virtual chassis number or slot number of a PEX	N/A	Unsigned integer.	For distributed parent devices, this object represents the virtual chassis number. For centralized parent devices, this object represents the virtual slot number.
Name	Configuration file	N/A	String.	The file name is in the

Column name	Column description	Column type	Data type and restrictions	Remarks
	name		Length: 1 to 255 characters.	format of pex_ <i>peid</i> .cfg. The <i>peid</i> argument represents the virtual chassis number or slot number of the PEX. For example: pex_100.cfg.

## Responded columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Configuration file name	N/A	String. Length: 1 to 255 characters.	The configuration file name is pex.cfg. This object responds to the save operation.

## VBR/CB/UpgradePEXs

This table contains PEX upgrade information on PEX.

## XML structure

```

<VBR>
  <CB>
    <UpgradePEXs>
      <Server></Server>
      <FtpUserName></FtpUserName>
      <Password></Password>
      <IPEFile></IPEFile>
      <PEXDeviceList></PEXDeviceList>
      <Patch>
        <PatchFile></PatchFile>
        <Action></Action>
      </Patch>
      <DeleteIPEFile></DeleteIPEFile>
    </UpgradePEXs>
  </CB>
</VBR>

```

## Table description

Item	Description
Feature name	VBR
Table name	UpgradePEXs



Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Server	IP address of the FTP server.	N/A	String, dotted decimal notation.	N/A
FtpUserName	User's name of the FTP server entered by user.	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
Password	password of the FtpUserName	N/A	String, case-sensitive. Length: 1 to 63 characters.	N/A
IPEFile	Name of an .ipe image package file in the system.	N/A	String. Length: 1 to 127 characters.	N/A
PEXDeviceList	List of PEX device that user selected for upgrade.	N/A	Number string. It is a comma-separated list of PEX items. An item can be an individual PEX ID or a PEX ID range. Use a hyphen (-) to separate the start and end PEXs of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 100,102,103,105-108,110-120.
PatchFile	Name of a patch image package file in the system.	N/A	String. Length: 1 to 127 characters.	"patch" means this is a patch image file.
Action	Specify which action to handle the patch image file.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—activate.</li> <li>2—deactivate.</li> </ul>	Action of "activate" will update the patch image file that the user selected, "deactivate" will unload the selected patch file.
DeleteIPEFile	Whether delete the .ipe image package file after decompress it.	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	Optional column, if not specify default is false.

# Contents

VBR .....	1
VBR/CB/Groups .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
VBR/CB/CascadePorts .....	1
XML structure .....	2
Table description .....	2
Columns .....	2

# VBR

## VBR/CB/Groups

This table contains PEX group information on the parent fabric.

### XML structure

```
<VBR>
  <CB>
    <Groups>
      <Group>
        <ID></ID>
        <Description></Description>
      </Group>
    </Groups>
  </CB>
</VBR>
```

### Table description

Item	Description
Feature name	VBR
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	PEX group ID.	index	Unsigned integer.	N/A
Description	PEX group description.	N/A	String, case-insensitive. Length: 1 to 79 characters. Default: PEX group XXX (XXX represents the PEX group ID).	N/A

## VBR/CB/CascadePorts

This table contains cascade port configuration information on the parent fabric.

## XML structure

```
<VBR>
  <CB>
    <CascadePorts>
      <CascadePort>
        <IfIndex></IfIndex>
        <Group></Group>
        <Associate></Associate>
        <LocalForwarding></LocalForwarding>
        <ShutdownIfWhenPEOffline></ShutdownIfWhenPEOffline>
      </CascadePort>
    </CascadePorts>
  </CB>
</VBR>
```

## Table description

Item	Description
Feature name	VBR
Table name	CascadePorts
Table type	Multi-instance table
Row name	CascadePort
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Aggregate interface index.	index	Unsigned integer.	Some versions support interface name. For more information, see the XSD document of your product.  For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.

Column name	Column description	Column type	Data type and restrictions	Remarks
Group	PEX group ID.	N/A	Unsigned integer.	If this column has a valid value, the PEX connection capability of the aggregate interface is enabled. In other situations, the PEX connection capability of the aggregate interface is not enabled.
Associate	Associated virtual chassis number or slot number of the PEX port.	N/A	Unsigned integer.	For distributed parent devices, this object represents the virtual chassis number. For centralized parent devices, this object represents the virtual slot number.
LocalForwarding	Whether PEX local forwarding capability is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>.</li> <li>• <b>false</b> (default).</li> </ul>	N/A
ShutdownIfWhenPEOffline	Whether all user-side ports on the PEX will be shut down when the PEX is offline.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b></li> <li>• <b>false</b> (default).</li> </ul>	N/A

# Contents

VBR .....	1
VBR/PE/SetConfiguration .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
VBR/PE/UpstreamPorts .....	1
XML structure .....	2
Table description .....	2
Columns .....	2
VBR/CB/Groups .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
VBR/CB/CascadePorts .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
VBR/CB/ExtendPorts .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
VBR/CB/UpstreamPorts .....	7
XML structure .....	7
Table description .....	8
Columns .....	8
VBR/CB/UpgradeOpResults .....	8
XML structure .....	8
Table description .....	9
Columns .....	9

# VBR

## VBR/PE/SetConfiguration

This table contains PEX local forwarding capability information on a PEX.

### XML structure

```
<VBR>
  <PE>
    <SetConfiguration>
      <LocalForwarding></LocalForwarding>
      <ShutdownIfWhenOffline></ShutdownIfWhenOffline>
    </SetConfiguration>
  </PE>
</VBR>
```

### Table description

Item	Description
Feature name	VBR
Table name	SetConfiguration
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
LocalForwarding	Whether PEX local forwarding capability is enabled.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Not enabled.</li></ul>	N/A
ShutdownIfWhenOffline	Whether all user-side ports will be shut down when the PEX is offline.	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Shut down.</li><li><b>false</b>—Not shut down.</li></ul>	N/A

## VBR/PE/UpstreamPorts

This table contains upstreamports on the PEX.

## XML structure

```
<VBR>
  <PE>
    <UpstreamPorts>
      <UpstreamPort>
        <IfIndex></IfIndex>
        <PortInfo>
          <Name></Name>
          <Chassis></Chassis>
          <Slot></Slot>
          <SubSlot></SubSlot>
          <Combo></Combo>
        </PortInfo>
      </UpstreamPort>
    </UpstreamPorts>
  </PE>
</VBR>
```

## Table description

Item	Description
Feature name	VBR
Table name	UpstreamPorts
Table type	Multi-instance table
Row name	UpstreamPort
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	UpstreamPort IfIndex	index	Unsigned integer.	UpstreamPort IfIndex on PEX
Name	Full name of an interface	N/A	String. Length: 2 to 47 characters.	Full name of an interface on PEX
Chassis	Chassis ID which the UpstreamPort belonged to.	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no chassis number, return 0.
Slot	Slot ID which the UpstreamPort belonged to.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SubSlot	SubSlot ID which the UpstreamPort belonged to.	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no subslot number, return 0.



Column name	Column description	Column type	Data type and restrictions	Remarks
Combo	Combo mode of an interface	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—fiber mode</li> <li>2—copper mode</li> </ul>	Applicable to only Ethernet interfaces.

## VBR/CB/Groups

This table contains PEX group information on the parent fabric.

### XML structure

```

<VBR>
  <CB>
    <Groups>
      <Group>
        <ID></ID>
        <Description></Description>
      </Group>
    </Groups>
  </CB>
</VBR>

```

### Table description

Item	Description
Feature name	VBR
Table name	Groups
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	PEX group ID.	index	Unsigned integer.	N/A
Description	PEX group description.	N/A	String, case-insensitive. Length: 1 to 79	N/A

# VBR/CB/CascadePorts

This table contains cascade port configuration information on the parent fabric.

## XML structure

```
<VBR>
  <CB>
    <CascadePorts>
      <CascadePort>
        <IfIndex></IfIndex>
        <Group></Group>
        <Associate></Associate>
        <Member>
          <Local></Local>
          <Neighbour></Neighbour>
        </Member>
        <LocalForwarding></LocalForwarding>
        <ShutdownIfWhenPEOffline></ShutdownIfWhenPEOffline>
        <Tier></Tier>
        <Parent></Parent>
        <DeviceMAC></DeviceMAC>
      </CascadePort>
    </CascadePorts>
  </CB>
</VBR>
```

## Table description

Item	Description
Feature name	VBR
Table name	CascadePorts
Table type	Multi-instance table
Row name	CascadePort
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Aggregate interface index.	index	Unsigned integer.	Some versions support interface name. For more information, see the XSD document of your product.  For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Group	PEX group ID.	N/A	Unsigned integer.	If this column has a valid value, the PEX connection capability of the aggregate interface is enabled. In other situations, the PEX connection capability of the aggregate interface is not enabled.
Associate	Associated virtual chassis number or slot number of the PEX port.	N/A	Unsigned integer.	For distributed parent devices, this object represents the virtual chassis number.  For centralized parent devices, this object represents the virtual slot number.
Member	Member Interfaces of CascadePort	Data structure	Member: <ul style="list-style-type: none"> <li>Local</li> <li>Neighbour</li> </ul>	Multi-instance
Local	Local Interface name	N/A	String. Length: 2 to 47 characters.	N/A
Neighbour	Neighbour Interface name	N/A	String. Length: 2 to 47 characters.	N/A
LocalForwarding	Whether PEX local forwarding capability is enabled.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Not enabled.</li> </ul>	N/A
ShutdownIfWhenPEOffline	Whether all user-side ports on the PEX will be shut down when the PEX is offline.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Shut down.</li> <li><b>false</b>—Not shut down.</li> </ul>	N/A
Tier	Tier of the PEX	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Parent	Parent node of current PEX node	N/A	Unsigned integer.	If this column has an invalid value 0xFFFF, then current PEX's parent is CB. In other situations, this column's value is the ID of PEX.
DeviceMAC	PEX Device's bridge MAC address	N/A	String. Format: HH-HH-HH-HH-HH-HH	N/A

## VBR/CB/ExtendPorts

This table contains extendport list of the PEX.

### XML structure

```

<VBR>
  <CB>
    <ExtendPorts>
      <ExtendPort>
        <AssociateID></AssociateID>
        <IfIndex></IfIndex>
        <PortInfo>
          <Chassis></Chassis>
          <Slot></Slot>
          <SubSlot></SubSlot>
        </PortInfo>
      </ExtendPort>
    </ExtendPorts>
  </CB>
</VBR>

```

### Table description

Item	Description
Feature name	VBR
Table name	ExtendPorts
Table type	Multi-instance table
Row name	ExtendPort
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AssociateID	Associated virtual chassis number or slot number of the PEX .	index	Unsigned integer.	For distributed parent devices, this object represents the virtual chassis number. For centralized parent devices, this object represents the virtual slot number.
IfIndex	ExtendPort IfIndex	index	Unsigned integer.	N/A
Chassis	Chassis ID which the ExtendPort belonged to.	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no chassis number, return 65535.
Slot	Slot ID which the ExtendPort belonged to.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SubSlot	SubSlot ID which the ExtendPort belonged to.	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no subslot number, return 0.

## VBR/CB/UpstreamPorts

This table contains upstreamports on the PEX.

## XML structure

```

<VBR>
  <CB>
    <UpstreamPorts>
      <UpstreamPort>
        <AssociateID></AssociateID>
        <IfIndex></IfIndex>
        <PortInfo>
          <Name></Name>
          <Chassis></Chassis>
          <Slot></Slot>
          <SubSlot></SubSlot>
          <Combo></Combo>
        </PortInfo>
      </UpstreamPort>
    </UpstreamPorts>
  </CB>
</VBR>

```

## Table description

Item	Description
Feature name	VBR
Table name	UpstreamPorts
Table type	Multi-instance table
Row name	UpstreamPort
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AssociateID	Associated virtual chassis number or slot number of the PEX .	index	Unsigned integer.	For distributed parent devices, this object represents the virtual chassis number. For centralized parent devices, this object represents the virtual slot number.
IfIndex	UpstreamPort IfIndex	index	Unsigned integer.	N/A
Name	Full name of an interface	N/A	String. Length: 2 to 47 characters.	N/A
Chassis	Chassis ID which the UpstreamPort belonged to.	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no chassis number, return 0.
Slot	Slot ID which the UpstreamPort belonged to.	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
SubSlot	SubSlot ID which the UpstreamPort belonged to.	N/A	Unsigned integer. Value range: 0 to 65535.	If there is no subslot number, return 0.
Combo	Combo mode of an interface	N/A	Enumeration: <ul style="list-style-type: none"><li>1—fiber mode</li><li>2—copper mode</li></ul>	Applicable to only Ethernet interfaces.

## VBR/CB/UpgradeOpResults

This table contains information of the upgrading status of PEX.

## XML structure

<VBR>

```

<CB>
  <UpgradeOpResults>
    <UpgradeOpResult>
      <AssociateID></AssociateID>
      <UpgradeStatus></UpgradeStatus>
      <FailedReason></FailedReason>
    </UpgradeOpResult>
  </UpgradeOpResults>
</CB>
</VBR>

```

## Table description

Item	Description
Feature name	VBR
Table name	UpgradeOpResults
Table type	Multi-instance table
Row name	UpgradeOpResult
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AssociateID	Associated virtual chassis number or slot number of the PEX .	index	Unsigned integer.	For distributed parent devices, this object represents the virtual chassis number. For centralized parent devices, this object represents the virtual slot number.
UpgradeStatus	Upgrade status of the PEX.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—not upgrade</li> <li>• <b>1</b>—loading</li> <li>• <b>2</b>—loaded</li> <li>• <b>3</b>—upgrading</li> <li>• <b>4</b>—committed</li> </ul>	N/A
FailedReason	Failed reason of this PEX.	N/A	String. Length: 1 to 192 characters.	Usefully only in failure.

# Contents

VCF .....	1
VCF/Role .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
VCF/Underlay .....	1
XML structure .....	1
Table description .....	2
Columns .....	2



# VCF

## VCF/Role

This table contains VCF role name information.

### XML structure

```
<VCF>
  <Role>
    <Name></Name>
  </Role>
</VCF>
```

### Table description

Item	Description
Feature name	VCF
Table name	Role
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Role name	N/A	String: <ul style="list-style-type: none"><li>• <b>access</b>—Access node.</li><li>• <b>leaf</b>—Leaf node.</li><li>• <b>spine</b>—Spine node.</li><li>• <b>aggr</b>—Aggregate node.</li></ul>	N/A

## VCF/Underlay

This table contains VCF underlay information.

### XML structure

```
<VCF>
  <Underlay>
    <PauseStatus></PauseStatus>
  </Underlay>
</VCF>
```

</Underlay>  
<VCF>

## Table description

Item	Description
Feature name	VCF
Table name	Underlay
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PauseStatus	Paused state of automated underlay network deployment	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Automated underlay network deployment is paused.</li><li>• <b>false</b>—Automated underlay network deployment is running.</li></ul>	N/A

# Contents

VCF .....	1
VCF/Topos .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
VCF/Role .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
VCF/Underlay .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# VCF

## VCF/Topos

This table contains VCF topology information.

### XML structure

```
<VCF>
  <Topos>
    <TopoItem>
      <IfIndex></IfIndex>
      <MacAddress></MacAddress>
      <PeerInterface></PeerInterface>
      <LocalInterface></LocalInterface>
      <Role></Role>
      <SystemName></SystemName>
      <PeerIP></PeerIP>
      <LoopbackIP></LoopbackIP>
      <Loopback1IP></Loopback1IP>
    </TopoItem>
  </Topos>
</VCF>
```

### Table description

Item	Description
Feature name	VCF
Table name	Topos
Table type	Multi-instance table
Row name	TopoItem
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfInex	Interface index	Index	Unsigned integer. Length: 32 bits.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF

Column name	Column description	Column type	Data type and restrictions	Remarks
				XML API Configuration
MacAddress	MAC address	index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
PeerInterface	Neighbor interface name	index	String. Length: 1 to 47 characters.	
Role	Neighbor role	N/A	Enumeration: <ul style="list-style-type: none"> <li>• 1—spine.</li> <li>• 2—leaf.</li> <li>• 3—access.</li> <li>• 4—computer.</li> <li>• 5—aggr.</li> </ul>	
LocalInterface	Interface name	N/A	String. Length: 1 to 47 characters.	
SystemName	System name	N/A	String. Length: 0 to 255 characters.	0 denotes Null.
PeerIP	Neighbor management address.	N/A	IPv4: String, dotted decimal notation.	Example: 1.1.1.1.
LoopbackIP	Neighbor Loopback0 address.	N/A	IPv4: String, dotted decimal notation.	Example: 1.1.1.1.
Loopback1IP	Neighbor Loopback1 address.	N/A	IPv4: String, dotted decimal notation.	Example: 1.1.1.1.

## VCF/Role

This table contains VCF role name information.

## XML structure

```

<VCF>
  <Role>
    <Name></Name>
  </Role>
</VCF>

```

## Table description

Item	Description
Feature name	VCF
Table name	Role
Table type	Single-instance table

Item	Description
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Role name	N/A	String: <ul style="list-style-type: none"> <li>access</li> <li>leaf</li> <li>spine</li> <li>aggr</li> </ul>	

## VCF/Underlay

This table contains VCF underlay information.

## XML structure

```

<VCF>
  <Underlay>
    <PauseStatus></PauseStatus>
    <Completion></Completion>
    <Maddr></Maddr>
    <Mask></Mask>
    <Mac></Mac>
    <StandByMac></StandByMac>
    <SN></SN>
    <Execution></Execution>
  </Underlay>
</VCF>

```

## Table description

Item	Description
Feature name	VCF
Table name	Underlay
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PauseStatus	Underlay pause status	N/A	Boolean: <ul style="list-style-type: none"> <li>true—pause</li> <li>false—running</li> </ul>	
Completion	Underlay completion	N/A	Boolean: <ul style="list-style-type: none"> <li>true—completion</li> <li>false—incompletion</li> </ul>	If Vlan-interface4094 or Vsi-interface4094 have ipv4, completion status will be set true.
Maddr	Management address	N/A	Unsigned integer. Length: 32 bits.	Vlan-interface4094 or Vsi-interface4094 ipAdress.
Mask	Management address Mask	N/A	Unsigned integer. Length: 32 bits.	Vlan-interface4094 or Vsi-interface4094 mask .
Mac	Bridge Mac	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
StandByMac	Standby Original Bridge Mac	N/A	Six groups of two hexadecimal digits, hyphen-separated	StandByMac default 00-00-00-00-00-00. If irf mode, "StandByMac" means standby original Bridge Mac .Example: 00-0c-af-e3-5d-c1.
SN	Device serial number	N/A	String	
Execution	Finished phase	N/A	String	Example: 1.0.1,1.0.2, means, Underlay has finished phase: 1.0.1, 1.0.2

# Contents

VCF .....1

    VCF/Role .....1



# VCF

## VCF/Role

Message	Explanation
The role name only support spine leaf access and aggr. 该角色名只支持spine, leaf, access, aggr四种。	The role name only support spine, leaf, access and aggr. 角色名仅支持 spine, leaf, access, aggr 四种。

# Contents

- VLAN.....1
  - VLAN/BatchVLANs.....1
    - XML structure.....1
    - Responded XML structure.....1
    - Table description.....1
    - Columns.....1
    - Responded columns .....2

# VLAN

## VLAN/BatchVLANs

This table is used to batch create or delete VLANs.

### XML structure

```
<VLAN>
  <BatchVlans>
    <CreateVlanList></CreateVlanList>
    <DestroyVlanList></DestroyVlanList>
  </BatchVlans>
</VLAN>
```

### Response XML structure

```
<VLAN>
  <BatchVlans>
    <CreateVlanList></CreateVlanList>
    <DestroyVlanList></DestroyVlanList>
  </BatchVlans>
</VLAN>
```

### Table description

Item	Description
Feature name	VLAN
Table name	BatchVlans
Table type	Single-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Data type and restrictions	Remarks
CreateVlanList	List of VLANs to create	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string must not end with a comma	Example: 2,3,5-8,10-20.

Column name	Column description	Data type and restrictions	Remarks
		or hyphen, or include any whitespace characters.	
DestoryVlanList	List of VLANs to delete	<p>Number string.</p> <p>It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range.</p> <p>The string must not end with a comma or hyphen, or include any whitespace characters.</p>	<p>Example: 2,3,5-8,10-20.</p>

## Responded columns

Column name	Column description	Data type and restrictions	Remarks
CreateVlanList	List of VLANs that have been created successfully	<p>Number string.</p> <p>It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range.</p> <p>The string must not end with a comma or hyphen, or include any whitespace characters.</p>	<p>Example: 2,3,5-8,10-20.</p> <p>Responded only when CreateVlanList is submitted.</p>
DestoryVlanList	List of VLANs that have been deleted successfully	<p>Number string.</p> <p>It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range.</p> <p>The string must not end with a comma or hyphen, or include any whitespace characters.</p>	<p>Example: 2,3,5-8,10-20.</p> <p>Responded only when DestoryVlanList is submitted.</p>

# Contents

VLAN.....	3
VLAN/VLANs .....	3
XML structure .....	3
Table description .....	3
Columns .....	3
VLAN/AccessInterfaces .....	4
XML structure .....	5
Table description .....	5
Columns .....	5
VLAN/TrunkInterfaces .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
VLAN/HybridInterfaces .....	6
XML structure .....	7
Table description .....	7
Columns .....	7
VLAN/QinQ .....	8
XML structure .....	8
Table description .....	8
Columns .....	8
VLAN/QinQPorts .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
VLAN/VLANnetworkNto1mapping .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
VLAN/VLAN1to1mapping .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
VLAN/VLANUserNto1mapping .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
VLAN/VLAN1to2mapping .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
VLAN/VLAN2to2mapping .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
VLAN/VLAN0to2mapping .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
VLAN/VLAN2to3mapping .....	17
XML structure .....	17
Table description .....	18
Columns .....	18
VLAN/VoiceInfo .....	19
XML structure .....	19
Table description .....	19
Columns .....	19

VLAN/VoiceOUI.....	19
XML structure.....	20
Table description.....	20
Columns.....	20
VLAN/VoicePorts.....	20
XML structure.....	20
Table description.....	21
Columns.....	21
VLAN/MACPorts.....	22
XML structure.....	22
Table description.....	22
Columns.....	23

# VLAN

## VLAN/VLANs

This table contains basic VLAN information.

### XML structure

```
<VLAN>
  <VLANs>
    <VLANID>
      <ID></ID>
      <Description></Description>
      <Name></Name>
      <AccessPortList></AccessPortList>
      <Ipv4>
        <Ipv4Address></Ipv4Address>
        <Ipv4Mask></Ipv4Mask>
      </Ipv4>
    </VLANID>
  </VLANs>
</VLAN>
```

### Table description

Item	Description
Feature name	VLAN
Table name	VLANs
Table type	Multi-instance table
Row name	VLANID
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Description	VLAN description	N/A	String. Length: 1 to 255 characters. Default: <b>VLAN</b> <i>vlan-id</i> .	Example: VLAN 0001.

Column name	Column description	Column type	Data type and restrictions	Remarks
			The <i>vlan id</i> argument uses the four-digit form. If the VLAN ID has less than four digits, leading zeros are added.	
Name	VLAN name	N/A	String. Length: 1 to 32 characters. Default: <b>VLAN</b> <i>vlan-id</i> . The <i>vlan id</i> argument uses the four-digit form. If the VLAN ID has less than four digits, leading zeros are added.	Example: VLAN 0001.
AccessPortList	Access port list of the VLAN	N/A	Number string. It is a comma-separated list of port index items. An item can be an individual port index or a port index range. Use a hyphen (-) to separate the start and end port indexes of a range. The string cannot end with a comma or hyphen, or include any whitespace characters. By default, a VLAN does not have an access port list.	Example: 1,2,3,5-8,10-20. Available port indexes are in the PortIndex column in the Ifmgr/Interfaces table.
Ipv4	IPv4 address of the VLAN interface	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv4Address.</li> <li>Ipv4Mask.</li> </ul>	You must configure both the IP address and mask if the operation is <b>merge</b> , <b>create</b> , or <b>replace</b> . You can configure only the IP address if the operation is <b>delete</b> or <b>remove</b> .
Ipv4Address	IPv4 address of the VLAN interface	N/A	String, dotted decimal notation.	Example: 1.1.1.1. When you perform the <b>merge</b> , <b>create</b> , or <b>replace</b> operation, the system creates the VLAN interface automatically if the VLAN interface has not been created.
Ipv4Mask	IPv4 address mask	N/A	String, dotted decimal notation.	Example: 55.255.255.0.

## VLAN/AccessInterfaces

This table contains information about Access ports.



## XML structure

```
<VLAN>
  <AccessInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <PVID></PVID>
    </Interface>
  </AccessInterfaces>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	AccessInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see Ifmgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.	N/A

## VLAN/TrunkInterfaces

This table contains information about Trunk ports.

## XML structure

```
<VLAN>
  <TrunkInterfaces>
    <Interface>
```

```

    <IfIndex></IfIndex>
    <PermitVlanList></PermitVlanList>
    <PVID></PVID>
  </Interface>
</TrunkInterfaces>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	TrunkInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see Ifmgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
PermitVlanList	List of permitted VLANs on the port	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20.  The item is permitted to incremental edit. You can sign the flag like "<PermitVlanList base:incremental='true'>". If the value is true, the vlan list will be added or removed. Otherwise, it is the final result.
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.	N/A

## VLAN/HybridInterfaces

This table contains information about Hybrid ports.

## XML structure

```
<VLAN>
  <HybridInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <UntaggedVlanList></UntaggedVlanList>
      <TaggedVlanList></TaggedVlanList>
      <PVID></PVID>
    </Interface>
  </HybridInterfaces>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	HybridInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see Ifmgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
UntaggedVlanList	List of VLANs to which the port is assigned as an untagged VLAN member	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. Do not specify a VLAN both in this column and the <b>TaggedVlanList</b> column. The item is permitted to incremental edit. You can sign the flag like "<UntaggedVlanList base:incremental='true'>". If the value is true, the vlan list will be added or removed. Otherwise, it is the final result.
TaggedVlanList	List of VLANs to	N/A	Number string.	Example: 1,2,3,5-8,10-20.

Column name	Column description	Column type	Data type and restrictions	Remarks
	which the port is assigned as a tagged VLAN member		<p>It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range.</p> <p>The string cannot end with a comma or hyphen, or include any whitespace characters.</p> <p>By default, a port is not assigned to any VLANs as a tagged member.</p>	<p>Do not specify a VLAN both in this column and the <b>UntaggedVlanList</b> column.</p> <p>The item is permitted to incremental edit. You can sign the flag like "&lt;TaggedVlanList base:incremental='true'&gt;". If the value is true, the vlan list will be added or removed. Otherwise, it is the final result.</p>
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.	N/A

## VLAN/QinQ

This table contains QinQ information of all ports.

## XML structure

```

<VLAN>
  <QinQ>
    <ServiceTPID></ServiceTPID>
    <CustomerTPID></CustomerTPID>
  </QinQ>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	QinQ
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceTPID	TPID value in the service VLAN tag.	N/A	Unsigned integer. Value range: 1 to 65535.	Excluding the reserved EtherType

Column name	Column description	Column type	Data type and restrictions	Remarks
				values listed in <a href="#">Table 1</a> .
CustomerTPID	TPID value in the customer VLAN tag.	N/A	Unsigned integer. Value range: 1 to 65535.	Excluding the reserved EtherType values listed in <a href="#">Table 1</a> .

**Table 1 Reserved EtherType values**

Protocol type	Value
ARP	2054
PUP	512
RARP	32821
IP	2048
IPv6	34525
PPPoE	34915/34916
MPLS	34887/34888
IPX/SPX	33079
IS-IS	32768
LACP	34825
LLDP	35020
802.1X	34958
802.1ag	35074
Cluster	34983
Reserved	65533/65534/65535

## VLAN/QinQPorts

This table contains QinQ information for a port.

### XML structure

```

<VLAN>
  <QinQPorts>
    <Interface>
      <IfIndex></IfIndex>
      <QinQ></QinQ>
      <ServiceTPID></ServiceTPID>
      <CustomerTPID></CustomerTPID>
      <TransVlanList></TransVlanList>
    </Interface>
  </QinQPorts>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	QinQPorts
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see Ifmgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
QinQ	Whether QinQ is enabled on the port.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
ServiceTPID	TPID value in the service VLAN tag on the port.	N/A	Unsigned integer. Value range: 1 to 65535.	Excluding the reserved EtherType values listed in <a href="#">Table 1</a> .
CustomerTPID	TPID value in the customer VLAN tag on the port.	N/A	Unsigned integer. Value range: 1 to 65535.	Excluding the reserved EtherType values listed in <a href="#">Table 1</a> .
TransVlanList	List of transparent VLANs on the port.	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20.  This VLANs cannot exist in CustomerOuterVlan on table VLAN/VLANMapping.

# VLAN/VLANnetworkNto1mapping

This table contains network-side many-to-one VLAN mapping information.

## XML structure

```
<VLAN>
  <VLANnetworkNto1mapping>
    <Interface>
      <IfIndex></IfIndex>
      <NNI></NNI>
    </Interface>
  </VLANnetworkNto1mapping>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	VLANnetworkNto1mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
			•	
			•	
NNI	Whether the network-side interface for VLAN mapping is enabled on the port.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A

# VLAN/VLAN1to1mapping

This table contains VLAN one-to-one mapping information.

## XML structure

```
<VLAN>
  <VLAN1to1mapping>
    <Interface>
      <IfIndex></IfIndex>
      <OriginalVlan></OriginalVlan>
      <TranslatedVlan></TranslatedVlan>
    </Interface>
  </VLAN1to1mapping>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	VLAN1to1mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OriginalVlan	Original VLAN for one to one VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
TranslatedVlan	Translated VLAN for one to one mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A



# VLAN/VLANUserNto1mapping

This table contains user-side many-to-one VLAN mapping information.

## XML structure

```
<VLAN>
  <VLANUserNto1mapping>
    <Interface>
      <IfIndex></IfIndex>
      <OriginalStartVlan></OriginalStartVlan>
      <OriginalEndVlan></OriginalEndVlan>
      <TranslatedVlan></TranslatedVlan>
    </Interface>
  </VLANUserNto1mapping>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	VLANUserNto1mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OriginalStartVlan	Start VLAN of the original VLAN for many-to-one VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.

Column name	Column description	Column type	Data type and restrictions	Remarks
Original EndVlan	End VLAN of the original VLAN for many-to-one VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
TranslatedVlan	Translated VLAN for many-to-one VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.

## VLAN/VLAN1to2mapping

This table contains one-to-two VLAN mapping information.

### XML structure

```

<VLAN>
  <VLAN1to2mapping>
    <Interface>
      <IfIndex></IfIndex>
      <CustomerStartVlan></CustomerStartVlan>
      <CustomerEndVlan></CustomerEndVlan>
      <NestedVlan></NestedVlan>
    </Interface>
  </VLAN1to2mapping>
</VLAN>

```

### Table description

Item	Description
Feature name	VLAN
Table name	VLAN1To2mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant

Column name	Column description	Column type	Data type and restrictions	Remarks
				information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
CustomerStartVlan	Start VLAN of the customer VLAN for one-to-two vlan mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
CustomerEndVlan	End VLAN of the customer VLAN for one-to-two VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A
NestedVlan	Nest VLAN for one-to-two VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.

## VLAN/VLAN2to2mapping

This table contains VLAN two-to-two VLAN mapping information.

### XML structure

```

<VLAN>
  <VLAN2to2mapping>
    <Interface>
      <IfIndex></IfIndex>
      <OuterVlan></OuterVlan>
      <InnerVlan></InnerVlan>
      <TranslatedOuterVlan></TranslatedOuterVlan>
      <TranslatedInnerVlan></TranslatedInnerVlan>
    </Interface>
  </VLAN2to2mapping>
</VLAN>

```

### Table description

Item	Description
Feature name	VLAN
Table name	VLAN2to2mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

Item	Description
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OuterVlan	Outer VLAN for two-to-two VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
InnerVlan	Inner VLAN for two-to-two VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
TranslatedOuterVlan	Translated outer VLAN for two-to-two VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.
TranslatedInnerVlan	Translated inner VLAN for two-to-two VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.

## VLAN/VLAN0to2mapping

This table contains zero-to-two VLAN mapping information.

## XML structure

```

<VLAN>
  <VLAN0to2mapping>
    <Interface>
      <IfIndex></IfIndex>
      <ServiceOuterVlan></ServiceOuterVlan>
      <ServiceInnerVlan></ServiceInnerVlan>
    </Interface>
  </VLAN0to2mapping>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	VLAN0to2mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
ServiceOuterVlan	Outer service VLAN for zero-to-two VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.
ServiceInnerVlan	Inner service VLAN for zero-to-two VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.

## VLAN/VLAN2to3mapping

This table contains two-to-three VLAN mapping information.

## XML structure

```
<VLAN>
  <VLAN2to3mapping>
    <Interface>
      <IfIndex></IfIndex>
      <OuterStartVlan></OuterStartVlan>
      <OuterEndVlan></OuterEndVlan>
      <InnerStartVlan></InnerStartVlan>
      <InnerEndVlan></InnerEndVlan>
      <NestedVlan></NestedVlan>
```

```

    </Interface>
  </VLAN2to3mapping>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	VLAN2to3mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OuterStartVlan	Start VLAN of the outer VLAN for two-to-three VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
OuterEndVlan	End VLAN of the outer VLAN for two-to-three VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A
InnerStartVlan	Start VLAN of the inner vlan for two-to-three VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
InnerEndVlan	End VLAN of the inner VLAN for two-to-three VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
NestedVlan	Nest VLAN for two-to-three VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.

# VLAN/VoiceInfo

This table contains voice VLAN information.

## XML structure

```
<VLAN>
  <VoiceInfo>
    <AgingTime></AgingTime>
    <LLDPTrack></LLDPTrack>
    <Mode></Mode>
  </VoiceInfo>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	VoiceInfo
Table type	Single-instance table
Row name	N/A
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AgingTime	Voice VLAN aging time.	N/A	Unsigned integer, in minutes. Value range: 5 to 43200 minutes.	By default, the aging time is 1440 minutes.
LLDPTrack	Whether LLDP is enabled for automatic IP phone discovery.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
Mode	Voice VLAN security mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>1—Security.</b></li><li>• <b>2—Normal.</b></li></ul>	By default, the voice VLAN security mode is enabled.

# VLAN/VoiceOUI

This table contains voice VLAN OUI address information.

## XML structure

```
<VLAN>
  <VoiceOUI>
    <OUI>
      <Address></Address>
      <Mask></Mask>
      <Description></Description>
    </OUI>
  </VoiceOUI>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	VoiceOUI
Table type	Multi-instance table
Row name	OUI
Restrictions	This table does not support merge, replace, remove operations.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Source MAC address of voice traffic	Index	Six groups of two hexadecimal digits, hyphen-separated.	For example, 12-34-12-34-12-34.
Mask	Valid length of the OUI address by a mask.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	The mask contains consecutive 1s and 0s. For example, FF-FF-00-00-00-00.
Description	OUI address description.	N/A	Case-sensitive string of 1 to 30 characters.	N/A

## VLAN/VoicePorts

This table contains voice VLAN information for a port.

## XML structure

```
<VLAN>
  <VoicePorts>
    <Interface>
      <IfIndex></IfIndex>
```



```

    <Vlan></Vlan>
    <Mode></Mode>
    <QoS>
      <Trust></Trust>
      <CoS></CoS>
      <DSCP></DSCP>
    </QoS>
  </Interface>
</VoicePorts>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	VoicePorts
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see Ifmgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Vlan	Voice VLAN ID on the port.	N/A	Unsigned integer. Value range: 2 to 4094	Valid only on a hybrid or trunk port operating in automatic voice VLAN assignment mode.
Mode	Voice VLAN assignment mode on the port.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Automatic.</li> <li>2—Manual.</li> </ul>	By default, a port operates in automatic voice VLAN assignment mode.
QoS	QoS information of voice VLAN on the port.	N/A	Include: <ul style="list-style-type: none"> <li><b>Trust.</b></li> <li><b>CoS.</b></li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li><b>DSCP.</b></li> </ul>	
Trust	Whether the QoS priority settings is trusted for incoming voice VLAN packets.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	When a port trusts the QoS priority settings in incoming voice VLAN packets, the port does not modify their CoS and DSCP values.
CoS	CoS value for incoming voice VLAN packets on the port.	N/A	Unsigned integer. Value range: 0 to 7	Valid only when the Trust label above is false. The value is 6 by default.
DSCP	DSCP value for incoming voice VLAN packets on the port.	N/A	Unsigned integer. Value range: 0 to 63	Valid only when the Trust label above is false,. The value is 46 by default.

## VLAN/MACPorts

This table contains MAC-based VLAN information for a port.

### XML structure

```

<VLAN>
  <MACPorts>
    <Interface>
      <IfIndex></IfIndex>
      <MACVlanEnable></MACVlanEnable>
      <MACVlanTriggerEnable></MACVlanTriggerEnable>
    </Interface>
  </MACPorts>
</VLAN>

```

### Table description

Item	Description
Feature name	VLAN
Table name	MACPorts
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only ports where MAC-based VLAN can be configured are included.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
MACVlanEnable	MAC-based vlan enable on the port.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Disable.</li> <li>2—Enable.</li> </ul>	N/A
MACVlanTrigger Enable	MAC-based vlan Trigger enable on the port.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Disable.</li> <li>2—Enable.</li> </ul>	N/A

# Contents

VLAN.....	1
VLAN/VLANs .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
VLAN/Interfaces .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
VLAN/AccessInterfaces .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
VLAN/TrunkInterfaces .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
VLAN/HybridInterfaces .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
VLAN/QinQ .....	8
XML structure .....	9
Table description .....	9
Columns .....	9
VLAN/QinQPorts .....	9
XML structure .....	9
Table description .....	10
Columns .....	10
VLAN/QinQCapabilities .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
VLAN/VLANnetworkNto1mapping .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
VLAN/VLAN1to1mapping .....	13
XML structure .....	13
Table description .....	13
Columns .....	13
VLAN/VLANUserNto1mapping .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
VLAN/VLAN1to2mapping .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
VLAN/VLAN2to2mapping .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
VLAN/VLAN0to2mapping .....	17
XML structure .....	17
Table description .....	18
Columns .....	18

VLAN/VLAN2to3mapping .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
VLAN/VoiceInfo .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
VLAN/VoiceOUI .....	21
XML structure .....	21
Table description .....	21
Columns .....	21
VLAN/VoicePorts .....	21
XML structure .....	22
Table description .....	22
Columns .....	22
VLAN/MACPorts .....	23
XML structure .....	23
Table description .....	23
Columns .....	24

# VLAN

## VLAN/VLANs

This table contains basic VLAN information.

### XML structure

```
<VLAN>
  <VLANs>
    <VLANID>
      <ID></ID>
      <Description></Description>
      <Name></Name>
      <RouteIfIndex></RouteIfIndex>
      <UntaggedPortList></UntaggedPortList>
      <TaggedPortList></TaggedPortList>
      <AccessPortList></AccessPortList>
      <Ipv4>
        <Ipv4Address></Ipv4Address>
        <Ipv4Mask></Ipv4Mask>
      </Ipv4>
      <Shared></Shared>
    </VLANID>
  </VLANs>
</VLAN>
```

### Table description

Item	Description
Feature name	VLAN
Table name	VLANs
Table type	Multi-instance table
Row name	VLANID
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
Description	VLAN description	N/A	String.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 255 characters.	
Name	VLAN name	N/A	String. Length: 1 to 32 characters.	N/A
RoutelIndex	VLAN interface index	N/A	Unsigned integer.	This column is not displayed if the VLAN interface does not exist.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
UntaggedPortList	List of ports that are assigned to the VLAN as untagged VLAN members	N/A	Number string.  It is a comma-separated list of port index items. An item can be an individual port index or a port index range. Use a hyphen (-) to separate the start and end port indexes of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20.  Available port indexes are in the PortIndex column in the Ifmgr/Interfaces table.  These ports forward traffic with the VLAN tag removed.
TaggedPortList	List of ports that are assigned to the VLAN as tagged VLAN members	N/A	Number string.  It is a comma-separated list of port index items. An item can be an individual port index or a port index range. Use a hyphen (-) to separate the start and end port indexes of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20.  Available port indexes are in the PortIndex column in the Ifmgr/Interfaces table.  These ports forward traffic without removing the VLAN tag.
AccessPortList	Access port list of the VLAN	N/A	Number string.  It is a comma-separated list of port index items. An item can be an individual port index or a port index range. Use a hyphen (-) to separate the start and end port indexes of a range.	Example: 1,2,3,5-8,10-20.  Available port indexes are in the PortIndex column in the Ifmgr/Interfaces table.

Column name	Column description	Column type	Data type and restrictions	Remarks
			The string cannot end with a comma or hyphen, or include any whitespace characters. By default, a VLAN does not have an access port list.	
Ipv4	IPv4 address of the VLAN interface	Data structure	Members include: <ul style="list-style-type: none"> <li>Ipv4Address.</li> <li>Ipv4Mask.</li> </ul>	You must configure both the IP address and mask if the operation is <b>merge</b> , <b>create</b> , or <b>replace</b> . You can configure only the IP address if the operation is <b>delete</b> or <b>remove</b> .
Ipv4Address	IPv4 address of the VLAN interface	N/A	String, dotted decimal notation.	Example: 1.1.1.1. When you perform the <b>merge</b> , <b>create</b> , or <b>replace</b> operation, the system creates the VLAN interface automatically if the VLAN interface has not been created.
Ipv4Mask	IPv4 address mask	N/A	String, dotted decimal notation.	Example: 55.255.255.0.
Shared	Whether the VLAN is shared	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A

## VLAN/Interfaces

This table contains VLAN information for a port.

## XML structure

```

<VLAN>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Name></Name>
      <LinkType></LinkType>
      <PVID></PVID>
      <UntaggedVlanList></UntaggedVlanList>
      <TaggedVlanList></TaggedVlanList>
      <PermitVlanList></PermitVlanList>
    </Interface>
  </Interfaces>

```



</VLAN>

## Table description

Item	Description
Feature name	VLAN
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Name	Full name of the interface, including the interface type and number	N/A	String. Length: 2 to 47 characters.	N/A
LinkType	Port link type	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—Access.</li><li>• 2—Trunk.</li><li>• 3—Hybrid.</li></ul>	N/A
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.	N/A
UntaggedVlanList	List of VLANs to which the port is assigned as an untagged VLAN member	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20.

Column name	Column description	Column type	Data type and restrictions	Remarks
TaggedVlanList	List of VLANs to which the port is assigned as a tagged VLAN member	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. The column is available only for trunk and hybrid ports.
PermitVlanList	List of permitted VLANs on the port	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20. The column is available only for trunk ports.

## VLAN/AccessInterfaces

This table contains information about Access ports.

### XML structure

```

<VLAN>
  <AccessInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <PVID></PVID>
    </Interface>
  </AccessInterfaces>
</VLAN>

```

### Table description

Item	Description
Feature name	VLAN
Table name	AccessInterfaces
Table type	Multi-instance table
Row name	Interface

Item	Description
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.	N/A

## VLAN/TrunkInterfaces

This table contains information about Trunk ports.

## XML structure

```

<VLAN>
  <TrunkInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <PermitVlanList></PermitVlanList>
      <PVID></PVID>
    </Interface>
  </TrunkInterfaces>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	TrunkInterfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
PermitVlanList	List of permitted VLANs on the port	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range.  The string cannot end with a comma or hyphen, or include any whitespace characters.	N/A
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.	N/A

## VLAN/HybridInterfaces

This table contains information about Hybrid ports.

## XML structure

```

<VLAN>
  <HybridInterfaces>
    <Interface>
      <IfIndex></IfIndex>
      <UntaggedVlanList></UntaggedVlanList>
      <TaggedVlanList></TaggedVlanList>
      <PVID></PVID>
    </Interface>
  </HybridInterfaces>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	HybridInterfaces

Item	Description
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
UntaggedVlanList	List of VLANs to which the port is assigned as an untagged VLAN member	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	N/A
TaggedVlanList	List of VLANs to which the port is assigned as a tagged VLAN member	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters. By default, a port is not assigned to any VLANs as a tagged member.	N/A
PVID	Port VLAN ID	N/A	Value range: 1 to 4094.	N/A

## VLAN/QinQ

This table contains QinQ information of all ports.

## XML structure

```
<VLAN>
  <QinQ>
    <ServiceTPID></ServiceTPID>
    <CustomerTPID></CustomerTPID>
  </QinQ>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	QinQ
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceTPID	TPID value in the service VLAN tag.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
CustomerTPID	TPID value in the customer VLAN tag.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

## VLAN/QinQPorts

This table contains QinQ information for a port.

## XML structure

```
<VLAN>
  <QinQPorts>
    <Interface>
      <IfIndex></IfIndex>
      <QinQ></QinQ>
      <ServiceTPID></ServiceTPID>
      <CustomerTPID></CustomerTPID>
      <TransVlanList></TransVlanList>
    </Interface>
  </QinQPorts>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	QinQPorts
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
QinQ	Whether QinQ is enabled on the port.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A
ServiceTPID	The TPID value in the service VLAN tag on the port.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
CustomerTPID	The TPID value in the customer VLAN tag on the port.	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
TransVlanList	List of transparent VLANs on the port.	N/A	Number string. It is a comma-separated list of VLAN items. An item can be an individual VLAN ID or a VLAN ID range. Use a hyphen (-) to separate the start and end VLANs of a range. The string cannot end with a comma or hyphen, or include any whitespace characters.	Example: 1,2,3,5-8,10-20.  This VLANs cannot exist in CustomerOuterVlan on table VLAN/VLANMapping.

# VLAN/QinQCapabilities

This table contains QinQ capabilities information.

## XML structure

```
<VLAN>
  <QinQCapabilities>
    <GlobalServiceTPID></GlobalServiceTPID>
    <GlobalCustomerTPID></GlobalCustomerTPID>
    <QinQState></QinQState>
    <ServiceTPID></ServiceTPID>
    <CustomerTPID></CustomerTPID>
    <TransVlan></TransVlan>
  </QinQCapabilities>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	QinQCapabilities
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GlobalServiceTPID	Whether service TPID for all interfaces can be configured.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
GlobalCustomerTPID	Whether customer TPID for all interfaces can be configured.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
QinQState	Whether QinQ state can be configured on ports.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
ServiceTPID	Whether service TPID can be configured on ports.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
CustomerTPID	Whether customer TPID can be	N/A	Boolean:	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	configured on ports.		<ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	
TransVlan	Whether transparent VLAN can be configured on ports.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## VLAN/VLANnetworkNto1mapping

This table contains network-side many-to-one VLAN mapping information.

### XML structure

```

<VLAN>
  <VLANnetworkNto1mapping>
    <Interface>
      <IfIndex></IfIndex>
      <NNI></NNI>
    </Interface>
  </VLANnetworkNto1mapping>
</VLAN>

```

### Table description

Item	Description
Feature name	VLAN
Table name	VLANnetworkNto1mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration

Column name	Column description	Column type	Data type and restrictions	Remarks
				Reference.
NNI	Whether the network-side interface for many-to-one VLAN mapping is enabled on the port.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	N/A

## VLAN/VLAN1to1mapping

This table contains one-to-one VLAN mapping information.

## XML structure

```

<VLAN>
  <VLAN1to1mapping>
    <Interface>
      <IfIndex></IfIndex>
      <OriginalVlan></OriginalVlan>
      <TranslatedVlan></TranslatedVlan>
    </Interface>
  </VLAN1to1mapping>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	VLAN1to1mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr

Column name	Column description	Column type	Data type and restrictions	Remarks
				NETCONF XML API Configuration Reference.
OriginalVlan	Original VLAN for one to one VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
TranslatedVlan	Translated VLAN for one to one mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A

## VLAN/VLANUserNto1mapping

This table contains user-side many-to-one VLAN mapping information.

### XML structure

```

<VLAN>
  <VLANUserNto1mapping>
    <Interface>
      <IfIndex></IfIndex>
      <OriginalStartVlan></OriginalStartVlan>
      <OriginalEndVlan></OriginalEndVlan>
      <TranslatedVlan></TranslatedVlan>
    </Interface>
  </VLANUserNto1mapping>
</VLAN>

```

### Table description

Item	Description
Feature name	VLAN
Table name	VLANUserNto1mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of

Column name	Column description	Column type	Data type and restrictions	Remarks
				your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OriginalStartVlan	Start VLAN of the original VLAN for many-to-one VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
OriginalEndVlan	End VLAN of the original VLAN for many-to-one VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
TranslatedVlan	Translated VLAN for many-to-one VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.

## VLAN/VLAN1to2mapping

This table contains one-to-two VLAN mapping information.

### XML structure

```

<VLAN>
  <VLAN1to2mapping>
    <Interface>
      <IfIndex></IfIndex>
      <CustomerStartVlan></CustomerStartVlan>
      <CustomerEndVlan></CustomerEndVlan>
      <NestedVlan></NestedVlan>
    </Interface>
  </VLAN1to2mapping>
</VLAN>

```

### Table description

Item	Description
Feature name	VLAN
Table name	VLAN1to2mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
CustomerStartVlan	Start VLAN of the customer VLAN for one-to-two vlan mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
CustomerEndVlan	End VLAN of the customer VLAN for one-to-two VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A
NestedVlan	Nest VLAN for one-to-two VLAN mapping .	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.

## VLAN/VLAN2to2mapping

This table contains two-to-two VLAN mapping information.

## XML structure

```

<VLAN>
  <VLAN2to2mapping>
    <Interface>
      <IfIndex></IfIndex>
      <OuterVlan></OuterVlan>
      <InnerVlan></InnerVlan>
      <TranslatedOuterVlan></TranslatedOuterVlan>
      <TranslatedInnerVlan></TranslatedInnerVlan>
    </Interface>
  </VLAN2to2mapping>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN

Item	Description
Table name	VLAN2to2mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OuterVlan	Outer VLAN for two-to-two VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
InnerVlan	Inner VLAN for two-to-two VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
TranslatedOuterVlan	Translated outer VLAN for two-to-two VLAN mapping .	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.
TranslatedInnerVlan	Translated inner VLAN for two-to-two VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.

## VLAN/VLAN0to2mapping

This table contains zero-to-two VLAN mapping information.

## XML structure

```

<VLAN>
  <VLAN0to2mapping>
    <Interface>
      <IfIndex></IfIndex>
      <ServiceOuterVlan></ServiceOuterVlan>
      <ServiceInnerVlan></ServiceInnerVlan>
    </Interface>
  </VLAN0to2mapping>

```

</VLAN>

## Table description

Item	Description
Feature name	VLAN
Table name	VLAN0to2mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
ServiceOuterVlan	Outer service VLAN for zero-to-two VLAN mapping .	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.
ServiceInnerVlan	Inner service VLAN for zero-to-two VLAN mapping.	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.

## VLAN/VLAN2to3mapping

This table contains two-to-three VLAN mapping information.

## XML structure

```
<VLAN>
  <VLAN2to3mapping>
    <Interface>
      <IfIndex></IfIndex>
      <OuterStartVlan></OuterStartVlan>
      <OuterEndVlan></OuterEndVlan>
      <InnerStartVlan></InnerStartVlan>
```

```

    <InnerEndVlan></InnerEndVlan>
    <NestedVlan></NestedVlan>
  </Interface>
</VLAN2to3mapping>
</VLAN>

```

## Table description

Item	Description
Feature name	VLAN
Table name	VLAN2to3mapping
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
OuterStartVlan	Start VLAN of the outer VLAN for two-to-three VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
OuterEndVlan	End VLAN of the outer VLAN for two-to-three VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
InnerStartVlan	Start VLAN of the inner VLAN for two-to-three VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
InnerEndVlan	End VLAN of the inner VLAN for two-to-three VLAN mapping.	Index	Unsigned integer. Value range: 1 to 4094.	N/A.
NestedVlan	Nest VLAN for two-to-three VLAN mapping .	N/A	Unsigned integer. Value range: 1 to 4094.	N/A.



# VLAN/VoiceInfo

This table contains voice VLAN basic information.

## XML structure

```
<VLAN>
  <VoiceInfo>
    <AgingTime></AgingTime>
    <LLDPTrack></LLDPTrack>
    <Mode></Mode>
    <CurNum></CurNum>
  </VoiceInfo>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	VoiceInfo
Table type	Single-instance table
Row name	N/A
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AgingTime	Voice VLAN aging time.	N/A	Unsigned integer, in minutes. Value range: 5 to 43200 minutes.	By default, the aging time is 1440 minutes.
LLDPTrack	Whether LLDP is enabled for automatic IP phone discovery.	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b></li><li>• <b>false</b></li></ul>	N/A
Mode	Voice VLAN security mode.	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>1—Security</b></li><li>• <b>2—Normal</b></li></ul>	By default, the voice VLAN security mode is enabled.
CurNum	Number of existing voice VLANs.	N/A	Unsigned integer.	N/A

# VLAN/VoiceOUI

This table contains voice VLAN OUI address information.

## XML structure

```
<VLAN>
  <VoiceOUI>
    <OUI>
      <Address></Address>
      <Mask></Mask>
      <Description></Description>
    </OUI>
  </VoiceOUI>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	VoiceOUI
Table type	Multi-instance table
Row name	OUI
Restrictions	N/A

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Address	Source MAC address of voice traffic	Index	Six groups of two hexadecimal digits, hyphen-separated.	For example, 1234-1234-1234.
Mask	Valid length of the OUI address by a mask.	N/A	Six groups of two hexadecimal digits, hyphen-separated.	The mask contains consecutive 1s and 0s. For example, FFFF-0000-0000.
Description	OUI address description.	N/A	Case-sensitive string of 1 to 30 characters.	N/A

# VLAN/VoicePorts

This table contains voice VLAN information for a port.

## XML structure

```
<VLAN>
  <VoicePorts>
    <Interface>
      <IfIndex></IfIndex>
      <Vlan></Vlan>
      <Mode></Mode>
      <QoS>
        <Trust></Trust>
        <CoS></CoS>
        <DSCP></DSCP>
      </QoS>
    </Interface>
  </VoicePorts>
</VLAN>
```

## Table description

Item	Description
Feature name	VLAN
Table name	VoicePorts
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only includes ports where voice VLAN can be configured. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Vlan	Voice VLAN ID on the port.	N/A	Unsigned integer. Value range: 2 to 4094	Valid only on a hybrid or trunk port operating in automatic voice

Column name	Column description	Column type	Data type and restrictions	Remarks
				VLAN assignment mode.
Mode	Voice VLAN assignment mode on the port.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Automatic.</li> <li>2—Manual.</li> </ul>	By default, a port operates in automatic voice VLAN assignment mode.
QoS	QoS information of voice VLAN on the port.	N/A	Include: <ul style="list-style-type: none"> <li><b>Trust.</b></li> <li><b>CoS.</b></li> <li><b>DSCP.</b></li> </ul>	N/A
Trust	Whether the QoS priority settings is trusted for incoming voice VLAN packets.	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>	When a port trusts the QoS priority settings in incoming voice VLAN packets, the port does not modify their CoS and DSCP values.
CoS	CoS value for incoming voice VLAN packets on the port.	N/A	Unsigned integer. Value range: 0 to 7	Valid only when the Trust label above is false. The value is 6 by default.
DSCP	The DSCP values for incoming voice VLAN packets on the port.	N/A	Unsigned integer. Value range: 0 to 63	Valid only when the Trust label above is false. The value is 46 by default.

## VLAN/MACPorts

This table contains MAC-based VLAN information for a port.

### XML structure

```

<VLAN>
  <MACPorts>
    <Interface>
      <IfIndex></IfIndex>
      <MACVlanEnable></MACVlanEnable>
      <MACVlanTriggerEnable></MACVlanTriggerEnable>
    </Interface>
  </MACPorts>
</VLAN>

```

### Table description

Item	Description
Feature name	VLAN

Item	Description
Table name	MACPorts
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Only ports where MAC-based VLAN can be configured are included.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
MacVlanEnable	MAC-based vlan enable on the port.	N/A	Enumeration: • 1—Disable. • 2—Enable.	N/A
MACVlanTrigger Enable	MAC-based vlan Trigger enable on the port.	N/A	Enumeration: • 1—Disable. • 2—Enable.	N/A

Vlan ..... 2

    Vlan/Vlans ..... 2

    Vlan/AccessInterfaces ..... 5

    Vlan/VoiceInfo ..... 6

    Vlan/VoiceOUI ..... 6

    Vlan/VoicePorts ..... 7

    Vlan/VLANMapping ..... 9

    Vlan/QinQ ..... 13

# Vlan

## Vlan/Vlans

Message	Explanation
Please set the link type of the port to access first. 请先把接口链路类型改成Access。	During executing merge operation for vlan type of interfaces info table, please set the link type of the port to access first. 在对接口信息表的 vlan type 进行 Merge 操作时, 请先把接口链路类型改成 Access。
The VLAN doesn't support the operation. 该VLAN不支持当前操作。	During executing merge operation for vlan type of interfaces info table, the VLAN doesn't support it. 在对接口信息表的 vlan type 进行 Merge 操作时, 该 VLAN 不支持当前操作。
Can't change the link type of %s because it is not an access port. 不能更改%s的链路类型因为它当前不是 Access 端口。	During executing merge operation for vlan type of interfaces info table, it can't change the link type because it is not an access port. 在对接口信息表的 vlan type 进行 Merge 操作时, 不能更改该端口的链路类型因为它当前不是 Access 端口。
Failed to configure some VLANs. 部分VLAN设置失败。	During executing set operation for adding vlan for port by vlan list, it failed to configure some VLANs. 根据 vlanlist 对端口进行添加 vlan , 部分 VLAN 设置失败。
Can't assign ports to or remove ports from the default VLAN. 不能向缺省VLAN添加或者删除端口。	During executing merge operation for port range of vlan info table, it can't assign ports to or remove ports from the default VLAN. 对 vlan 信息表的 portrange 字段进行 merge 操作时, 不能向缺省 VLAN 添加或者删除端口。
Invalid IP address or subnet mask. 无效IP地址或子网掩码。	During executing merge operation for IpInfo of vlan info table, the IP address or subnet mask is invalid. 对 vlan 信息表的 portrange 字段进行 merge 操作时, 无效 IP 地址或子网掩码。
The IP address you entered is in the same subnet as the IP address of another interface. 不同接口的IP地址不能在相同网段。	暂未引用

<p>The VLAN name already exists.</p> <p>VLAN名称已经存在。</p>	<p>During executing merge operation for vlan name of vlan info table, it already exists.</p> <p>对 vlan 信息表的 VlanName 字段进行 merge 操作时，VLAN 名称已经存在。</p>
<p>Cannot use the default name of another VLAN.</p> <p>不能配置成其它VLAN的默认VLAN名称。</p>	<p>During executing merge operation for vlan name of vlan info table, it cannot use the default name of another VLAN.</p> <p>对 vlan 信息表的 VlanName 字段进行 merge 操作时，不能配置成其它 VLAN 的默认 VLAN 名称。</p>
<p>The port %u doesn't exist.</p> <p>端口%u不存在。</p>	<p>During executing merge operation for port range of vlan info table, the port doesn't exist.</p> <p>对 vlan 信息表的 portrange 字段进行 merge 操作时，该端口不存在。</p>
<p>The port %u is not an access port.</p> <p>端口%u不是一个Access端口。</p>	<p>During executing merge operation for port range of vlan info table, the port is not an access port.</p> <p>对 vlan 信息表的 portrange 字段进行 merge 操作时，该端口不是一个 Access 端口。</p>
<p>Allocated VLANs can't be set as the port PVID.</p> <p>已经被分配的VLAN不能设置成端口PVID。</p>	<p>During executing merge operation for port range of vlan info table, allocated VLANs can't be set as the port PVID.</p> <p>对 vlan 信息表的 portrange 字段进行 merge 操作时，已经被分配的 VLAN 不能设置成端口 PVID。</p>
<p>Maximum number of addresses on the interface already reached.</p> <p>接口下的已配置的地址数达到上限。</p>	<p>During executing merge operation for IpInfo of vlan info table, the maximum number of addresses on the interface already reached.</p> <p>对 vlan 信息表的 IpInfo 字段进行 merge 操作时，接口下的已配置的地址数达到上限。</p>
<p>Please configure the primary address first.</p> <p>请先配置主地址。</p>	<p>During executing merge operation for IpInfo of vlan info table, please configure the primary address first.</p> <p>对 vlan 信息表的 IpInfo 字段进行 merge 操作时，请先配置主地址。</p>
<p>Please delete secondary addresses first.</p> <p>请先删除从地址。</p>	<p>During executing merge operation for IpInfo of vlan info table, please delete secondary addresses first.</p> <p>对 vlan 信息表的 IpInfo 字段进行 merge 操作时，请先删除从地址。</p>
<p>Address types don't match.</p> <p>IP地址类型不匹配。</p>	<p>During executing merge operation for IpInfo of vlan info table, address types don't match.</p>



	对 vlan 信息表的 IpInfo 字段进行 merge 操作时, IP 地址类型不匹配。
The IP address doesn't exist. 该IP地址不存在。	During executing merge operation for IpInfo of vlan info table, the IP address doesn't exist. 对 vlan 信息表的 IpInfo 字段进行 merge 操作时, 该 IP 地址不存在。
Operation failed. 操作失败。	During executing merge operation for IpInfo of vlan info table, the operation failed. 对 vlan 信息表的 IpInfo 字段进行 merge 操作时, 操作失败。
This IP address has been assigned to another MDC. 该IP地址已经分配给其它MDC。	During executing merge operation for IpInfo of vlan info table, this IP address has been assigned to another MDC. 对 vlan 信息表的 IpInfo 字段进行 merge 操作时, 该 IP 地址已经分配给其它 MDC。
Can't change a primary IP address to a secondary IP address. 不能直接将主地址转成从地址。	During executing merge operation for IpInfo of vlan info table, it can't change a primary IP address to a secondary IP address. 对 vlan 信息表的 IpInfo 字段进行 merge 操作时, 不能直接将主地址转成从地址。
This address conflicts with the IP address of another interface. 与其他接口地址冲突。	During executing merge operation for IpInfo of vlan info table, this address conflicts with the IP address of another interface. 对 vlan 信息表的 IpInfo 字段进行 merge 操作时, 与其他接口地址冲突。
Operation is not supported. 操作不支持。	During executing set operation for voice-vlan qos, the operation is not supported. 对 vlan 信息表的 IpInfo 字段进行 merge 操作时, 操作不支持。
The VLAN doesn't exist. 该VLAN不存在。	During executing merge operation for vlans table, the VLAN doesn't exist. 在对 vlans 信息表进行 Merge 操作时, 该 VLAN 不存在。
MAC VLAN can be enabled on only hybrid ports. MAC VLAN 功能仅支持在 Hybrid 端口上配置。	During executing set operation for mac ports table, MAC VLAN can be enabled on only hybrid ports. 在对 mac ports 表进行设置操作时, MAC VLAN 功能仅支持在 Hybrid 端口上配置。
Please disable MAC VLAN trigger first.	During executing set operation for mac ports table,

请先关闭端口上的 MAC VLAN 动态触发功能。	Please disable MAC VLAN trigger first. 在对 mac ports 表进行设置操作时，请先关闭端口上的 MAC VLAN 动态触发功能。
Operation is not supported. 端口不支持开启 MAC VLAN 功能。	During executing set operation for mac ports table, Operation is not supported. 在对 mac ports 表进行设置操作时，端口不支持开启 MAC VLAN 功能。
Cannot delete the system default VLAN. 无法删除系统默认 VLAN。	During executing set operation for vlans table, the system default VLAN cannot be deleted. 在对 VLAN 表进行设置操作时，不能删除系统默认 VLAN。

## Vlan/AccessInterfaces

Message	Explanation
The VLAN doesn't exist. 该VLAN不存在。	During executing merge operation for PVID of AccessInterfaces table, the VLAN doesn't exist. 在对 Access 接口信息表的 PVID 进行 Merge 操作时，该 VLAN 不存在。
This is not a hybrid port. 不是一个Hybrid端口。	During executing merge operation for PVID of AccessInterfaces table, this is not a hybrid port. 在对 Access 接口信息表的 PVID 进行 Merge 操作时，不是一个 Hybrid 端口。
This is not a trunk port. 不是一个Trunk端口。	During executing merge operation for PVID of AccessInterfaces table, this is not a trunk port. 在对 Access 接口信息表的 PVID 进行 Merge 操作时，不是一个 Trunk 端口。
This is not an access port. 不是一个Access端口。	During executing merge operation for PVID of AccessInterfaces table, this is not an access port. 在对 Access 接口信息表的 PVID 进行 Merge 操作时，不是一个 Access 端口。
The VLAN doesn't exist. 该VLAN不存在。	During executing merge operation for PVID of AccessInterfaces table, the VLAN doesn't exist. 在对 Access 接口信息表的 PVID 进行 Merge 操作时，该 VLAN 不存在。

## Vlan/VoiceInfo

Message	Explanation
Can't change the port mode because the port is assigned to the voice VLAN. 端口已加入语音VLAN，不能切换端口模式。	During executing set operation for mode of voice info table, it can't change the port mode because the port is assigned to the voice VLAN. 在对 Voice 信息表的 mode 进行设置操作时，该端口已加入语音 VLAN，故不能切换端口模式。
Can't change the port mode because the access port is enabled with the voice VLAN feature. Access端口已使能语音VLAN，不能切换端口模式。	During executing set operation for mode of voice info table, it can't change the port mode because the access port is enabled with the voice VLAN feature. 在对 Voice 信息表的 mode 进行设置操作时，Access 端口已使能语音 VLAN，不能切换端口模式。
Can't change the voice VLAN mode to security, because some ports in the VLAN don't support this mode. 不能更改语音VLAN为安全模式，因为一些端口不支持语音VLAN安全模式。	During executing set operation for mode of voice info table, it can't change the voice VLAN mode to security, because some ports in the VLAN don't support this mode. 在对 Voice 信息表的 mode 进行设置操作时，不能更改语音 VLAN 为安全模式，因为一些端口不支持语音 VLAN 安全模式。
Please create the VLAN first. 请先创建该VLAN。	During executing set operation for voice info table, please create the VLAN first. 在对 Voice 信息表进行设置操作时，请先创建该 VLAN。

## Vlan/VoiceOUI

Message	Explanation
Invalid MAC address. MAC地址不合法。	During executing set operation for address of voiceOUI table, the MAC address is invalid. 在对 VoiceOUI 信息表的 address 字段进行设置操作时，MAC 地址不合法。
Invalid OUI mask. OUI掩码错误。	During executing set operation for address of voiceOUI table, the OUI mask is invalid. 在对 VoiceOUI 信息表的 address 字段进行设置操作时，OUI 掩码错误。
Maximum number of OUI addresses already reached.	暂未引用

已到达OUI上限。	
The OUI address already exists. 本OUI地址已存在。	During executing set operation for address of voiceOUI table, the OUI address already exists. 在对 VoiceOUI 信息表的 address 字段进行设置操作时，本 OUI 地址已存在。
Not enough resources available. 资源不足。	During executing set operation for address of voiceOUI table, no enough resources are available. 在对 VoiceOUI 信息表的 address 字段进行设置操作时，资源不足。

## Vlan/VoicePorts

Message	Explanation
The VLAN is not a voice VLAN. 本VLAN不是语音VLAN。	During executing set operation for voice port table, the VLAN is not a voice VLAN. 在对 Voice port 信息表的进行设置操作时，本 VLAN 不是语音 VLAN。
Another voice VLAN has been enabled on this port. 本端口已经使能了另外一个语音VLAN。	During executing set operation for voice port table, another voice VLAN has been enabled on this port. 在对 Voice port 信息表的进行设置操作时，本端口已经使能了另外一个语音 VLAN。
Trunk and hybrid ports that are in automatic mode and enabled with the voice VLAN feature can't be added to or removed from the voice VLAN manually. 自动模式下，已使能了语音VLAN的Trunk或Hybrid端口不能手动加入、退出语音VLAN。	During executing set operation for voice port table, trunk and hybrid ports that are in automatic mode and enabled with the voice VLAN feature can't be added to or removed from the voice VLAN manually. 在对 Voice port 信息表的进行设置操作时，在自动模式下已使能了语音 VLAN 的 Trunk 或 Hybrid 端口不能手动加入、退出语音 VLAN。
Can't delete the voice VLAN. 语音VLAN不能删除。	暂未引用
Can't change the link type of trunk or hybrid ports that are enabled with the voice VLAN feature. 使能了语音VLAN的Trunk或Hybrid端口不能切换链路类型。	During executing set operation for vlan port table, it can't change the link type of trunk or hybrid ports that are enabled with the voice VLAN feature. 在对 Voice port 信息表的进行设置操作时，使能了语音 VLAN 的 Trunk 或 Hybrid 端口不能切换链路类型。
Can't configure QoS settings on ports	During executing set operation for voice port table, it

<p>that are enabled with the voice VLAN feature.</p> <p>使能了语音VLAN的端口不能设置QoS参数。</p>	<p>can't configure QoS settings on ports that are enabled with the voice VLAN feature.</p> <p>在对 Voice port 信息表的进行设置操作时，使能了语音 VLAN 的端口不能设置 QoS 参数。</p>
<p>Can't configure nonstatic VLANs as voice VLANs.</p> <p>非静态VLAN不能配置为语音VLAN。</p>	<p>During executing set operation for voice port table, it can't configure nonstatic VLANs as voice VLANs.</p> <p>在对 Voice port 信息表的进行设置操作时，非静态 VLAN 不能配置为语音 VLAN。</p>
<p>Parameter settings conflict.</p> <p>参数配置冲突。</p>	<p>During executing set operation for voice port table, parameter settings conflict.</p> <p>在对 voice port 信息表的 VLANID 进行 Merge 操作时，参数配置冲突。</p>
<p>Can't enable the automatic mode on an access port.</p> <p>Access端口不能配置为自动模式。</p>	<p>During executing set operation for voice port table, it can't enable the automatic mode on an access port.</p> <p>在对 voice port 信息表进行设置操作时，Access 端口不能配置为自动模式。</p>
<p>Can't enable the voice VLAN feature on trunk or hybrid ports that are operating in automatic mode and have been assigned to voice VLANs.</p> <p>自动模式下，已加入语音VLAN的Trunk或Hybrid端口不能使能语音VLAN。</p>	<p>During executing set operation for voice port table, it can't enable the voice VLAN feature on trunk or hybrid ports that are operating in automatic mode and have been assigned to voice VLANs.</p> <p>在对 voice port 信息表进行设置操作时，在自动模式下已加入语音 VLAN 的 Trunk 或 Hybrid 端口不能使能语音 VLAN。</p>
<p>Can't configure the system default VLAN as a voice VLAN.</p> <p>默认VLAN不能配置为语音VLAN。</p>	<p>During executing set operation for voice port table, it can't configure the system default VLAN as a voice VLAN.</p> <p>在对 voice port 信息表进行设置操作时，默认 VLAN 不能配置为语音 VLAN。</p>
<p>Super VLANs don't support the configuration.</p> <p>Super VLAN不支持该配置。</p>	<p>During executing set operation for voice port table, super VLANs don't support the configuration.</p> <p>在对 voice port 信息表进行设置操作时，Super VLAN 不支持该配置。</p>
<p>Can't configure protocol-based VLANs as voice VLANs.</p> <p>协议VLAN不能配置为语音VLAN。</p>	<p>During executing set operation for voice port table, can't configure protocol-based VLANs as voice VLANs.</p> <p>在对 voice port 信息表进行设置操作时，协议 VLAN 不能配置为语音 VLAN。</p>

# Vlan/VLANMapping

Message	Explanation
<p>Can't enable network-side many-to-one VLAN mapping on the port, because user-side many-to-one VLAN mapping has been enabled.</p> <p>接口已经配置了用户侧N:1 VLAN映射，不能再配置网络侧N:1 VLAN映射。</p>	<p>During executing set operation for VLAN Mapping table, can't enable network-side many-to-one VLAN mapping on the port, because user-side many-to-one VLAN mapping has been enabled.</p> <p>在对 VLAN Mapping 映射表的进行设置操作时，接口已经配置了用户侧 N:1 VLAN 映射，不能再配置网络侧 N:1 VLAN 映射。</p>
<p>Can't enable user-side many-to-one VLAN mapping on the port, because network-side many-to-one VLAN mapping has been enabled.</p> <p>接口已经配置了网络侧 N:1 VLAN 映射，不能再配置用户侧 N:1 VLAN 映射。</p>	<p>During executing set operation for VLAN Mapping table, can't enable user-side many-to-one VLAN mapping on the port, because network-side many-to-one VLAN mapping has been enabled.</p> <p>在对 VLAN Mapping 映射表的进行设置操作时，接口已经配置了网络侧 N:1 VLAN 映射，不能再配置用户侧 N:1 VLAN 映射。</p>
<p>The input translated or nested VLANs conflict with existing VLAN mapping entries on the interface.</p> <p>配置的转换后 VLAN 或添加的外层 VLAN 与接口已有 VLAN 映射表项冲突。</p>	<p>During executing set operation for VLAN Mapping table, the input translated or nested VLANs conflict with existing VLAN mapping entries on the interface.</p> <p>在对 VLAN Mapping 映射表的进行设置操作时，配置的转换后 VLAN 或添加的外层 VLAN 与接口已有 VLAN 映射表项冲突。</p>
<p>The input original VLANs conflict with existing VLAN mapping entries on the interface.</p> <p>配置的原始 VLAN 与接口已有 VLAN 映射表项冲突。</p>	<p>During executing set operation for VLAN Mapping table, the input original VLANs conflict with existing VLAN mapping entries on the interface.</p> <p>在对 VLAN Mapping 映射表的进行设置操作时，配置的原始 VLAN 与接口已有 VLAN 映射表项冲突。</p>
<p>The VLAN mapping configuration conflicts with QinQ transparent VLAN configuration on the interface.</p> <p>VLAN 映射的配置与接口上 QinQ 透传 VLAN 的配置冲突。</p>	<p>During executing set operation for VLAN Mapping table, the VLAN mapping configuration conflicts with QinQ transparent VLAN configuration on the interface.</p> <p>在对 VLAN Mapping 映射表的进行设置操作时，VLAN 映射的配置与接口上 QinQ 透传 VLAN 的配置冲突。</p>
<p>The configuration conflicts with QinQ configuration.</p> <p>配置与接口上 QinQ 的配置冲突。</p>	<p>During executing set operation for VLAN Mapping table, the configuration conflicts with QinQ configuration.</p> <p>在对 VLAN Mapping 映射表的进行设置操作时，配置与接口上 QinQ 的配置冲突。</p>
<p>Failed to remove VLAN mapping configuration from the interface. Please make sure the removed VLANs are in the</p>	<p>During executing set operation for VLAN Mapping table, failed to remove VLAN mapping configuration from the interface. Please make sure the removed VLANs are in</p>



configured VLAN range. 取消 VLAN 映射的配置失败，请检查指定的 VLAN 范围。	the configured VLAN range. 在对 VLAN Mapping 映射表的进行设置操作时，取消 VLAN 映射的配置失败，请检查指定的 VLAN 范围。
Configuration failed because of conflicts. 存在冲突，配置失败。	During executing set operation for VLAN Mapping table, configuration failed because of conflicts. 在对 VLAN Mapping 映射表的进行设置操作时，存在冲突，配置失败。
The operation is not supported on the port. 不支持本操作。	During executing set operation for VLAN Mapping table, the operation is not supported on the port. 在对 VLAN Mapping 映射表的进行设置操作时，不支持本操作。
Not enough resources for the operation on the interface. 硬件资源不足，配置失败。	During executing set operation for VLAN Mapping table, Not enough resources for the operation on the interface. 在对 VLAN Mapping 映射表的进行设置操作时，硬件资源不足，配置失败。
Can't execute the command multiple times on the interface. To modify the configuration, first remove the original configuration. 不支持多次执行本命令，请先取消原有配置后重新执行。	During executing set operation for VLAN Mapping table, can't execute the command multiple times on the interface. To modify the configuration, first remove the original configuration. 在对 VLAN Mapping 映射表的进行设置操作时，不支持多次执行本命令，请先取消原有配置后重新执行。
To modify the two-to-three VLAN mapping, first remove the original configuration. 接口上已经存在指定内、外层 VLAN ID 的 2:3 VLAN 映射表项，请先取消原有配置后重新执行。	During executing set operation for VLAN Mapping table, first remove the original configuration when to modify the two-to-three VLAN mapping. 在对 VLAN Mapping 映射表的进行设置操作时，接口上已经存在指定内、外层 VLAN ID 的 2:3 VLAN 映射表项，请先取消原有配置后重新执行。
Can't configure both two-to-three VLAN mapping and two-to-two VLAN mapping for the same double-tagged packets on the interface. 对于同一报文，不允许同时配置 2:2 VLAN 映射和 2:3 VLAN 映射。	During executing set operation for VLAN Mapping table, can't configure both two-to-three VLAN mapping and two-to-two VLAN mapping for the same double-tagged packets on the interface. 在对 VLAN Mapping 映射表的进行设置操作时，对于同一报文，不允许同时配置 2:2 VLAN 映射和 2:3 VLAN 映射。
Configuration failed on the interface. 配置失败。	During executing set operation for VLAN Mapping table, configuration failed on the interface. 在对 VLAN Mapping 映射表的进行设置操作时，配置失败。
Cannot map VLAN to itself. 不能映射成自己。	During executing set operation for VLAN Mapping table, cannot map VLAN to itself.

	在对 VLAN Mapping 映射表的进行设置操作时, 不能映射成自己。
<p>The end VLAN ID must be equal to or greater than the start VLAN ID.</p> <p>指定 VLAN 列表时, VLAN 范围的结束值必须大于等于起始值。</p>	<p>During executing check operation for VLAN range list , the end VLAN ID must be equal to or greater than the start VLAN ID.</p> <p>在对 VLAN range list 列表的进行检查操作时, VLAN 范围的结束值必须大于等于起始值。</p>
<p>The input original VLAN range(s) overlapped.</p> <p>输入的原始 VLAN 叠套了。</p>	<p>During executing check operation for CVLAN range cross , the input original VLAN range(s) overlapped.</p> <p>对 CVLAN range cross 的进行检查操作时, 输入的原始 VLAN 叠套了。</p>
<p>Please input both the inner and outer VLAN IDs.</p> <p>请同时输入为 Untagged 报文添加的外层 VLAN ID 和内层 VLAN ID。</p>	<p>During executing set operation for VLAN Mapping 0To2 table, please input both the inner and outer VLAN IDs.</p> <p>在对 VLAN Mapping 0To2 table 映射表的进行设置操作时, 请同时输入为 Untagged 报文添加的外层 VLAN ID 和内层 VLAN ID。</p>
<p>Invalid interface name or interface index.</p> <p>无效的接口名称或接口索引。</p>	暂未引用
<p>This operation is not supported on the interface.</p> <p>接口不支持本操作。</p>	<p>During executing set operation for VLAN Mapping 2To3 table, this operation is not supported on the interface.</p> <p>在对 VLAN Mapping 2To3 table 映射表的进行设置操作时, 接口不支持本操作。</p>
<p>Can't configure both an original outer VLAN ID range and an original inner VLAN ID range for the two-to-three VLAN mapping.</p> <p>配置 2:3 映射时, 原始内层 VLAN 和原始外层 VLAN 不允许都指定为 VLAN 列表。</p>	<p>During executing set operation for VLAN Mapping 2To3 table, can't configure both an original outer VLAN ID range and an original inner VLAN ID range for the two-to-three VLAN mapping.</p> <p>在对 VLAN Mapping 2To3 table 映射表的进行设置操作时, 原始内层 VLAN 和原始外层 VLAN 不允许都指定为 VLAN 列表。</p>
<p>Please input the original outer VLAN ID, the original inner VLAN ID, the translated outer VLAN ID, and the translated inner VLAN ID.</p> <p>配置 2:2VLAN 映射时, 请同时输入原始外层 VLAN ID、内层 VLAN ID 和转换后的外层 VLAN ID、内层 VLAN ID。</p>	<p>During executing set operation for VLAN Mapping 2To2 table, please input the original outer VLAN ID, the original inner VLAN ID, the translated outer VLAN ID, and the translated inner VLAN ID.</p> <p>在对 VLAN Mapping 2To2 table 映射表的进行设置操作时, 请同时输入原始外层 VLAN ID、内层 VLAN ID 和转换后的外层 VLAN ID、内层 VLAN ID。</p>
Please input the translated VLAN ID or nested	During executing set operation for VLAN Mapping



<p>VLAN ID.</p> <p>请输入转换后 VLAN 或添加的外层 VLAN。</p>	<p>1To1 or 1To2 table, please input the translated VLAN ID or nested VLAN ID.</p> <p>在对 VLAN Mapping 1To2 或者 1To2 table 映射表的进行设置操作时, 请输入转换后 VLAN 或添加的外层 VLAN。</p>
<p>Please input the original outer VLAN ID or VLAN ID range, original inner VLAN ID or VLAN ID range, and the nested VLAN ID.</p> <p>配置 2:3 VLAN 映射时, 请同时输入原始外层 VLAN ID 或 VLAN 列表、原始内层 VLAN ID 或 VLAN 列表和添加的 VLAN ID。</p>	<p>During executing set operation for VLAN Mapping 2To3 table, please input the original outer VLAN ID or VLAN ID range, original inner VLAN ID or VLAN ID range, and the nested VLAN ID.</p> <p>在对 VLAN Mapping 2To3 table 映射表的进行设置操作时, 请同时输入原始外层 VLAN ID 或 VLAN 列表、原始内层 VLAN ID 或 VLAN 列表和添加的 VLAN ID。</p>
<p>Please input the original VLAN ID or VLAN ID range, and the translated VLAN ID.</p> <p>配置用户侧 N:1 VLAN 映射时, 请同时输入原始 VLAN ID 或 VLAN 列表和转换后 VLAN ID。</p>	<p>During executing set operation for VLAN Mapping NTo1 table, please input the original VLAN ID or VLAN ID range, and the translated VLAN ID.</p> <p>在对 VLAN Mapping NTo1 table 映射表的进行设置操作时, 请同时输入原始 VLAN ID 或 VLAN 列表和转换后 VLAN ID。</p>
<p>Please specify both the TranslatedOuterVlan label and the TranslatedInnerVlan label, or specify none of them.</p> <p>请同时指定 TranslatedOuterVlan 标签和 TranslatedInnerVlan 标签, 或同时都不指定这两个标签。</p>	<p>During executing set operation for VLAN Mapping 2To2 table, please specify both the TranslatedOuterVlan label and the TranslatedInnerVlan label, or specify none of them.</p> <p>在对 VLAN Mapping 2To2 table 映射表的进行设置操作时, 请同时指定 TranslatedOuterVlan 标签和 TranslatedInnerVlan 标签, 或同时都不指定这两个标签。</p>
<p>Please specify both the ServiceOuterVlan label and the ServiceInnerVlan label, or specify none of them.</p> <p>请同时指定 ServiceOuterVlan 标签和 ServiceInnerVlan。</p>	<p>During executing set operation for VLAN Mapping 0To2 table, please specify both the ServiceOuterVlan label and the ServiceInnerVlan label, or specify none of them.</p> <p>在对 VLAN Mapping 0To2 table 映射表的进行设置操作时, 请同时指定 ServiceOuterVlan 标签 ServiceInnerVlan</p>
<p>The configuration conflicts with two-to-two VLAN mapping on the port.</p> <p>配置与接口上 2:2 VLAN 映射的配置冲突。</p>	<p>During executing set operation for VLAN Mapping 2To2 table, the configuration conflicts with two-to-two VLAN mapping on the port.</p> <p>在对 VLAN Mapping 2To2 table 映射表的进行设置操作时, 配置与接口上 2:2 VLAN 映射的配置冲突。</p>
<p>The configuration conflicts with network-side many-to-one VLAN mapping on the port.</p> <p>配置与接口上网络侧 N:1 VLAN 映射的配置冲突。</p>	<p>During executing set operation for VLAN Mapping NTo1 table, the configuration conflicts with network-side many-to-one VLAN mapping on the port.</p> <p>在对 VLAN Mapping NTo1 table 映射表的进行设置操</p>

作时，配置与接口上网络侧 N:1 VLAN 映射的配置冲突。

## Vlan/QinQ

Message	Explanation
<p>Failed to set Ethernet-type on the port because QinQ has been enabled.</p> <p>接口已开启 QinQ 功能，不能再配置 VLAN Tag 的 TPID 值。</p>	<p>During executing set operation for QinQ table, failed to set Ethernet-type on the port because QinQ has been enabled.</p> <p>在对 QinQ 表的进行设置操作时，接口已开启 QinQ 功能，不能再配置 VLAN Tag 的 TPID 值。</p>
<p>Failed to enable QinQ on the port because the Ethernet-type setting has been configured.</p> <p>接口已配置 VLAN Tag 的 TPID 值，不能再开启 QinQ 功能。</p>	<p>During executing set operation for QinQ table, failed to enable QinQ on the port because the Ethernet-type setting has been configured.</p> <p>在对 QinQ 表的进行设置操作时，接口已配置 VLAN Tag 的 TPID 值，不能再开启 QinQ 功能。</p>
<p>The input inner VLAN conflicts with existing VLAN mappings on the interface.</p> <p>输入的内层 VLAN 与接口已有 VLAN 映射表项冲突。</p>	<p>During executing set operation for QinQ table, the input inner VLAN conflicts with existing VLAN mappings on the interface.</p> <p>在对 QinQ 表的进行设置操作时，输入的内层 VLAN 与接口已有 VLAN 映射表项冲突。</p>
<p>Please first remove VLAN mapping configuration from the port.</p> <p>请先清除接口上的 VLAN 映射配置。</p>	<p>During executing set operation for QinQ table, Please first remove VLAN mapping configuration from the port.</p> <p>在对 QinQ 表的进行设置操作时，请先清除接口上的 VLAN 映射配置。</p>
<p>The transparent VLANs conflict with VLAN mapping configuration on the port.</p> <p>QinQ 透传 VLAN 的配置与接口上 VLAN 映射的配置冲突。</p>	<p>During executing set operation for QinQ table, the transparent VLANs conflict with VLAN mapping configuration on the port.</p> <p>在对 QinQ 表的进行设置操作时，QinQ 透传 VLAN 的配置与接口上 VLAN 映射的配置冲突。</p>

# Contents

VMM .....	1
VMM/CreateVMPassword.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
VMM/DeleteVMPassword .....	1
XML structure.....	2
Table description.....	2
Columns.....	2

# VMM

## VMM/CreateVMPassword

This table is used to create password for a virtual machine.

### XML structure

```
<VMM>
  <CreateVMPassword>
    <VM>
      <IpAddress></IpAddress>
      <Password></Password>
    </VM>
  </CreateVMPassword>
</VMM>
```

### Table description

Item	Description
Feature name	VMM
Table name	CreateVMPassword
Table type	Multi-instance table
Row name	VM
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpAddress	The IP address of a virtual machine	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated..	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.
Password	The password to be created	N/A	String. Length: 4 to 32 characters.	

## VMM/DeleteVMPassword

This table is used to delete the password of a virtual machine.

## XML structure

```
<VMM>
  <DeleteVMPassword>
    <VM>
      <IpAddress></IpAddress>
    </VM>
  </DeleteVMPassword>
</VMM>
```

## Table description

Item	Description
Feature name	VMM
Table name	DeleteVMPassword
Table type	Multi-instance table
Row name	VM
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IpAddress	The IP address of a virtual machine	Index	IPv4: String, dotted decimal notation. IPv6: Hexadecimal string, colon-separated..	IPv4 example: 1.1.1.1. IPv6 example: 1:2:3:4:5:6:7:8.

# Contents

VPLS.....	1
VPLS/SignalingLDPs .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
VPLS/LDPPeers .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
VPLS/LDPBackupPeers .....	3
XML structure.....	3
Table description.....	4
Columns.....	4
VPLS/SignalingStatics .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
VPLS/StaticPeers .....	5
XML structure.....	5
Table description.....	6
Columns.....	6
VPLS/StaticBackupPeers .....	7
XML structure.....	7
Table description.....	7
Columns.....	8

# VPLS

## VPLS/SignalingLDPs

This table contains PW information of VPLS signaling LDP.

### XML structure

```
<VPLS>
  <SignalingLDPs>
    <SignalingLDP>
      <VsiName></VsiName>
      <Revertive>
        <Type></Type>
        <Time></Time>
      </Revertive>
    </SignalingLDP>
  </SignalingLDPs>
</VPLS>
```

### Table description

Item	Description
Feature name	VPLS
Table name	SignalingLDPs
Table type	Multi-instance table
Row name	SignalingLDP
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	You must create a VSI instance first before you merge, replace or create SignalingLDPs.
Revertive	Switch traffic back to the primary PW when it recovers	N/A	Members include: <ul style="list-style-type: none"><li>Type.</li><li>Time.</li></ul>	The member of Type must be specified.
Type	Revertive	N/A	Enumeration:	This member must

Column name	Column description	Column type	Data type and restrictions	Remarks
	member. Revertive type.		<ul style="list-style-type: none"> <li>1—Never.</li> <li>2—WTR.</li> </ul>	be specified.
Time	Revertive member. Time for WTR.	N/A	Unsigned integer. Value range: 0 to 3600 sec.	Only works and must be specified when the revertive type is WTR.

## VPLS/LDPPeers

This table contains PW peer information of VPLS using LDP signaling.

### XML structure

```

<VPLS>
  <LDPPeers>
    <LDPPeer>
      <VsiName></VsiName>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <Hub></Hub>
      <SplitHorizon></SplitHorizon>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </LDPPeer>
  </LDPPeers>
</VPLS>

```

### Table description

Item	Description
Feature name	VPLS
Table name	LDPPeers
Table type	Multi-instance table
Row name	LDPPeer
Restrictions	No modification.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String.	You must create a



Column name	Column description	Column type	Data type and restrictions	Remarks
			Length: 1 to 31 characters.	VSI instance first before you merge, replace or create VPLSPeers.
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
Hub	Hub spoke attribute for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke(default).</li> </ul>	You must first enable the VSI with the hub-spoke capability. No modification.
SplitHorizon	Split horizon forwarding for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled(default).</li> <li>false—Disabled.</li> </ul>	No modification.
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
Statistics	Statistics for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this command depends on the device model.

## VPLS/LDPBackupPeers

This table contains PW backup peer information of VPLS using signaling LDP.

### XML structure

```

<VPLS>
  <LDPBackupPeers>
    <LDPBackupPeer>
      <VsiName></VsiName>
      <MainPeerAddr></MainPeerAddr>
      <MainPWID></MainPWID>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
    </LDPBackupPeer>
  </LDPBackupPeers>
</VPLS>

```

## Table description

Item	Description
Feature name	VPLS
Table name	LDPBackupPeers
Table type	Multi-instance table
Row name	LDPBackupPeer
Restrictions	No modification.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	You must create a VSI instance first before you merge, replace or create VPLSPeers.
MainPeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
MainPWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.

## VPLS/SignalingStatics

This table contains PW information of VPLS signaling STATIC.

## XML structure

```
<VPLS>
  <SignalingStatics>
    <SignalingStatic>
      <VsiName></VsiName>
      <Revertive>
        <Type></Type>
```

```

        <Time></Time>
    </Revertive>
</SignalingStatic>
</SignalingStatics>
</VPLS>

```

## Table description

Item	Description
Feature name	VPLS
Table name	SignalingStatics
Table type	Multi-instance table
Row name	SignalingStatic
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	You must create a VSI instance first before you merge, replace or create SignalingLDPs.
Revertive	Switch traffic back to the primary PW when it recovers	N/A	Members include: <ul style="list-style-type: none"> <li>Type.</li> <li>Time.</li> </ul>	The member of Type must be specified.
Type	Revertive member. Revertive type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Never.</li> <li>2—WTR.</li> </ul>	This member must be specified.
Time	Revertive member. Time for WTR.	N/A	Unsigned integer. Value range: 0 to 3600 sec.	Only works and must be specified when the revertive type is WTR.

## VPLS/StaticPeers

This table contains PW peer information of VPLS using static signaling.

## XML structure

```

<VPLS>
  <StaticPeers>
    <StaticPeer>

```

```

    <VsiName></VsiName>
    <PeerAddr></PeerAddr>
    <PWID></PWID>
    <InLabel></InLabel>
    <OutLabel></OutLabel>
    <Hub></Hub>
    <SplitHorizon></SplitHorizon>
    <PWClass></PWClass>
    <TunnelPolicy></TunnelPolicy>
    <Statistics></Statistics>    </StaticPeer>
</StaticPeers>
</VPLS>

```

## Table description

Item	Description
Feature name	VPLS
Table name	StaticPeers
Table type	Multi-instance table
Row name	StaticPeer
Restrictions	No modification.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	You must create a VSI instance first before you merge, replace or create VPLSPeers.
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	The signaling type must be STATIC. No modification.
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies by device model.	The signaling type must be STATIC. No modification.
Hub	Hub spoke attribute for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke(default).</li> </ul>	You must first enable the VSI with the hub-spoke capability.

Column name	Column description	Column type	Data type and restrictions	Remarks
				No modification.
SplitHorizon	Split horizon forwarding for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled(default).</li> <li>false—Disabled.</li> </ul>	No modification.
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
Statistics	PW Statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this command depends on the device model.

## VPLS/StaticBackupPeers

This table contains PW backup peer information of VPLS using static signaling.

### XML structure

```

<VPLS>
  <StaticBackupPeers>
    <StaticBackupPeer>
      <VsiName></VsiName>
      <MainPeerAddr></MainPeerAddr>
      <MainPWID></MainPWID>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
    </StaticBackupPeer>
  </StaticBackupPeers>
</VPLS>

```

### Table description

Item	Description
Feature name	VPLS
Table name	StaticBackupPeers
Table type	Multi-instance table
Row name	StaticBackupPeer
Restrictions	No modification.

Support for row creation and deletion

Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	You must create a VSI instance first before you merge, replace or create VPLSPeers.
MainPeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
MainPWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	The signaling type must be STATIC. No modification.
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies by device model.	The signaling type must be STATIC. No modification.
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.

# Contents

VPLS.....	1
VPLS/SignalingLDPs .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
VPLS/LDPPeers .....	2
XML structure.....	2
Table description.....	2
Columns.....	2
VPLS/LDPBackupPeers .....	3
XML structure.....	3
Table description.....	3
Columns.....	4
VPLS/SignalingStatics .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
VPLS/StaticPeers .....	5
XML structure.....	5
Table description.....	6
Columns.....	6
VPLS/StaticBackupPeers .....	7
XML structure.....	7
Table description.....	7
Columns.....	8
VPLS/RmtMACs .....	8
XML structure.....	8
Table description.....	9
Columns.....	9
VPLS/PWs .....	9
XML structure.....	9
Table description.....	10
Columns.....	11

# VPLS

## VPLS/SignalingLDPs

This table contains PW information of VPLS signaling LDP.

### XML structure

```
<VPLS>
  <SignalingLDPs>
    <SignalingLDP>
      <VsiName></VsiName>
      <Revertive>
        <Type></Type>
        <Time></Time>
      </Revertive>
    </SignalingLDP>
  </SignalingLDPs>
</VPLS>
```

### Table description

Item	Description
Feature name	VPLS
Table name	SignalingLDPs
Table type	Multi-instance table
Row name	SignalingLDP
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
Revertive	Switch traffic back to the primary PW when it recovers	N/A	Members include: <ul style="list-style-type: none"><li>Type.</li><li>Time.</li></ul>	N/A
Type	Revertive member. Revertive type.	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Never.</li><li>2—WTR.</li></ul>	N/A
Time	Revertive	N/A	Unsigned integer.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
	member.		Value range:	
	Time for WTR.		0 to 3600 sec.	

## VPLS/LDPPeers

This table contains PW peer information of VPLS using LDP signaling.

### XML structure

```

<VPLS>
  <LDPPeers>
    <LDPPeer>
      <VsiName></VsiName>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <Hub></Hub>
      <SplitHorizon></SplitHorizon>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </LDPPeer>
  </LDPPeers>
</VPLS>

```

### Table description

Item	Description
Feature name	VPLS
Table name	LDPPeers
Table type	Multi-instance table
Row name	LDPPeer
Restrictions	No modification.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the	Index	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	PW		Value range: 1 to 4294967295.	
Hub	Hub spoke attribute for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke(default).</li> </ul>	You must first enable the VSI with the hub-spoke capability.
SplitHorizon	Split horizon forwarding for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled(default).</li> <li>false—Disabled.</li> </ul>	N/A.
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	N/A
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	N/A
Statistics	Statistics for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this command depends on the device model.

## VPLS/LDPBackupPeers

This table contains PW backup peer information of VPLS using signaling LDP.

### XML structure

```

<VPLS>
  <LDPBackupPeers>
    <LDPBackupPeer>
      <VsiName></VsiName>
      <MainPeerAddr></MainPeerAddr>
      <MainPWID></MainPWID>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <Hub></Hub>
      <SplitHorizon></SplitHorizon>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </LDPBackupPeer>
  </LDPBackupPeers>
</VPLS>

```

### Table description

Item	Description
Feature name	VPLS

Table name	LDPBackupPeers
Table type	Multi-instance table
Row name	LDPBackupPeer
Restrictions	No modification.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
MainPeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
MainPWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
Hub	Hub spoke attribute for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke(default).</li> </ul>	You must first enable the VSI with the hub-spoke capability.
SplitHorizon	Split horizon forwarding for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled(default).</li> <li>false—Disabled.</li> </ul>	N/A.
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	N/A
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	N/A
Statistics	Statistics for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this command depends on the device model.

## VPLS/SignalingStatics

This table contains PW information of VPLS signaling STATIC.

## XML structure

```
<VPLS>
  <SignalingStatics>
    <SignalingStatic>
```

```

    <VsiName></VsiName>
    <Revertive>
      <Type></Type>
      <Time></Time>
    </Revertive>
  </SignalingStatic>
</SignalingStatics>
</VPLS>

```

## Table description

Item	Description
Feature name	VPLS
Table name	SignalingStatics
Table type	Multi-instance table
Row name	SignalingStatic
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
Revertive	Switch traffic back to the primary PW when it recovers	N/A	Members include: <ul style="list-style-type: none"> <li>Type.</li> <li>Time.</li> </ul>	N/A
Type	Revertive member. Revertive type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Never.</li> <li>2—WTR.</li> </ul>	N/A
Time	Revertive member. Time for WTR.	N/A	Unsigned integer. Value range: 0 to 3600 sec.	N/A

## VPLS/StaticPeers

This table contains PW peer information of VPLS using static signaling.

## XML structure

```

<VPLS>
  <StaticPeers>
    <StaticPeer>

```

```

    <VsiName></VsiName>
    <PeerAddr></PeerAddr>
    <PWID></PWID>
    <InLabel></InLabel>
    <OutLabel></OutLabel>
    <Hub></Hub>
    <SplitHorizon></SplitHorizon>
    <PWClass></PWClass>
    <TunnelPolicy></TunnelPolicy>
    <Statistics></Statistics>
  </StaticPeer>
</StaticPeers>
</VPLS>

```

## Table description

Item	Description
Feature name	VPLS
Table name	StaticPeers
Table type	Multi-instance table
Row name	StaticPeer
Restrictions	No modification.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	N/A
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies by device model.	N/A
Hub	Hub spoke attribute for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke(default).</li> </ul>	You must first enable the VSI with the hub-spoke capability.
SplitHorizon	Split horizon forwarding for	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled(default).</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	the PW		<ul style="list-style-type: none"> <li>false—Disabled.</li> </ul>	
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	N/A
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	N/A
Statistics	PW Statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this command depends on the device model.

## VPLS/StaticBackupPeers

This table contains PW backup peer information of VPLS using static signaling.

### XML structure

```

<VPLS>
  <StaticBackupPeers>
    <StaticBackupPeer>
      <VsiName></VsiName>
      <MainPeerAddr></MainPeerAddr>
      <MainPWID></MainPWID>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <Hub></Hub>
      <SplitHorizon></SplitHorizon>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </StaticBackupPeer>
  </StaticBackupPeers>
</VPLS>

```

### Table description

Item	Description
Feature name	VPLS
Table name	StaticBackupPeers
Table type	Multi-instance table
Row name	StaticBackupPeer
Restrictions	No modification.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
MainPeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
MainPWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	N/A.
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies by device model.	N/A
Hub	Hub spoke attribute for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Hub.</li> <li>false—Spoke(default).</li> </ul>	You must first enable the VSI with the hub-spoke capability.
SplitHorizon	Split horizon forwarding for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled(default).</li> <li>false—Disabled.</li> </ul>	N/A
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	N/A
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	N/A
Statistics	PW Statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this command depends on the device model.

## VPLS/RmtMACs

This table contains information about remote MAC addresses of each VPLS VSI.

### XML structure

```
<VPLS>
  <RmtMACs>
    <MAC>
```

```

    <VsiName></VsiName>
    <MacAddr></MacAddr>
    <LinkID></LinkID>
    <MACState></MACState>
    <Aging></Aging>
    <AgingTime></AgingTime>
  </MAC>
</RmtMACs>
</VPLS>

```

## Table description

Item	Description
Feature name	VPLS
Table name	RmtMACs
Table type	Multi-instance table
Row name	MAC
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String, Length: 1 to 31 characters.	N/A
MacAddr	Remote MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
LinkID	Link ID of the Mac	N/A	Unsigned integer.	N/A
MACState	State	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—dynamic.</li> </ul>	N/A
Aging	Whether in aging state	N/A	<ul style="list-style-type: none"> <li>true—Aging.</li> <li>false—Not aging</li> </ul>	N/A
AgingTime	When it is true in aging state	N/A	Unsigned integer. The value range varies by device model.	N/A

## VPLS/PWs

This table contains information of PW.

## XML structure

```
<VPLS>
```



```

<PWs>
  <PW>
    <VsiName></VsiName>
    <PeerAddr></PeerAddr>
    <PWID></PWID>
    <Protocol></Protocol>
    <InLabel></InLabel>
    <OutLabel></OutLabel>
    <MTU></MTU>
    <TunnelGroupID></TunnelGroupID>
    <TunnelNHLFEIDs>
      <TunnelNHLFEID></TunnelNHLFEID>
    </TunnelNHLFEIDs>
    <IsMainPW></IsMainPW>
    <HubSpoke></HubSpoke>
    <SplitHorizon></SplitHorizon>
    <ControlWord></ControlWord>
    <PWType></PWType>
    <LinkID></LinkID>
    <State></State>
    <InputStatistics>
      <Octets></Octets>
      <Packets></Packets>
      <Errors></Errors>
      <Discards></Discards>
    </InputStatistics>
    <OutputStatistics>
      <Octets></Octets>
      <Packets></Packets>
      <Errors></Errors>
      <Discards></Discards>
    </OutputStatistics>
  </PW>
</PWs>
</VPLS>

```

## Table description

Item	Description
Feature name	VPLS
Table name	PWs
Table type	Multi-instance table
Row name	PW
Restrictions	None

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
Protocol	Signaling protocol.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—STATIC</li> <li>2—LDP</li> </ul>	N/A
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	N/A
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies by device model.	N/A
MTU	MTU	N/A	Unsigned integer.	N/A
TunnelGroupID	Tunnel group ID.	N/A	Unsigned integer(64).	N/A
TunnelNHLFEIDs	List of Tunnel NHLFE IDs	N/A	Members include: <ul style="list-style-type: none"> <li>TunnelNHLFEID</li> </ul>	N/A
TunnelNHLFEID	Tunnel NHLFE ID	N/A	Unsigned integer.	Repeat supported.
IsMainPW	Is main PW or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Main PW.</li> <li>false—Backup PW.</li> </ul>	N/A
HubSpoke	Hub spoke capability.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—None</li> <li>1—Hub</li> <li>2—Spoke</li> </ul>	N/A
SplitHorizon	Split horizon forwarding for the PW	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled(default).</li> <li>false—Disabled.</li> </ul>	N/A.
ControlWord	Whether using control word.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled.</li> </ul>	N/A
PWType	PW type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> <li>1—FR_DLCI_MARTINI</li> <li>2—ATM_AAL5_SDU_VCC</li> <li>3—ATM_CELL_TRANSPORT</li> <li>4—VLAN</li> <li>5—ETHERNET</li> </ul>	N/A

			<ul style="list-style-type: none"> <li>• 6—HDLC</li> <li>• 7—PPP</li> <li>• 8—CESOM</li> <li>• 9—ATM_CELL_VCC</li> <li>• 10—ATM_CELL_VPC</li> <li>• 11—IP_INTERWORKING</li> <li>• 12—ATM_CELL_1TO1_VCC</li> <li>• 13—ATM_CELL_1TO1_VPC</li> <li>• 14—ATM_AAL5_PDU_VC</li> <li>• 15—FR_PORT</li> <li>• 16—CEP</li> <li>• 17—TDM_SATOP_E1</li> <li>• 18—TDM_SATOP_T1</li> <li>• 19—TDM_SATOP_E3</li> <li>• 20—TDM_SATOP_T3</li> <li>• 21—TDM_CESOPSN_BASIC</li> <li>• 22—TDMoIP_AAL1_Mode</li> <li>• 23—TDM_CESOPSN_WITH_CAS</li> <li>• 24—TDMoIP_AAL2_Mode</li> <li>• 25—FR_DLCI</li> </ul>	
LinkID	Link ID of the PW	N/A	Unsigned integer.	N/A
			Enumeration:	
			<ul style="list-style-type: none"> <li>• 1—UP</li> <li>• 2—Down</li> <li>• 3—Blocked</li> <li>• 4—Defect</li> <li>• 5—Idle</li> <li>• 6—Duplicate</li> </ul>	
State	State of the PW	N/A		N/A
			Members include:	
			<ul style="list-style-type: none"> <li>• Octets</li> <li>• Packets</li> <li>• Errors</li> <li>• Discards</li> </ul>	N/A
InputStatistics	Input statistics	N/A		
			Members include:	
			<ul style="list-style-type: none"> <li>• Octets</li> <li>• Packets</li> <li>• Errors</li> <li>• Discards</li> </ul>	N/A
OutputStatistics	Output statistics	N/A		
Octets	Packet octets	N/A	Unsigned integer(64).	N/A
Packets	Packet number	N/A	Unsigned integer(64).	N/A
Errors	Error packet number	N/A	Unsigned integer(64).	N/A
Discards	Discarded packet number	N/A	Unsigned integer(64).	N/A



# Contents

VPLS.....	2
VPLS/SIGNALINGLDPS.....	2
VPLS/RMTMACS .....	2
VPLS/LDPPEERS.....	3
VPLS/LDPBACKUPPEERS .....	3
VPLS/SIGNALINGSTATICS.....	4
VPLS/STATICPEERS.....	4
VPLS/STATICBACKUPPEERS.....	5
VPLS/PWS.....	6

# VPLS

## VPLS/SIGNALINGLDPS

Message	Explanation
Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。	Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。
Parameters don't exist. 参数不存在。	The configuration of delete has a default value and doesn't allow delete. Delete配置有默认值且不允许删除。

## VPLS/RMTMACS

Message	Explanation
Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situa tion. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。

# VPLS/LDPPEERS

Message	Explanation
Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server. 1. 访问一个no-access节点。 2. 发送、接收数据超。 3. 向服务器发起连接失败。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。
Executes the set command, and the variable exists, but the assignment fails because the condition is not satisfied in the current environment. 执行SET命令，变量存在，但因当前环境下条件不满足而导致赋值失败。	Executes the set command, and the variable exists, but the assignment fails because the condition is not satisfied in the current environment. 执行SET命令，变量存在，但因当前环境下条件不满足而导致赋值失败。
Parameters don't exist. 参数不存在。	The configuration of delete has a default value and doesn't allow delete. Delete配置有默认值且不允许删除。

# VPLS/LDPBACKUPPEERS

Message	Explanation
Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invalid configuration messages. Generally speaking, the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node, communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1. Access a no-access node. 2. Send/receive data timeout. 3. A failure to initiate a connect to a server. 1. 访问一个no-access节点。 2. 发送、接收数据超。 3. 向服务器发起连接失败。
When set is operated, the set value does not meet the requirements of the module.	When set is operated, the set value does not meet the requirements of the module.

SET操作时，所设的值不符合模块要求。	SET操作时，所设的值不符合模块要求。
Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。	1.The create value attribute column does not allow modification. 2.The merge value attributed column is different from the lower hair attribute column. 1.create value 属性列不允许修改。 2.merge value 属性列与下发属性列不同。
Parameters don't exist. 参数不存在。	The configturation of delete has a default value and doesn't allow delete. Delete配置有默认值且不允许删除。

## VPLS/SIGNALINGSTATICS

Message	Explanation
Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。	Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。
Parameters don't exist. 参数不存在。	The configturation of delete has a default value and doesn't allow delete. Delete配置有默认值且不允许删除。

## VPLS/STATICPEERS

Message	Explanation
Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。



	<p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>Executed the set command, the variable exists but can not be modified.</p> <p>执行SET命令，变量存在但不能被修改。</p>	<p>Executed the set command, the variable exists but can not be modified.</p> <p>执行SET命令，变量存在但不能被修改。</p>
<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>	<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>
<p>Parameters don't exist.</p> <p>参数不存在。</p>	<p>The configuration of delete has a default value and doesn't allow delete.</p> <p>Delete配置有默认值且不允许删除。</p>
<p>Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment.</p> <p>执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。</p>	<p>Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment.</p> <p>执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。</p>

## VPLS/STATICBACKUPPEERS

Message	Explanation
<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>	<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>
<p>Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment.</p> <p>执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。</p>	<p>Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment.</p> <p>执行 SET 命令,变量存在，但因当前环境下条件不满足而导致赋值失败。</p>
<p>Parameters don't exist.</p> <p>参数不存在。</p>	<p>The configuration of delete has a default value and doesn't allow delete.</p> <p>Delete配置有默认值且不允许删除。</p>

# VPLS/PWS

Message	Explanation
<p>Invaile configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invaile configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>

# Contents

VPWS .....	1
VPWS/XCGs .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
VPWS/Connections .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
VPWS/LDPPeers .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
VPWS/LDPBackupPeers .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
VPWS/StaticPeers .....	6
XML structure .....	6
Table description .....	6
Columns .....	6
VPWS/L3Interfaces .....	7
XML structure .....	7
Table description .....	7
Columns .....	8
VPWS/ACs .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
VPWS/StaticBackupPeers .....	10
XML structure .....	10
Table description .....	10
Columns .....	11

# VPWS

## VPWS/XCGs

This table contains information about XCGs.

### XML structure

```
<VPWS>
  <XCGs>
    <XCG>
      <XCGName></XCGName>
      <Description></Description>
      <AdminStatus></AdminStatus>
    </XCG>
  </XCGs>
</VPWS>
```

### Table description

Item	Description
Feature name	VPWS
Table name	XCGs
Table type	Multi-instance table
Row name	XCG
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCGName	Index	String. Length: 1 to 31 characters.	N/A
Description	description for the XCG	N/A	String. Length: 1 to 80 characters.	N/A
AdminStatus	Administratively status	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Administratively up(default).</li><li>2—Administratively down.</li></ul>	N/A

# VPWS/Connections

This table contains information about XCGs.

## XML structure

```
<VPWS>
  <Connections>
    <Connection>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <Interworking></Interworking>
      <MTU></MTU>
      <ArpSuppression></ArpSuppression>
      <DualReceive></DualReceive>
      <Revertive>
        <Type></Type>
        <Time></Time>
      </Revertive>
    </Connection>
  </Connections>
</VPWS>
```

## Table description

Item	Description
Feature name	VPWS
Table name	Connections
Table type	Multi-instance table
Row name	Connection
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	N/A
Interworking	Interworking for a cross-connect	N/A	Enumeration: <ul style="list-style-type: none"><li>1—None(default).</li><li>2—IPV4.</li></ul>	Support for this command depends on the device model.

Column name	Column description	Column type	Data type and restrictions	Remarks
MTU	MTU	N/A	Unsigned integer. Value range: The value range varies by device model. Default: 1500 bytes.	N/A
ArpSuppression	ARP flooding suppression	N/A	Boolean: true—Enabled. false—Disabled(default).	Support for this command depends on the device model.
DualReceive	Dual receive function for PW redundancy	N/A	Boolean: • true—Enabled. • false—Disabled(default).	Support for this command depends on the device model.
Revertive	Switch traffic back to the primary PW when it recovers	N/A	Members include: • Type. • Time.	The member of Type must be specified.
Type	Revertive member. Revertive type.	N/A	Enumeration: • 1—Never. • 2—WTR.	This member must be specified.
Time	Revertive member. Time for WTR.	N/A	Unsigned integer. Value range: 0 to 3600 sec. Default: 0 sec.	Only works when the revertive type is WTR.

## VPWS/LDP Peers

This table contains PW peer information of VPWS using LDP signaling.

### XML structure

```

<VPWS>
  <LDPPeers>
    <LDPPeer>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </LDPPeer>
  </LDPPeers>
</VPWS>

```

## Table description

Item	Description
Feature name	VPWS
Table name	LDPPeers
Table type	Multi-instance table
Row name	LDPPeer
Restrictions	No modification.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	You must create the connection first.
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
Statistics	PW Statistics	N/A	Boolean: <ul style="list-style-type: none"><li>true—Enabled.</li><li>false—Disabled(default).</li></ul>	Support for this command depends on the device model.

## VPWS/LDPBackupPeers

This table contains PW peer information of VPWS using LDP signaling.

## XML structure

```
<VPWS>
  <LDPBackupPeers>
    <LDPBackupPeer>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <MainPeerAddr></MainPeerAddr>
```

```

    <MainPWID></MainPWID>
    <PeerAddr></PeerAddr>
    <PWID></PWID>
    <PWClass></PWClass>
    <TunnelPolicy></TunnelPolicy>
  </LDPBackupPeer>
</LDPBackupPeers>
</VPWS>

```

## Table description

Item	Description
Feature name	VPWS
Table name	LDPBackupPeers
Table type	Multi-instance table
Row name	LDPBackupPeer
Restrictions	No modification.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	You must create the connection first.
MainPeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
MainPWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.



# VPWS/StaticPeers

This table contains PW peer information of VPWS using static signaling.

## XML structure

```
<VPWS>
  <StaticPeers>
    <StaticPeer>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </StaticPeer>
  </StaticPeers>
</VPWS>
```

## Table description

Item	Description
Feature name	VPWS
Table name	StaticPeers
Table type	Multi-instance table
Row name	StaticPeer
Restrictions	No modification.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	You must create the connection first.
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	This member must be specified. No modification.
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies by device model.	This member must be specified. No modification.
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
Statistics	PW Statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this command depends on the device model.

## VPWS/L3Interfaces

This table contains information about ACs for Layer 3 Ethernet interfaces.

### XML structure

```

<VPWS>
  <L3Interfaces>
    <L3Interface>
      <IfIndex></IfIndex>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <AccessMode></AccessMode>
    </L3Interface>
  </L3Interfaces>
</VPWS>

```

### Table description

Item	Description
Feature name	VPWS
Table name	L3Interfaces
Table type	Multi-instance table
Row name	L3Interface
Restrictions	This table supports only layer 3 Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.  You must create the XCG first.
XCGName	XCG Name	N/A	String. Length: 1 to 31 characters.	You must specify this column when the operation is create, merge or replace.  Can not be modified after creation.
ConnectionName	Connection Name	N/A	String. Length: 1 to 20 characters.	You must create the connection first.  You must specify this column when the operation is create, merge or replace.  Can not be modified after creation.
AccessMode	Access mode of the AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—VLAN.</li> <li>2—Ethernet.</li> </ul>	By default, the value is 1.  Cannot be modified after creation.

## VPWS/ACs

This table contains information about ACs.

## XML structure

```

<VPWS>
  <ACs>
    <AC>

```

```

<IfIndex></IfIndex>
<SrvID></SrvID>
<XCGName></XCGName>
<ConnectionName></ConnectionName>
<AccessMode></AccessMode>
</AC>
</ACs>
</VPWS>

```

## Table description

Item	Description
Feature name	VPWS
Table name	ACs
Table type	Multi-instance table
Row name	AC
Restrictions	This table supports only layer 2 Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	You must create a service instance first before you merge, replace or create ACs.
XCGName	XCG Name	N/A	String. Length: 1 to 31 characters.	You must create the XCG first. You must specify this column when the operation is create, merge or replace. Can not be

Column name	Column description	Column type	Data type and restrictions	Remarks
				modified after creation.
				You must create the connection first.
ConnectionName	Connection Name	N/A	String. <ul style="list-style-type: none"> <li>Length: 1 to 20 characters.</li> </ul>	You must specify this column when the operation is create, merge or replace.
				Can not be modified after creation.
AccessMode	The access mode of this AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Vlan.</li> <li>2—Ethernet.</li> </ul>	By default, the value is 1.
				Can not be modified after creation.

## VPWS/StaticBackupPeers

This table contains PW peer information of VPWS using static signaling.

### XML structure

```

<VPWS>
  <StaticBackupPeers>
    <StaticBackupPeer>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <MainPeerAddr></MainPeerAddr>
      <MainPWID></MainPWID>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
    </StaticBackupPeer>
  </StaticBackupPeers>
</VPWS>

```

### Table description

Item	Description
Feature name	VPWS
Table name	StaticBackupPeers

Table type	Multi-instance table
Row name	StaticBackupPeer
Restrictions	No modification.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	You must create the connection first.
MainPeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
MainPWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	This member must be specified. No modification.
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies by device model.	This member must be specified. No modification.
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.

# Contents

VPWS.....	1
VPWS/XCGs .....	1
XML structure.....	1
Table description.....	1
Columns.....	1
VPWS/Connections.....	1
XML structure.....	2
Table description.....	2
Columns.....	2
VPWS/LDPPeers.....	3
XML structure.....	3
Table description.....	3
Columns.....	4
VPWS/LDPBackupPeers .....	4
XML structure.....	4
Table description.....	5
Columns.....	5
VPWS/StaticPeers .....	5
XML structure.....	6
Table description.....	6
Columns.....	6
VPWS/StaticBackupPeers .....	7
XML structure.....	7
Table description.....	7
Columns.....	8
VPWS/L3Interfaces .....	8
XML structure.....	8
Table description.....	9
Columns.....	9
VPWS/ACs.....	9
XML structure.....	9
Table description.....	10
Columns.....	10
VPWS/PWs .....	11
XML structure.....	11
Table description.....	12
Columns.....	12

# VPWS

## VPWS/XCGs

This table contains information about XCGs.

### XML structure

```
<VPWS>
  <XCGs>
    <XCG>
      <XCGName></XCGName>
      <Description></Description>
      <AdminStatus></AdminStatus>
    </XCG>
  </XCGs>
</VPWS>
```

### Table description

Item	Description
Feature name	VPWS
Table name	XCGs
Table type	Multi-instance table
Row name	XCG
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCGName	Index	String. Length: 1 to 31 characters.	N/A
Description	description for the XCG	N/A	String. Length: 1 to 80 characters.	N/A
AdminStatus	Administratively status	N/A	Enumeration: <ul style="list-style-type: none"><li>1—Administratively up(default).</li><li>2—Administratively down.</li></ul>	N/A

## VPWS/Connections

This table contains information about XCGs.



# XML structure

```
<VPWS>
  <Connections>
    <Connection>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <Interworking></Interworking>
      <MTU></MTU>
      <ArpSuppression></ArpSuppression>
      <DualReceive></DualReceive>
      <Revertive>
        <Type></Type>
        <Time></Time>
      </Revertive>
    </Connection>
  </Connections>
</VPWS>
```

## Table description

Item	Description
Feature name	VPWS
Table name	Connections
Table type	Multi-instance table
Row name	Connection
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	N/A
Interworking	Interworking for a cross-connect	N/A	Enumeration: <ul style="list-style-type: none"><li>1—None(default).</li><li>2—IPv4.</li></ul> Unsigned integer.	Support for this command depends on the device model.
MTU	MTU	N/A	Value range: The value range varies by device model. Default: 1500 bytes.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ArpSuppression	ARP flooding suppression	N/A	Boolean: true—Enabled. false—Disabled(default).	Support for this command depends on the device model.
DualReceive	Dual receive function for PW redundancy	N/A	Boolean: • true—Enabled. • false—Disabled(default).	Support for this command depends on the device model.
Revertive	Switch traffic back to the primary PW when it recovers	N/A	Members include: • Type. • Time.	The member of Type must be specified.
Type	Revertive member. Revertive type.	N/A	Enumeration: • 1—Never. • 2—WTR.	This member must be specified.
Time	Revertive member. Time for WTR.	N/A	Unsigned integer. Value range: 0 to 3600 sec. Default: 0 sec.	Only works when the revertive type is WTR.

## VPWS/LDPPeers

This table contains PW peer information of VPWS using LDP signaling.

### XML structure

```

<VPWS>
  <LDPPeers>
    <LDPPeer>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </LDPPeer>
  </LDPPeers>
</VPWS>

```

### Table description

Item	Description
Feature name	VPWS
Table name	LDPPeers

Table type	Multi-instance table
Row name	LDPPeer
Restrictions	No modification.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	You must create the connection first.
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
Statistics	PW Statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this command depends on the device model.

## VPWS/LDPBackupPeers

This table contains PW peer information of VPWS using LDP signaling.

## XML structure

```

<VPWS>
  <LDPBackupPeers>
    <LDPBackupPeer>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <MainPeerAddr></MainPeerAddr>
      <MainPWID></MainPWID>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </LDPBackupPeer>
  </LDPBackupPeers>
</VPWS>

```

```
</LDPBackupPeers>
</VPWS>
```

## Table description

Item	Description
Feature name	VPWS
Table name	LDPBackupPeers
Table type	Multi-instance table
Row name	LDPBackupPeer
Restrictions	No modification.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	You must create the connection first.
MainPeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
MainPWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
Statistics	PW Statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default).</li> </ul>	Support for this command depends on the device model.

## VPWS/StaticPeers

This table contains PW peer information of VPWS using static signaling.

# XML structure

```
<VPWS>
  <StaticPeers>
    <StaticPeer>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </StaticPeer>
  </StaticPeers>
</VPWS>
```

## Table description

Item	Description
Feature name	VPWS
Table name	StaticPeers
Table type	Multi-instance table
Row name	StaticPeer
Restrictions	No modification.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	You must create the connection first.
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	This member must be specified. No modification.
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies	This member must be specified.

Column name	Column description	Column type	Data type and restrictions	Remarks
			by device model.	No modification.
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
Statistics	PW Statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default for other).</li> </ul>	Support for this command depends on the device model.

## VPWS/StaticBackupPeers

This table contains PW peer information of VPWS using static signaling.

### XML structure

```

<VPWS>
  <StaticBackupPeers>
    <StaticBackupPeer>
      <XCName></XCName>
      <ConnectionName></ConnectionName>
      <MainPeerAddr></MainPeerAddr>
      <MainPWID></MainPWID>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <PWClass></PWClass>
      <TunnelPolicy></TunnelPolicy>
      <Statistics></Statistics>
    </StaticBackupPeer>
  </StaticBackupPeers>
</VPWS>

```

### Table description

Item	Description
Feature name	VPWS
Table name	StaticBackupPeers
Table type	Multi-instance table
Row name	StaticBackupPeer
Restrictions	No modification.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG Name	Index	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	You must create the connection first.
MainPeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
MainPWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	This member must be specified. No modification.
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies by device model.	This member must be specified. No modification.
PWClass	PW class related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
TunnelPolicy	Tunnel policy related to the PW	N/A	String. Length: 1 to 19 characters.	No modification.
Statistics	PW Statistics	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled(default for other).</li> </ul>	Support for this command depends on the device model.

## VPWS/L3Interfaces

This table contains information about ACs for Layer 3 Ethernet interfaces.

### XML structure

```

<VPWS>
  <L3Interfaces>
    <L3Interface>
      <IfIndex></IfIndex>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <AccessMode></AccessMode>
    </L3Interface>
  </L3Interfaces>
</VPWS>

```

```

    </L3Interfaces>
</VPWS>

```

## Table description

Item	Description
Feature name	VPWS
Table name	L3Interfaces
Table type	Multi-instance table
Row name	L3Interface
Restrictions	This table supports only layer 3 Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
XCGName	XCG Name	N/A	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	N/A	String. Length: 1 to 20 characters.	You must create the connection first.
AccessMode	Access mode of the AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—VLAN.</li> <li>2—Ethernet.</li> </ul>	By default, the value is 1.

## VPWS/ACs

This table contains information about ACs.

## XML structure

```
<VPWS>
```



```

<ACs>
  <AC>
    <IfIndex></IfIndex>
    <SrvID></SrvID>
    <XCGName></XCGName>
    <ConnectionName></ConnectionName>
    <AccessMode></AccessMode>
  </AC>
</ACs>
</VPWS>

```

## Table description

Item	Description
Feature name	VPWS
Table name	ACs
Table type	Multi-instance table
Row name	AC
Restrictions	This table supports only layer 2 Ethernet interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
SrvID	Service instance ID	Index	Unsigned integer. Value range: 1 to 4096.	You must create a service instance first before you merge, replace or create ACs.
XCGName	XCG Name	N/A	String. Length: 1 to 31 characters.	You must create the XCG first.
ConnectionName	Connection Name	N/A	String. Length: 1 to 20 characters.	You must create the connection first.

Column name	Column description	Column type	Data type and restrictions	Remarks
AccessMode	The access mode of this AC	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Vlan.</li> <li>2—Ethernet.</li> </ul>	By default, the value is 1.

## VPWS/PWs

This table contains information of PW.

### XML structure

```

<VPWS>
  <PWs>
    <PW>
      <XCGName></XCGName>
      <ConnectionName></ConnectionName>
      <PeerAddr></PeerAddr>
      <PWID></PWID>
      <Protocol></Protocol>
      <InLabel></InLabel>
      <OutLabel></OutLabel>
      <MTU></MTU>
      <TunnelGroupID></TunnelGroupID>
      <TunnelNHLFEIDs>
        <TunnelNHLFEID></TunnelNHLFEID>
      </TunnelNHLFEIDs>
      <IsMainPW></IsMainPW>
      <ControlWord></ControlWord>
      <PWType></PWType>
      <LinkID></LinkID>
      <State></State>
      <InputStatistics>
        <Octets></Octets>
        <Packets></Packets>
        <Errors></Errors>
        <Discards></Discards>
      </InputStatistics>
      <OutputStatistics>
        <Octets></Octets>
        <Packets></Packets>
        <Errors></Errors>
        <Discards></Discards>
      </OutputStatistics>
    </PW>
  </PWs>
</VPWS>

```

## Table description

Item	Description
Feature name	VPWS
Table name	PWs
Table type	Multi-instance table
Row name	PW
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
XCGName	XCG name	Index	String. Length: 1 to 31 characters.	N/A
ConnectionName	Connection Name	Index	String. Length: 1 to 20 characters.	N/A
PeerAddr	LSR ID of the peer PE	Index	String, dotted decimal notation.	N/A
PWID	PW ID for the PW	Index	Unsigned integer. Value range: 1 to 4294967295.	N/A
Protocol	Signaling protocol.	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—STATIC</li> <li>2—LDP</li> </ul>	N/A
InLabel	Incoming label of the PW	N/A	Unsigned integer. The value range varies by device model.	N/A
OutLabel	Outgoing label of the PW	N/A	Unsigned integer. The value range varies by device model.	N/A
MTU	MTU	N/A	Unsigned integer.	N/A
TunnelGroupID	Tunnel group ID.	N/A	Unsigned integer (64).	N/A
TunnelNHLFEIDs	Tunnel NHLFE IDs.	N/A	Unsigned integer.	Repeat supported.
IsMainPW	Is main PW or not.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Main PW.</li> <li>false—Backup PW.</li> </ul>	N/A
ControlWord	Whether using control word.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—Enabled</li> <li>false—Disabled.</li> </ul>	N/A
PWType	PW type.	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Unknown</li> <li>1—FR_DLCL_MARTINI</li> </ul>	N/A

			<ul style="list-style-type: none"> <li>• 2—ATM_AAL5_SDU_VCC</li> <li>• 3—ATM_CELL_TRANSPORT</li> <li>• 4—VLAN</li> <li>• 5—ETHERNET</li> <li>• 6—HDLC</li> <li>• 7—PPP</li> <li>• 8—CESOM</li> <li>• 9—ATM_CELL_VCC</li> <li>• 10—ATM_CELL_VPC</li> <li>• 11—IP_INTERWORKING</li> <li>• 12—ATM_CELL_1TO1_VCC</li> <li>• 13—ATM_CELL_1TO1_VPC</li> <li>• 14—ATM_AAL5_PDU_VC</li> <li>• 15—FR_PORT</li> <li>• 16—CEP</li> <li>• 17—TDM_SATOP_E1</li> <li>• 18—TDM_SATOP_T1</li> <li>• 19—TDM_SATOP_E3</li> <li>• 20—TDM_SATOP_T3</li> <li>• 21—TDM_CESOPSN_BASIS</li> <li>• 22—TDMoIP_AAL1_Mode</li> <li>• 23—TDM_CESOPSN_WITH_CAS</li> <li>• 24—TDMoIP_AAL2_Mode</li> <li>• 25—FR_DLCI</li> </ul>	
LinkID	Link ID of the PW	N/A	Unsigned integer.	N/A
			Enumeration:	
			<ul style="list-style-type: none"> <li>• 1—UP</li> <li>• 2—Down</li> <li>• 3—Blocked</li> <li>• 4—Defect</li> <li>• 5—Idle</li> <li>• 6—Duplicate</li> </ul>	
State	State of the PW	N/A		N/A
			Members include:	
			<ul style="list-style-type: none"> <li>• Octets</li> <li>• Packets</li> <li>• Errors</li> <li>• Discards</li> </ul>	N/A
InputStatistics	Input statistics	N/A		
			Members include:	
			<ul style="list-style-type: none"> <li>• Octets</li> <li>• Packets</li> <li>• Errors</li> <li>• Discards</li> </ul>	N/A
OutputStatistics	Output statistics	N/A		
Octets	Packet octets	N/A	Unsigned integer(64).	N/A
Packets	Packet number	N/A	Unsigned integer(64).	N/A

Errors	Error packet number	N/A	Unsigned integer(64).	N/A
Discards	Discarded packet number	N/A	Unsigned integer(64).	N/A

# Contents

VPWS.....	2
VPWS/XCGS .....	2
VPWS/CONNECTIONS .....	2
VPWS/LDPPEERS.....	3
VPWS/LDPBACKUPPEERS .....	3
VPWS/STATICPEERS.....	4
VPWS/STATICBACKUPPERS .....	4
VPWS/L3INTERFACES .....	5
VPWS/ACS .....	6
VPWS/PWS.....	6

# VPWS

## VPWS/XCGS

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Parameters don't exist. 参数不存在。	Parameters don't exist. 参数不存在。

## VPWS/CONNECTIONS

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situa tion. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。
Parameters don't exist. 参数不存在。	Parameters don't exist. 参数不存在。

# VPWS/LDPPEERS

Message	Explanation
<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>	<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>
<p>Executed the set commamd, the variable exists but can not be modified.</p> <p>执行SET命令，变量存在但不能被修改。</p>	<p>Executed the set commamd, the variable exists but can not be modified.</p> <p>执行SET命令，变量存在但不能被修改。</p>
<p>Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment.</p> <p>执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。</p>	<p>Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment.</p> <p>执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。</p>
<p>Parameters don't exist.</p> <p>参数不存在。</p>	<p>The configturation of delete has a default value and doesn't allow delete.</p> <p>Delete配置有默认值且不允许删除。</p>

# VPWS/LDPBACKUPPEERS

Message	Explanation
<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>When set is operated, the set value does not meet the requirements of the module.</p>	<p>When set is operated, the set value does not meet the requirements of the module.</p>



SET操作时，所设的值不符合模块要求。	SET操作时，所设的值不符合模块要求。
Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。	1.The create value attribute column does not allow modification. 2.The merge value attributed column is different from the lower hair attribute column. 1.create value 属性列不允许修改。 2.merge value 属性列与下发属性列不同。
Parameters don't exist. 参数不存在。	The configturation of delete has a default value and doesn't allow delete. Delete配置有默认值且不允许删除。

## VPWS/STATICPEERS

Message	Explanation
Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。	Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。
Executed the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	The xml tag does not support the custom item. Xml标签不支持该定制项。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	Illegal ip address. 非法ip地址。
Parameters don't exist. 参数不存在。	The configturation of delete has a default value and doesn't allow delete. Delete配置有默认值且不允许删除。

## VPWS/STATICBACKUPPERS

Message	Explanation
Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.	Invaild configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.

无效的配置消息，一般是消息的长度和实际不相符的情况。	无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。	1.The create value attribute column does not allow modification. 2.The merge value attributed column is different from the lower hair attribute column. 3.The replace value attributed column is different from the lower hair attribute column. 1.create value 属性列不允许修改。 2.merge value属性列与下发属性列不同。 3.replace value属性列与下发属性列不同。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。
Parameters don't exist. 参数不存在。	The configuration of delete has a default value and doesn't allow delete. Delete配置有默认值且不允许删除。

## VPWS/L3INTERFACES

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。	Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment. 执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。
No operation permissions. 无操作权限。	No RBAC permissions. 无 RBAC 权限。
Executed the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	1.Interface does not support L3AC. 2.The interface does not exist or is a temporary interface. 1.接口不支持 L3AC。 2. 接口不存在或为临时接口。
Parameters don't exist. 参数不存在。	The configturation of delete has a default value and doesn't allow delete. Delete配置有默认值且不允许删除。

# VPWS/ACS

Message	Explanation
<p>Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment.</p> <p>执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。</p>	<p>Executes the set command,and the variable exists,but the assignment fails because the condition is not satisfied in the currnet environment.</p> <p>执行SET命令,变量存在，但因当前环境下条件不满足而导致赋值失败。</p>
<p>Executed the set commamd, the variable exists but can not be modified.</p> <p>执行SET命令，变量存在但不能被修改。</p>	<p>1.Non-two-layer interface has no AC data.</p> <p>2.The current interface is not a Ethernet interface and aggregate interface.</p> <p>1.非二层接口无AC数据。</p> <p>2.当前接口不是以太接口和聚合接口。</p>
<p>Parameters don't exist.</p> <p>参数不存在。</p>	<p>The default value of the delete operation cann't be set again.</p> <p>.删除操作默认值不能再设置。</p>
<p>No operation permissions.</p> <p>无操作权限。</p>	<p>No RBAC permissions.</p> <p>无 RBAC 权限。</p>

# VPWS/PWS

Message	Explanation
<p>Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>

# Contents

VRRP .....	1
VRRP/VRRPOper .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
VRRP/VRRPAssolpAddr .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
VRRP/VRRPTrack .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
VRRP/VRRPInterface .....	5
XML structure .....	6
Table description .....	6
Columns .....	6

# VRRP

## VRRP/VRRPOper

This table contains VRRP operation information.

### XML structure

```
<VRRP>
  <VRRPOper>
    <Operation>
      <AddressType></AddressType>
      <IfIndex></IfIndex>
      <VrID></VrID>
      <PriorityConfig></PriorityConfig>
      <AuthTypeConfig></AuthTypeConfig>
      <AuthKey></AuthKey>
      <AdverInterval></AdverInterval>
      <PreemptMode></PreemptMode>
      <PreemptDelay></PreemptDelay>
    </Operation>
  </VRRPOper>
</VRRP>
```

### Table description

Item	Description
Feature name	VRRP
Table name	VRRPOper
Table type	Multi-instance table
Row name	Operation
Restrictions	Only supported on Layer 3 interfaces
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type	Index	Enumeration: <ul style="list-style-type: none"><li>0—IPv4.</li><li>1—IPv6.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
VrID	Virtual router ID	Index	Unsigned integer. Value range: 1 to 255.	The value range depends on the device model.
PriorityConfig	Priority of virtual router	N/A	Unsigned integer. Value range: 1 to 254. Default: 100.	A larger value indicates a higher priority.
AuthTypeConfig	Authentication type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Simple password.</li> <li>2—Authentication header.</li> </ul>	By default, no authentication is specified for VRRP. IPv6 VRRP does not support authentication configuration. Both AuthTypeConfig and AuthKey must be configured for the merge, create, replace, delete and remove operations.
AuthKey	Authentication key	N/A	String, case-sensitive. Length: 1 to 8 characters.	Only plaintext password is supported. AuthKey cannot be configured when no AuthTypeConfig is configured.
AdverInterval	Advertisement interval	N/A	Unsigned integer. Value range: 10 to 4095. Default: 100.	The unit is centiseconds.
PreemptMode	Preempt mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Preemptive mode.</li> <li>2—Non-preemptive mode.</li> </ul> Default: preemptive mode.	For the merge, create, and replace operations, configure the preemptive mode and the preemption delay, or configure the non-preemptive mode without the preemption delay. Both the preempt mode and preemption delay must be configured for the delete and remove operations.
PreemptDelay	Preemption delay	N/A	Unsigned integer. Value range: 0 to 180000. Default: 0.	The unit is centiseconds. The default value is 0, which means to preempt immediately.

## VRRP/VRRPAssolpAddr

This table contains information about VRRP associated addresses.

## XML structure

```
<VRRP>
```

```

<VRRPAssoIpAddress>
  <AssoIpAddr>
    <AddressType></AddressType>
    <IfIndex></IfIndex>
    <VrID></VrID>
    <IpAddress></IpAddress>
    <LinkLocal></LinkLocal>
    <Group></Group>
  </AssoIpAddr>
</VRRPAssoIpAddress>
</VRRP>

```

## Table description

Item	Description
Feature name	VRRP
Table name	VRRPAssoIpAddress
Table type	Multi-instance table
Row name	AssoIpAddr
Restrictions	Only supported on Layer 3 interfaces
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
VrID	Virtual router ID	Index	Unsigned integer. Value range: 1 to 255.	The value range depends on the device model.
IpAddress	VRRP virtual IP address	Index	String, dotted decimal notation. Or Hexadecimal string, colon-separated.	For example, 1.1.1.1, or 1::1.
LinkLocal	LinkLocal keyword.	N/A	Boolean: <ul style="list-style-type: none"> <li>true.</li> <li>false.</li> </ul>	For the merge, create, and replace operations, you cannot configure the LinkLocal keyword when the VRRP virtual IP

Column name	Column description	Column type	Data type and restrictions	Remarks
				address is an IPv4 address. You must configure the LinkLocal keyword when the VRRP virtual IP address is an IPv6 address. When the IPv6 address is a link-local address, set the value to <b>true</b> . Otherwise, set the value to <b>false</b> . For the delete and remove operations, the LinkLocal keyword cannot be configured.
Group	Group type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Not associated with RBM.</li> <li>1—Associate the VRRP group with RBM by adding the router to the active group.</li> <li>2—Associate the VRRP group with RBM by adding the router to the standby group.</li> </ul>	The state of the RBM-associated virtual router is determined by RBM.  Whether this column is supported depends on the device model.

## VRRP/VRRPTrack

This table contains information about VRRP Track.

### XML structure

```

<VRRP>
  <VRRPTrack>
    <Track>
      <AddressType></AddressType>
      <IfIndex></IfIndex>
      <VrID></VrID>
      <TrackID></TrackID>
      <TrackMode></TrackMode>
      <ReducePriority></ReducePriority>
    </Track>
  </VRRPTrack>
</VRRP>

```

### Table description

Item	Description
Feature name	VRRP



Table name	VRRPTrack
Table type	Multi-instance table
Row name	Track
Restrictions	Only supported on Layer 3 interfaces
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
VrID	Virtual router ID	Index	Unsigned integer. Value range: 1 to 255.	The value range depends on the device model.
TrackID	Track ID	Index	Unsigned integer. Value range: 1 to 1024.	N/A
TrackMode	Track mode	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Switchover.</li> <li>2—Priority reduced.</li> </ul>	For reduced mode: when the track switches to Negative, reduce the VRRP priority of local router.  For switchover mode: when the track switches to Negative, if local router's VRRP state is Backup, switch to Master at once.
ReducePriority	Value of reduced priority	N/A	Unsigned integer. Value range: 1 to 255.	ReducePriority cannot be configured when TrackMode is <b>switchover</b> .  The default value is 10 when TrackMode is priority <b>reduced</b> .

## VRRP/VRRPInterface

This table contains information about VRRP interfaces.

## XML structure

```
<VRRP>
  <VRRPInterface>
    <Interface>
      <IfIndex></IfIndex>
      <Ipv4Dot1QVLANID></Ipv4Dot1QVLANID>
      <Ipv4SecondDot1QVLANID></Ipv4SecondDot1QVLANID>
      <Ipv4Version></Ipv4Version>
      <Ipv4RecoverDelay></Ipv4RecoverDelay>
      <Ipv6RecoverDelay></Ipv6RecoverDelay>
    </Interface>
  </VRRPInterface>
</VRRP>
```

## Table description

Item	Description
Feature name	VRRP
Table name	VRRPInterface
Table type	Multi-instance table
Row name	Interface
Restrictions	Only supported on Layer 3 interfaces
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	IPv4 VRRP control VLAN configuration takes effect on only Layer 3 Ethernet subinterfaces and aggregate subinterfaces. Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Ipv4Dot1QVLANID	Outer VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.	For the delete and remove operations, if you configure the outer VLAN ID, you must also configure the inner VLAN ID.

Column name	Column description	Column type	Data type and restrictions	Remarks
Ipv4SecondDot1QVLANID	Inner VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.	For the merge, create, and replace operations, you must configure both the outer VLAN ID and inner VLAN ID.
Ipv4Version	IPv4 VRRP version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>2</b>—VRRPv2.</li> <li>• <b>3</b>—VRRPv3.</li> </ul> Default: VRRPv3.	N/A
Ipv4RecoverDelay	Delay time for the IPv4 VRRP group to transition from Initialize to Master or Backup state	N/A	Unsigned integer. Value range: 0 to 60 seconds. Default: 0.	The unit is seconds. The default value is 0, which means to recover immediately.
Ipv6RecoverDelay	Delay time for the IPv6 VRRP group to transition from Initialize to Master or Backup state	N/A	Unsigned integer. Value range: 0 to 60 seconds. Default: 0.	The unit is seconds. The default value is 0, which means to recover immediately.

# Contents

VRRP .....	1
VRRP/Base .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
VRRP/VRRPAssolpAddr .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
VRRP/VRRPTrack .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
VRRP/VRRPInterface .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
VRRP/VRRPSpecification .....	7
XML structure .....	7
Table description .....	8
Columns .....	8

# VRRP

## VRRP/Base

This table contains VRRP operation table.

### XML structure

```
<VRRP>
  <VRRPOper>
    <Operation>
      <AddressType></AddressType>
      <IfIndex></IfIndex>
      <VrID></VrID>
      <OperState></OperState>
      <PriorityConfig></PriorityConfig>
      <PriorityRun></PriorityRun>
      <IpAddressCount></IpAddressCount>
      <MasterIpAddress></MasterIpAddress>
      <AuthTypeConfig></AuthTypeConfig>
      <AuthTypeRun></AuthTypeRun>
      <AdverInterval></AdverInterval>
      <PreemptMode></PreemptMode>
      <PreemptDelay></PreemptDelay>
    </Operation>
  </VRRPOper>
</VRRP>
```

### Table description

Item	Description
Feature name	VRRP
Table name	VRRPOper
Table type	Multi-instance table
Row name	Operation
Restrictions	Only supported on Layer 3 interfaces

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
VrID	Virtual router ID	Index	Unsigned integer. Value range: 1 to 255.	The value range depends on the device model.
OperState	Virtual router state	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Inactive.</li> <li>1—Initialize.</li> <li>2—Backup.</li> <li>3—Master.</li> </ul>	N/A
PriorityConfig	Configured priority of virtual router	N/A	Unsigned integer. Value range: 1 to 254. Default: 100.	A larger value indicates a higher priority.
PriorityRun	Running priority of virtual router	N/A	Unsigned integer. Value range: 0 to 255.	The larger value indicates higher priority.
IPAddressCount	Count of associated addresses	N/A	Unsigned integer. Value range: 0 to 16.	N/A
MasterIpAddress	IP address of the Master router	N/A	String, dotted decimal notation. Or Hexadecimal string, colon-separated.	For example, 1.1.1.1, or 1::1.
AuthTypeConfig	Configured authentication type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—no authentication</li> <li>1—Simple password</li> <li>2—Authentication header.</li> </ul>	N/A
AuthTypeRun	Running authentication type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—no authentication</li> <li>1—Simple Password</li> <li>2—Authentication header.</li> </ul>	The value is 0 for VRRPv3
AdverInterval	Advertisement interval	N/A	Unsigned integer. Value range: 10 to 4095.	The unit is centiseconds.

Column name	Column description	Column type	Data type and restrictions	Remarks
PreemptMode	Preempt mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Preemptive mode.</li> <li>2—Non-preemptive mode.</li> </ul> Default: preemptive mode.	N/A
PreemptDelay	Preemption delay	N/A	Unsigned integer. Value range: 0 to 180000.	The unit is centiseconds. The default value is 0, which means to preempt immediately. If PreemptMode is non-preemptive mode, this value cannot be obtained.

## VRRP/VRRPAssolpAddr

This table contains information about VRRP associated IP addresses.

### XML structure

```

<VRRP>
  <VRRPAssoIpAddress>
    <AssoIpAddr>
      <AddressType></AddressType>
      <IfIndex></IfIndex>
      <VrID></VrID>
      <IpAddress></IpAddress>
      <LinkLocal></LinkLocal>
      <Group></Group>
    </AssoIpAddr>
  </VRRPAssoIpAddress>
</VRRP>

```

### Table description

Item	Description
Feature name	VRRP
Table name	VRRPAssolpAddr
Table type	Multi-instance table
Row name	AssolpAddr
Restrictions	Only supported on Layer 3 interfaces

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type	Index	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—IPv4.</li> <li>• <b>1</b>—IPv6.</li> </ul>	N/A
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
VrID	Virtual router ID	Index	Unsigned integer. Value range: 1 to 255.	The value range depends on the device model.
IpAddress	Virtual IP address	Index	String, dotted decimal notation. Or Hexadecimal string, colon-separated.	For example, 1.1.1.1, or 1::1.
LinkLocal	LinkLocal keyword.	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true.</b></li> <li>• <b>false.</b></li> </ul>	If IpAddress is IPv4 address, this value cannot be obtained.
Group	Group type	N/A	Enumeration: <ul style="list-style-type: none"> <li>• <b>0</b>—Not associated with RBM.</li> <li>• <b>1</b>—Associate the VRRP group with RBM by adding the router to the active group.</li> <li>• <b>2</b>—Associate the VRRP group with RBM by adding the router to the standby group.</li> </ul>	The state of the RBM-associated virtual router is determined by RBM.  This value is always 0 if the device does not support this column.

## VRRP/VRRPTrack

This table contains information about VRRP Track.

## XML structure

```

<VRRP>
  <VRRPTrack>
    <Track>
      <AddressType></AddressType>
      <IfIndex></IfIndex>
      <VrID></VrID>
    </Track>
  </VRRPTrack>
</VRRP>

```



```

    <TrackID></TrackID>
    <TrackMode></TrackMode>
    <ReducePriority></ReducePriority>
  </Track>
</VRRPTrack>
</VRRP>

```

## Table description

Item	Description
Feature name	VRRP
Table name	VRRPTrack
Table type	Multi-instance table
Row name	Track
Restrictions	Only supported on Layer 3 interfaces

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AddressType	Address type	Index	Enumeration: <ul style="list-style-type: none"> <li>0—IPv4.</li> <li>1—IPv6.</li> </ul>	N/A
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
VrID	Virtual router ID	Index	Unsigned integer. Value range: 1 to 255.	The value range depends on the device model.
TrackID	Track ID	Index	Unsigned integer. Value range: 1 to 1024.	N/A
TrackMode	Track mode	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Switchover.</li> <li>2—Priority reduced.</li> </ul>	For reduced mode: when the track switches to Negative, reduce the VRRP priority of local router.  For switchover mode: when the track switches to Negative, if local router's VRRP state is Backup, switch to Master at once.

Column name	Column description	Column type	Data type and restrictions	Remarks
ReducePriority	Value of reduced priority	N/A	Unsigned integer. Value range: 1 to 255.	If TrackMode is switchover, this value cannot be obtained.

## VRRP/VRRPInterface

This table contains VRRP interface information.

### XML structure

```

<VRRP>
  <VRRPInterface>
    <Interface>
      <IfIndex></IfIndex>
      <Ipv4Dot1QVLANID></Ipv4Dot1QVLANID>
      <Ipv4SecondDot1QVLANID></Ipv4SecondDot1QVLANID>
      <Ipv4Version></Ipv4Version>
      <Ipv4RecoverDelay></Ipv4RecoverDelay>
      <Ipv6RecoverDelay></Ipv6RecoverDelay>
    </Interface>
  </VRRPInterface>
</VRRP>

```

### Table description

Item	Description
Feature name	VRRP
Table name	VRRPInterface
Table type	Multi-instance table
Row name	Interface
Restrictions	Only supported on Layer 3 interfaces

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	IPv4 VRRP control VLAN configuration takes effect on only Layer 3 Ethernet subinterfaces and aggregate subinterfaces.  Some versions support interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see IfMgr in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
Ipv4Dot1QVLANID	Outer VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.	This value cannot be obtained if it's not configured.
Ipv4SecondDot1QVLANID	Inner VLAN ID.	N/A	Unsigned integer. Value range: 1 to 4094.	This value cannot be obtained if it's not configured.
Ipv4Version	IPv4 VRRP version.	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—VRRPv2.</li> <li>3—VRRPv3.</li> </ul>	N/A
Ipv4RecoverDelay	Delay time for the IPv4 VRRP group to transition from Initialize to Master or Backup state	N/A	Unsigned integer. Value range: 0 to 60 seconds. Default: 0.	The unit is seconds. The default value is 0, which means to recover immediately.
Ipv6RecoverDelay	Delay time for the IPv6 VRRP group to transition from Initialize to Master or Backup state	N/A	Unsigned integer. Value range: 0 to 60 seconds. Default: 0.	The unit is seconds. The default value is 0, which means to recover immediately.

## VRRP/VRRP Specification

This table contains VRRP specification information.

## XML structure

```
<VRRP>
  <VRRPSpecification>
```

```

    <MaxVrID></MaxVrID>
  </VRRPSpecification>
</VRRP>

```

## Table description

Item	Description
Feature name	VRRP
Table name	VRRPSpecification
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MaxVrID	Maximum value of virtual router ID	N/A	Unsigned integer. Value range: 1 to 255.	N/A

# Contents

VRRP .....	1
VRRP/VRRPOper .....	1
VRRP/VRRPAssolpAddr .....	1
VRRP/VRRPTrack .....	3
VRRP/VRRPInterface .....	3

# VRRP

## VRRP/VRRPOper

Message	Explanation
Maximum number of VRRP groups on the device already reached. 设备上存在的备份组数目已经达到上限。	Maximum number of VRRP groups on the device already reached.For more information,please reference to product manuals.
Maximum number of VRRP groups on the interface already reached. 接口上存在的备份组数目已经达到上限。	Maximum number of VRRP groups on the interface already reached.For more information,please reference to product manuals.
Invalid IP address. 非法的IPv4地址。	Only class A,class B,class C addresses are available.
Invalid IPv6 address. 非法的IPv6地址。	The VRRP virtual IPv6 address cannot be all 0s or loopback address.,.
Configuration items don't meet the requirements. 不符合配置要求。	<ol style="list-style-type: none"><li>1. Cannot set new configurations without non-index column.</li><li>2. Preempt mode and preempt delay have to be configured together.</li></ol>
VRID of the VRRP group is out of range. 备份组号达到产品定制的最大值。	VRID of the VRRP group is out of range.For more information,please reference to product manuals.
Authkey can't include backslashes (\). 认证字中不能有转义字符。	Please change your authkey,and do not include '\'.
VRRP4 is not configured. VRRP4未配置。	VRRP4 service has not been started.
VRRP6 is not configured. VRRP6未配置。	VRRP6 service has not been started.
This configuration is not supported on interfaces of this type. 该类型接口不支持此配置。	Only routed ports are available.

## VRRP/VRRPAssolpAddr

Message	Explanation
The virtual address has already been assigned to the VRRP group. 虚拟地址已经在备份组中存在。	Cannot assign same virtual address for different VRRP groups.
Maximum number of virtual addresses assigned to the VRRP group already reached. 备份组中配置的虚拟地址个数已经达到上限。	The maximum number of virtual address of VRRP groups is 16.
Please delete all other virtual IPv6 addresses	Please delete all other virtual IPv6 addresses before deleting the

before deleting the link-local address. 在删除链路本地地址前请先删除该备份组的其他所有虚拟地址。	link-local address.
The first assigned virtual IPv6 address must be a link-local address. 第一个指定的虚拟IPv6地址必须是链路本地地址。	Please assign link-local IPv6 address first.
Specify the link-local option when configuring a virtual link-local address. 当配置虚拟链路本地地址时须指定link-local关键字。	Specify the link-local option when configuring a virtual link-local address.
The link-local option can't be specified. 不需要link-local关键字。	Do not specify the link-local option when configuring a non-link-local address.
VRID of the VRRP group is out of range. 备份组号达到产品定制的最大值。	VRID of the VRRP group is out of range. For more information, please reference to product manuals.
Configuration items don't meet the requirements. 不符合配置要求。	The linklocal column must be specified when configure IPv6 addresses.
Can't associate a virtual router with RBM in load balancing mode. 负载均衡模式VRRP下不允许将备份组与RBM模块关联。	You can associate a virtual router with RBM only in normal mode. 只有工作在标准模式下的VRRP备份组支持与RBM模块关联。
Can't switch to load balancing mode for an RBM-associated virtual router. 存在RBM关联备份组时，不允许切换到负载均衡VRRP模式。	To set VRRP to work in load balancing mode, first delete all virtual routers associated with RBM. 如果VRRP备份组已经关联了RBM，如果要将VRRP备份组切换为负载均衡模式，需要先删除所有RBM关联备份组。
Can't configure the RBM attribute for an existing virtual router. 如果VRRP备份组已存在，不允许关联RBM属性。	You can associate a virtual router with RBM only when creating the virtual router. 仅允许在备份组创建时增加关联RBM属性。
Can't remove the RBM attribute for a virtual router. 不允许取消VRRP备份组与RBM关联。	To cancel the association with RBM, first delete the virtual router. 如果一个VRRP备份组已经关联RBM，不允许取消与RBM关联。需要先删除整个VRRP备份组。
Can't modify the RBM attribute for a virtual router. 不允许修改VRRP备份组与RBM关联。	To modify the association with RBM, first delete the virtual router. 如果一个VRRP备份组已经关联RBM，不允许修改RBM关联方式。需要先删除整个VRRP备份组。
Can't configure multiple virtual IP address for an RBM-associated virtual router. 不允许关联RBM的VRRP备份组配置多个虚IP地址。	Can't configure multiple virtual IP addresses for a virtual router associated with RBM. 如果一个VRRP备份组已经关联RBM，不允许配置多个虚IP地址。
Can't associate RBM with a virtual router that has already been associated with Track. 如果VRRP备份组已经关联Track，不能再关联RBM。	Can't associate a virtual router with RBM if the virtual router has been associated with Track. 如果一个VRRP备份组已经关联Track，则不允许再关联RBM。
Can't associate Track with a virtual router that has already been associated with RBM. 如果VRRP备份组已经关联RBM，不能再关联Track。	Can't associate a virtual router with Track if the virtual router has been associated with RBM. 如果一个VRRP备份组已经关联RBM，则不允许再关联Track。
This device model doesn't support configure RBM attribute for VRRP.	The device doesn't support the RBM option. 设备不支持RBM选项。

设备不支持“VRRP备份组支持RBM”功能。	
------------------------	--

## VRRP/VRRPTrack

Message	Explanation
Maximum number of associated track entries already reached. 关联的Track项数目已经达到上限。	The maximum number of track entries of VRRP groups is 8.
VRID of the VRRP group is out of range. 备份组号达到产品定制的最大值。	VRID of the VRRP group is out of range.For more information,please reference to product manuals.
This configuration is not supported on interfaces of this type. 该类型接口不支持此配置。	Only route ports are available.

## VRRP/VRRPInterface

Message	Explanation
This configuration is not supported on interfaces of this type. 该类型接口不支持此配置。	Only route ports are available.
Configuration items don't meet the requirements. 不符合配置要求。	<ol style="list-style-type: none"> <li>1. Cannot configure second dot1q without dot1q.</li> <li>2. Cannot remove dot1q without second dot1q.</li> </ol>





# Contents

VXLAN.....	1
VXLAN/ClearVxlanTunnelStatistics.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
VXLAN/ClearAllVxlanTunnelStatistics .....	1
XML structure.....	1
Table description.....	2
Columns.....	2

# VXLAN

## VXLAN/ClearVxlanTunnelStatistics

This table clears traffic statistics for all VXLAN tunnels of a VSI.

### XML structure

```
<VXLAN>
  <ClearVxlanTunnelStatistics>
    <VxlanTunnelStatistics>
      <VsiName></VsiName>
      <Clear></Clear>
    </VxlanTunnelStatistics>
  </ClearVxlanTunnelStatistics>
</VXLAN>
```

### Table description

Item	Description
Feature name	VXLAN
Table name	ClearVxlanTunnelStatistics
Table type	Multi-instance table
Row name	VxlanTunnelStatistics
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
VsiName	VSI name	Index	String. Length: 1 to 31 characters.
Clear	Clear traffic statistics for all VXLAN tunnels of the VSI	N/A	This column must be empty.

## VXLAN/ClearAllVxlanTunnelStatistics

This table clears traffic statistics for all VXLAN tunnels.

### XML structure

```
<VXLAN>
```

```

<ClearAllVxlanTunnelStatistics>
  <Clear></Clear>
</ClearAllVxlanTunnelStatistics>
</VXLAN>

```

## Table description

Item	Description
Feature name	VXLAN
Table name	ClearAllVxlanTunnelStatistics
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Clear	Clear traffic statistics for all VXLAN tunnels	N/A	This column must be empty.

# Contents

- VXLAN.....1
  - VXLAN/Base .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1
  - VXLAN/VXLANs .....2
    - XML structure.....2
    - Table description.....3
    - Columns.....3
  - VXLAN/Tunnels.....4
    - XML structure.....4
    - Table description.....4
    - Columns.....4
  - VXLAN/RmtMACs.....5
    - XML structure.....5
    - Table description.....5
    - Columns.....5
  - VXLAN/Allocations .....6
    - XML structure.....6
    - Table description.....6
    - Columns.....6
  - VXLAN/EvpnVxlanEncaps .....7
    - XML structure.....7
    - Table description.....7
    - Columns.....8
  - VXLAN/EvpnVxlanRTs.....8
    - XML structure.....9
    - Table description.....9
    - Columns.....9
  - VXLAN/VRFs.....9
    - XML structure.....10
    - Table description.....10
    - Columns.....10

# VXLAN

## VXLAN/Base

This table contains information about global VXLAN functions.

### XML structure

```
<VXLAN>
  <Base>
    <RmtMacLearn></RmtMacLearn>
    <RmtArpLearn></RmtArpLearn>
    <RmtNdLearn></RmtNdLearn>
    <LocMacNtf></LocMacNtf>
    <ReservedVxlanID></ReservedVxlanID>
    <EvpnMultihomingAdvertise></EvpnMultihomingAdvertise>
    <EvpnMultihomingTimerDFDelay></EvpnMultihomingTimerDFDelay>
    <EvpnArpMobilitySuppression></EvpnArpMobilitySuppression>
  </Base>
</VXLAN>
```

### Table description

Item	Description
Feature name	VXLAN
Table name	Base
Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only global functions.
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RmtMacLearn	Remote MAC address learning function	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled(default).</li><li><b>false</b>—Disabled.</li></ul>	N/A
RmtArpLearn	Remote ARP learning function	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled(default).</li><li><b>false</b>—Disabled.</li></ul>	You must enable L2VPN feature globally at first.
RmtNdLearn	Remote ND learning	N/A	Boolean:	You must enable L2VPN

Column name	Column description	Column type	Data type and restrictions	Remarks
	function		<ul style="list-style-type: none"> <li><b>true</b>—Enabled(default).</li> <li><b>false</b>—Disabled.</li> </ul>	feature globally at first.
LocMacNtf	Local MAC address report function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default).</li> </ul>	N/A
ReservedVxlanID	Reserved VXLAN ID	N/A	Unsigned integer, Value range: 0 to 16777215.	You must enable L2VPN feature globally at first. You must specify this column for tunnel BFD. The value must be different from that of VxlanID column in VXLANs table. The available value can be get from the NextVxlanID column in Base table.
EvpnMultihomingAdvertise	EVPN multihoming route advertisement	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled (default).</li> <li><b>false</b>—Disabled.</li> </ul>	You must enable L2VPN feature globally at first.
EvpnMultihomingTimerDFDelay	EVPN multihoming DF election delay	N/A	Unsigned integer, Value range: 1 to 1200.	You must enable L2VPN feature globally at first.
EvpnArpMobilitySuppression	EVPN ARP mobility event suppression	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled (default).</li> </ul>	You must enable L2VPN feature globally at first.

## VXLAN/VXLANs

This table contains information about VXLAN configurations.

### XML structure

```

<VXLAN>
  <VXLANs>
    <Vxlan>
      <VxlanID></VxlanID>
      <VsiName></VsiName>
      <Ipv4Group>
        <GroupAddr></GroupAddr>
        <SrcAddr></SrcAddr>
      </Ipv4Group>
      <TunnelAll></TunnelAll>
    </Vxlan>
  </VXLANs>
</VXLAN>

```

## Table description

Item	Description
Feature name	VXLAN
Table name	VXLANs
Table type	Multi-instance table
Row name	Vxlan
Restrictions	You must enable global L2VPN feature at first.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VxlanID	VXLAN ID	Index	Unsigned integer, Value range: 0-16777215.	N/A
VsiName	VSI name	N/A	String, Length: 1 to 31 characters.	You must create a VSI first before you merge, replace or create VXLANs. You must specify this column when the operation is merge, create or replace. You can't specify this column when the operation is delete or remove. Can not be modified after creation.
Ipv4Group	VXLAN multicast group structure	Data structure	Members include: <ul style="list-style-type: none"> <li>GroupAddr.</li> <li>SrcAddr.</li> </ul>	You must specify both the GroupAddr and SrcAddr when the operation is merge, create or replace.
GroupAddr	IPv4 multicast address	N/A	String, dotted decimal notation.	Example: 224.1.1.1.
SrcAddr	IPv4 source address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
TunnelAll	All tunnels	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default).</li> </ul>	If you assign VXLAN tunnels to a VXLAN one by one, you cannot remove all the VXLAN tunnels by using this column.



## VXLAN/Tunnels

批注 [c0(1)]: Need confirmed by product

This table contains information about tunnels associated with VXLANs.

### XML structure

```
<VXLAN>
  <Tunnels>
    <Tunnel>
      <VxlanID></VxlanID>
      <TunnelID></TunnelID>
      <FloodingProxy></FloodingProxy>
      <RelayAgent></RelayAgent>
    </Tunnel>
  </Tunnels>
</VXLAN>
```

### Table description

Item	Description
Feature name	VXLAN
Table name	Tunnels
Table type	Multi-instance table
Row name	Tunnel
Restrictions	You must enable global L2VPN feature at first.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VxlanID	VXLAN ID	Index	Unsigned integer, Value range:0-16777215.	You must create a VXLAN first before you merge, replace or create tunnels.
TunnelID	Tunnel ID	Index	Unsigned integer.	You must create a tunnel first before you merge, replace or create tunnels.
FloodingProxy	Flooding proxy	N/A	Boolean: • <b>true</b> —Enabled. • <b>false</b> —Disabled(default).	Can't be modified after creation.
RelayAgent	Relay agent	N/A	Enumeration: • <b>0</b> —Disabled(default).	Support for this column depends on the device

			<ul style="list-style-type: none"> <li>1—PPPoE.</li> <li>2—IPoE.</li> <li>3—The combination of the two type above.</li> </ul>	model.
--	--	--	---	--------

## VXLAN/RmtMACs

This table contains information about remote MAC addresses of each VXLAN.

### XML structure

```
<VXLAN>
  <RmtMACs>
    <MAC>
      <VsiName></VsiName>
      <MacAddr></MacAddr>
      <TunnelID></TunnelID>
    </MAC>
  </RmtMACs>
</VXLAN>
```

### Table description

Item	Description
Feature name	VXLAN
Table name	RmtMACs
Table type	Multi-instance table
Row name	MAC
Restrictions	You must enabled global L2VPN feature at first.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	You must create a VSI first before you merge, replace or create MACs.
MacAddr	Remote MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated. The value must be unicast address.	Example: 00-0c-af-e3-5d-c0.
TunnelID	Tunnel ID	N/A	Unsigned integer	You must create a

Column name	Column description	Column type	Data type and restrictions	Remarks
				tunnel first before you merge, replace or create MACs.  You must specify this column when the operation is merge, create or replace. You can't specify this column when the operation is delete or remove.

## VXLAN/Allocations

This table contains VXLAN allocate information in context.

### XML structure

```

<VXLAN>
  <Allocations>
    <Allocation>
      <ContextID></ContextID>
      <Vxlan></Vxlan>
    </Allocation>
  </Allocations>
</VXLAN>

```

### Table description

Item	Description
Feature name	VXLAN
Table name	Allocations
Table type	Multi-instance table
Row name	Allocation
Restrictions	You must enable global L2VPN feature at first.
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ContextID	Context ID	Index	Unsigned integer.	N/A

Vxlan	VXLAN ID list	N/A	Numeric string separated by commas and a maximum of one minus sign. The string cannot contain blank spaces or end with a comma or minus sign. Such as: 1,3,5,8,10-20	N/A
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批注 [c0(2)]: Need confirmed by product

## VXLAN/EvpnVxlanEncaps

This table contains information about EVPN with VXLAN encapsulation.

### XML structure

```
<VXLAN>
  <EvpnVxlanEncaps>
    <VxlanEncap>
      <VsiName></VsiName>
      <bRDAuto></bRDAuto>
      <RDAutoType></RDAutoType>
      <RD></RD>
      <bIrtAuto></bIrtAuto>
      <bErtAuto></bErtAuto>
      <bMacAdvertise></bMacAdvertise>
      <bArpMacLearn></bArpMacLearn>
      <NdMacLearn></NdMacLearn>
      <MappingVni></MappingVni>
      <ArpAdvertise></ArpAdvertise>
    </VxlanEncap>
  </EvpnVxlanEncaps>
</VXLAN>
```

### Table description

Item	Description
Feature name	VXLAN
Table name	EvpnVxlanEncaps
Table type	Multi-instance table
Row name	VxlanEncap
Restrictions	You must enable L2VPN globally first.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
bRDAuto	RD Auto	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default)</li> </ul>	N/A
RD	Route distinguisher.	Data structure	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn	N/A
blrtAuto	Import route target	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default)</li> </ul>	N/A
bErtAuto	Export route target	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled(default)</li> </ul>	N/A
bMacAdvertise	MAC advertise	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled(default)</li> <li><b>false</b>—Disabled</li> </ul>	N/A
bArpMacLearn	ARP MAC learning	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled(default)</li> <li><b>false</b>—Disabled</li> </ul>	N/A
NdMacLearn	ND MAC learning	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled(default)</li> <li><b>false</b>—Disabled</li> </ul>	N/A
MappingVni	Mapping VXLAN ID	N/A	Unsigned integer, Value range: 0-16777215.	Support for this column depends on the device model.
ArpAdvertise	ARP advertisement	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled(default)</li> <li><b>false</b>—Disabled</li> </ul>	N/A
RDAutoType	Automatic RD generation type	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—VXLAN ID-based (default).</li> <li><b>1</b>—Router ID-based.</li> </ul>	Available for an automatically generated RD.

## VXLAN/EvpnVxlanRTs

This table contains information about EVPN route target associated with VXLANs.

批注 [c0(3)]: Need confirmed by product

## XML structure

```
<VXLAN>
  <EvpnVxlanRTs>
    <VxlanRT>
      <VsiName></VsiName>
      <RTType></RTType>
      <RTEntry></RTEntry>
    </VxlanRT>
  </EvpnVxlanRTs>
</VXLAN>
```

## Table description

Item	Description
Feature name	VXLAN
Table name	EvpnVxlanRTs
Table type	Multi-instance table
Row name	VxlanRT
Restrictions	You must enabled global L2VPN feature at first.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A You must create a VSI and enable EVPN encapsulation vxlan first before you merge, replace or create VXLAN RTs, and the RT is not auto in table EvpnVxlanEncaps.
RTType	Route target type	Index	Enumeration: <ul style="list-style-type: none"><li>1—Import</li><li>2—Export</li></ul>	N/A
RTEntry	Route target	Index	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn	N/A

## VXLAN/VRFs

This table contains VNIs associated with VPN instances.

## XML structure

```
<VXLAN>
  <VRFs>
    <VRF>
      <VRF></VRF>
      <VNI></VNI>
    </VRF>
  </VRFs>
</VXLAN>
```

## Table description

Item	Description
Feature name	VXLAN
Table name	VRFs
Table type	Multi-instance table
Row name	VRF
Restrictions	You must enable L2VPN globally first.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name	Index	String, case-sensitive. Length: 0 to 31 characters.	configured only in the public instance. This column must be empty.
VNI	Layer 3 VNI for the tenant	N/A	Unsigned integer. Value range: 0 to 16777215.	N/A

# Contents

- VXLAN.....1
  - VXLAN/Base .....1
    - XML structure.....1
    - Table description.....1
    - Columns.....1
  - VXLAN/VXLANS .....2
    - XML structure.....2
    - Table description.....3
    - Columns.....3
  - VXLAN/Tunnels.....3
    - XML structure.....4
    - Table description.....4
    - Columns.....4
  - VXLAN/RmtMACs.....5
    - XML structure.....5
    - Table description.....6
    - Columns.....6
  - VXLAN/VXLANAllocations .....6
    - XML structure.....6
    - Table description.....7
    - Columns.....7
  - VXLAN/EvpnVxlanEncaps .....7
    - XML structure.....7
    - Table description.....8
    - Columns.....8
  - VXLAN/EvpnVxlanRTs.....9
    - XML structure.....9
    - Table description.....9
    - Columns.....9
  - VXLAN/VRFs.....10
    - XML structure.....10
    - Table description.....10
    - Columns.....10
  - VXLAN/EvpnESs .....10
    - XML structure.....10
    - Table description.....11
    - Columns.....11



# VXLAN

## VXLAN/Base

This table contains information about global VXLAN functions.

### XML structure

```
<VXLAN>
  <Base>
    <RmtMacLearn></RmtMacLearn>
    <RmtArpLearn></RmtArpLearn>
    <RmtNdLearn></RmtNdLearn>
    <LocMacNtf></LocMacNtf>
    <NextVxlanID></NextVxlanID>
    <TotalVxlanNum></TotalVxlanNum>
    <ReservedVxlanID></ReservedVxlanID>
    <SupportRelayAgent></SupportRelayAgent>
    <EvpnMultihomingAdvertise></EvpnMultihomingAdvertise>
    <EvpnMultihomingTimerDFDelay></EvpnMultihomingTimerDFDelay>
    <EvpnArpMobilitySuppression></EvpnArpMobilitySuppression>
  </Base>
</VXLAN>
```

### Table description

Item	Description
Feature name	VXLAN
Table name	Base
Table type	Single-instance table
Row name	N/A
Restrictions	This table supports only global functions.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
RmtMacLearn	Remote MAC address learning function	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A
RmtArpLearn	Remote ARP learning function	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RmtNdLearn	Remote ND learning function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
LocMacNtf	Local MAC address report function	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
NextVxlanID	Next useful VXLAN ID	N/A	Unsigned integer, Value range: 0 to 16777215.	You must enable global L2VPN feature at first. The invalid value 4294967295 indicates that no ID can be set.
TotalVxlanNum	Total number of existing VXLANs	N/A	Unsigned integer	You must enable global L2VPN feature at first.
ReservedVxlanID	Reserved VXLAN ID	N/A	Unsigned integer, Value range: 0-16777215.	You must enable L2VPN feature globally at first.
SupportRelayAgent	Relay agent supporting function	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—Disabled.</li> <li><b>1</b>—PPPoE.</li> <li><b>2</b>—IPoE.</li> <li><b>3</b>—The combination of the two type above.</li> </ul>	N/A
EvpnMultihomingAdvertise	EVPN multihoming route advertisement	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	You must enable L2VPN feature globally at first.
EvpnMultihomingTimerDFDelay	EVPN multihoming DF election delay	N/A	Unsigned integer, Value range: 1 to 1200.	You must enable L2VPN feature globally at first.
EvpnArpMobilitySuppression	EVPN ARP mobility event suppression	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	You must enable L2VPN feature globally at first.

## VXLAN/VXLANS

This table contains information about VXLAN configurations.

### XML structure

```

<VXLAN>
  <VXLANS>
    <Vxlan>
      <VxlanID></VxlanID>
      <VsiName></VsiName>
      <Ipv4Group>
        <GroupAddr></GroupAddr>

```

```

        <SrcAddr></SrcAddr>
    </Ipv4Group>
    <RmtMacCnt></RmtMacCnt>
    <TunnelAll></TunnelAll>
</Vxlan>
</VXLANS>
</VXLAN>

```

## Table description

Item	Description
Feature name	VXLAN
Table name	VXLANS
Table type	Multi-instance table
Row name	Vxlan
Restrictions	You must enable L2VPN globally first.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VxlanID	VXLAN ID	Index	Unsigned integer, Value range: 0-16777215.	N/A
VsiName	VSI name	N/A	String, Length: 1 to 31 characters.	N/A
Ipv4Group	VXLAN multicast group structure	Data structure	Members include: <ul style="list-style-type: none"> <li>GroupAddr.</li> <li>SrcAddr.</li> </ul>	N/A
GroupAddr	IPv4 multicast address	N/A	String, dotted decimal notation.	Example: 224.1.1.1.
SrcAddr	IPv4 source address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
RmtMacCnt	The count of remote MAC addresses	N/A	Unsigned integer	N/A
TunnelAll	All tunnels	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A

## VXLAN/Tunnels

This table contains information about tunnels associated with VXLANs.

批注 [c0(1)]: Need confirmed by product

## XML structure

```
<VXLAN>
  <Tunnels>
    <Tunnel>
      <VxlanID></VxlanID>
      <TunnelID></TunnelID>
      <Type></Type>
      <FloodingProxy></FloodingProxy>
      <State></State>
      <RelayAgent></RelayAgent>
      <InPkts></InPkts>
      <InOctets></InOctets>
      <OutPkts></OutPkts>
      <OutOctets></OutOctets>
      <SystemTime></SystemTime>
    </Tunnel>
  </Tunnels>
</VXLAN>
```

## Table description

Item	Description
Feature name	VXLAN
Table name	Tunnels
Table type	Multi-instance table
Row name	Tunnel
Restrictions	You must enabled global L2VPN feature at first.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VxlanID	VXLAN ID	Index	Unsigned integer, Value range:0-16777215.	N/A
TunnelID	Tunnel ID	Index	Unsigned integer.	N/A
Type	Tunnel type	N/A	Enumeration: <ul style="list-style-type: none"><li>• <b>0</b>—auto.</li><li>• <b>1</b>—manual.</li><li>• <b>2</b>—auto and manual.</li></ul>	N/A
FloodingProxy	Flooding proxy	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>	N/A

State	Tunnel state	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—down.</li> <li>2—up.</li> <li>3—defect.</li> <li>4—blocked.</li> </ul>	1-down: The tunnel is not available. 2-up: The tunnel is available. 3-defect: BFD has detected a defect on the tunnel. 4-blocked: The tunnel is a backup tunnel.
RelayAgent	Relay agent	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—Disabled.</li> <li>1—PPPoE.</li> <li>2—IPoE.</li> <li>3—The combination of the two type above.</li> </ul>	N/A
InPkts	Number of incoming packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
InOctets	Number of incoming bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutPkts	Number of outgoing packets	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
OutOctets	Number of outgoing bytes	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ .	N/A
SystemTime	Time that has elapsed since the device started up when the tunnel statistics are updated	N/A	Unsigned integer. Value range: 0 to $2^{64} - 1$ , in milliseconds.	If the tunnel statistics feature is disabled, the value for this column is 0.

## VXLAN/RmtMACs

This table contains information about remote MAC addresses of each VXLAN.

### XML structure

```

<VXLAN>
  <RmtMACs>
    <MAC>
      <VsiName></VsiName>
      <MacAddr></MacAddr>
      <TunnelID></TunnelID>
      <Status></Status>
    </MAC>
  </RmtMACs>
</VXLAN>

```

## Table description

Item	Description
Feature name	VXLAN
Table name	RmtMACs
Table type	Multi-instance table
Row name	MAC
Restrictions	You must enable global L2VPN feature at first.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String, Length: 1 to 31 characters.	N/A
MacAddr	Remote MAC address	Index	Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
TunnelID	Tunnel ID	N/A	Unsigned integer	N/A
Status	Type of remote MAC address	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—other.</li><li>• 1—static.</li><li>• 2—selfLearned.</li><li>• 3—protocolLearned.</li><li>• 4—OpenFlow.</li><li>• 5—OVSDB.</li></ul>	1- static: Manually configured static unicast address 2- selfLearned: Dynamically learned unicast address 3- protocolLearned: Unicast address added by protocol. 4- OpenFlow: Unicast address issued by a controller through OpenFlow 5- OVSDB: Unicast address issued by a controller through OVSDB.

## VXLAN/VXLANAAllocations

This table contains VXLAN allocate information in context.

## XML structure

```
<VXLAN>
  <VXLANAAllocations>
    <VXLANAAllocation>
      <VXLANID></VXLANID>
```

```

    <ContextID></ContextID>
  </VXLANAllocation>
</VXLANAllocations>
</VXLAN>

```

## Table description

Item	Description
Feature name	VXLAN
Table name	VXLANAllocations
Table type	Multi-instance table
Row name	VXLANAllocation
Restrictions	You must enable global L2VPN feature at first.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VXLANID	VXLAN ID	Index	Unsigned integer.	N/A
ContextID	Context ID	N/A	Unsigned integer.	N/A

## VXLAN/EvpnVxlanEncaps

批注 [c0(2)]: Need confirmed by product

This table contains information about EVPN encapsulation associated with VXLANS.

## XML structure

```

<VXLAN>
  <EvpnVxlanEncaps>
    <VxlanEncap>
      <VsiName></VsiName>
      <bRDAuto></bRDAuto>
      <RD></RD>
      <bIrtAuto></bIrtAuto>
      <bErtAuto></bErtAuto>
      <bMacAdvertise></bMacAdvertise>
      <bArpMacLearn></bArpMacLearn>
      <NdMacLearn></NdMacLearn>
      <MappingVni></MappingVni>
      <ArpAdvertise></ArpAdvertise>
    </VxlanEncap>
  </EvpnVxlanEncaps>
</VXLAN>

```

## Table description

Item	Description
Feature name	VXLAN
Table name	EvpnVxlanEncaps
Table type	Multi-instance table
Row name	VxlanEncap
Restrictions	You must enabled global L2VPN feature at first.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
bRDAuto	RD Auto	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
RD	Route distinguisher.	Data structure	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn	N/A
blrtAuto	Import route target	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
bErtAuto	Export route target	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
bMacAdvertise	MAC advertise	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
bArpMacLearn	ARP MAC learning	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
NdMacLearn	ND MAC learning	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
MappingVni	Mapping VXLAN ID	N/A	Unsigned integer, Value range: 0-16777215.	N/A
ArpAdvertise	ARP advertisement	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
RDAutoType	Automatic RD generation	N/A	Enumeration: <ul style="list-style-type: none"> <li><b>0</b>—VXLAN ID-based.</li> </ul>	Available for an automatically generated



	type		1—Router ID-based.	RD.
--	------	--	--------------------	-----

## VXLAN/EvpnVxlanRTs

批注 [c0(3)]: Need confirmed by product

This table contains information about EVPN route target associated with VXLANs.

### XML structure

```
<VXLAN>
  <EvpnVxlanRTs>
    <VxlanRT>
      <VsiName></VsiName>
      <RTType></RTType>
      <RTEntry></RTEntry>
    </VxlanRT>
  </EvpnVxlanRTs>
</VXLAN>
```

### Table description

Item	Description
Feature name	VXLAN
Table name	EvpnVxlanRTs
Table type	Multi-instance table
Row name	VxlanRT
Restrictions	You must enabled global L2VPN feature at first.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VsiName	VSI name	Index	String. Length: 1 to 31 characters.	N/A
RTType	Route target type	Index	Enumeration: <ul style="list-style-type: none"> <li>1—Import</li> <li>2—Export</li> </ul>	N/A
RTEntry	VPN target	Index	String. Length: 3 to 21 characters. The format is ASN:nn or IP_address:nn	N/A

## VXLAN/VRFs

This table contains VNIs associated with VPN instances.

### XML structure

```
<VXLAN>
  <VRFs>
    <VRF>
      <VRF></VRF>
      <VNI></VNI>
    </VRF>
  </VRFs>
</VXLAN>
```

### Table description

Item	Description
Feature name	VXLAN
Table name	VRFs
Table type	Multi-instance table
Row name	VRF
Restrictions	You must enable L2VPN globally first.

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
VRF	VPN instance name	Index	String, case-sensitive. Length: 0 to 31 characters.	This column must be empty.
VNI	Layer 3VNI for the tenant	N/A	Unsigned integer. Value range: 0 to 16777215.	N/A

## VXLAN/EvpnESs

This table contains EVPN Ethernet segment information.

### XML structure

```
<VXLAN>
  <EvpnESs>
```

```

<EvpnES>
  <Esi></Esi>
  <VLANID></VLANID>
  <VxlanID></VxlanID>
  <SelfAddr></SelfAddr>
  <MemberGroup>
    <MemberAddr></MemberAddr>
    <bDF></bDF>
  </MemberGroup>
</EvpnES>
</EvpnESs>
</VXLAN>

```

## Table description

Item	Description
Feature name	VXLAN
Table name	EvpnESs
Table type	Multi-instance table
Row name	EvpnES
Restrictions	You must first enable the L2VPN feature globally.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Esi	Ethernet segment identifier	Index	Five groups of four hexadecimal digits, hyphen-separated.	Example: 0011.2233.4455.6677.8899  The value of an ESI starts with 00 and cannot be all 0s.
VLANID	VLAN mapped to the Ethernet segment	Index	Unsigned integer.	If multiple VLANs are mapped to the Ethernet segment, this value is the lowest VLAN ID. The value of this column also indicates AC types: <ul style="list-style-type: none"> <li>2147483649 for tagged ACs.</li> <li>2147483650 for untagged ACs.</li> <li>0 for the others.</li> </ul>
VxlanID	Mapped VXLAN ID	N/A	Unsigned integer.	N/A
SelfAddr	Local IP address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.

GroupMember	Ethernet segment group membership	Data structure	Members include: <ul style="list-style-type: none"> <li>• MemberAddr.</li> <li>• bDF.</li> </ul>	Multiple Ethernet segment group members can exist.
MemberAddr	Member IP address	N/A	String, dotted decimal notation.	Example: 1.1.1.1.
bDF	Designated forwarder role	N/A	Boolean: <ul style="list-style-type: none"> <li>• <b>true</b>—DF.</li> <li>• <b>false</b>—Not DF.</li> </ul>	N/A

# Contents

VXLAN.....	2
VXLAN/BASE .....	2
VXLAN/VXLAN.....	2
VXLAN/TUNNEL .....	3
VXLAN/RMTAC.....	3
VXLAN/ALLOC CONFIG .....	4
VXLAN/ALLOC DATA .....	4
VXLAN/ESS .....	4
VXLAN/EVPNVXLANENCAPS .....	5
VXLAN/EVPNVXLANRTS.....	5
VXLAN/VRFS .....	6

# VXLAN

## VXLAN/BASE

Message	Explanation
Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Parameters don't exist. 参数不存在。	Parameters don't exist. 参数不存在。

## VXLAN/VXLAN

Message	Explanation
Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situa tion. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
Executed the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Executed the set commamd, the variable exists but can not be modified. 执行 SET 命令，变量存在但不能被修改。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。
Parameters don't exist. 参数不存在。	Multicast addresses don't exist. 组播地址不存在。

# VXLAN/TUNNEL

Message	Explanation
<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>No operation permissions.</p> <p>无操作权限。</p>	<p>Tnld is not satisfied with the RBAC interface policy.</p> <p>Tnld不满足RBAC接口策略</p>
<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>	<p>1.The replay-agent pppoe command is not supported.</p> <p>2.The replay-agent ipoe command is not supported.</p> <p>1.不支持replay-agent pppoe命令。</p> <p>2.不支持replay-agent ipoe命令。</p>

# VXLAN/RMTAC

Message	Explanation
<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>	<p>Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation.</p> <p>无效的配置消息，一般是消息的长度和实际不相符的情况。</p>
<p>Access a no-access node,communication failure.</p> <p>访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。</p>	<p>1.Access a no-access node.</p> <p>2.Send/receive data timeout.</p> <p>3.A failure to initiate a connect to a server.</p> <p>1.访问一个no-access节点。</p> <p>2.发送、接收数据超。</p> <p>3.向服务器发起连接失败。</p>
<p>When set is operated, the set value does not meet the requirements of the module.</p> <p>SET操作时，所设的值不符合模块要求。</p>	<p>Illegal MAC address.</p> <p>非法的mac地址。</p>
<p>Executed the set commamd, the variable exists but can not be modified.</p> <p>执行SET命令，变量存在但不能被修改。</p>	<p>Executed the set commamd, the variable exists but can not be modified.</p> <p>执行 SET 命令，变量存在但不能被修改。</p>
<p>No operation permissions.</p> <p>无操作权限。</p>	<p>Tnld is not satisfied with the RBAC interface policy.</p> <p>Tnld不满足RBAC接口策略</p>

# VXLAN/ALLOC CONFIG

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。

# VXLAN/ALLOC DATA

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。

# VXLAN/ESS

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
No operation permissions. 无操作权限。	No RBAC permissions. 无 RBAC 权限。



Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Executed the set command, the variable exists but can not be modified. 执行 SET 命令，变量存在但不能被修改。
Parameters don't exist. 参数不存在。	1.When the operation is deleted,the Esi is not configured. 2.The default value of the delete operation can't be set again. 1.删除操作时，未配置Esi。 2.删除操作默认值不能再设置。

## VXLAN/EVPN VXLAN ENCAPS

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。
Executed the set command, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Executed the set command, the variable exists but can not be modified. 执行 SET 命令，变量存在但不能被修改。
Parameters don't exist. 参数不存在。	The default value of the delete operation can't be set again. .删除操作默认值不能再设置。

## VXLAN/EVPN VXLAN RTS

Message	Explanation
Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invailld configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。

	2.发送、接收数据超。 3.向服务器发起连接失败。
When set is operated, the set value does not meet the requirements of the module. SET操作时，所设的值不符合模块要求。	When set is operated, the set value does not meet the requirements of the module. SET 操作时，所设的值不符合模块要求。

## VXLAN/VRFS

Message	Explanation
Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。	Invaield configuration messages.Generally speaking,the length of the message is not consistent with the actual situation. 无效的配置消息，一般是消息的长度和实际不相符的情况。
Executed the set commamd, the variable exists but can not be modified. 执行SET命令，变量存在但不能被修改。	Executed the set commamd, the variable exists but can not be modified. 执行 SET 命令，变量存在但不能被修改。
No operation permissions. 无操作权限。	No RBAC permissions. 无RBAC权限。
Access a no-access node,communication failure. 访问一个no-access节点，发送、接收数据超时，向服务器发起连接失败。	1.Access a no-access node. 2.Send/receive data timeout. 3.A failure to initiate a connect to a server. 1.访问一个no-access节点。 2.发送、接收数据超。 3.向服务器发起连接失败。

# Contents

<b>WebAuth</b> .....	1
WebAuth/WebServers .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
WebAuth/UriParams .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
WebAuth/Interfaces .....	3
XML structure .....	3
Table description .....	4
Columns .....	4
WebAuth/FreelPs .....	5
XML structure .....	5
Table description .....	5
Columns .....	5
WebAuth/ProxyPorts .....	5
XML structure .....	5
Table description .....	6
Columns .....	6

# WebAuth

## WebAuth/WebServers

This table contains information about web-auth server.

### XML structure

```
<WebAuth>
  <WebServers>
    <WebServer>
      <ServerName></ServerName>
      <IPAddress></IPAddress>
      <Port></Port>
      <Url></Url>
    </WebServer>
  </WebServers>
</WebAuth>
```

### Table description

Item	Description
Feature name	WebAuth
Table name	WebServers
Table type	Multi-instance table
Row name	WebServer
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Name of the web-auth server	Index	String. <ul style="list-style-type: none"><li>Length: 1 to 32 characters.</li></ul>	N/A
IPAddress	IPv4 address of the web-auth server	N/A	String, dotted decimal notation. Default is not configured.	The column supports IPv4-only format.
Port	URL of the web-auth server	N/A	Unsigned integer. <ul style="list-style-type: none"><li>Value range:</li></ul>	The column must be defined when the IPAddress exists.

Column name	Column description	Column type	Data type and restrictions	Remarks
			1-65535. Default is not configured.	
Url	Name of the web-auth server	N/A	String. <ul style="list-style-type: none"> <li>Length: 1 to 256 characters.</li> </ul> Default is not configured.	N/A

## WebAuth/UrlParams

This table contains information about Url parameters.

### XML structure

```

<WebAuth>
  <UrlParams>
    <UrlParam>
      <ServerName></ServerName>
      <ParamName></ParamName>
      <ParamType></ParamType>
      <SelfDefValue></SelfDefValue>
    </UrlParam>
  </UrlParams>
</WebAuth>

```

### Table description

Item	Description
Feature name	WebAuth
Table name	UrlParams
Table type	Multi-instance table
Row name	UrlParam
Restrictions	Row creation is allowed only when the web-server exists.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Name of the web-auth server	Index	String. case-insensitive. <ul style="list-style-type: none"><li>Length: 1 to 32 characters.</li></ul>	N/A
ParamName	Parameter name of the URL	Index	String. <ul style="list-style-type: none"><li>Length: 1 to 32 characters.</li></ul>	The column configures the parameter name carried in the redirect URL.
ParamType	Parameter type	N/A	Enumeration: <ul style="list-style-type: none"><li>0—source-address</li><li>1—source-mac</li><li>2—original-url</li><li>3—selfdefine</li></ul>	The column must be defined.
SelfDefValue	Self-defined parameter	N/A	String. Length: 1 to 256 Characters. Default is not configured.	The column takes effect when ParamType is selfdefine.

## WebAuth/Interfaces

This table contains interface configuration of web-auth.

### XML structure

```
<WebAuth>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <AuthEnable></AuthEnable>
      <ApplyServer></ApplyServer>
      <ApplyDomain></ApplyDomain>
      <MaxUser></MaxUser>
      <AuthFailVlan></AuthFailVlan>
      <OfflineDetectInterval></OfflineDetectInterval>
    </Interface>
  </Interfaces>
</WebAuth>
```

## Table description

Item	Description
Feature name	WebAuth
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 interfaces.
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	Some versions support interface names. For more information, see the XSD document of your product. For information about IfIndex, see "Appendix" in <i>Ifmgr NETCONF XML API Configuration Reference</i> .
AuthEnable	Enable the Web-Auth function	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Yes.</li><li>• <b>false</b>—No(Default).</li></ul>	Can not enable with port security funtion at same time.
ApplyServer	Apply authentication server	N/A	String. case-insensitive. <ul style="list-style-type: none"><li>• Length: 1 to 32 characters.</li></ul> Default is not configured.	N/A
ApplyDomain	Apply IPv4 authentication domain	N/A	String, <ul style="list-style-type: none"><li>• Length: 1 to 24.</li></ul> Default is not configured.	N/A
MaxUser	Maximum number of users on the interface	N/A	Unsigned integer.	The value range depends on the device model.
AuthFailVlan	VLAN for users failed in authentication	N/A	Unsigned integer. <ul style="list-style-type: none"><li>• Value range: 1 to 4094.</li></ul> Default Value is not configured.	N/A
OfflineDetectInterval	Detecting offline user timer	N/A	Unsigned integer <ul style="list-style-type: none"><li>• Value range: 60 to 65535 seconds.</li></ul> Default is not configured.	N/A

# WebAuth/FreeIPs

This table contains free ip configuration of web-auth.

## XML structure

```
<WebAuth>
  <FreeIPs>
    <FreeIP>
      <IPv4Address></IPv4Address>
      <IPv4Mask></IPv4Mask>
    </FreeIP>
  </FreeIPs>
</WebAuth>
```

## Table description

Item	Description
Feature name	WebAuth
Table name	FreeIPs
Table type	Multi-instance table
Row name	FreeIP
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Address	IP address used in EAD assistance feature	Index	String, dotted decimal notation.	The column supports IPv4-only format.
IPv4Mask	IP address mask	Index	Ipv4Mask.	N/A

# WebAuth/ProxyPorts

This table contains proxy port configuration of web-auth.

## XML structure

```
<WebAuth>
  <ProxyPorts>
    <ProxyPort>
      <PortNumber></PortNumber>
    </ProxyPort>
  </ProxyPorts>
</WebAuth>
```



```

    </ProxyPort>
  </ProxyPorts>
</WebAuth>

```

## Table description

Item	Description
Feature name	WebAuth
Table name	ProxyPorts
Table type	Multi-instance table
Row name	ProxyPort
Restrictions	No.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
PortNumber	Port number of TCP	Index	Unsigned integer. <ul style="list-style-type: none"> <li>Value <b>range: 1-65535</b>.</li> </ul> Default is not configured.

# Contents

WebAuth .....	1
WebAuth/WebServers .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
WebAuth/UrlParams .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
WebAuth/Interfaces .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
WebAuth/FreelPs .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
WebAuth/ProxyPorts .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
WebAuth/OnlineUsers .....	6
XML structure .....	6
Table description .....	6
Columns .....	7

# WebAuth

## WebAuth/WebServers

This table contains information about web-auth server.

### XML structure

```
<WebAuth>
  <WebServers>
    <WebServer>
      <ServerName></ServerName>
      <IPAddress></IPAddress>
      <Port></Port>
      <Url></Url>
    </WebServer>
  </WebServers>
</WebAuth>
```

### Table description

Item	Description
Feature name	WebAuth
Table name	WebServers
Table type	Multi-instance table
Row name	WebServer
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Name of the web-auth server	Index	String. <ul style="list-style-type: none"><li>Length: 1 to 32 characters.</li></ul>	N/A
IPAddress	IPv4 address of the web-auth server	N/A	String, dotted decimal notation. Default is not configured.	The column supports IPv4-only format.
Port	Port number of the web-auth server	N/A	Unsigned integer. <ul style="list-style-type: none"><li>Value range: 1-65535.</li></ul> Default is not configured.	The column must be defined when the IPAddress exists.

Column name	Column description	Column type	Data type and restrictions	Remarks
Url	URL of the web-auth server	N/A	String. <ul style="list-style-type: none"> <li>Length: 1 to 256 characters.</li> </ul> Default is not configured.	N/A

## WebAuth/UrlParams

This table contains information about Url parameters.

### XML structure

```

<WebAuth>
  <UrlParams>
    <UrlParam>
      <ServerName></ServerName>
      <ParamName></ParamName>
      <ParamType></ParamType>
      <SelfDefValue></SelfDefValue>
    </UrlParam>
  </UrlParams>
</WebAuth>

```

### Table description

Item	Description
Feature name	WebAuth
Table name	UrlParams
Table type	Multi-instance table
Row name	UrlParam
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServerName	Name of the web-auth server	Index	String, case-insensitive. <ul style="list-style-type: none"> <li>Length: 1 to 32 characters.</li> </ul>	N/A
ParamName	Parameter name of the URL	Index	String. <ul style="list-style-type: none"> <li>Length: 1 to 32 characters.</li> </ul>	The column configures the parameter name carried in the redirect URL.

Column name	Column description	Column type	Data type and restrictions	Remarks
ParamType	Parameter type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—source-address</li> <li>1—source-mac</li> <li>2—original-url</li> <li>3—selfdefine</li> </ul>	The column must be defined.
SelfDefValue	Self-defined parameter	N/A	String. Length: 1 to 256 Characters. Default is not configured.	The column takes effect when ParamType is selfdefine.

## WebAuth/Interfaces

This table contains interface information of web-auth.

### XML structure

```

<WebAuth>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <AuthEnable></AuthEnable>
      <ApplyServer></ApplyServer>
      <ApplyDomain></ApplyDomain>
      <MaxUser></MaxUser>
      <AuthFailVlan></AuthFailVlan>
      <OfflineDetectInterval></OfflineDetectInterval>
      <OnlineUserNum></OnlineUserNum>
    </Interface>
  </Interfaces>
</WebAuth>

```

### Table description

Item	Description
Feature name	WebAuth
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	No.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Ifindex	Interface index	Index	Unsigned integer.	Some versions supports interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
AuthEnable	Enable the Web-Auth function	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Yes.</li><li><b>false</b>—No</li></ul>	Can not enable with port security funtion at same time.
ApplyServer	Apply authentication server	N/A	String. case-insensitive. <ul style="list-style-type: none"><li>Length: 1 to 32 characters.</li></ul>	N/A
ApplyDomain	Apply IPv4 authentication domain	N/A	String, case-insensitive. <ul style="list-style-type: none"><li>Length: 1 to 24.</li></ul>	N/A
MaxUser	Maximum number of users on the interface	N/A	Unsigned integer.	N/A
AuthFailVlan	VLAN for users failed in authentication	N/A	Unsigned integer. <ul style="list-style-type: none"><li>Value range: 1 to 4094..</li></ul>	N/A
OfflineDetectInterval	Detecting offline user timer	N/A	Unsigned integer <ul style="list-style-type: none"><li>Value range: 60 to 65535 seconds.</li></ul>	N/A
OnlineUserNum	Current online user number	N/A	Unsigned integer.	N/A

## WebAuth/FreeIPs

This table contains free ip information of web-auth.

## XML structure

```
<WebAuth>
  <FreeIPs>
    <FreeIP>
      <IPv4Address></IPv4Address>
      <IPv4Mask></IPv4Mask>
    </FreeIP>
  </FreeIPs>
```

</WebAuth>

## Table description

Item	Description
Feature name	WebAuth
Table name	FreeIPs
Table type	Multi-instance table
Row name	FreeIP
Restrictions	No.

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IPv4Address	IP address used in EAD assistance feature	Index	String, dotted decimal notation.	The column supports IPv4-only format.
IPv4Mask	IP address mask	Index	Ipv4Mask.	N/A

## WebAuth/ProxyPorts

This table contains proxy port information of web-auth.

## XML structure

```
<WebAuth>
  <ProxyPorts>
    <ProxyPort>
      <PortNumber></PortNumber>
    </ProxyPort>
  </ProxyPorts>
</WebAuth>
```

## Table description

Item	Description
Feature name	WebAuth
Table name	ProxyPorts
Table type	Multi-instance table
Row name	ProxyPort
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
PortNumber	Port number of TCP	Index	Unsigned integer. <ul style="list-style-type: none"><li>Value range: 1-65535.</li></ul>

## WebAuth/OnlineUsers

This table contains online user information of web-auth.

## XML structure

```
<WebAuth>
  <OnlineUsers>
    <OnlineUser>
      <UserMac></UserMac>
      <AccessInterface></AccessInterface>
      <UserName></UserName>
      <InitVlan></InitVlan>
      <AuthVlan></AuthVlan>
      <AuthAcl></AuthAcl>
      <AuthUserProfile></AuthUserProfile>
    </OnlineUser>
  </OnlineUsers>
</WebAuth>
```

## Table description

Item	Description
Feature name	WebAuth
Table name	OnlineUsers
Table type	Multi-instance table
Row name	OnlineUser
Restrictions	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
AccessInterface	The access interface of user	Index	Unsigned integer.	Some versions supports interface name. For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
UserMac	Mac of the online user	Index	MAC address in the HH-HH-HH-HH-HH-HH format	N/A
UserName	User name	N/A	String.	N/A
InitVlan	Init Vlan of user	N/A	Unsigned integer.	N/A
AuthVlan	Authorization Vlan	N/A	Unsigned integer.	N/A
AuthAcl	Authorization ACL	N/A	Unsigned integer.	N/A
AuthUserProfile	Authorization user profile	N/A	String.	N/A

# Comware V7 WLANClient NETCONF XML API Action Reference

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# Revision Record

Date	Revision Version	Change Description	Author
2015-5-16	V1.00	Initial	C09811

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# Contents

- WLANClient ..... 1
  - WLANClient/ResetDynamicBlackList ..... 1
    - XML structure ..... 1
    - Table description ..... 1
    - Columns ..... 1
  - WLANClient/ResetClient ..... 1
    - XML structure ..... 2
    - Table description ..... 2
    - Columns ..... 2

# WLANClient

## WLANClient/ResetDynamicBlackList

This table contains information of dynamic black list resetting.

### XML structure

```
<WLANClient>
  <ResetDynamicBlackList>
    <DynamicBlackList>
      <MacAddress></MacAddress>
    </DynamicBlackList>
  </ResetDynamicBlackList>
</WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	ResetDynamicBlackList
Table type	Multi-instance table
Row name	N/A
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	Client MAC address.	N/A	MAC address. Example: 00-0c-af-e3-5d-c0.	When MacAddress is empty, all client will be reset.

## WLANClient/ResetClient

This table contains information of client resetting.

## XML structure

```
<WLANClient>
  <ResetClient>
    <Client>
      <MacAddress></MacAddress>
    </Client>
  </ResetClient>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	ResetClient
Table type	Multi-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	Client MAC address.	N/A	MAC address. Example: 00-0c-af-e3-5d-c0.	When MacAddress is empty, all client will be reset.

# Contents

WLANClient .....	1
WLANClient/ServiceTemplates .....	1
XML structure .....	1
Table description .....	1
Columns .....	2
WLANClient/ServiceBindings .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
WLANClient/APGroupServiceBindings .....	4
XML structure .....	4
Table description .....	5
Columns .....	5
WLANClient/ServiceSecurity .....	6
XML structure .....	6
Table description .....	6
Columns .....	7
WLANClient/ServiceWepKey .....	9
XML structure .....	9
Table description .....	9
Columns .....	9
WLANClient/RadioWmm .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
WLANClient/ClientEdca .....	12
XML structure .....	12
Table description .....	12
Columns .....	12
WLANClient/MobilityRole .....	13
XML structure .....	13
Table description .....	13
Columns .....	14
WLANClient/MobilityGroups .....	14
XML structure .....	14
Table description .....	14
Columns .....	15
WLANClient/MobilityIPv4Members .....	15
XML structure .....	15
Table description .....	15
Columns .....	16
WLANClient/MobilityIPv6Members .....	16
XML structure .....	16
Table description .....	16
Columns .....	17
WLANClient/MobilityPeerGroups .....	17
XML structure .....	17
Table description .....	17
Columns .....	17
WLANClient/PeerGroupIPv4Members .....	18
XML structure .....	18
Table description .....	18
Columns .....	18
WLANClient/PeerGroupIPv6Members .....	19
XML structure .....	19
Table description .....	19
Columns .....	19

WLANClient/Layer2Authentication .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
WLANClient/APs .....	22
XML structure .....	22
Table description .....	22
Columns .....	23
WLANClient/APGroup .....	23
XML structure .....	23
Table description .....	23
Columns .....	24
WLANClient/BandNavigation .....	24
XML structure .....	24
Table description .....	24
Columns .....	25
WLANClient/LoadBalance .....	25
XML structure .....	25
Table description .....	26
Columns .....	26
WLANClient/LoadBalanceGroup .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
WLANClient/RadioInLBGroup .....	28
XML structure .....	28
Table description .....	28
Columns .....	28
WLANClient/WhiteList .....	29
XML structure .....	29
Table description .....	29
Columns .....	29
WLANClient/StaticBlackList .....	29
XML structure .....	30
Table description .....	30
Columns .....	30
WLANClient/DynamicBlackListCfg .....	30
XML structure .....	30
Table description .....	30
Columns .....	31
WLANClient/pmfConfiguration .....	31
XML structure .....	31
Table description .....	31
Columns .....	32
WLANClient/FtConfiguration .....	32
XML structure .....	32
Table description .....	33
Columns .....	33
WLANClient/Layer2AccessControl .....	33
XML structure .....	33
Table description .....	34
Columns .....	34



# WLANClient

## WLANClient/ServiceTemplates

This table contains service template information.

### XML structure

```
<WLANClient>
  <ServiceTemplates>
    <Template>
      <Name></Name>
      <SSID></SSID>
      <DefaultVlan></DefaultVlan>
      <HideSsid></HideSsid>
      <MaxClientCnt></MaxClientCnt>
      <Enable></Enable>
      <ForwardingLocation></ForwardingLocation>
      <LocalForwardVlanList></LocalForwardVlanList>
      <PolicyForwarding></PolicyForwarding>
      <PolicyName></PolicyName>
      <AssociationLocation></AssociationLocation>
      <AuthenticationLocation></AuthenticationLocation>
      <QuikAssociation></QuikAssociation>
      <HotspotPolicyNum></HotspotPolicyNum>
      <UserIsolation></UserIsolation>
      <Description></Description>
    </Template>
  </ServiceTemplates>
</WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	ServiceTemplates
Table type	Multi-instance table
Row name	ServiceTemplate
Restrictions	None
Support for row creation and deletion	Yes

# Columns

Column name	Column description	Column type	Data type and restrictions
Name	Service template name	Index	String, letter, number or '-', '[', ']', '/', '\'. The length is 1 to 63.
SSID	Identifier of service set.		String, the length is 1 to 32.
DefaultVlan	DefaultVlan.		Unsigned integer. Value range: 1 to 4094. The default value is 1.
HideSsid	Hiding status of SSID		Boolean: <ul style="list-style-type: none"> <li><b>true</b>—enabled.</li> <li><b>false</b>—disabled, default value.</li> </ul>
MaxClientCnt	Maximum clients of the BSS.		Unsigned integer. Value range: 1 to 2007. The default value is 0.
Enable	Status of service template.		Boolean: <b>True or 1</b> : enabled. <b>False or 0</b> : disabled. <b>The default value is false.</b>
ForwardingLocation	Client forwarding location.		Enumeration:. <ul style="list-style-type: none"> <li>4—On AP</li> <li>2—On AC</li> </ul> Default value is 2.
LocalForwardVlanList	Client local forwarding vlan list.		VlanRange
PolicyForwarding	Status of policy forwarding.		Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul> Default value is false.
PolicyName	Name of policy forwarding.		String, letter, number or '\'. The length is 1 to 31.
AssociationLocation	Client association location.		Enumeration: <ul style="list-style-type: none"> <li>4—On AP</li> <li>2—On AC</li> </ul> Default value is 2.
AuthenticationLocation	Client authentication location.		Enumeration: <ul style="list-style-type: none"> <li>1—On MAC</li> <li>2—On AC</li> <li>4—On AP</li> </ul> Default value is 2.
QuickAssociation	Status of quick association.		Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
			<ul style="list-style-type: none"> <li>false—Disabled. Default value is false.</li> </ul>
HotspotPolicyNum	Hotspot policy number		Unsigned integer. Value range: 1 to 32.
UserIsolation	Status of user isolation.		Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul> Default value is false.
Description	Description of service template.		Text. The length is 1 to 64.

## WLANClient/ServiceBindings

This table contains service template binding information.

### XML structure

```

<WLANClient>
  <ServiceBindings>
    <Binding>
      <ApName></ApName>
      <RadioId></RadioId>
      <ServiceTemplateName></ServiceTemplateName>
      <Vlan></Vlan>
      <VlanGroup></VlanGroup>
      <NasID></NasID>
      <NasPortID></NasPortID>
      <HideSsid></HideSsid>
    </Binding>
  </ServiceBindings>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	ServiceBindings
Table type	Multi-instance table
Row name	Binding
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ApName	AP name	Index	String, lowercase. Length: 1 to 63 characters.
RadioId	Radio identifier.	Index	Unsigned char. Value range: 1 to 4
ServiceTemplateName	Service template name.	Index	String, letter, number or '-', '[', ']', '/', '_'. The length is 1 to 63.
Vlan	VLAN.		Unsigned integer. Value range: 1 to 4094. .
VlanGroup	VlanGroup		String. Length: 1 to 31 characters.
NasID	Network access server identifier.		Text. Length: 1 to 63 characters.
NasPortID	Network access server port identifier.		Text. Length: 1 to 63 characters.
HideSsid	Hide the identifier of service set in beacon frames		Boolean: <ul style="list-style-type: none"> <li><b>true</b>—enabled.</li> <li><b>false</b>—disabled.</li> </ul> <b>Default value is false.</b>

## WLANClient/APGroupServiceBindings

This table contains service template binding information of AP group radios.

### XML structure

```

<WLANClient>
  <APGroupServiceBindings>
    <Binding>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioID></RadioID>
      <ServiceTemplateName></ServiceTemplateName>
      <Vlan></Vlan>
      <VlanGroup></VlanGroup>
      <NasID></NasID>
      <NasPortID></NasPortID>
    
```

```

        <HideSsid></HideSsid>
    </Binding>
</APGroupServiceBindings>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	APGroupServiceBindings
Table type	Multi-instance table
Row name	Binding
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	AP group	Index	String, lowercase. Length: 1 to 31 characters.
ModelName	AP model name	Index	String, case-insensitive. Length: 1 to 63 characters.
RadioId	Radio identifier.	Index	Unsigned char. Value range: 1 to 4
ServiceTemplateName	Service template name.	Index	String, letter, number or '-', '[', ']', '/', '-'. The length is 1 to 63.
Vlan	VLAN.		Unsigned integer. Value range: 1 to 4094. .
VlanGroup	VlanGroup		String. Length: 1 to 31 characters.
NasID	Network access server identifier.		Text. Length: 1 to 63 characters.
NasPortID	Network access server port identifier.		Text. Length: 1 to 63 characters.
HideSsid	Hide the identifier of service set in beacon frames		Boolean: <ul style="list-style-type: none"> <li><b>true</b>—enabled.</li> <li><b>false</b>—disabled.</li> </ul> <b>Default value is false.</b>

# WLANClient/ServiceSecurity

This table contains security information of service template.

## XML structure

```
<WLANClient>
  <ServiceSecurity>
    <Security>
      <Name></Name>
      <WpaIeSelected></WpaIeSelected>
      <RsnIeSelected></RsnIeSelected>
      <TkipSelected></TkipSelected>
      <CcmpSelected></CcmpSelected>
      <Wep40Selected></Wep40Selected>
      <Wep104Selected></Wep104Selected>
      <Wep128Selected></Wep128Selected>
      <WepMode></WepMode>
      <AkmMode></AkmMode>
      <PskInputMode></PskInputMode>
      <PskPassPhraseKey></PskPassPhraseKey>
      <PskRawKey></PskRawKey>
      <PtkLifeTime></PtkLifeTime>
      <GtkUpdateEnable></GtkUpdateEnable>
      <GtkUpdateMode></GtkUpdateMode>
      <GtkUpdateTime></GtkUpdateTime>
      <GtkPacketNumber></GtkPacketNumber>
      <ClientOffUpdateGtk></ClientOffUpdateGtk>
      <TkipCmTime></TkipCmTime>
    </Security>
  </ServiceSecurity>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	ServiceSecurity
Table type	Multi-instance table
Row name	Security
Restrictions	None
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Service template name	Index	String, letter, number or '-', '[', ']', '/', ' '. The length is 1 to 63.	N/A
WpaSelected	Is Security IE WPA selected.		Boolean. True or 1 : selected. False or 0 : no selected. The default value is false.	N/A
RsnSelected	Is Security IE RSN selected.		Boolean. True or 1 : selected. False or 0 : no selected. The default value is false.	N/A
TkipSelected	Tkip is selected cipher		Boolean. True or 1 : selected. False or 0 : no selected. The default value is false.	N/A
CcmpSelected	Ccmp is selected cipher		Boolean. True or 1 : selected. False or 0 : no selected. The default value is false.	N/A
Wep40Selected	Wep40 is selected cipher		Boolean. True or 1 : selected. False or 0 : no selected. The default value is false.	N/A
Wep104Selected	Wep104 is selected cipher		Boolean. True or 1 : selected. False or 0 : no selected. The default value is false.	N/A
Wep128Selected	Wep128 is selected cipher		Boolean. True or 1 : selected. False or 0 : no selected. The default value is false.	N/A
WepMode	Wep mode		Enumeration. 0: static WEP. 1: dynamic WEP. The default value is 0.	N/A
AkmMode	AKM mode.		Enumeration.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			1: 802.1x. 2: PSK.	
PskInputMode	PSK input mode.		Enumeration. 1: pass-phrase. 2: rawkey.	N/A
PskPassPhraseKey	Pre-shared key.		String.	PSK is a string including 8-63 alphanumeric characters.
PskRawKey	Raw key		String	PSK is a string including 64 hex characters.
PtkLifeTime	PTK life time.		Unsigned integer. Unit is second. Value range: 180-604800. The default value is 43200.	N/A
GtkUpdateEnable	Whether GTK update is enabled.		Boolean. True or 1 : update. False or 0 : no update. The default value is true.	N/A
GtkUpdateMode	GTK update mode.		Enumeration. 1 : based on time. 2 : based on packet number. The default value is 1.	N/A
GtkUpdateTime	GTK update time interval.		Unsigned integer. Unit is second. Value range is 180 to 604800. The default value is 86400.	N/A
GtkPacketNumber	GTK update packet number threshold.		Unsigned integer. Value range is 5000 to 4294967295. The default value is 10000000.	N/A
ClientOffUpdateGtk	Whether to update GTK when client goes offline.		Boolean. True or 1: update. False or 0 : no update. The default value is false.	N/A
TkipCmTime	Interval time of TKIP counter measures.		Unsigned integer. Value range is 0 to 3600. Unit is second. The default value is 0 which means no counter measures.	N/A



# WLANClient/ServiceWepKey

This table contains security wep key information of service template.

## XML structure

```
<WLANClient>
  <ServiceWepKey>
    <WepKey>
      <ServiceName></ServiceName>
      <WepKeyId></WepKeyId>
      <CipherSuite></CipherSuite>
      <KeyInputType></KeyInputType>
      <Wep40PassPhraseKey></Wep40PassPhraseKey>
      <Wep40RawKey></Wep40RawKey>
      <Wep104PassPhraseKey></Wep104PassPhraseKey>
      <Wep104RawKey></Wep104RawKey>
      <Wep128PassPhraseKey></Wep128PassPhraseKey>
      <Wep128RawKey></Wep128RawKey>
      <IsSelected></IsSelected>
    </WepKey>
  </ServiceWepKey>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	ServiceWepKey
Table type	Multi-instance table
Row name	WepKey
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceName	Service template name	Index	String, letter, number or '-', '[', ']', '/', '\'. The length is 1 to 63.	N/A
WepKeyId	WEP key ID	Index	Enumeration. Value range: 1 to 4.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
CipherSuite	WEP cipher suite.		Enumeration. 1 : wep40. 5 : wep104. 7 : wep128.	N/A
KeyInputType	Key Type		Enumeration. 1 : PassPhrase. 2 : RawKey	N/A
Wep40PassPhraseKey	Wep40 key in pass-phrase		String.	The key is 5 alphanumeric characters.
Wep40RawKey	Wep40 key in raw		String.	The key is 10 hex characters.
Wep104PassPhraseKey	Wep104 key in pass-phrase		String.	The key is 13 alphanumeric characters.
Wep104RawKey	Wep104 key in raw		String.	The key is 26 hex characters.
Wep128PassPhraseKey	Wep128 key in pass-phrase		String.	The key is 16 alphanumeric characters.
Wep128RawKey	Wep128 key in raw		String.	The key is 32 hex characters.
IsSelected	Is this wep key Selected.		Boolean. True or 1 : selected. False or 0 : no selected. The default value is false.	N/A

## WLANClient/RadioWmm

This table contains radio WMM information.

### XML structure

```

<WLANClient>
  <RadioWmm>
    <Wmm>
      <ApName></ApName>
      <RadioId></RadioId>
      <Enable></Enable>
      <SvpMapAc></SvpMapAc>
      <CacPolicy></CacPolicy>
      <CacUserNum></CacUserNum>
      <CacChannelUtilization></CacChannelUtilization>
    </Wmm>
  </RadioWmm>
</WLANClient>

```

```

</RadioWmm>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	RadioWmm
Table type	Multi-instance table
Row name	Wmm
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
ApName	AP name	Index	String, lowercase. Length: 1 to 63 characters.
RadioId	Radio identifier.	Index	Unsigned char. Value range: 1 to 4
Enable	WMM status of radio		Boolean. True or 1 : enabled False or 0 : disabled The default value is true.
SvpMapAc	Access category of SVP		Enumeration 2 : vi 3 : vo
CacPolicy	CAC policy		Enumeration. 1 : channel utilization. 2 : based on client number. The default value is 2.
CacUserNum	CAC client number threshold		Unsigned integer. Value range is 0 to 124. The default value is 20.
CacChannelUtilization	CAC channel utilization threshold.		Unsigned integer. Unit is percent. Value range is 0 to 100. The default value is 65.

# WLANClient/ClientEdca

This table contains client EDCA information.

## XML structure

```
<WLANClient>
  <ClientEdca>
    <Edca>
      <ApName></ApName>
      <RadioId></RadioId>
      <AccessCategory></AccessCategory>
      <Aifsn></Aifsn>
      <TxOpLimit></TxOpLimit>
      <Ecwmin></Ecwmin>
      <Ecwmax></Ecwmax>
      <CacEnable></CacEnable>
    </Edca>
  </ClientEdca>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	ClientEdca
Table type	Multi-instance table
Row name	Edca
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, lowercase. Length: 1 to 63 characters.	N/A
RadioId	Radio identifier.	Index	Unsigned char. Value range is 1 to 4	N/A
AccessCategory	Access category.	Index	Enumeration. 0 : be. 1 : bk.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			2 : vi 3 : vo	
Aifsn	Arbitration Inter Frame Spacing Number		Unsigned integer. Value range is 2 to 15, and is restricted by chipset.	N/A
TxOpLimit	Transmission opportunity limit		Unsigned number. Value range is 0 to 65535. Unit is millisecond.	N/A
Ecwmin	Exponent form of CWmin		Unsigned integer. Value range is 1 to 15.	N/A
Ecwmax	Exponent form of CWmax		Unsigned integer. Value range is 1 to 15.	N/A
CacEnable	Whether CAC is enabled.		Boolean. True or 1 : enabled. False or 0 : disabled. The default value is false.	When ac is vi or vo, Cac can be configured.

## WLANClient/MobilityRole

This table contains mobility role information.

### XML structure

```

<WLANClient>
  <MobilityRole>
    <Role></Role>
    <MAIPv4Address></MAIPv4Address>
    <MAIPv6Address></MAIPv6Address>
  </MobilityRole>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	MobilityRole
Table type	single-instance table
Row name	None
Restrictions	None

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions
Role	Mobility role of the device.		Enumeration. 0 : not configured, default value. 1 : ma 2 : mc
MAIPv4Address	IPv4 address of mobility agent.		Ipv4Address
MAIPv6Address	IPv6 address of mobility agent.		Ipv6Address 若Ipv4和Ipv6同时存在下，则Ipv6有效

## WLANClient/MobilityGroups

This table contains mobility group information.

## XML structure

```

<WLANClient>
  <MobilityGroups>
    <MobilityGroup>
      <Name></Name>
      <TunnelType></TunnelType>
      <SourceIpv4Address></SourceIpv4Address>
      <SourceIpv6Address></SourceIpv6Address>
      <Enable></Enable>
    </MobilityGroup>
  </MobilityGroups>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	MobilityGroups
Table type	Multi-instance table

Row name	MobilityGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Mobility group name	Index	String. Length is 1 to 15 characters. Case sensitive.
TunnelType	Tunnel IP address type.		Enumeration. 2 : IPv4 10 : IPv6
SourceIpv4 Address	Source IPv4 address		Ipv4Address
SourceIpv6 Address	Source IPv6 address		Ipv6Address
Enable	Status of mobility group.		Boolean. True or 1 : enabled. False or 0 : disabled. The default value is false.

## WLANClient/MobilityIPv4Members

This table contains mobility group IPv4 member information.

## XML structure

```

<WLANClient>
  <MobilityIPv4Members>
    <Member>
      <GroupName></GroupName>
      <MemberIpv4Address></MemberIpv4Address>
    </Member>
  </MobilityIPv4Members>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient

Table name	MobilityIPv4Members
Table type	Multi-instance table
Row name	Member
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Mobility group name	Index	String. Length is 1 to 15 characters. Case sensitive.
MemberIpv4 Address	IPv4 address of member.	Index	Ipv4Address.

## WLANClient/MobilityIPv6Members

This table contains mobility group IPv6 member information.

## XML structure

```

<WLANClient>
  <MobilityIPv6Members>
    <Member>
      <GroupName></GroupName>
      <MemberIpv6Address></MemberIpv6Address>
    </Member>
  </MobilityIPv6Members>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	MobilityIPv6Members
Table type	Multi-instance table
Row name	Member
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Mobility group name	Index	String. Length is 1 to 15 characters. Case sensitive.
MemberIpv6 Address	IPv6 address of member.	Index	Ipv6Address.

## WLANClient/MobilityPeerGroups

This table contains mobility peer group information.

## XML structure

```
<WLANClient>
  <MobilityPeerGroups>
    <MobilityPeerGroup>
      <Name></Name>
      <TunnelType></TunnelType>
      <Enable></Enable>
    </MobilityPeerGroup>
  </MobilityPeerGroups>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	MobilityPeerGroups
Table type	Multi-instance table
Row name	MobilityPeerGroup
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Mobility peer group name	Index	String. Length is 1 to 15 characters. Case sensitive.

Column name	Column description	Column type	Data type and restrictions
TunnelType	Tunnel IP address type.		Enumeration. 2 : IPv4 10 : IPv6
Enable	Status of mobility peer group.		Boolean. True or 1: enabled. False or 0 : disabled. The default value is false.

## WLANClient/PeerGroupIPv4Members

This table contains mobility peer group IPv4 member information.

### XML structure

```

<WLANClient>
  <PeerGroupIPv4Members>
    <Member>
      <GroupName></GroupName>
      <MemberIpv4Address></MemberIpv4Address>
    </Member>
  </PeerGroupIPv4Members>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	PeerGroupIPv4Members
Table type	Multi-instance table
Row name	Member
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Mobility peer group name	Index	String. Length is 1 to 15 characters. Case sensitive.

Column name	Column description	Column type	Data type and restrictions
MemberIpv4 Address	IPv4 address of member.	Index	Ipv4Address.

## WLANClient/PeerGroupIPv6Members

This table contains mobility peer group IPv6 member information.

### XML structure

```

<WLANClient>
  <PeerGroupIPv6Members>
    <Member>
      <GroupName></GroupName>
      <MemberIpv6Address></MemberIpv6Address>
    </Member>
  </PeerGroupIPv6Members>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	PeerGroupIPv6Members
Table type	Multi-instance table
Row name	Member
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Mobility peer group name	Index	String. Length is 1 to 15 characters. Case sensitive.
MemberIpv6 Address	IPv6 address of member.	Index	Ipv6Address.

# WLANClient/Layer2Authentication

This table contains WLAN access security's authenticating configurations in service template.

## XML structure

```
<WLANClient>
  <Layer2Authentication>
    <Authentication>
      <ServiceTemplateName></ServiceTemplateName>
      <AuthenticationMode></AuthenticationMode>
      <IntrusionProtectionEnable></IntrusionProtectionEnable>
      <IntrusionProtectionOperation></IntrusionProtectionOperation>
      <TemporaryServiceStopTimer></TemporaryServiceStopTimer>
      <TemporaryBlockTimer></TemporaryBlockTimer>
      <IgnoreAuthorization></IgnoreAuthorization>
      <AuthorizationFailOffline></AuthorizationFailOffline>
      <Dot1xHandshakeEnable></Dot1xHandshakeEnable>
      <Dot1xSecurityHandshakeEnable></Dot1xSecurityHandshakeEnable>
      <Dot1xReauthenticationEnable></Dot1xReauthenticationEnable>
      <Dot1xMandatoryDomain></Dot1xMandatoryDomain>
      <Dot1xMaxUserCount></Dot1xMaxUserCount>
      <MACAuthenticationDomain></MACAuthenticationDomain>
      <MACAuthenticationMaxUserCount></MACAuthenticationMaxUserCount>
      <FailVLAN></FailVLAN>
    </Authentication>
  </Layer2Authentication>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	Layer2Authentication
Table type	Multi-instance table
Row name	Authentication
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceTem	Service template	Index	String, letter, number or '-', '[', ']', '/', '\', '.'	

Column name	Column description	Column type	Data type and restrictions	Remarks
plateName	name.		The length is 1 to 63.	
AuthenticationMode	Authentication mode of the service template	N/A	Enumeration: 0 : bypass. 1 : mac authentication 2 : mac then dot1x authentication 3 : dot1x authentication 4 : dot1x then mac authentication 5 : oui then dot1x	Default status is bypass.
IntrusionProtectionEnable	Enable Intrusion Protection of the Service Template	N/A	Boolean: <b>True or 1</b> : enabled. <b>False or 0</b> : disabled.	Default status is disabled.
IntrusionProtectionOperation	Operation mode when intrusion detected	N/A	Enumeration: <b>0</b> : temporary block mac. <b>1</b> : temporary stop the service <b>2</b> : stop service	
TemporaryServiceStopTimer	Period value of temporarily stop service	N/A	Unsigned integer Value range is 10 to 300.	Default value is 20 s.
TemporaryBlockTimer	Period value of temporarily block user mac	N/A	Unsigned integer Value range is 60 to 300.	Default value is 180 s.
IgnoreAuthorization	Ignore all authorization information set by server.	N/A	<b>Boolean:</b> <b>True or 1</b> : enabled. <b>False or 0</b> : disabled.	Default status is disabled.
AuthorizationFailOffline	Users are offline if the authorizing failed.	N/A	<b>Boolean:</b> <b>True or 1</b> : enabled. <b>False or 0</b> : disabled.	Default status is disabled
Dot1xHandshakeEnable	Enable handshake feature of dot1x	N/A	Boolean: <b>True or 1</b> : enabled. <b>False or 0</b> : disabled.	Default status is disabled
Dot1xSecurityHandshakeEnable	Enable secure handshake feature of dot1x	N/A	Boolean: <b>True or 1</b> : enabled. <b>False or 0</b> : disabled.	Default status is disabled, and handshake feature should be enabled first.
Dot1xReauthenticationEnable	Enable re-authentication feature of dot1x	N/A	Boolean: <b>True or 1</b> : enabled. <b>False or 0</b> : disabled.	Default status is disabled.
Dot1xMandatoryDomain	Mandatory domain of users for the service template	N/A	String, case-insensitive. Length: 1 to 255 characters	No default value.

Column name	Column description	Column type	Data type and restrictions	Remarks
Dot1xMaxUserCount	Max dot1x user numbers for a bss bound to this service template	N/A	Unsigned integer Value range is 1 to 4096.	Default value is 4096.
MACAuthenticationDomain	Domain of users for the service template	N/A	String, case-insensitive. Length: 1 to 255 characters	
MACAuthenticationMaxUserCount	Max MAC authentication user numbers for a bss bound to this service template	N/A	Unsigned integer Value range is 1 to 4096.	
FailVLAN	VLAN used	N/A	Unsigned integer Value range: 1 to 4094.	No default value

## WLANClient/APs

This table contains AP configuration information.

### XML structure

```

<WLANClient>
  <APs>
    <AP>
      <Name></Name>
      <IdleTime></IdleTime>
      <KeepAliveTime></KeepAliveTime>
      <BandNaviStatus></BandNaviStatus>
    </AP>
  </APs>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	APs
Table type	Multi-instance table
Row name	AP
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name	Index	String, lowercase. Length: 1 to 64 characters.	N/A
IdleTime	Station Idle time	N/A	Unsigned integer. Value range: 60s to 86400s. The default value is 3600s.	N/A
KeepAliveTime	Keeping alive time of station	N/A	Unsigned integer. Value range: 3s to 1800s. The default value is 300s, which means disabled.	N/A
BandNaviStatus	Band navigation status	N/A	Enumeration. <ul style="list-style-type: none"><li>0—disabled.</li><li>1—enabled.</li><li>2—inherit(default).</li></ul>	Effective only when global BandNaviStatus is enabled.

## WLANClient/APGroup

This table contains AP group configuration information.

## XML structure

```
<WLANClient>
  <APGroup>
    <Group>
      <Name></Name>
      <BandNaviStatus></BandNaviStatus>
    </Group>
  </APGroup>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	APGroup
Table type	Multi-instance table

Row name	Group
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
BandNaviStatus	Band navigation status	N/A	Boolean. <ul style="list-style-type: none"> <li>false—disabled</li> <li>true—enabled (default)</li> </ul>	Effective only when global BandNaviStatus is enabled.

## WLANClient/BandNavigation

This table contains band navigation information.

## XML structure

```

<WLANClient>
  <BandNavigation>
    <GlobalStatus></GlobalStatus>
    <AgingTime></AgingTime>
    <DenialCnt></DenialCnt>
    <Session></Session>
    <Gap></Gap>
    <Threshold></Threshold>
  </BandNavigation>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	BandNavigation
Table type	Single-instance table
Row name	N/A
Restrictions	None



Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions
GlobalStatus	Global status of band navigation	N/A	Boolean. <ul style="list-style-type: none"> <li>false—disabled(default).</li> <li>true—enabled.</li> </ul>
AgingTime	Client information aging time	N/A	Unsigned integer. Unit is second. Value range: 10 to 600. The default value is 180.
DenialCnt	Maximum number of denials for 5 GHz association requests	N/A	Unsigned integer. Value range: 1 to 10. The default value is 0.
Session	Client number threshold for the 5 GHz radio	N/A	Unsigned integer. Value range: 2 to 255.
Gap	Threshold for the session gap between the current 5 GHz radio and the radio that has the fewest clients	N/A	Unsigned integer. Value range: 1 to 8. The default value is 4.
Threshold	RSSI threshold	N/A	Unsigned integer. Unit is dB. Value range: 5 to 100. The default value is 15.

## WLANClient/LoadBalance

This table contains load balancing information.

### XML structure

```

<WLANClient>
  <LoadBalance>
    <Status></Status>
    <Mode></Mode>
    <Bandwidth></Bandwidth>
    <BandwidthGap></BandwidthGap>
    <Session></Session>
    <SessionGap></SessionGap>
    <Traffic></Traffic>
    <TrafficGap></TrafficGap>
    <DenialNum></DenialNum>
    <Threshold></Threshold>
  </LoadBalance>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	LoadBalance
Table type	Single-instance table
Row name	N/A
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	WLAN load balancing status	N/A	Boolean. <ul style="list-style-type: none"> <li>false—disabled(default).</li> <li>true—enabled.</li> </ul>	N/A
Mode	Load balancing mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—session-mode(default).</li> <li>2—traffic-mode.</li> <li>3—bandwidth-mode.</li> </ul>	N/A
Session	Session threshold in number of clients	N/A	Unsigned integer. Value range:1 to 120. The default value is 20.	This column can be configured only when the Mode is session-mode (1).To delete value just input Mode label.
Session Gap	Session gap threshold	N/A	Unsigned integer. Value range:1 to 12. The default value is 4.	This column cannot be configured if the Session is not configured. To delete value just input Mode label.
Bandwidth	Bandwidth threshold	N/A	Unsigned integer. Unit is Mbps. Value range:1 to 500. The default value is 40.	This column can be configured only when the Mode is bandwidth-mode (3). To delete value just input Mode label.
Bandwidth Gap	Bandwidth gap threshold	N/A	Unsigned integer. Unit is Mbps. Value range:1 to 200. The default value is 20.	This column cannot be configured if the Bandwidth is not configured. To delete value just input Mode label.
Traffic	Traffic threshold	N/A	Unsigned integer. Unit is percent. Value range:1 to 80. The default value is 30.	This column can be configured only when the Mode is traffic -mode (2). To delete value just input Mode label.

Column name	Column description	Column type	Data type and restrictions	Remarks
TrafficGap	Traffic gap threshold	N/A	Unsigned integer. Unit is percent. Value range:10 to 40. The default value is 20.	This column cannot be configured if theTraffic is not configured. To delete value just input Mode label.
DenialNum	Maximum number of denials for association requests	N/A	Unsigned integer. Value range:2 to 10.The default value is 10.	N/A
Threshold	RSSI threshold	N/A	Unsigned integer. Unit is dB. Value range:5 to 100.The default value is 25.	N/A

## WLANClient/LoadBalanceGroup

This table contains load balancing group information.

### XML structure

```

<WLANClient>
  <LoadBalanceGroup>
    <Group>
      <GroupId></GroupId>
      <GroupDescription></GroupDescription>
    </Group>
  </LoadBalanceGroup>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	LoadBalanceGroup
Table type	Multi-instance table
Row name	Group
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupId	Load balancing group identifier	Index	Unsigned integer. Value range: 1 to 65535.
GroupDescription	Description for the load balancing group	N/A	String, case-sensitive. Length: 1 to 64 characters.

## WLANClient/RadioInLBGroup

This table contains radio information of radios in the load balancing group.

## XML structure

```
<WLANClient>
  <RadioInLBGroup>
    <Radio>
      <GroupId></GroupId>
      <ApName></ApName>
      <RadioId></RadioId>
    </Radio>
  </RadioInLBGroup>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	RadioInLBGroup
Table type	Multi-instance table
Row name	Radio
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupId	Load balancing group identifier	Index	Unsigned integer. Value range: 1 to 65535.

Column name	Column description	Column type	Data type and restrictions
ApName	AP name	Index	String, lowercase. Length: 1 to 64 characters.
Radioid	Radio identifier	Index	Unsigned integer. Value range: 1 to 31

## WLANClient/WhiteList

This table contains information of white list.

### XML structure

```
<WLANClient>
  <WhiteList>
    <MacList>
      <MacAddress></MacAddress>
    </MacList>
  </WhiteList>
</WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	WhiteList
Table type	Multi-instance table
Row name	MacList
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	Client MAC address.	Index	<ul style="list-style-type: none"> <li>MAC address.</li> </ul>	Example: 00-0c-af-e3-5d-c0.

## WLANClient/StaticBlackList

This table contains information of static black list.

## XML structure

```
<WLANClient>
  <StaticBlackList>
    <MacList>
      <MacAddress></MacAddress>
    </MacList>
  </StaticBlackList>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	StaticBlackList
Table type	Multi-instance table
Row name	MacList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	Client MAC address.	Index	<ul style="list-style-type: none"><li>MAC address.</li></ul>	Example: 00-0c-af-e3-5d-c0.

## WLANClient/DynamicBlackListCfg

This table contains configuration of dynamic black list.

## XML structure

```
<WLANClient>
  <DynamicBlackListCfg>
    <LifeTime></LifeTime>
  </DynamicBlackListCfg>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	DynamicBlackListCfg

Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
LifeTime	Global life time of dynamic black list.		Unsigned integer. Value range:1 to 3600.Unit is second.

## WLANClient/pmfConfiguration

This table contains Protected management frames information.

## XML structure

```

<WLANClient>
  <PmfConfiguration>
    <Information>
      <ServiceTemplateName></ServiceTemplateName>
      <KeyDerivation></KeyDerivation>
      <PmfSwitch></PmfSwitch>
      <ComeBackTime></ComeBackTime>
      <RetryCnt></RetryCnt>
      <RetryTime></RetryTime>
    </Information>
  </PmfConfiguration >
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	PmfConfiguration
Table type	Multi-instance table
Row name	Information
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceTemplateName	Service template name.	Index	String, letter, number or '-', '[,]', '/', '-', lowercase. The length is 1 to 63.
KeyDerivation	Key derivation		Enumeration: 1 : SHA1 2 : SHA256 3: SHA1 and SHA256 The default value is 1.
PmfSwitch	Pmf function switch		Enumeration: 0 : disable 1 : optional 2 : mandatory The default value is 0
ComeBackTime	Association comeback interval		Unsigned int. The value range is 1 to 20. Unit is second. The default value is 1 (s)
RetryCnt	Maximum number of SA query request retransmission		Unsigned int. The value range is 1 to 16. The default value is 4.
RetryTime	Retry interval for SA query response		Unsigned int. The value range is 100 to 500. Unit is millisecond. The default value is 200 (ms) .

## WLANClient/FtConfiguration

This table contains FT configuration information.

### XML structure

```

<WLANClient>
  <FtConfiguration>
    <Configuration>
      <ServiceTemplateName></ServiceTemplateName>
      <Enable></Enable>
      <Method></Method>
      <ReassocTime></ReassocTime>
    </Configuration>
  </FtConfiguration>
</WLANClient>

```



## Table description

Item	Description
Feature name	WLANClient
Table name	FtConfiguration
Table type	Multi-instance table
Row name	Configuration
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceTemplateName	Service template name.	Index	String, letter, number or '-', '[,]', '/', '-', lowercase. The length is 1 to 63.
Enable	Status of fast BSS transition protocol.		Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—enabled.</li><li>• <b>false</b>—disabled.</li></ul> The default value is false.
Method	Fast BSS transition method.		Unsigned char. 0:over-the-air; 1:over-the-ds. The default value is 0.
ReassocTime	Reassociation timeout.		Unsigned int. The value range is 1 to 100. The default value is 20. Unit is second.

## WLANClient/Layer2AccessControl

This table contains Layer 2 access control information.

## XML structure

```
<WLANClient>
  <Layer2AccessControl>
    <AccessControl>
      <ServiceTemplateName></ServiceTemplateName>
      <AclNum></AclNum>
    </AccessControl>
  </Layer2AccessControl>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	Layer2AccessControl
Table type	Multi-instance table
Row name	AccessControl
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceTemplateName	Service template name	Index	String, lowercase. Length: 1 to 63 characters.
AcNum	ACL number	N/A	Unsigned integer Value range: 4000 to 4999.

# Contents

WLANClient .....	1
WLANClient/APAssociations .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
WLANClient/ServiceTemplates .....	2
XML structure .....	2
Table description .....	2
Columns .....	3
WLANClient/ServiceBindings .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
WLANClient/APGroupServiceBindings .....	5
XML structure .....	5
Table description .....	6
Columns .....	6
WLANClient/ServiceConnections .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
WLANClient/ServiceSecurity .....	8
XML structure .....	8
Table description .....	8
Columns .....	9
WLANClient/ServiceWepKey .....	11
XML structure .....	11
Table description .....	11
Columns .....	11
WLANClient/Stations .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
WLANClient/Station11nInformation .....	14
XML structure .....	14
Table description .....	14
Columns .....	14
WLANClient/StationSecurityInformation .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
WLANClient/StationRoamInformation .....	16
XML structure .....	16
Table description .....	16
Columns .....	16
WLANClient/StationStatistics .....	17
XML structure .....	17
Table description .....	17
Columns .....	18
WLANClient/RadioWmm .....	19
XML structure .....	19
Table description .....	19
Columns .....	20
WLANClient/ClientEdca .....	20
XML structure .....	20
Table description .....	21
Columns .....	21

WLANClient/StationWmmInformation .....	22
XML structure .....	22
Table description .....	22
Columns .....	22
WLANClient/MobilityRole .....	23
XML structure .....	23
Table description .....	23
Columns .....	23
WLANClient/MobilityGroups .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
WLANClient/MobilityIPv4Members .....	25
XML structure .....	25
Table description .....	25
Columns .....	25
WLANClient/MobilityIPv6Members .....	26
XML structure .....	26
Table description .....	26
Columns .....	26
WLANClient/RoamInStation .....	27
XML structure .....	27
Table description .....	27
Columns .....	27
WLANClient/RoamOutStation .....	28
XML structure .....	28
Table description .....	28
Columns .....	28
WLANClient/StationRoamTrack .....	29
XML structure .....	29
Table description .....	29
Columns .....	29
WLANClient/MobilityPeerGroups .....	30
XML structure .....	30
Table description .....	30
Columns .....	30
WLANClient/PeerGroupIPv4Members .....	30
XML structure .....	31
Table description .....	31
Columns .....	31
WLANClient/PeerGroupIPv6Members .....	31
XML structure .....	31
Table description .....	32
Columns .....	32
WLANClient/Layer2Authentication .....	32
XML structure .....	32
Table description .....	33
Columns .....	33
WLANClient/StationLayer2Authentication .....	35
XML structure .....	35
Table description .....	35
Columns .....	35
WLANClient/APs .....	36
XML structure .....	36
Table description .....	36
Columns .....	37
WLANClient/APGroup .....	37
XML structure .....	37
Table description .....	37
Columns .....	38
WLANClient/BandNavigation .....	38
XML structure .....	38

Table description .....	38
Columns .....	39
WLANClient/LoadBalance .....	39
XML structure .....	39
Table description .....	40
Columns .....	40
WLANClient/LoadBalanceGroup .....	41
XML structure .....	41
Table description .....	41
Columns .....	41
WLANClient/RadiolnLBGroup .....	41
XML structure .....	42
Table description .....	42
Columns .....	42
WLANClient/APStations .....	42
XML structure .....	42
Table description .....	43
Columns .....	43
WLANClient/APStationsNum .....	43
XML structure .....	43
Table description .....	44
Columns .....	44
WLANClient/WhiteList .....	44
XML structure .....	44
Table description .....	44
Columns .....	45
WLANClient/StaticBlackList .....	45
XML structure .....	45
Table description .....	45
Columns .....	45
WLANClient/DynamicBlackListCfg .....	45
XML structure .....	46
Table description .....	46
Columns .....	46
WLANClient/pmfConfiguration .....	46
XML structure .....	46
Table description .....	47
Columns .....	47
WLANClient/FtConfiguration .....	47
XML structure .....	47
Table description .....	48
Columns .....	48
WLANClient/Layer2AccessControl .....	48
XML structure .....	49
Table description .....	49
Columns .....	49

# WLANClient

## WLANClient/APAssociations

This table contains AP association information.

### XML structure

```
<WLANClient>
  <APAssociations>
    <Association>
      <Name></Name>
      <Total></Total>
      <Reassociation></Reassociation>
      <Failure></Failure>
      <Rejection></Rejection>
      <Exception></Exception>
      <Current></Current>
    </Association>
  </APAssociations>
</WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	APAssociations
Table type	Multi-instance table
Row name	Association
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	AP name	Index	String, lowercase. Length: 1 to 63 characters.
Total	Total associations		Unsigned integer

Column name	Column description	Column type	Data type and restrictions
Reassociation	Reassociations		Unsigned integer
Failure	Association failures		Unsigned integer
Rejection	Rejections of association		Unsigned integer
Exception	Exceptional associations		Unsigned integer
Current	Current associations		Unsigned integer

## WLANClient/ServiceTemplates

This table contains service template information.

### XML structure

```

<WLANClient>
  <ServiceTemplates>
    <Template>
      <Name></Name>
      <SSID></SSID>
      <DefaultVlan></DefaultVlan>
      <HideSsid></HideSsid>
      <MaxClientCnt></MaxClientCnt>
      <Enable></Enable>
      <ForwardingLocation></ForwardingLocation>
      <LocalForwardVlanList></LocalForwardVlanList>
      <PolicyForwarding></PolicyForwarding>
      <PolicyName></PolicyName>
      <AssociationLocation></AssociationLocation>
      <AuthenticationLocation></AuthenticationLocation>
      <QuikAssociation></QuikAssociation>
      <HotspotPolicyNum></HotspotPolicyNum>
      <UserIsolation></UserIsolation>
      <Description></Description>
    </Template>
  </ServiceTemplates>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient

Table name	ServiceTemplates
Table type	Multi-instance table
Row name	Template
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Service template name	Index	String, letter, number or '-', '[', ']', '/', '\'. The length is 1 to 63.
SSID	Identifier of service set.		String, the length is 1 to 32.
DefaultVlan	DefaultVlan		Unsigned integer. Value range: 1 to 4094. The default value is 1.
HideSsid	Hiding status of SSID		Boolean: <ul style="list-style-type: none"> <li>true—enabled.</li> <li>false—disabled, default value.</li> </ul>
MaxClientCnt	Maximum clients of the BSS.		Unsigned integer. Value range: 1 to 2007. The default value is 0. Value 0 : the number is not restricted.
Enable	Status of service template.		Boolean: <ul style="list-style-type: none"> <li>true—enabled.</li> <li>false—disabled, default value.</li> </ul>
ForwardingLocation	Client forwarding location.		Enumeration: <ul style="list-style-type: none"> <li>4—On AP</li> <li>2—On AC</li> </ul> Default value is 2.
LocalForwardVlanList	Client local forwarding vlan list.		VlanRange
PolicyForwarding	Status of policy forwarding.		Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul> Default value is false.
PolicyName	Name of policy forwarding.		String, letter, number or '_'. The length is 1 to 31.
Association Location	Client association location.		Enumeration: <ul style="list-style-type: none"> <li>4—On AP</li> <li>2—On AC</li> </ul>



Column name	Column description	Column type	Data type and restrictions
			Default value is 2.
AuthenticationLocation	Client authentication location.		Enumeration: <ul style="list-style-type: none"> <li>1—On MAC</li> <li>2—On AC</li> <li>4—On AP</li> </ul> Default value is 2.
QuikAssociation	Status of quik association.		Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul> Default value is false.
HotspotPolicyNum	Hotspot policy number		Unsigned integer. Value range: 1 to 32.
UserIsolation	Status of user isolation.		Boolean: <ul style="list-style-type: none"> <li>true—Enabled.</li> <li>false—Disabled.</li> </ul> Default value is false.
Description	Description of service template.		Text. The length is 1 to 64.

## WLANClient/ServiceBindings

This table contains service template binding information.

### XML structure

```

<WLANClient>
  <ServiceBindings>
    <Binding>
      <ApName></ApName>
      <RadioId></RadioId>
      <ServiceTemplateName></ServiceTemplateName>
      <Vlan></Vlan>
      <VlanGroup></VlanGroup>
      <NasID></NasID>
      <NasPortID></NasPortID>
      <HideSsid></HideSsid>    </Binding>
    </ServiceBindings>
  </WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient

Table name	ServiceBindings
Table type	Multi-instance table
Row name	Binding
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ApName	AP name	Index	String, lowercase. Length: 1 to 63 characters.
Radioid	Radio identifier.	Index	Unsigned char. Value range: 1 to 4
ServiceTemplateName	Service template name.	Index	String, letter, number or '-', '[', ']', '/', '\'. The length is 1 to 63.
Vlan	VLAN.		Unsigned integer. Value range: 1 to 4094.
VlanGroup	VlanGroup		String. Length: 1 to 31 characters.
NasID	Network access server identifier.		Text. Length: 1 to 63 characters.
NasPortID	Network access server port identifier.		Text. Length: 1 to 63 characters.
HideSsid	Hide the identifier of service set in beacon frames		Boolean: <ul style="list-style-type: none"> <li><b>true</b>—enabled.</li> <li><b>false</b>—disabled.</li> </ul> <b>Default value is false.</b>

## WLANClient/APGroupServiceBindings

This table contains service template binding information of AP group radios.

## XML structure

```

<WLANClient>
  <APGroupServiceBindings>
    <Binding>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioID></RadioID>
    </Binding>
  </APGroupServiceBindings>
</WLANClient>

```

```

    <ServiceTemplateName></ServiceTemplateName>
    <Vlan></Vlan>
    <VlanGroup></VlanGroup>
    <NasID></NasID>
    <NasPortID></NasPortID>
    <HideSsid></HideSsid>
  </Binding>
</APGroupServiceBindings>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	APGroupServiceBindings
Table type	Multi-instance table
Row name	Binding
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	AP group	Index	String, lowercase. Length: 1 to 31 characters.
ModelName	AP model name	Index	String, case-insensitive. Length: 1 to 63 characters.
Radiold	Radio identifier.	Index	Unsigned char. Value range: 1 to 4
ServiceTemplateName	Service template name.	Index	String, letter, number or '-', '[', ']', '/', '\'. The length is 1 to 63.
Vlan	VLAN.		Unsigned integer. Value range: 1 to 4094. .
VlanGroup	VlanGroup		String. Length: 1 to 31 characters.
NasID	Network access server identifier.		Text. Length: 1 to 63 characters.
NasPortID	Network access server		Text. Length: 1 to 63 characters.

Column name	Column description	Column type	Data type and restrictions
	port identifier.		
HideSsid	Hide the identifier of service set in beacon frames		Boolean: <ul style="list-style-type: none"> <li><b>true</b>—enabled.</li> <li><b>false</b>—disabled.</li> </ul> <b>Default value is false.</b>

## WLANClient/ServiceConnections

This table contains service template connection information.

### XML structure

```

<WLANClient>
  <ServiceConnections>
    <Connection>
      <Name></Name>
      <ApName></ApName>
      <RadioId></RadioId>
    </Connection>
  </ServiceConnections>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	ServiceConnections
Table type	Multi-instance table
Row name	Connection
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Name	Service template name.	Index	String, letter, number or '-', '[', ']', '/', '\'. The length is 1 to 63.
ApName	AP name	Index	String, lowercase. Length: 1 to 63 characters.
RadioId	Radio	Index	Unsigned char.

Column name	Column description	Column type	Data type and restrictions
	identifier.		Value range: 1 to 4

## WLANClient/ServiceSecurity

This table contains security information of service template.

### XML structure

```

<WLANClient>
  <ServiceSecurity>
    <Security>
      <Name></Name>
      <WpaIeSelected></WpaIeSelected>
      <RsnIeSelected></RsnIeSelected>
      <TkipSelected></TkipSelected>
      <CcmpSelected></CcmpSelected>
      <Wep40Selected></Wep40Selected>
      <Wep104Selected></Wep104Selected>
      <Wep128Selected></Wep128Selected>
      <WepMode></WepMode>
      <AkmMode></AkmMode>
      <PskInputMode></PskInputMode>
      <PskPassPhraseKey></PskPassPhraseKey>
      <PskRawKey></PskRawKey>
      <PtkLifeTime></PtkLifeTime>
      <GtkUpdateEnable></GtkUpdateEnable>
      <GtkUpdateMode></GtkUpdateMode>
      <GtkUpdateTime></GtkUpdateTime>
      <GtkPacketNumber></GtkPacketNumber>
      <ClientOffUpdateGtk></ClientOffUpdateGtk>
      <TkipCmTime></TkipCmTime>
    </Security>
  </ServiceSecurity>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	ServiceSecurity
Table type	Multi-instance table
Row name	Security
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	Service template name	Index	String, letter, number or '-', '[', ']', '/', '.'. The length is 1 to 63.	N/A
WpaSelected	Is Security IE WPA selected.		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A
RsnSelected	Is Security IE RSN selected.		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A
TkipSelected	Tkip is selected cipher		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A
CcmpSelected	Ccmp is selected cipher		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A
Wep40Selected	Wep40 is selected cipher		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A
Wep104Selected	Wep104 is selected cipher		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A
Wep128Selected	Wep128 is selected cipher		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A
WepMode	Wep mode		Enumeration. 0: static WEP.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			1: dynamic WEP. The default value is 0.	
AkmMode	AKM mode.		Enumeration. 1 : 802.1x. 2 : PSK.	N/A
PskInputMode	PSK input mode.		Enumeration. 1 : pass-phrase. 2 : rawkey.	N/A
PskPassPhraseKey	Pre-shared key.		String.	PSK is a string including 8-63 alphanumeric characters.
PskRawKey	Raw key		String	PSK is a string including 64 hex characters.
PtkLifeTime	PTK life time.		Unsigned integer. Unit is second. Value range is 180 to 604800. The default value is 43200.	N/A
GtkUpdateEnable	Whether GTK update is enabled.		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A
GtkUpdateMode	GTK update mode.		Enumeration. 1: based on time. 2 : based on packet number.	N/A
GtkUpdateTime	GTK update time interval.		Unsigned integer. Unit is second. Value range is 180 to 604800. The default value is 86400.	N/A
GtkPacketNumber	GTK update packet number threshold.		Unsigned integer. Value range is 5000 to 4294967295. The default value is 10000000.	N/A
ClientOffUpdateGtk	Whether to update GTK when client goes offline.		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A
TkipCmTime	Interval time of TKIP counter measures.		Unsigned integer. Value range is 0 to 3600. Unit is second. The default value is 0 which means no counter measures.	N/A

# WLANClient/ServiceWepKey

This table contains security wep key information of service template.

## XML structure

```
<WLANClient>
  <ServiceWepKey>
    <WepKey>
      <ServiceName></ServiceName>
      <WepKeyId></WepKeyId>
      <CipherSuite></CipherSuite>
      <KeyInputType></KeyInputType>
      <Wep40PassPhraseKey></Wep40PassPhraseKey>
      <Wep40RawKey></Wep40RawKey>
      <Wep104PassPhraseKey></Wep104PassPhraseKey>
      <Wep104RawKey></Wep104RawKey>
      <Wep128PassPhraseKey></Wep128PassPhraseKey>
      <Wep128RawKey></Wep128RawKey>
      <IsSelected></IsSelected>
    </WepKey>
  </ServiceWepKey>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	ServiceWepKey
Table type	Multi-instance table
Row name	WepKey
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceName	Service template name	Index	String, letter, number or '-', '[', ']', '/', '\'. The length is 1 to 63.	N/A
WepKeyId	WEP key ID	Index	Enumeration. Value range: 1 to 4.	N/A
CipherSuite	WEP cipher suite.		Enumeration. 1 : wep40.	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
			5 : wep104. 7 : wep128.	
KeyInputType	Key Type		Enumeration. 1 : PassPhrase. 2 : RawKey	N/A
Wep40PassPhraseKey	Wep40 key in pass-phrase		String.	The key is 5 alphanumeric characters.
Wep40RawKey	Wep40 key in raw		String.	The key is 10 hex characters.
Wep104PassPhraseKey	Wep104 key in pass-phrase		String.	The key is 13 alphanumeric characters.
Wep104RawKey	Wep104 key in raw		String.	The key is 26 hex characters.
Wep128PassPhraseKey	Wep128 key in pass-phrase		String.	The key is 16 alphanumeric characters.
Wep128RawKey	Wep128 key in raw		String.	The key is 32 hex characters.
IsSelected	Is this wep key Selected.		Boolean: <ul style="list-style-type: none"> <li>true—selected.</li> <li>false—no selected, The default value is false..</li> </ul>	N/A

## WLANClient/Stations

This table contains station summary information.

### XML structure

```

<WLANClient>
  <Stations>
    <Station>
      <MacAddress></MacAddress>
      <UserName></UserName>
      <Aid></Aid>
      <ApName></ApName>
      <RadioId></RadioId>
      <Ssid></Ssid>
      <Bssid></Bssid>
      <VLAN></VLAN>
      <PowerSaveMode></PowerSaveMode>
      <ListenInterval></ListenInterval>
    </Station>
  </Stations>
</WLANClient>

```

```

    <UpTime></UpTime>
    <QoSMode></QoSMode>
  </Station>
</Stations>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	Stations
Table type	Multi-instance table
Row name	Station
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MacAddress of station	Index	MAC address	N/A
UserName	User name of station.		String	N/A
Aid	Association ID		Unsigned integer	N/A
ApName	AP name		String	N/A
RadioId	Radio ID		Unsigned char	N/A
Ssid	SSID		String	N/A
Bssid	BSS ID		MAC address	N/A
Vlan	VLAN		Unsigned integer	N/A
PowerSave Mode	Power save status		Enumeration. 0 : active 1 : sleep	N/A
ListenInterval	Listen interval		Unsigned integer	N/A
RSSI	RSSI		Unsigned integer	N/A
RxRate	Reception rate		String	N/A
TxRate	Transmission rate		String	N/A
UpTime	Up time		Integer	N/A
QoSMode	Qosmode		Enumeration. 0 : doesn't support any qos mode	N/A

			1 : support mode WMM 2 : support mode 11e 3 : support mode WMM and 11e	
--	--	--	---	--

## WLANClient/Station11nInformation

This table contains station 11n information.

### XML structure

```
<WLANClient>
  <Station11nInformation>
    <Dot11n>
      <MacAddress></MacAddress>
      <WirelessMode></WirelessMode>
      <SupportMCSSet></SupportMCSSet>
    </Dot11n>
  </Station11nInformation>
</WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	Station11nInformation
Table type	Multi-instance table
Row name	11n
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MacAddress of station	Index	MAC address	N/A
WirelessMode	Wireless mode		Enumeration. 1 : 802.11b 2 : 802.11a 4 : 802.11g 8 : 802.11gn 16 : 802.11an 64 : 802.11ac	N/A

SupportMC SSet	Supported MCS		String	N/A
-------------------	------------------	--	--------	-----

## WLANClient/StationSecurityInformation

This table contains station security information.

### XML structure

```

<WLANClient>
  <StationSecurityInformation>
    <Security>
      <MacAddress></MacAddress>
      <ClientType></ClientType>
      <AkmMethod></AkmMethod>
      <EncryptionCipher></EncryptionCipher>
    </Security>
  </StationSecurityInformation>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	StationSecurityInformation
Table type	Multi-instance table
Row name	Security
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MacAddress of station	Index	MAC address	N/A
ClientType	Client type		Enumeration. 0 : pre-rsn 1: WPA 2 : RSN	N/A
AkmMethod	AKM method		Enumeration.1 : 802.1x 2 : PSK	N/A
EncryptionCipher	Encryption cipher		Enumeration.	N/A

			0 : USEGROUP 1 : WEP40 2 : TKIP 4 : CCMP 5 : WEP104 6 : BIP 7 : WEP128 255 : CLEAR 255 : CLEAR	
--	--	--	--	--

## WLANClient/StationRoamInformation

This table contains station roam information.

### XML structure

```

<WLANClient>
  <StationRoamInformation>
    <Roam>
      <MacAddress></MacAddress>
      <RoamStatus></RoamStatus>
    </Roam>
  </StationRoamInformation>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	StationRoamInformation
Table type	Multi-instance table
Row name	Roam
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MacAddress of station	Index	MAC address	N/A
RoamStatus	Roam status		Enumeration.0 : NORMAL. 1 : SEARCHING.	N/A

			2 : SLOW. 3 : FAST. 4 : ROAMAUTHING. 5 : ROAMFAILED. 6 : INTRAAC_SLOW. 7 : INTERAC_SLOW, 8 : INTRAAC_FAST, 9 : INTERAC_FAST. 10 : INTRAMA_SLOW. 11 : INTERMA_SLOW. 12 : INTRAMA_FAST. 13 : INTERMA_FAST. 14 : ROAMBACK_SLOW. 15 : ROAMBACK_FAST.  16 : INTRABSSID_FAST. 17 : INTRABSSID_SLOW.	
--	--	--	---	--

## WLANClient/StationStatistics

This table contains station statistics information.

### XML structure

```

<WLANClient>
  <StationStatistics>
    <Statistics>
      <MacAddress></MacAddress>
    </Statistics>
  </StationStatistics>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	StationStatistics
Table type	Multi-instance table
Row name	Statistics
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MacAddress of station	Index	MAC address	N/A
TxBkFrames	Transmitted backgroud frames		Unsigned integer64	N/A
TxBkBytes	Transmitted backgroud bytes		Unsigned integer64	N/A
TxBeFrames	Transmitted besteffort frames		Unsigned integer64	N/A
TxBeBytes	Transmitted besteffort bytes		Unsigned integer64	N/A
TxViFrames	Transmitted video frames		Unsigned integer64	N/A
TxViBytes	Transmitted video bytes		Unsigned integer64	N/A
TxVoFrames	Transmitted voice frames		Unsigned integer64	N/A
TxVoBytes	Transmitted voice bytes		Unsigned integer64	N/A
RxBkFrames	Received backgroud frames		Unsigned integer64	N/A
RxBkBytes	Received backgroud bytes		Unsigned integer64	N/A
RxBeFrames	Received besteffort frames		Unsigned integer64	N/A
RxBeBytes	Received besteffort bytes		Unsigned integer64	N/A
RxViFrames	Received video frames		Unsigned integer64	N/A
RxViBytes	Received video bytes		Unsigned integer64	N/A
RxVoFrames	Received voice frames		Unsigned integer64	N/A
RxVoBytes	Received voice bytes		Unsigned integer64	N/A
DropBkFrames	Dropped backgroud frames		Unsigned integer64	N/A
DropBkByte	Dropped		Unsigned integer64	N/A

s	backgroud bytes			
DropBeFrames	Dropped besteffort frames		Unsigned integer64	N/A
DropBeBytes	Dropped besteffort bytes		Unsigned integer64	N/A
DropViFrames	Dropped video frames		Unsigned integer64	N/A
DropViBytes	Dropped video bytes		Unsigned integer64	N/A
DropVoFrames	Dropped voice frames		Unsigned integer64	N/A
DropVoBytes	Dropped voice bytes		Unsigned integer64	N/A

## WLANClient/RadioWmm

This table contains radio WMM information.

### XML structure

```

<WLANClient>
  <RadioWmm>
    <Wmm>
      <ApName></ApName>
      <RadioId></RadioId>
      <Enable></Enable>
      <SvpMapAc></SvpMapAc>
      <CacPolicy></CacPolicy>
      <CacUserNum></CacUserNum>
      <CacChannelUtilization></CacChannelUtilization>
    </Wmm>
  </RadioWmm>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	RadioWmm
Table type	Multi-instance table
Row name	Wmm



Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions
ApName	AP name	Index	String, lowercase. Length: 1 to 63 characters.
RadioId	Radio identifier.	Index	Unsigned char. Value range: 1 to 4
Enable	WMM status of radio		Boolean: <ul style="list-style-type: none"> <li>true—enable.</li> <li>false—disable, The default value is false.</li> </ul>
SvpMapAc	Access category of SVP		Enumeration. 2 : vi 3 : vo
CacPolicy	CAC policy		Enumeration. 1 : channel utilization. 2 : based on client number. The default value is 2.
CacUserNum	CAC client number threshold		Unsigned integer. Value range is 0 to 124. The default value is 20.
CacChUtilValue	CAC channel utilization threshold.		Unsigned integer. Unit is percent. Value range is 0 to 100. The default value is 65.

## WLANClient/ClientEdca

This table contains client EDCA information.

## XML structure

```

<WLANClient>
  <ClientEdca>
    <Edca>
      <ApName></ApName>
      <RadioId></RadioId>
      <AccessCategory></AccessCategory>
      <Aifsn></Aifsn>
    </Edca>
  </ClientEdca>
</WLANClient>

```

```

    <TxOpLimit></TxOpLimit>
    <Ecwmin></Ecwmin>
    <Ecwmax></Ecwmax>
    <CacEnable></CacEnable>
  </Edca>
</ClientEdca>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	ClientEdca
Table type	Multi-instance table
Row name	Edca
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, lowercase. Length: 1 to 63 characters.	N/A
Radiold	Radio identifier.	Index	Unsigned char. Value range: 1 to 4	N/A
AccessCategory	Access category.	Index	Enumeration. 0 : be. 1 : bk. 2 : vi 3 : vo	N/A
Aifsn	Arbitration Inter Frame Spacing Number		Unsigned integer. Value range is 2 to 15, and is restricted by chipset.	N/A
TxOpLimit	Transmission opportunity limit		Unsigned number. Value range is 0 to 65535. Unit is millisecond.	N/A
Ecwmin	Exponent form of CWmin		Unsigned integer. Value range is 1 to 15.	N/A
Ecwmax	Exponent form of CWmax		Unsigned integer. Value range is 1 to 15.	N/A
CacEnable	Whether CAC is enabled.		Boolean: • true—enable.	When ac is vi or vo, Cac can be configured.

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>false—disable, The default value is false.</li> </ul>	

## WLANClient/StationWmmInformation

This table contains station WMM information.

### XML structure

```
<WLANClient>
  <StationWmmInformation>
    <Wmm>
      <MacAddress></MacAddress>
      <SSID></SSID>
      <QoSMode></QoSMode>
    </Wmm>
  </StationWmmInformation>
</WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	StationWmmInformation
Table type	Multi-instance table
Row name	Wmm
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MacAddress of station	Index	MAC address	N/A
SSID	SSID		String	N/A
QoSMode	QoS mode		0 : doesn't support any qos mode 1 : support mode WMM 2 : support mode 11e 3 : support mode WMM	N/A

			and 11e	
--	--	--	---------	--

## WLANClient/MobilityRole

This table contains mobility role information.

### XML structure

```
<WLANClient>
  <MobilityRole>
    <Role></Role>
    <MAIPv4Address></MAIPv4Address>
    <MAIPv6Address></MAIPv6Address>
  </MobilityRole></WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	MobilityRole
Table type	single-instance table
Row name	Noe
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
Role	Mobility role of the device.		Enumeration. 0 : not configured, default value. 1 : ma 2 : mc
MAIPv4Address	IPv4 address of mobility agent.		Ipv4Address
MAIPv6Address	IPv6 address of mobility agent.		Ipv6Address 若Ipv4和Ipv6同时存在下，则Ipv6有效

# WLANClient/MobilityGroups

This table contains mobility group information.

## XML structure

```
<WLANClient>
  <MobilityGroups>
    <MobilityGroup>
      <Name></Name>
      <TunnelType></TunnelType>
      <SourceIpv4Address></SourceIpv4Address>
      <SourceIpv6Address></SourceIpv6Address>
      <Enable></Enable>
    </MobilityGroup>
  </MobilityGroups>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	MobilityGroups
Table type	Multi-instance table
Row name	MobilityGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Mobility group name	Index	String. Length is 1 to 15 characters. Case sensitive.
TunnelType	Tunnel IP address type.		Enumeration. 2 : IPv4. 10 : IPv6
SourceIpv4 Address	Source IPv4 address		Ipv4Address
SourceIpv6 Address	Source IPv6 address		Ipv6Address
Enable	Status of mobility group.		Boolean: <ul style="list-style-type: none"><li>true—enable.</li><li>false—disable,</li></ul>

Column name	Column description	Column type	Data type and restrictions
			The default value is false.

## WLANClient/MobilityIPv4Members

This table contains mobility group IPv4 member information.

### XML structure

```

<WLANClient>
  <MobilityIPv4Members>
    <Member>
      <GroupName></GroupName>
      <MemberIpv4Address></MemberIpv4Address>
      <Status></Status>
      <UpTime></UpTime>
    </Member>
  </MobilityIPv4Members>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	MobilityIPv4Members
Table type	Multi-instance table
Row name	Member
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Mobility group name	Index	String. Length is 1 to 15 characters. Case sensitive.
MemberIpv4 Address	IPv4 address of member.	Index	Ipv4Address.
Status	Mobility Status		Enumeration. 1 : up 2 : down

Column name	Column description	Column type	Data type and restrictions
UpTime	Online Time		Unsigned integer.

## WLANClient/MobilityIPv6Members

This table contains mobility group IPv6 member information.

### XML structure

```

<WLANClient>
  <MobilityIPv6Members>
    <Member>
      <GroupName></GroupName>
      <MemberIpv6Address></MemberIpv6Address>
      <Status></Status>
      <UpTime></UpTime>
    </Member>
  </MobilityIPv6Members>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	MobilityIPv4Members
Table type	Multi-instance table
Row name	Member
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Mobility group name	Index	String. Length is 1 to 15 characters. Case sensitive.
MemberIpv6 Address	IPv6 address of member.	Index	Ipv6Address.
Status	Mobility Status		Enumeration. 1 : up 2 : down
UpTime	Online Time		Unsigned integer.

# WLANClient/RoamInStation

This table contains station roam in information.

## XML structure

```
<WLANClient>
  <RoamInStation>
    <Station>
      <MacAddress></MacAddress>
      <BssID></BssID>
      <VlanID></VlanID>
      <OnlineTime></OnlineTime>
      <HomeAcIpv4></HomeAcIpv4>
      <HomeAcIpv6></HomeAcIpv6>
    </Station>
  </RoamInStation>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	RoamInStation
Table type	Multi-instance table
Row name	Station
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MacAddress of station	Index	MAC address	N/A
BssID	BSS ID		MAC address	N/A
VlanID	VLAN-ID		Unsigned integer 1 to 4094	N/A
OnlineTime	Online time in seconds		Unsigned integer	N/A
HomeAcIpv4	Home AC IPv4		String	N/A
HomeAcIpv6	Home AC Ipv6		String	N/A



# WLANClient/RoamOutStation

This table contains station roam out information.

## XML structure

```
<WLANClient>  <RoamOutStation>
  <RoamOutStaInfo>
    <MacAddress></MacAddress>
    <BssID></BssID>
    <VlanID></VlanID>
    <OnlineTime></OnlineTime>
    <ForeignAcIpv4></ForeignAcIpv4>
    <ForeignAcIpv6></ForeignAcIpv6>
  </RoamOutStaInfo>
</RoamOutStation>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	RoamOutStation
Table type	Multi-instance table
Row name	RoamOutStaInfo
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MacAddress of station	Index	MAC address	N/A
BssID	BSS ID		MAC address	N/A
VlanID	VLAN-ID		Unsigned integer 1 to 4094	N/A
OnlineTime	Online time in seconds		Unsigned integer	N/A
HomeAcIpv4	Foreign AC Ipv4		String	N/A
ForeignAcIpv6	Foreign AC Ipv6		String	N/A

# WLANClient/StationRoamTrack

This table contains station roam track information.

## XML structure

```
<WLANClient>
  <StationRoamTrack>
    <RoamTrack>
      <MacAddress></MacAddress>
      <TrackCnt></TrackCnt>
      <BssId></BssId>
      <OnlineTime></OnlineTime>
      <AcIpv4Addr></AcIpv4Addr>
      <AcIpv6Addr></AcIpv6Addr>
    </RoamTrack>
  </StationRoamTrack>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	StationRoamTrack
Table type	Multi-instance table
Row name	RoamTrack
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	MacAddress of station	Index	MAC address	N/A
TrackCnt	Track count	Index	Unsigned integer	N/A
BssId	BSS ID		MAC address	N/A
OnlineTime	Online time in seconds		Unsigned integer	N/A
AcIpv4Addr	Ipv4 address of AC		String	N/A
AcIpv6Addr	Ipv6 address of AC		String	N/A

# WLANClient/MobilityPeerGroups

This table contains mobility peer group information.

## XML structure

```
<WLANClient>
  <MobilityPeerGroups>
    <MobilityPeerGroup>
      <Name></Name>
      <TunnelType></TunnelType>
      <Enable></Enable>
    </MobilityPeerGroup>
  </MobilityPeerGroups>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	MobilityPeerGroups
Table type	Multi-instance table
Row name	MobilityPeerGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
Name	Mobility peer group name	Index	String. Length is 1 to 15 characters. Case sensitive.
TunnelType	Tunnel IP address type.		Enumeration. 2 : IPv4. 10 : IPv6
Enable	Status of mobility peer group.		Boolean: <ul style="list-style-type: none"><li>true—enable.</li><li>false—disable, The default value is false.</li></ul>

# WLANClient/PeerGroupIPv4Members

This table contains mobility peer group IPv4 member information.

## XML structure

```
<WLANClient>
  <PeerGroupIPv4Members>
    <Member>
      <GroupName></GroupName>
      <MemberIPv4Address></MemberIPv4Address>
    </Member>
  </PeerGroupIPv4Members>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	PeerGroupIPv4Members
Table type	Multi-instance table
Row name	Member
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Mobility peer group name	Index	String. Length is 1 to 15 characters. Case sensitive.
MemberIPv4 Address	IPv4 address of member.	Index	Ipv4Address.

## WLANClient/PeerGroupIPv6Members

This table contains mobility peer group IPv6 member information.

## XML structure

```
<WLANClient>
  <PeerGroupIPv6Members>
    <Member>
      <GroupName></GroupName>
      <MemberIPv6Address></MemberIPv6Address>
    </Member>
  </PeerGroupIPv6Members>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	PeegGroupIPv6Members
Table type	Multi-instance table
Row name	Member
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	Mobility peer group name	Index	String. Length is 1 to 15 characters. Case sensitive.
MemberIPv6 Address	IPv6 address of member.	Index	Ipv6Address.

## WLANClient/Layer2Authentication

This table contains WLAN access security's authenticating configurations in service template.

## XML structure

```
<WLANClient>
  <Layer2Authentication>
    <Authentication>
      <ServiceTemplateName></ServiceTemplateName>
      <AuthenticationMode></AuthenticationMode>
      <IntrusionProtectionEnable></IntrusionProtectionEnable>
      <IntrusionProtectionOperation></IntrusionProtectionOperation>
      <TemporaryServiceStopTimer></TemporaryServiceStopTimer>
      <TemporaryBlockTimer></TemporaryBlockTimer>
      <IgnoreAuthorization></IgnoreAuthorization>
      <AuthorizationFailOffline></AuthorizationFailOffline>
      <Dot1xHandshakeEnable></Dot1xHandshakeEnable>
      <Dot1xSecurityHandshakeEnable></Dot1xSecurityHandshakeEnable>
      <Dot1xReauthenticationEnable></Dot1xReauthenticationEnable>
      <Dot1xMandatoryDomain></Dot1xMandatoryDomain>
      <Dot1xMaxUserCount></Dot1xMaxUserCount>
      <MACAuthenticationDomain></MACAuthenticationDomain>
      <MACAuthenticationMaxUserCount></MACAuthenticationMaxUserCount>
    
```

```

    <FailVLAN></FailVLAN>
  </Authentication>
</Layer2Authentication>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	Layer2Authentication
Table type	Multi-instance table
Row name	Authentication
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ServiceTemplateName	Service template name.	Index	String, letter, number or '-', '[,]', '/', '.'. The length is 1 to 63.	
AuthenticationMode	Authentication mode of the service template	N/A	Enumeration: 0 : bypass. 1 : mac authentication 2 : mac then dot1x authentication 3 : dot1x authentication 4 : dot1x then mac authentication 5 : oui then dot1x	Default mode is bypass
IntrusionProtectionEnable	Enable Intrusion Protection of the Service Template	N/A	Boolean: <ul style="list-style-type: none"> <li>true—enable.</li> <li>false—disable, The default value is false.</li> </ul>	Default status is disabled
IntrusionProtectionOperation	Operation mode when intrusion detected	N/A	Enumeration: 0 : temporary block mac. 1 : temporary stop the service 2 : stop service	Column name
TemporaryServiceStopTimer	Period value of temporarily stop service	N/A	Unsigned integer Value range: 10 to 300.	Default value is 20 s.
TemporaryBlockTimer	Period value of temporarily block user mac	N/A	Unsigned integer Value range: 60 to 300.	Default value is 180 s.
IgnoreAutho	Ignore all	N/A	Boolean:	Default status is disabled

Column name	Column description	Column type	Data type and restrictions	Remarks
Authorization	authorization information set by server.		<ul style="list-style-type: none"> <li>true—enable.</li> <li>false—disable, The default value is false.</li> </ul>	
AuthorizationFailOffline	Users are offline if the authorizing failed.	N/A	Boolean: <ul style="list-style-type: none"> <li>true—enable.</li> <li>false—disable, The default value is false.</li> </ul>	Default status is disabled
Dot1xHandshakeEnable	Enable handshake feature of dot1x	N/A	Boolean: <ul style="list-style-type: none"> <li>true—enable.</li> <li>false—disable, The default value is false.</li> </ul>	Default status is disabled
Dot1xSecurityHandshakeEnable	Enable secure handshake feature of dot1x	N/A	Boolean: <ul style="list-style-type: none"> <li>true—enable.</li> <li>false—disable, The default value is false.</li> </ul>	Default status is disabled, and handshake feature should be enabled first.
Dot1xReauthenticationEnable	Enable re-authentication feature of dot1x	N/A	Boolean: <ul style="list-style-type: none"> <li>true—enable.</li> <li>false—disable, The default value is false.</li> </ul>	Default status is disabled
Dot1xMandatoryDomain	Mandatory domain of users for the service template	N/A	String, case-insensitive. Length: 1 to 255 characters	No default value
Dot1xMaxUserCount	Max dot1x user numbers for a bss bound to this service template	N/A	Unsigned integer Value range: 1 to 4096.	Default value is 4096.
MACAuthenticationDomain	Domain of users for the service template	N/A	String, case-insensitive. Length: 1 to 255 characters	
MACAuthenticationMaxUserCount	Max MAC authentication user numbers for a bss bound to this service template	N/A	Unsigned integer Value range: 1 to 4096.	
FailVLAN	VLAN used	N/A	Unsigned integer Value range: 1 to 4094.	No default value

# WLANClient/StationLayer2Authentication

This table contains wlan authenticated station's connection information.

## XML structure

```
<WLANClient>
  <StationLayer2Authentication>
    <Information>
      <MACAddress></MACAddress>
      <AuthenDomain></AuthenDomain>
      <AuthenMode></AuthenMode>
      <AuthenMethod></AuthenMethod>
      <AuthorACLIndex></AuthorACLIndex>
      <AuthorUserProfile></AuthorUserProfile>
    </Information>
  </StationLayer2Authentication>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLAS
Table name	StationLayer2Authentication
Table type	Multi-instance table
Row name	Information
Restrictions	None.

## Columns

Column name	Column description	Column type	Data type and restrictions
MACAddress	Station MAC address	Index	MAC address
AuthenDomain	Domain of the user.	N/A	String, case-insensitive. Length: 1 to 255 characters.
AuthenMode	Authentication Mode.	N/A	Enumeration: 0 : BYPASS. 1 : MAC authentication. 2 : Dot1X. 3 : OUI.



Column name	Column description	Column type	Data type and restrictions
AuthenMethod	Authentication Method of Dot1X user.	N/A	Enumeration: 1 : Chap. 2 : PAP. 3 : EAP
AuthorACLIndex	Authorization ACL group index allocated by the server.	N/A	Unsigned integer.
AuthorUserProfile	Authorization User Profile name allocated by the server.	N/A	String Length: 1 to 31 characters.

## WLANClient/APs

This table contains AP configuration information.

### XML structure

```

<WLANClient>
  <APs>
    <AP>
      <Name></Name>
      <IdleTime></IdleTime>
      <KeepAliveTime></KeepAliveTime>
      <BandNaviStatus></BandNaviStatus>
    </AP>
  </APs>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	APs
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP name	Index	String, lowercase. Length: 1 to 64 characters.	N/A
IdleTime	Station Idle time	N/A	Unsigned integer. Value range: 60s to 86400s.	N/A
KeepAliveTime	Keeping alive time of station	N/A	Unsigned integer. Value range: 3s to 1800s.	N/A
BandNaviStatus	Band navigation status	N/A	Enumeration. <ul style="list-style-type: none"><li>0—disabled</li><li>1—enabled</li><li>2—inherit</li></ul>	Effective only when global BandNaviStatus is enabled.

## WLANClient/APGroup

This table contains AP group configuration information.

### XML structure

```
<WLANClient>
  <APGroup>
    <Group>
      <Name></Name>
      <BandNaviStatus></BandNaviStatus>
    </Group>
  </APGroup>
</WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	APGroup
Table type	Multi-instance table
Row name	Group
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	AP group name	Index	String, lowercase. Length: 1 to 31 characters.	N/A
BandNaviStatus	Band navigation status	N/A	Boolean. <ul style="list-style-type: none"><li>false—disabled.</li><li>true—enabled.</li></ul>	Effective only when global BandNaviStatus is enabled.

## WLANClient/BandNavigation

This table contains band navigation information.

### XML structure

```
<WLANClient>
  <BandNavigation>
    <GlobalStatus></GlobalStatus>
    <AgingTime></AgingTime>
    <DenialCnt></DenialCnt>
    <Session></Session>
    <Gap></Gap>
    <Threshold></Threshold>
  </BandNavigation>
</WLANClient>
```

### Table description

Item	Description
Feature name	WLANClient
Table name	BandNavigation
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GlobalStatus	Global status of band navigation	N/A	Boolean. <ul style="list-style-type: none"><li>false—disabled.</li><li>true—enabled.</li></ul>
AgingTime	Client information aging time	N/A	Unsigned integer. Unit is second. Value range: 10 to 600.
DenialCnt	Maximum number of denials for 5 GHz association requests	N/A	Unsigned integer. Value range: 1 to 10.
Session	Client number threshold for the 5 GHz radio	N/A	Unsigned integer. Value range: 2 to 255.
Gap	Threshold for the session gap between the current 5 GHz radio and the radio that has the fewest clients	N/A	Unsigned integer. Value range: 1 to 8.
Threshold	RSSI threshold	N/A	Unsigned integer. Unit is dB. Value range: 5 to 100.

## WLANClient/LoadBalance

This table contains load balancing information.

### XML structure

```
<WLANClient>
  <LoadBalance>
    <Status></Status>
    <Mode></Mode>
    <Bandwidth></Bandwidth>
    <BandwidthGap></BandwidthGap>
    <Session></Session>
    <SessionGap></SessionGap>
    <Traffic></Traffic>
    <TrafficGap></TrafficGap>
    <DenialNum></DenialNum>
    <Threshold></Threshold>
  </LoadBalance>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	LoadBalance
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	WLAN load balancing status	N/A	Boolean. <ul style="list-style-type: none"> <li>false—disabled.</li> <li>true—enabled.</li> </ul>	N/A
Mode	Load balancing mode	N/A	Enumeration. <ul style="list-style-type: none"> <li>1—session-mode.</li> <li>2—traffic-mode.</li> <li>3—bandwidth-mode.</li> </ul>	N/A
Session	Session threshold in number of clients	N/A	Unsigned integer. Value range:1 to 120.	This column can be configured only when the Mode is session-mode (1).
Session Gap	Session gap threshold	N/A	Unsigned integer. Value range:1 to 12.	This column cannot be configured if the Session is not configured.
Bandwidth	Bandwidth threshold	N/A	Unsigned integer. Unit is Mbps. Value range:1 to 500.	This column can be configured only when the Mode is bandwidth-mode (3).
Bandwidth Gap	Bandwidth gap threshold	N/A	Unsigned integer. Unit is Mbps. Value range:1 to 200.	This column cannot be configured if the Bandwidth is not configured.
Traffic	Traffic threshold	N/A	Unsigned integer. Unit is percent. Value range:1 to 80.	This column can be configured only when the Mode is traffic -mode (2).
TrafficGap	Traffic gap threshold	N/A	Unsigned integer. Unit is percent. Value range:10 to 40.	This column cannot be configured if the Traffic is not configured.
DenialNum	Maximum number of denials for association requests	N/A	Unsigned integer. Value range:2 to 10.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Threshold	RSSI threshold	N/A	Unsigned integer. Unit is dB. Value range:5 to 100.	N/A

## WLANClient/LoadBalanceGroup

This table contains load balancing group information.

### XML structure

```

<WLANClient>
  <LoadBalanceGroup>
    <Group>
      <GroupId></GroupId>
      <GroupDescription></GroupDescription>
    </Group>
  </LoadBalanceGroup>
</WLANClient>

```

### Table description

Item	Description
Feature name	WLANClient
Table name	LoadBalanceGroup
Table type	Multi-instance table
Row name	Group
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupId	Load balancing group identifier	Index	Unsignedinteger. Value range: 1 to 65535.
GroupDescription	Description for the load balancing group	N/A	String, case-sensitive. Length: 1 to 64 characters.

## WLANClient/RadioInLBGroup

This table contains radio information of radios in the load balancing group.

## XML structure

```
<WLANClient>
  <RadioInLBGroup>
    <Radio>
      <GroupId></GroupId>
      <ApName></ApName>
      <RadioId></RadioId>
    </Radio>
  </RadioInLBGroup>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	RadiInLBGroup
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupId	Load balancing group identifier	Index	Unsigned integer. Value range: 1 to 65535.
ApName	AP name	Index	String, lowercase. Length: 1 to 64 characters.
RadioId	Radio identifier	Index	Unsigned integer. Value range:1 to 31

## WLANClient/APStations

This table contains information about clients associated with an AP.

## XML structure

```
<WLANClient>
  <APStations>
    <APStation>
      <ApName></ApName>
```

```

    <MacAddress></MacAddress>
    <Ipv4Address></Ipv4Address>
    <Ipv6Address></Ipv6Address>
    <UpTime></UpTime>
  </APStation>
</APStations>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	APStations
Table type	Multi-instance table
Row name	APStation
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String	Length: 1 to 64 characters.
MacAddress	MAC address of the client	Index	MAC address	N/A
Ipv4Address	IPv4 address of the client		IPv4 address.	N/A
Ipv6Address	IPv6 address of the client		IPv6 address.	N/A
UpTime	Uptime		Integer	N/A

## WLANClient/APStationsNum

This table contains the number of clients associated with an AP.

## XML structure

```

<WLANClient>
  <APStationsNum>
    <StationNum>
      <ApName></ApName>
      <StaNum></StaNum>
    </StationNum>
  </APStationsNum>

```



</WLANClient>

## Table description

Item	Description
Feature name	WLANClient
Table name	APStationsNum
Table type	Multi-instance table
Row name	StationNum
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String	Length: 1 to 64 characters.
StaNum	Number of clients associated with the AP		Integer	N/A

## WLANClient/WhiteList

This table contains information of white list.

## XML structure

```
<WLANClient>
  <WhiteList>
    <MacList>
      <MacAddress></MacAddress>
    </MacList>
  </WhiteList>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	WhiteList
Table type	Multi-instance table
Row name	MacList

Restrictions	None
--------------	------

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	Client MAC address.	Index	<ul style="list-style-type: none"> <li>MAC address.</li> </ul>	Example: 00-0c-af-e3-5d-c0.

## WLANClient/StaticBlackList

This table contains information of static black list.

## XML structure

```

<WLANClient>
  <StaticBlackList>
    <MacList>
      <MacAddress></MacAddress>
    </MacList>
  </StaticBlackList>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	StaticBlackList
Table type	Multi-instance table
Row name	MacList
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
MacAddress	Client MAC address.	Index	<ul style="list-style-type: none"> <li>MAC address.</li> </ul>	Example: 00-0c-af-e3-5d-c0.

## WLANClient/DynamicBlackListCfg

This table contains configuration of dynamic black list.

## XML structure

```
<WLANClient>
  <DynamicBlackListCfg>
    <LifeTime></LifeTime>
  </DynamicBlackListCfg>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	DynamicBlackListCfg
Table type	Single-instance table
Row name	N/A
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
LifeTime	Global life time of dynamic black list.		Unsigned integer. Value range:1 to 3600.Unit is second.

## WLANClient/pmfConfiguration

This table contains Protected management frames information.

## XML structure

```
<WLANClient>
  <PmfConfiguration>
    <Information>
      <ServiceTemplateName></ServiceTemplateName>
      <KeyDerivation></KeyDerivation>
      <PmfSwitch></PmfSwitch>
      <ComeBackTime></ComeBackTime>
      <RetryCnt></RetryCnt>
      <RetryTime></RetryTime>
    </Information>
  </PmfConfiguration >
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	PmfConfiguration
Table type	Multi-instance table
Row name	Information
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceTemplateName	Service template name.	Index	String, letter, number or '-', '[,]', '/', '-', lowercase. The length is 1 to 63.
KeyDerivation	Key derivation		Enumeration: 1 : SHA1 2 : SHA256 3: SHA1 and SHA256 The default value is 1.
PmfSwitch	Pmf function switch		Enumeration: 0 : disable 1 : optional 2 : mandatory The default value is 0
ComeBackTime	Association comeback interval		Unsigned int. The value range is 1 to 20. Unit is second. The default value is 1 (s)
RetryCnt	Maximum number of SA query request retransmission		Unsigned int. The value range is 1 to 16. The default value is 4.
RetryTime	Retry interval for SA query response		Unsigned int. The value range is 100 to 500. Unit is millisecond. The default value is 200 (ms) .

## WLANClient/FtConfiguration

This table contains FT configuration information.

## XML structure

```
<WLANClient>
```

```

<FtConfiguration>
  <Configuration>
    <ServiceTemplateName></ServiceTemplateName>
    <Enable></Enable>
    <Method></Method>
    <ReassocTime></ReassocTime>
  </Configuration>
</FtConfiguration>
</WLANClient>

```

## Table description

Item	Description
Feature name	WLANClient
Table name	FtConfiguration
Table type	Multi-instance table
Row name	Configuration
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceTemplateName	Service template name.	Index	String, letter, number or '-', '[,]', '/', '-', lowercase. The length is 1 to 63.
Enable	Status of fast BSS transition protocol.		Boolean: <ul style="list-style-type: none"> <li><b>true</b>—enabled.</li> <li><b>false</b>—disabled.</li> </ul> The default value is false.
Method	Fast BSS transition method.		Unsigned char. 0:over-the-air; 1:over-the-ds. The default value is 0.
ReassocTime	Reassociation timeout.		Unsigned int. The value range is 1 to 100. The default value is 20. Unit is second.

## WLANClient/Layer2AccessControl

This table contains Layer 2 access control ACL information..

## XML structure

```
<WLANClient>
  <Layer2AccessControl>
    <AccessControl>
      <ServiceTemplateName></ServiceTemplateName>
      <AclNum></AclNum>
    </AccessControl>
  </Layer2AccessControl>
</WLANClient>
```

## Table description

Item	Description
Feature name	WLANClient
Table name	Layer2AccessControl
Table type	Multi-instance table
Row name	AccessControl
Restrictions	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceTemplateName	Service template name	Index	String, lowercase. Length: 1 to 63 characters.
AclNum	ACL number	N/A	Unsigned integer Value range: 4000 to 4999.



# Contents

WlanMesh .....	1
WlanMesh/Profile.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
WlanMesh/Policy .....	2
XML structure.....	2
Table description.....	3
Columns.....	3
WlanMesh/ MLSPProxy.....	4
XML structure.....	5
Table description.....	5
Columns.....	5
WlanMesh/RadioCfg.....	6
XML structure.....	6
Table description.....	6
Columns.....	6
WlanMesh/APCfg.....	7
XML structure.....	7
Table description.....	7
Columns.....	8
WlanMesh/ WDSPeerMac .....	8
XML structure.....	8
Table description.....	8
Columns.....	9
WlanMesh/APGroupRadioCfg .....	9
XML structure.....	9
Table description.....	9
Columns.....	10
WlanMesh/APGroupAPCfg .....	10
XML structure.....	10
Table description.....	10
Columns.....	11
WlanMesh/APGroupWDSPeerMac .....	11
XML structure.....	11
Table description.....	11
Columns.....	12
WlanMesh/GlobalCfg.....	12
XML structure.....	12
Table description.....	12
Columns.....	13



# WlanMesh

## WlanMesh/Profile

This table contains mesh profile information.

### XML structure

```
<WlanMesh>
  <Profile>
    <ProfileEntry>
      <ProfileIndex></ProfileIndex>
      <MeshID></MeshID>
      <KeepAlive></KeepAlive>
      <AKMMode></AKMMode>
      <SimpleKey></SimpleKey>
      <IsKeyConfig></IsKeyConfig>
      <ProfileEnable></ProfileEnable>
    </ProfileEntry>
  </Profile>
</WlanMesh>
```

### Table description

Item	Description
Feature name	WlanMesh
Table name	Profile
Table type	Multi-instance table
Row name	ProfileEntry
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
ProfileIndex	Mesh profile number	Index	Unsigned integer. Value range: 1 to 32.
MeshID	Mesh ID for the mesh profile	N/A	String. Length: 1 to 32 characters.
KeepAlive	Mesh link keepalive interval	N/A	Unsigned integer. Value range: 1 to 1800.

Column name	Column description	Column type	Data type and restrictions
AKMMMode	SAE mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Enabled.</li> <li>2—Disabled.</li> </ul>
SimpleKey	Plain text string	N/A	String. Length: 8 to 63 characters.
IsKeyConfig	SimpleKey configuration state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The simpleKey has been configured.</li> <li><b>false</b>—The simpleKey is not configured.</li> </ul>
ProfileEnable	Mesh profile enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

## WlanMesh/Policy

This table contains mesh policy information.

### XML structure

```

<WlanMesh>
  <Policy>
    <PolicyEntry>
      <PolicyName></PolicyName>
      <PolicyEnable></PolicyEnable>
      <MlspEnable></MlspEnable>
      <MlspMode></MlspMode>
      <TransmitLevel></TransmitLevel>
      <ProbRequestInterval></ProbRequestInterval>
      <LinkHoldRSSI></LinkHoldRSSI>
      <WaveGuideHoldRSSI></WaveGuideHoldRSSI>
      <TransMissionMethod></TransMissionMethod>
      <WaveGuideSwitch></WaveGuideSwitch>
      <LinkHoldTime></LinkHoldTime>
      <SwitchMargin></SwitchMargin>
      <LinkSaturationRSSI></LinkSaturationRSSI>
      <LinkRateMode></LinkRateMode>
      <MaxLinkNum></MaxLinkNum>
      <MlspOptimize></MlspOptimize>
      <LinkOptimizeThreshold></LinkOptimizeThreshold>
      <MlspLog></MlspLog>
      <MlspLogInterval></MlspLogInterval>
      <TempLinkEnable></TempLinkEnable>
      <ActiveKeepaliveCount></ActiveKeepaliveCount>
      <LinkEstablishThreshold></LinkEstablishThreshold>

```

```

    </PolicyEntry>
  </Policy>
</WlanMesh>

```

## Table description

Item	Description
Feature name	WlanMesh
Table name	Policy
Table type	Multi-instance table
Row name	PolicyEntry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Mesh policy name	Index	String. Length: 1 to 31 characters.	N/A
PolicyEnable	Mesh policy enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
MlspEnable	MLSP enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for fat APs.
MlspMode	MLSP mode	N/A	Unsigned integer. Value range: 0 to 1.	Only available for fat APs.
TransmitLevel	Keepalive packet limit	N/A	Unsigned integer. Value range: 0 to 4.	Only available for ACs.
ProbRequestInterval	Probe request interval	N/A	Unsigned integer. Value range: 100 to 8191.	N/A
LinkHoldRSSI	Mesh link hold RSSI	N/A	Unsigned integer. Value range: 5 to 100.	N/A
WaveGuideHoldRSSI	Waveguide hold RSSI	N/A	Unsigned integer. Value range: 5 to 100.	Only available for fat APs.
TransMissionMethod	Transmission method	N/A	Unsigned integer. Value range: 0 to 1.	Only available for ACs.

Column name	Column description	Column type	Data type and restrictions	Remarks
WaveGuideSwitch	Fast waveguide switch state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for fat APs.
LinkHoldTime	Mesh link hold time	N/A	Unsigned integer. Value range: 1000 to 20000.	Only available for fat APs.
SwitchMargin	Mesh link switch threshold	N/A	Unsigned integer. Value range: 1 to 100.	Only available for fat APs.
LinkSaturationRSSI	Mesh link saturation RSSI	N/A	Unsigned integer. Value range: 30 to 150.	N/A
LinkRateMode	Mesh link rate mode	N/A	Unsigned integer. Value range: 1 to 2.	N/A
MaxLinkNum	Maximum number of links that an MP can form	N/A	Unsigned integer. Value range: 1 to 8.	N/A
MLspOptimize	MLSP optimization state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for fat APs.
LinkOptimizeThreshold	Mesh link optimization threshold	N/A	Unsigned integer. Value range: 30 to 120.	Only available for fat APs.
MLspLog	MLSP logging enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for fat APs.
MLspLogInterval	MLSP logging interval	N/A	Unsigned integer. Value range: 500 to 4000.	Only available for fat APs.
TempLinkEnable	Temporary link enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for ACs.
ActiveKeepaliveCount	Mesh link active keepalive packet limit	N/A	Unsigned integer. Value range: 1 to 100.	Only available for fat APs.
LinkEstablishThreshold	Mesh link establishment threshold	N/A	Unsigned integer. Value range: 1 to 100.	N/A

## WlanMesh/ MLSPProxy

This table contains MLSP proxy information.

## XML structure

```
<WlanMesh>
  <MLSPProxy>
    <MLSPProxyEntry>
      <PolicyName></PolicyName>
      <ProxyMac></ProxyMac>
      <VlanID></VlanID>
      <IPAddress></IPAddress>
    </MLSPProxyEntry>
  </MLSPProxy>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	MLSPProxy
Table type	Multi-instance table
Row name	MLSPProxyEntry
Restrictions	The table is applicable only to fat APs and MLSP must be enabled first.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Mesh policy name	Index	String. Length: 1 to 31 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
ProxyMac	Proxy MAC address	Index	MAC address. Six groups of two hexadecimal digits, hyphen-separated.	It cannot be an all zero address or broadcast address or multicast address, 00-0c-af-e3-5d-c0 for example.
VlanID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
IPAddress	IP address	N/A	String. Dotted decimal notation.	It cannot be an all zero address or broadcast address or multicast address, 192.168.0.1 for example.

# WlanMesh/RadioCfg

This table contains radio configuration information.

## XML structure

```
<WlanMesh>
  <RadioCfg>
    <Radio>
      <ApName></ApName>
      <RadioId></RadioId>
      <RadioType></RadioType>
      <PolicyName></PolicyName>
      <BindInterface></BindInterface>
      <ProfileIndex></ProfileIndex>
    </Radio>
  </RadioCfg>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	RadioCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String. Length: 1 to 64 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
RadioId	Radio ID	Index	Unsigned integer. Value range: 1 to 31	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RadioType	Radio type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b.</li> <li>2—802.11a.</li> <li>3—802.11g.</li> <li>4—802.11n(2.4GHz).</li> <li>5—802.11n(5GHz).</li> <li>6—802.11ac(2.4GHz).</li> <li>7—802.11ac(5GHz).</li> </ul>	N/A
PolicyName	Name of the policy bound to the radio	N/A	String. Length: 1 to 31 characters.	N/A
BindInterface	Index of the interface bound to the radio	N/A	Unsigned integer. Value range: 0 to 1023.	N/A
ProfileIndex	Index of the profile bound to the radio	N/A	Unsigned integer. Value range: 1 to 32.	N/A

## WlanMesh/APCfg

This table contains AP configuration information.

### XML structure

```

<WlanMesh>
  <APCfg>
    <CfgInfo>
      <ApName></ApName>
      <PortalEnable></PortalEnable>
    </CfgInfo>
  </APCfg>
</WlanMesh>

```

### Table description

Item	Description
Feature name	WlanMesh
Table name	APCfg
Table type	Multi-instance table
Row name	CfgInfo
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String. Length: 1 to 64 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
PortalEnable	Portal service enabling state	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

## WlanMesh/ WDSPeerMac

This table contains WDS peer MAC information.

## XML structure

```
<WlanMesh>
  <WDSPeerMac>
    <PeerMacEntry>
      <ApName></ApName>
      <RadioId></RadioId>
      <PeerMac></PeerMac>
    </PeerMacEntry>
  </WDSPeerMac>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	WDSPeerMac
Table type	Multi-instance table
Row name	PeerMacEntry
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String. Length: 1 to 64 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
RadioId	Radio ID	Index	Unsigned integer. Value range: 1 to 31	N/A
PeerMac	Peer MP's MAC address	Index	MAC address. Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

## WlanMesh/APGroupRadioCfg

This table contains radio configuration information for an AP group.

## XML structure

```
<WlanMesh>
  <APGroupRadioCfg>
    <GroupRadio>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioId></RadioId>
      <PolicyName></PolicyName>
      <BindInterface></BindInterface>
      <ProfileIndex></ProfileIndex>
    </GroupRadio>
  </APGroupRadioCfg>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	APGroupRadioCfg
Table type	Multi-instance table
Row name	GroupRadio
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String. Length: 1 to 31 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
ModelName	AP model name	Index	String. Length: 1 to 63 characters.	N/A
RadioId	Radio ID	Index	Unsigned integer. Value range: 1 to 31	N/A
PolicyName	Name of the policy bound to the radio	N/A	String. Length: 1 to 31 characters.	N/A
BindInterface	Index of the interface bound to the radio	N/A	Unsigned integer. Value range: 0 to 1023.	N/A
ProfileIndex	Index of the profile bound to the radio	N/A	Unsigned integer. Value range: 1 to 32.	N/A

## WlanMesh/APGroupAPCfg

This table contains AP group configuration information.

## XML structure

```
<WlanMesh>
  <APGroupAPCfg>
    <GroupCfgInfo>
      <GroupName></GroupName>
      <PortalEnable></PortalEnable>
    </GroupCfgInfo>
  </APGroupAPCfg>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	APGroupAPCfg
Table type	Multi-instance table
Row name	GroupCfgInfo
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	AP group name	Index	String. Length: 1 to 31 characters.
PortalEnable	Portal service enabling state	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>

## WlanMesh/APGroupWDSPeerMac

This table contains WDS peer MAC address information for an AP group.

## XML structure

```
<WlanMesh>
  <APGroupWDSPeerMac>
    <GroupPeerMacEntry>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioId></RadioId>
      <PeerMac></PeerMac>
    </GroupPeerMacEntry>
  </APGroupWDSPeerMac>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	APGroupWDSPeerMac
Table type	Multi-instance table
Row name	GroupPeerMacEntry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String. Length: 1 to 31 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
ModelName	AP model name	Index	String. Length: 1 to 63 characters.	N/A
RadioId	Radio ID	Index	Unsigned integer. Value range: 1 to 31	N/A
PeerMac	Peer MP MAC address	Index	MAC address. Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

## WlanMesh/GlobalCfg

This table contains global configuration information.

## XML structure

```
<WlanMesh>
  <GlobalCfg>
    <PeerConfig></PeerConfig>
    <PortalEnable></PortalEnable>
  </GlobalCfg>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	GlobalCfg
Table type	Multi-instance table
Row name	GroupCfgInfo
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
PeerConfig	Mesh peer configuration state	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>
PortalEnable	Portal service enabling state	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>

# Contents

WlanMesh .....	2
WlanMesh/Profile.....	2
XML structure.....	2
Table description.....	2
Columns.....	2
WlanMesh/Policy .....	3
XML structure.....	3
Table description.....	4
Columns.....	4
WlanMesh/ MLSPProxy.....	5
XML structure.....	6
Table description.....	6
Columns.....	6
WlanMesh/RadioCfg.....	7
XML structure.....	7
Table description.....	7
Columns.....	7
WlanMesh/APCfg.....	8
XML structure.....	8
Table description.....	8
Columns.....	9
WlanMesh/ WDSPeerMac .....	9
XML structure.....	9
Table description.....	9
Columns.....	10
WlanMesh/LinkStatus .....	10
XML structure.....	10
Table description.....	10
Columns.....	11
WlanMesh/LinkStatistics.....	11
XML structure.....	11
Table description.....	12
Columns.....	12
WlanMesh/NbrStatus .....	13
XML structure.....	13
Table description.....	14
Columns.....	14
WlanMesh/APMeshIF .....	15
XML structure.....	15
Table description.....	15
Columns.....	15
WlanMesh/GroupMeshIF .....	16
XML structure.....	16
Table description.....	16
Columns.....	16
WlanMesh/APGroupRadioCfg .....	17
XML structure.....	17
Table description.....	17
Columns.....	18
WlanMesh/APGroupAPCfg .....	18
XML structure.....	18
Table description.....	18
Columns.....	19
WlanMesh/APGroupWDSPeerMac.....	19
XML structure.....	19
Table description.....	19
Columns.....	20

WlanMesh/GlobalCfg.....	20
XML structure.....	20
Table description.....	20
Columns.....	21

# WlanMesh

## WlanMesh/Profile

This table contains mesh profile information.

### XML structure

```

<WlanMesh>
  <Profile>
    <ProfileEntry>
      <ProfileIndex></ProfileIndex>
      <MeshID></MeshID>
      <KeepAlive></KeepAlive>
      <AKMMode></AKMMode>
      <SimpleKey></SimpleKey>
      <IsKeyConfig></IsKeyConfig>
      <ProfileEnable></ProfileEnable>
    </ProfileEntry>
  </Profile>
</WlanMesh>

```

### Table description

Item	Description
Feature name	WlanMesh
Table name	Profile
Table type	Multi-instance table
Row name	ProfileEntry
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions
ProfileIndex	Mesh profile number	Index	Unsigned integer. Value range: 1 to 32.

Column name	Column description	Column type	Data type and restrictions
MeshID	Mesh ID for the mesh profile	N/A	String. Length: 1 to 32 characters.
KeepAlive	Mesh link keepalive interval	N/A	Unsigned integer. Value range: 1 to 1800.
AKMMode	SAE mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Enabled.</li> <li>2—Disabled.</li> </ul>
SimpleKey	Plain text string	N/A	String. Length: 8 to 63 characters.
IsKeyConfig	SimpleKey configuration state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—The simpleKey has been configured.</li> <li><b>false</b>—The simpleKey is not configured.</li> </ul>
ProfileEnable	Mesh profile enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>

## WlanMesh/Policy

This table contains mesh policy information.

### XML structure

```

<WlanMesh>
  <Policy>
    <PolicyEntry>
      <PolicyName></PolicyName>
      <PolicyEnable></PolicyEnable>
      <MlspEnable></MlspEnable>
      <MlspMode></MlspMode>
      <TransmitLevel></TransmitLevel>
      <ProbRequestInterval></ProbRequestInterval>
      <LinkHoldRSSI></LinkHoldRSSI>
      <WaveGuideHoldRSSI></WaveGuideHoldRSSI>
      <TransMissionMethod></TransMissionMethod>
      <WaveGuideSwitch></WaveGuideSwitch>
      <LinkHoldTime></LinkHoldTime>
      <SwitchMargin></SwitchMargin>
      <LinkSaturationRSSI></LinkSaturationRSSI>
      <LinkRateMode></LinkRateMode>
      <MaxLinkNum></MaxLinkNum>
      <MlspOptimize></MlspOptimize>
      <LinkOptimizeThreshold></LinkOptimizeThreshold>
    
```



```

    <MlspLog></MlspLog>
    <MlspLogInterval></MlspLogInterval>
    <TempLinkEnable></TempLinkEnable>
    <ActiveKeepaliveCount></ActiveKeepaliveCount>
    <LinkEstablishThreshold></LinkEstablishThreshold>
  </PolicyEntry>
</Policy>
</WlanMesh>

```

## Table description

Item	Description
Feature name	WlanMesh
Table name	Policy
Table type	Multi-instance table
Row name	PolicyEntry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Mesh policy name	Index	String. Length: 1 to 31 characters.	N/A
PolicyEnable	Mesh policy enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	N/A
MlspEnable	MLSP enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for fat APs.
MlspMode	MLSP mode	N/A	Unsigned integer. Value range: 0 to 1.	Only available for fat APs.
TransmitLevel	Keepalive packet limit	N/A	Unsigned integer. Value range: 0 to 4.	Only available for ACs.
ProbRequestInterval	Probe request interval	N/A	Unsigned integer. Value range: 100 to 8191.	N/A
LinkHoldRSSI	Mesh link hold RSSI	N/A	Unsigned integer. Value range: 5 to 100.	N/A
WaveGuideHoldRSSI	Waveguide hold RSSI	N/A	Unsigned integer. Value range: 5 to 100.	Only available for fat APs.

Column name	Column description	Column type	Data type and restrictions	Remarks
TransMissionMethod	Transmission method	N/A	Unsigned integer. Value range: 0 to 1.	Only available for ACs.
WaveGuideSwitch	Fast waveguide switch state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for fat APs.
LinkHoldTime	Mesh link hold time	N/A	Unsigned integer. Value range: 1000 to 20000.	Only available for fat APs.
SwitchMargin	Mesh link switch threshold	N/A	Unsigned integer. Value range: 1 to 100.	Only available for fat APs.
LinkSaturationRSSI	Mesh link saturation RSSI	N/A	Unsigned integer. Value range: 30 to 150.	N/A
LinkRateMode	Mesh link rate mode	N/A	Unsigned integer. Value range: 1 to 2.	N/A
MaxLinkNum	Maximum number of links that an MP can form	N/A	Unsigned integer. Value range: 1 to 8.	N/A
MLspOptimize	MLSP optimization state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for fat APs.
LinkOptimizeThreshold	Mesh link optimization threshold	N/A	Unsigned integer. Value range: 30 to 120.	Only available for fat APs.
MLspLog	MLSP logging enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for fat APs.
MLspLogInterval	MLSP logging interval	N/A	Unsigned integer. Value range: 500 to 4000.	Only available for fat APs.
TempLinkEnable	Temporary link enabling state	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enabled.</li> <li><b>false</b>—Disabled.</li> </ul>	Only available for ACs.
ActiveKeepaliveCount	Mesh link active keepalive packet limit	N/A	Unsigned integer. Value range: 1 to 100.	Only available for fat APs.
LinkEstablishThreshold	Mesh link establishment threshold	N/A	Unsigned integer. Value range: 1 to 100.	N/A

## WlanMesh/ MLSPProxy

This table contains MLSP proxy information.

## XML structure

```
<WlanMesh>
  <MLSPProxy>
    <MLSPProxyEntry>
      <PolicyName></PolicyName>
      <ProxyMac></ProxyMac>
      <VlanID></VlanID>
      <IPAddress></IPAddress>
    </MLSPProxyEntry>
  </MLSPProxy>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	MLSPProxy
Table type	Multi-instance table
Row name	MLSPProxyEntry
Restrictions	The table is applicable only to fat APs and MLSP must be enabled first.
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
PolicyName	Mesh policy name	Index	String. Length: 1 to 31 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
ProxyMac	Proxy MAC address	Index	MAC address. Six groups of two hexadecimal digits, hyphen-separated.	It cannot be an all zero address or broadcast address or multicast address, 00-0c-af-e3-5d-c0 for example.
VlanID	VLAN ID	Index	Unsigned integer. Value range: 1 to 4094.	N/A
IPAddress	IP address	N/A	String. Dotted decimal notation.	It cannot be an all zero address or broadcast address or multicast address, 192.168.0.1 for example.

# WlanMesh/RadioCfg

This table contains radio configuration information.

## XML structure

```
<WlanMesh>
  <RadioCfg>

    <Radio>
      <ApName></ApName>

      <RadioId></RadioId>
      <RadioType></RadioType>
      <PolicyName></PolicyName>
      <BindInterface></BindInterface>
      <ProfileIndex></ProfileIndex>
    </Radio>
  </RadioCfg>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	RadioCfg
Table type	Multi-instance table
Row name	Radio
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String. Length: 1 to 64 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
RadioId	Radio ID	Index	Unsigned integer. Value range: 1 to 31	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RadioType	Radio type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b.</li> <li>2—802.11a.</li> <li>3—802.11g.</li> <li>4—802.11n(2.4GHz).</li> <li>5—802.11n(5GHz).</li> <li>6—802.11ac(2.4GHz).</li> <li>7—802.11ac(5GHz).</li> </ul>	N/A
PolicyName	Name of the policy bound to the radio	N/A	String. Length: 1 to 31 characters.	N/A
BindInterface	Index of the interface bound to the radio	N/A	Unsigned integer. Value range: 0 to 1023.	N/A
ProfileIndex	Index of the profile bound to the radio	N/A	Unsigned integer. Value range: 1 to 32.	N/A

## WlanMesh/APCfg

This table contains AP configuration information.

### XML structure

```

<WlanMesh>
  <APCfg>
    <CfgInfo>
      <ApName></ApName>
      <PortalEnable></PortalEnable>
    </CfgInfo>
  </APCfg>
</WlanMesh>

```

### Table description

Item	Description
Feature name	WlanMesh
Table name	APCfg
Table type	Multi-instance table
Row name	CfgInfo
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String. Length: 1 to 64 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
PortalEnable	Portal service enabling state	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>	N/A

## WlanMesh/ WDSPeerMac

This table contains WDS peer MAC information.

## XML structure

```
<WlanMesh>
  <WDSPeerMac>
    <PeerMacEntry>
      <ApName></ApName>
      <RadioId></RadioId>
      <PeerMac></PeerMac>
    </PeerMacEntry>
  </WDSPeerMac>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	WDSPeerMac
Table type	Multi-instance table
Row name	PeerMacEntry
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String. Length: 1 to 64 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
Radioid	Radio ID	Index	Unsigned integer. Value range: 1 to 31	N/A
PeerMac	Peer MP's MAC address	Index	MAC address. Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

## WlanMesh/LinkStatus

This table contains mesh link state information.

### XML structure

```
<WlanMesh>
  <LinkStatus>
    <LinkStatusEntry>
      <IfIndex></IfIndex>
      <IfName></IfName>
      <BssID></BssID>
      <PeerMac></PeerMac>
      <Age></Age>
      <LinkType></LinkType>
      <LinkMode></LinkMode>
      <RSSI></RSSI>
      <IsZeroLink></IsZeroLink>
      <SignalType></SignalType>
    </LinkStatusEntry>
  </LinkStatus>
</WlanMesh>
```

### Table description

Item	Description
Feature name	WlanMesh
Table name	LinkStatus
Table type	Multi-instance table
Row name	LinkStatusEntry

Item	Description
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	N/A
IfName	Interface name	N/A	String. Length: 2 to 47 characters.	N/A
Bssid	Base service set ID	N/A	MAC address. Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
PeerMac	Peer MAC address	N/A	MAC address. Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.
Age	Link age timer	N/A	Unsigned integer.	N/A
LinkType	Link type	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Active.</li> <li>2—Standby.</li> </ul>	N/A
LinkMode	Link mode	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>1—802.11b.</li> <li>2—802.11a.</li> <li>3—802.11g.</li> <li>4—802.11n(2.4GHz).</li> <li>5—802.11n(5GHz).</li> <li>6—802.11ac(2.4GHz).</li> <li>7—802.11ac(5GHz).</li> </ul>	N/A
RSSI	Mean RSSI	N/A	Unsigned integer.	N/A
IsZeroLink	Whether the link is a zero link	N/A	Boolean: <ul style="list-style-type: none"> <li>true</li> <li>false</li> </ul>	N/A
SignalType	Signal type	N/A	Unsigned integer: <ul style="list-style-type: none"> <li>0—Air</li> <li>1—Waveguide</li> </ul>	N/A

## WlanMesh/LinkStatistics

This table contains mesh link statistics.

## XML structure

```

<WlanMesh>
  <LinkStatistics>
    <LinkStatisticsEntry>

```



```

    <ApName></ApName>
    <IfIndex></IfIndex>
    <NbrIndex></NbrIndex>
    <RecvPkt></RecvPkt>
    <RecvByte></RecvByte>
    <RecvUniPkt></RecvUniPkt>
    <RecvMultiPkt></RecvMultiPkt>
    <RecvBrocPkt></RecvBrocPkt>
    <RecvDiscPkt></RecvDiscPkt>
    <SendPkt></SendPkt>
    <SendByte></SendByte>
    <SendUniPkt></SendUniPkt>
    <SendMultiPkt></SendMultiPkt>
    <SendBrocPkt></SendBrocPkt>
    <SendDiscPkt></SendDiscPkt>
    <IfName></IfName>
  </LinkStatisticsEntry>
</LinkStatistics>
</WlanMesh>

```

## Table description

Item	Description
Feature name	WlanMesh
Table name	LinkStatistics
Table type	Multi-instance table
Row name	LinkStatisticsEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String. Length: 1 to 64 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
IfIndex	Interface index	Index	Unsigned integer.	N/A
NbrIndex	Neighbor index	N/A	Unsigned integer.	N/A
RecvPkt	Received packets	N/A	Unsigned integer.	N/A
RecvByte	Received bytes	N/A	Unsigned integer.	N/A
RecvUniPkt	Received unicast packets	N/A	Unsigned integer.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RecvMultiPkt	Received multicast packets	N/A	Unsigned integer.	N/A
RecvBrocPkt	Received broadcast packets	N/A	Unsigned integer.	N/A
RecvDiscPkt	Received discarded packet	N/A	Unsigned integer.	N/A
SendPkt	Sent packets	N/A	Unsigned integer.	N/A
SendByte	Sent bytes	N/A	Unsigned integer.	N/A
SendUniPkt	Sent unicast packets	N/A	Unsigned integer.	N/A
SendMultiPkt	Sent multicast packets	N/A	Unsigned integer.	N/A
SendBrocPkt	Sent broadcast packets	N/A	Unsigned integer.	N/A
SendDiscPkt	Sent discarded packets	N/A	Unsigned integer.	N/A
IfName	Interface name	N/A	String. Length: 2 to 47 characters.	N/A

## WlanMesh/NbrStatus

This table contains neighbor state information.

### XML structure

```

<WlanMesh>
  <NbrStatus>
    <NbrStatusEntry>
      <ApName></ApName>
      <NbrIndex></NbrIndex>
      <RadioID></RadioID>
      <RadioType></RadioType>
      <LocalMeshID></LocalMeshID>
      <NbrMeshID></NbrMeshID>
      <BSSID></BSSID>
      <PeerMac></PeerMac>
      <IfIndex></IfIndex>
      <Status></Status>
      <Channel></Channel>
      <Age></Age>
      <RSSI></RSSI>
      <SNR></SNR>
    </NbrStatusEntry>
  </NbrStatus>
</WlanMesh>

```

```

    </NbrStatusEntry>
  </NbrStatus>
</WlanMesh>

```

## Table description

Item	Description
Feature name	WlanMesh
Table name	NbrStatus
Table type	Multi-instance table
Row name	NbrStatusEntry
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ApName	AP name	Index	String. Length: 1 to 64 characters.
NbrIndex	Neighbor index	Index	Unsigned integer.
RadiolD	Radio ID	N/A	Unsigned integer.
RadioType	Radio mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—802.11b.</li> <li>2—802.11a.</li> <li>3—802.11g.</li> <li>4—802.11n(2.4GHz).</li> <li>5—802.11n(5GHz).</li> <li>6—802.11ac(2.4GHz).</li> <li>7—802.11ac(5GHz).</li> </ul>
LocalMeshID	Local mesh ID	N/A	String. Length: 1 to 32 characters.
NbrMeshID	Peer mesh ID	N/A	String. Length: 1 to 32 characters.
BSSID	Base service set ID	N/A	MAC address. Six groups of two hexadecimal digits, hyphen-separated.
PeerMac	Peer MAC address	N/A	MAC address. Six groups of two hexadecimal digits, hyphen-separated.
IfIndex	Interface index	N/A	Unsigned integer.
Status	Link status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—Active.</li> <li>2—Standby.</li> </ul>

Column name	Column description	Column type	Data type and restrictions
Channel	Radio channel	N/A	Unsigned integer.
Age	Link aging timer	N/A	Unsigned integer.
RSSI	Link RSSI	N/A	Unsigned integer.
SNR	Signal noise ratio	N/A	Unsigned integer.

## WlanMesh/APMeshIF

This table contains mesh interface information for an AP.

### XML structure

```

<WlanMesh>
  <APMeshIF>
    <APMeshIFEntry>
      <ApName></ApName>
      <MeshIFNum></MeshIFNum>
      <MeshIFName></MeshIFName>
      <LinkType></LinkType>
      <PVID></PVID>
    </APMeshIFEntry>
  </APMeshIF>
</WlanMesh>

```

### Table description

Item	Description
Feature name	WlanMesh
Table name	APMeshIF
Table type	Multi-instance table
Row name	APMeshIFEntry
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String. Length: 1 to 64 characters.	N/A
MeshIFNum	Mesh interface number	Index	Unsigned integer: Value range: 0 to 1023	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
MeshIFName	Mesh interface name	N/A	String. Length: 1 to 47 characters.	N/A
LinkType	Mesh interface type	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>1—Access.</li> <li>2—Trunk.</li> <li>3—Hybrid.</li> </ul>	N/A
PVID	Mesh interface PVID	N/A	Unsigned integer. Value range: 1 to 4094	N/A

## WlanMesh/GroupMeshIF

This table contains mesh interface information for an AP group.

### XML structure

```

<WlanMesh>
  <GroupMeshIF>
    <GroupMeshIFEntry>
      <GroupName></GroupName>
      <MeshIFNum></MeshIFNum>
      <MeshIFName></MeshIFName>
      <LinkType></LinkType>
      <PVID></PVID>
    </GroupMeshIFEntry>
  </GroupMeshIF>
</WlanMesh>

```

### Table description

Item	Description
Feature name	WlanMesh
Table name	GroupMeshIF
Table type	Multi-instance table
Row name	GroupMeshIFEntry
Restrictions	Support only for AC

### Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	AP group name	Index	String. Length: 1 to 31 characters.

Column name	Column description	Column type	Data type and restrictions
MeshIFNum	Mesh interface number	Index	Unsigned integer. Value range: 0 to 1023
MeshIFName	Mesh interface name	N/A	String. Length: 1 to 47 characters.
LinkType	Mesh interface type	N/A	Unsigned integer. <ul style="list-style-type: none"> <li>1—Access.</li> <li>2—Trunk.</li> <li>3—Hybrid.</li> </ul>
PVID	Mesh interface PVID	N/A	Unsigned integer. Value range: 1 to 4094

## WlanMesh/APGroupRadioCfg

This table contains radio configuration information for an AP group.

### XML structure

```

<WlanMesh>
  <APGroupRadioCfg>
    <GroupRadio>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioId></RadioId>
      <PolicyName></PolicyName>
      <BindInterface></BindInterface>
      <ProfileIndex></ProfileIndex>
    </GroupRadio>
  </APGroupRadioCfg>
</WlanMesh>

```

### Table description

Item	Description
Feature name	WlanMesh
Table name	APGroupRadioCfg
Table type	Multi-instance table
Row name	GroupRadio
Restrictions	Applicable only to ACs

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String. Length: 1 to 31 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
ModelName	AP model name	Index	String. Length: 1 to 63 characters.	N/A
RadioId	Radio ID	Index	Unsigned integer. Value range: 1 to 31.	N/A
PolicyName	Name of the policy bound to the radio	N/A	String. Length: 1 to 31 characters.	N/A
BindInterface	Index of the interface bound to the radio	N/A	Unsigned integer. Value range: 0 to 1023.	N/A
ProfileIndex	Index of the profile bound to the radio	N/A	Unsigned integer. Value range: 1 to 32.	N/A

## WlanMesh/APGroupAPCfg

This table contains AP configuration information for an AP group.

## XML structure

```
<WlanMesh>
  <APGroupAPCfg>
    <GroupCfgInfo>
      <GroupName></GroupName>
      <PortalEnable></PortalEnable>
    </GroupCfgInfo>
  </APGroupAPCfg>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	APGroupAPCfg
Table type	Multi-instance table
Row name	GroupCfgInfo
Restrictions	Support only for AC

## Columns

Column name	Column description	Column type	Data type and restrictions
GroupName	AP group name	Index	String. Length: 1 to 31 characters.
PortalEnable	Portal service enabling state	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enabled.</li><li><b>false</b>—Disabled.</li></ul>

## WlanMesh/APGroupWDSPeerMac

This table contains WDS peer MAC address information for an AP group.

## XML structure

```
<WlanMesh>
  <APGroupWDSPeerMac>
    <GroupPeerMacEntry>
      <GroupName></GroupName>
      <ModelName></ModelName>
      <RadioId></RadioId>
      <PeerMac></PeerMac>
    </GroupPeerMacEntry>
  </APGroupWDSPeerMac>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	APGroupWDSPeerMac
Table type	Multi-instance table
Row name	GroupPeerMacEntry
Restrictions	None
Support for row creation and deletion	Yes



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
GroupName	AP group name	Index	String. Length: 1 to 31 characters.	If this column contains an uppercase character, it will be converted to lowercase automatically.
ModelName	AP model name	Index	String. Length: 1 to 63 characters.	N/A
RadioId	Radio ID	Index	Unsigned integer. Value range: 1 to 31	N/A
PeerMac	Peer MP MAC address	Index	MAC address. Six groups of two hexadecimal digits, hyphen-separated.	Example: 00-0c-af-e3-5d-c0.

## WlanMesh/GlobalCfg

This table contains global configuration information.

## XML structure

```
<WlanMesh>
  <GlobalCfg>
    <PeerConfig></PeerConfig>
    <PortalEnable></PortalEnable>
  </GlobalCfg>
</WlanMesh>
```

## Table description

Item	Description
Feature name	WlanMesh
Table name	GlobalCfg
Table type	Multi-instance table
Row name	GroupCfgInfo
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
PeerConfig	Mesh peer configuration state	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>
PortalEnable	Portal service enabling state	N/A	Boolean: <ul style="list-style-type: none"><li>• <b>true</b>—Enabled.</li><li>• <b>false</b>—Disabled.</li></ul>

# Contents

WLANQoS.....	1
WLANQoS/RadioClientRateLimit.....	1
XML structure.....	1
Table description.....	1
Columns.....	1
WLANQoS/STClientRateLimit.....	2
XML structure.....	2
Table description.....	3
Columns.....	3

# WLANQoS

## WLANQoS/RadioClientRateLimit

This table contains radio client rate limit information.

### XML structure

```
<WLANQoS>
  <RadioClientRateLimit>
    <ClientRateLimit>
      <ApName></ApName>
      <RadioID></RadioID>
      <Status></Status>
      <Inbound>
        <Mode></Mode>
        <Cir></Cir>
      </Inbound>
      <Outbound>
        <Mode></Mode>
        <Cir></Cir>
      </Outbound>
    </ClientRateLimit>
  </RadioClientRateLimit>
</WLANQoS>
```

### Table description

Item	Description
Feature name	WLANQoS
Table name	RadioClientRateLimit
Table type	Multi-instance table
Row name	ClientRateLimit
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions
ApName	AP name	Index	String, number or '-', '[', ']', '/', '-'. The length is 1 to 64.

Column name	Column description	Column type	Data type and restrictions
RadiolD	Radio ID	Index	String. Length: 1 to 31 characters.
Status	Client rate limit status.		Unsigned integer. Value range: 0 to 2. 0:default value. 1:enable. 2:disable.
Inbound	Inbound direction from client to AP	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Cir</li> </ul>
Outbound	Outbound direction from client to AP.	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Cir</li> </ul>
Mode	Client rate limit mode		Unsigned integer. 1 : STATIC. 2 : DYNAMIC.
Cir	The committed information rate in Kbps		Unsigned integer. Value range: 16 to 1700000

## WLANQoS/STClientRateLimit

This table contains service template client rate limit information.

### XML structure

```

<WLANQoS>
  <STClientRateLimit>
    <ClientRateLimit>
      <ServiceTemplateName></ServiceTemplateName>
      <Inbound>
        <Mode></Mode>
        <Cir></Cir>
      </Inbound>
      <Outbound>
        <Mode></Mode>
        <Cir></Cir>
      </Outbound>
    </ClientRateLimit>
  </STClientRateLimit>
</WLANQoS>

```

## Table description

Item	Description
Feature name	WLANQoS
Table name	STClientRateLimit
Table type	Multi-instance table
Row name	ClientRateLimit
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceTemplateName	Service template name	Index	String, letter, number or '-', '[,]', '/', '-'. The length is 1 to 63.
Inbound	Inbound direction from client to AP	Data structure	Members include: <ul style="list-style-type: none"><li>Mode</li><li>Cir</li></ul>
Outbound	Outbound direction from client to AP.	Data structure	Members include: <ul style="list-style-type: none"><li>Mode</li><li>Cir</li></ul>
Mode	Client rate limit mode		Unsigned integer. 1 : STATIC. 2 : DYNAMIC.
Cir	The committed information rate in Kbps		Unsigned integer. Value range: 16 to 1700000

# Contents

WLANQoS.....	1
WLANQoS/RadioClientRateLimit.....	1
XML structure.....	1
Table description.....	1
Columns.....	2
WLANQoS/STClientRateLimit.....	2
XML structure.....	2
Table description.....	3
Columns.....	3

# WLANQoS

## WLANQoS/RadioClientRateLimit

This table contains radio client rate limit information.

### XML structure

```
<WLANQoS>
  <RadioClientRateLimit>
    <ClientRateLimit>
      <ApName></ApName>
      <RadioID></RadioID>
      <Status></Status>
      <Inbound>
        <Mode></Mode>
        <Cir></Cir>
      </Inbound>
      <Outbound>
        <Mode></Mode>
        <Cir></Cir>
      </Outbound>
      <RunInbound>
        <Mode></Mode>
        <Cir></Cir>
      </RunInbound>
      <RunOutbound>
        <Mode></Mode>
        <Cir></Cir>
      </RunOutbound>
    </ClientRateLimit>
  </RadioClientRateLimit>
</WLANQoS>
```

### Table description

Item	Description
Feature name	WLANQoS
Table name	RadioClientRateLimit
Table type	Multi-instance table
Row name	ClientRateLimit
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions
ApName	AP name	Index	String, number or '-', '[', ']', '/', '-'. The length is 1 to 64.
RadiolD	Radio ID	Index	String. Length: 1 to 31 characters.
Status	Client rate limit status.		Unsigned integer. Value range: 0 to 2. 0:default value. 1:enable. 2:disable.
Inbound	Inbound direction from client to AP	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Cir</li> </ul>
Outbound	Outbound direction from client to AP.	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Cir</li> </ul>
RunInbound	Effectuated inbound direction from client to AP	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Cir</li> </ul>
RunOutbound	Effectuated outbound direction from client to AP	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Cir</li> </ul>
Mode	Client rate limit mode		Unsigned integer. 1 : STATIC. 2 : DYNAMIC.
Cir	The committed information rate in Kbps		Unsigned integer. Value range: 16 to 1700000

## WLANQoS/STClientRateLimit

This table contains service template client rate limit information.

## XML structure

```

<WLANQoS>
  <STClientRateLimit>
    <ClientRateLimit>
      <ServiceTemplateName></ServiceTemplateName>
      <Inbound>
        <Mode></Mode>
        <Cir></Cir>
      </Inbound>
      <Outbound>

```

```

        <Mode></Mode>
        <Cir></Cir>
    </Outbound>
</ClientRateLimit>
</STClientRateLimit>
</WLANQoS>

```

## Table description

Item	Description
Feature name	WLANQoS
Table name	STClientRateLimit
Table type	Multi-instance table
Row name	ClientRateLimit
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions
ServiceTemplateName	Service template name	Index	String, letter, number or '-', '[,]', '/', '-'. The length is 1 to 63.
Inbound	Inbound direction from client to AP	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Cir</li> </ul>
Outbound	Outbound direction from client to AP.	Data structure	Members include: <ul style="list-style-type: none"> <li>Mode</li> <li>Cir</li> </ul>
Mode	Client rate limit mode		Unsigned integer. 1 : STATIC. 2 : DYNAMIC.
Cir	The committed information rate in Kbps		Unsigned integer. Value range: 16 to 1700000

# Contents

WLOC .....	1
WLOC/ModuleRestore .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
WLOC/ModuleReset .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
WLOC/ModuleManualUpDate .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
WLOC/ ModuleManualUpDateOfApGroup .....	3
XML structure .....	3
Table description .....	3
Columns .....	4

# WLOC

## WLOC/ModuleRestore

This table contains Module of AP related parameters information .

### XML structure

```
<WLOC>
  <ModuleRestore>
    <Module>
      <APName></APName>
      <ModuleID></ModuleID>
    </Module>
  </ModuleRestore>
</WLOC>
```

### Table description

Item	Description
Feature name	WLOC
Table name	ModuleRestore
Table type	Multi-instance table
Row name	Module
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
APName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A

## WLOC/ModuleReset

This table contains Module of AP related parameters information .

### XML structure

```
<WLOC>
  <ModuleReset>
```

```

    <Module>
      <APName></APName>
      <ModuleID></ModuleID>
    </Module>
  </ModuleReset>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	ModuleReset
Table type	Multi-instance table
Row name	Module
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
APName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A

## WLOC/ModuleManualUpdate

This table contains Module of AP related parameters information .

## XML structure

```

<WLOC>
  <ModuleManualUpdate>
    <Module>
      <ApName></ApName>
      <ModuleID></ModuleID>
      <FilePath></FilePath>
    </Module>
  </ModuleManualUpdate>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	ModuleManualUpDate
Table type	Multi-instance table
Row name	Module
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
FilePath	FilePath	Column	String, case-insensitive. Length: 1 to 512 characters	N/A

## WLOC/ ModuleManualUpDateOfApGroup

This table contains Module of AP related parameters information .

## XML structure

```
<WLOC>
  <ModuleManualUpDateOfApGroup>
    <Module>
      <ApGroupName></ApGroupName>
      <ApModelName></ApModelName>
      <ModuleID></ModuleID>
      <FilePath></FilePath>
    </Module>
  </ModuleManualUpDateOfApGroup>
</WLOC>
```

## Table description

Item	Description
Feature name	WLOC
Table name	ModuleManualUpDateOfApGroup
Table type	Multi-instance table

Row name	Module
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	Group name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
ApModelName	ModelName	Index	String, case-insensitive. Length: 1 to 63 characters	N/A
FilePath	FilePath	Column	String, case-insensitive. Length: 1 to 512 characters	N/A

# Contents

WLOC .....	1
WLOC/AeroScout .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
WLOC/BLE .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
WLOC/CUPID .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
WLOC/FingerPrint .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
WLOC/CommonConf .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
WLOC/AeroScoutOfApgroup .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
WLOC/BLEOfApgroup .....	12
XML structure .....	12
Table description .....	12
Columns .....	13
WLOC/CUPIDOfApgroup .....	14
XML structure .....	14
Table description .....	15
Columns .....	15
WLOC/FingerPrintOfApgroup .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
WLOC/CommonConfOfApgroup .....	18
XML structure .....	18
Table description .....	18
Columns .....	19
WLOC/AeroScoutOfGlobal .....	20
XML structure .....	20
Table description .....	20
Columns .....	20
WLOC/BLEOfGlobal .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
WLOC/CUPIDOfGlobal .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
WLOC/FingerPrintOfGlobal .....	25
XML structure .....	25
Table description .....	26
Columns .....	26



WLOC/CommonConfOfGlobal .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
WLOC/RadioConf .....	29
XML structure .....	29
Table description .....	29
Columns .....	29
WLOC/RadioConfOfApgroup .....	30
XML structure .....	30
Table description .....	30
Columns .....	30
WLOC/ModuleConf .....	31
XML structure .....	31
Table description .....	31
Columns .....	32
WLOC/ModuleConfOfApgroup .....	32
XML structure .....	32
Table description .....	33
Columns .....	33
WLOC/BLEModuleConf .....	33
XML structure .....	33
Table description .....	34
Columns .....	34
WLOC/BLEModuleConfOfApgroup .....	35
XML structure .....	35
Table description .....	35
Columns .....	36
WLOC/IOTConf .....	36
XML structure .....	36
Table description .....	37
Columns .....	37
WLOC/IOTConfOfApgroup .....	37
XML structure .....	37
Table description .....	38
Columns .....	38
WLOC/IOTConfOfGlobal .....	38
XML structure .....	38
Table description .....	38
Columns .....	39

# WLOC

## WLOC/AeroScout

This table contains AeroScout of AP protocol related parameters information.

### XML structure

```
<WLOC>
  <AeroScout>
    <AP>
      <ApName></ApName>
      <Status></Status>
      <VersionID></VersionID>
      <EngineDetectionMode></EngineDetectionMode>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <VendorPort></VendorPort>
      <TimeStamp></TimeStamp>
      <ReportMode></ReportMode>
      <MulticastAddress></MulticastAddress>
    </AP>
  </AeroScout>
</WLOC>
```

### Table description

Item	Description
Feature name	WLOC
Table name	AeroScout
Table type	Multi-instance table
Row name	AP
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
Status	Wireless locating through the	N/A	Enumeration: <ul style="list-style-type: none"><li>1—enable</li></ul>	N/A

	AeroScout protocol		<ul style="list-style-type: none"> <li>2—disable</li> </ul>	
VersionID	Specify the AeroScout version ID	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—V2</li> <li>3—V3</li> </ul>	N/A
EngineDetectionMode	Specify the AeroScout engine address mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—static</li> <li>2—dynamic</li> </ul>	N/A
EngineAddress	Specify a locating server IP address to which the AP sends packets, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify a locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
TimeStamp	Configure the timestamp field in MU reports	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—absolute</li> <li>2—relative</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—local</li> <li>2—central</li> </ul>	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/BLE

This table contains BLE of AP protocol related parameters information.

## XML structure

```

<WLOC>
  <BLE>
    <AP>
      <ApName></ApName>
      <Status></Status>
      <AgingTime></AgingTime>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
    </AP>
  </BLE>
</WLOC>

```

```

<ReportStatus></ReportStatus>
<ReportInterval></ReportInterval>
<RssiThresholdStatus></RssiThresholdStatus>
<RssiThreshold></RssiThreshold>
<VendorPort></VendorPort>
<CmdPasswdSimple></CmdPasswdSimple>
<CmdPasswdCipher></CmdPasswdCipher>
<RealTimeReportStatus></RealTimeReportStatus>
<RealTimeReportPrefix></RealTimeReportPrefix>
<RealTimeReportInterval></RealTimeReportInterval>
<RealTimeReportEngineAddress></RealTimeReportEngineAddress>
<RealTimeReportEnginePort></RealTimeReportEnginePort>
<ReportMode></ReportMode>
<ReportFormat></ReportFormat>
</AP>
</BLE>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	BLE
Table type	Multi-instance table
Row name	AP
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
Status	Wireless locating through the BLE protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
AgingTime	Specify a neighbor aging time for BLE location	N/A	Unsigned integer Value range:60 to 3600.	N/A
EngineAddress	Specify the locating server IP address to which the AP sends packets, this column must	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.

	configure with EnginePort			
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
ReportStatus	Specify the status of neighbor list report	N/A	Enumeration: • 1—enable • 2—disable	N/A
ReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 86400.	N/A
RssiThresholdStatus	Configure Rssi-Threshold status	N/A	Enumeration: • 1—enable • 2—dsable	N/A
RssiThreshold	Specify the Rssi-Threshold value	N/A	Unsigned integer. Value range: 5 to 255.	N/A
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
CmdPasswd Simple	Specify the simple Command password	N/A	String. Length: 12	N/A
CmdPasswd Cipher	Specify the cipher Command password	N/A	String. Length: 49	N/A
RealTimeReportStatus	Specify the status of real-time wireless locating	N/A	Enumeration: • 1—enable • 2—disable	N/A
RealTimeReportPrefix	Specify the prefix of manufacturers	N/A	String. Hexadecimal Length: 8 to 18(even number)	N/A
RealTimeReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 30	N/A
RealTimeReportEngineAddress	Specify the locating server IP address to which the AP sends packets, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example:1.1.1.1.
RealTimeReportEnginePort	Specify the locating server	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.

	port to which the AP sends packets, this column must configure with EngineAddress			
ReportMode	Specify the module of report to the server	N/A	Enumeration: • 1—local • 2—central	N/A
ReportFormat	Frame format	N/A	Enumeration: • 1—general • 2—lightweight	N/A

## WLOC/CUPID

This table contains CUPID of AP protocol related parameters information.

### XML structure

```

<WLOC>
  <CUPID>
    <AP>
      <ApName></ApName>
      <Status></Status>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <VendorPort></VendorPort>
      <ReportStatus></ReportStatus>
      <ReportInterval></ReportInterval>
      <UnassociateReportStatus></UnassociateReportStatus>
      <UnassoMeasStatus></UnassoMeasStatus>
      <ReportMode></ReportMode>
      <ReportFormat></ReportFormat>
      <LocalCalculate></LocalCalculate>
    </AP>
  </CUPID>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	CUPID
Table type	Multi-instance table
Row name	AP
Restrictions	None

Support for row creation and deletion	No
---------------------------------------	----

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
Status	Wireless locating through the Cupid protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
EngineAddress	Specify the locating server IP address, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
ReportStatus	Specify the status of client list report	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 10.	N/A
UnassociateReportStatus	Unassociated report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
UnassoMeasStatus	Unassociated Measurement report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—local</li> <li>2—central</li> </ul>	N/A
ReportFormat	Frame format	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—general</li> <li>2—lightweight</li> </ul>	N/A

# WLOC/FingerPrint

This table contains FingerPrint of AP protocol related parameters information.

## XML structure

```
<WLOC>
  <FingerPrint>
    <AP>
      <ApName></ApName>
      <Status></Status>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <VendorPort></VendorPort>
      <RawFrameStatus></RawFrameStatus>
      <MuReportStatus></MuReportStatus>
      <ReportMode></ReportMode>
      <ReportFormat></ReportFormat>
      <MulticastAddress></MulticastAddress>
    </AP>
  </FingerPrint>
</WLOC>
```

## Table description

Item	Description
Feature name	WLOC
Table name	FingerPrint
Table type	Multi-instance table
Row name	AP
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	N/A	String, case-insensitive. Length: 1 to 64 characters.	N/A
Status	Wireless locating through the FingerPrint protocol	N/A	Enumeration: <ul style="list-style-type: none"><li>1—enable</li><li>2—disable</li></ul>	N/A
EngineAddress	Specify the locating server IP address, this	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.



	column must configure with EnginePort			
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
RawFrameStatus	Specify the status of report raw frame information	N/A	Enumeration: • 1—enable • 2—disable	N/A
MuReportStatus	Specify the status of report MU information	N/A	Enumeration: • 1—enable • 2—disable	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: • 1—local • 2—central	N/A
ReportFormat	Frame format	N/A	Enumeration: • 1—general • 2—lightweight • 3—cupid-hybrid	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/CommonConf

This table contains CommonConf of AP protocol related parameters information.

### XML structure

```

<WLOC>
  <CommonConf>
    <AP>
      <ApName></ApName>
      <ClientRateLimitStatus></ClientRateLimitStatus>
      <ClientRateLimitCir></ClientRateLimitCir>
      <ClientRateLimitCbs></ClientRateLimitCbs>
      <DilutionStatus></DilutionStatus>
      <DilutionFactor></DilutionFactor>
      <DilutionTimeout></DilutionTimeout>
      <IgnoreBeaconStatus></IgnoreBeaconStatus>
      <RateLimitStatus></RateLimitStatus>
      <RateLimitCir></RateLimitCir>
      <RateLimitCbs></RateLimitCbs>

```

```

    <RssiStatus></RssiStatus>
    <RssiThreshold></RssiThreshold>
    <IgnoreApFrameStatus></IgnoreApFrameStatus>
    <KeepAliveStatus></KeepAliveStatus>
  </AP>
</CommonConf>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	CommonConf
Table type	Multi-instance table
Row name	AP
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ClientRateLimitStatus	Limit the rate for clients to send locating packets to the AP status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ClientRateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 1 to 1300000.	N/A
ClientRateLimitCbs	Configure the committed burst size, this column must configure with ClientRateLimitCir	N/A	Unsigned integer. Value range: 80 to 130000000.	Optional parameter
DilutionStatus	Configure dilution for locating packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
DilutionFactor	Configure the dilution factor, this column must configure with DilutionTimeout	N/A	Unsigned integer. Value range: 1 to 10000.	DilutionFactor and DilutionTimeout must set together.
DilutionTimeout	Configure the dilution timeout,	N/A	Unsigned integer. Value range: 1 to 60.	DilutionFactor and DilutionTimeout must

	this column must configure with DilutionFactor			set together.
IgnoreBeaconStatus	Ignore beacon frames	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RateLimitStatus	Limit the rate for sending locating packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RateLimitCir	Configure the committed information rate, this column must configure with RateLimitCbs	N/A	Unsigned integer. Value range: 8 to 1300000.	N/A
RateLimitCbs	Configure the committed burst size, this column must configure with RateLimitCir	N/A	Unsigned integer. Value range: 500 to 130000000.	Optional parameter
RssiStatus	Specify the Rssi-Threshold value	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RssiThreshold	Specify the Rssi-Threshold value	N/A	Unsigned integer. Value range: 5 to 100.	N/A
IgnoreApFrameStatus	Ignore Ap frames	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
KeepAliveStatus	Configure wireless location keepalive	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A

## WLOC/AeroScoutOfApgroup

This table contains AeroScout of APGroup protocol related parameters information.

### XML structure

```

<WLOC>
  <AeroScoutOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <Status></Status>
      <VersionID></VersionID>
      <EngineDetectionMode></EngineDetectionMode>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <VendorPort></VendorPort>
      <TimeStamp></TimeStamp>
    </APGroup>
  </AeroScoutOfApgroup>
</WLOC>

```

```

    <ReportMode></ReportMode>
    <MulticastAddress></MulticastAddress>
  </APGroup>
</AeroScoutOfApgroup>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	AeroScoutOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Wireless locating through the AeroScout protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
VersionID	Specify the AeroScout version ID	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—V2</li> <li>3—V3</li> </ul>	N/A
EngineDetectionMode	Specify the AeroScout engine address mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—static</li> <li>2—dynamic</li> </ul>	N/A
EngineAddress	Specify the locating server IP address, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify the Vendor portnum	N/A	Unsigned integer. Value range: 1 to 65535.	N/A

	of AP			
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—local</li> <li>2—central</li> </ul>	N/A
TimeStamp	Configure the timestamp field in MU reports	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—absolute</li> <li>2—relative</li> </ul>	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/BLEOfApgroup

This table contains Ble of APGroup protocol related parameters information.

### XML structure

```

<WLOC>
  <BLEOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <Status></Status>
      <AgingTime></AgingTime>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <ReportStatus></ReportStatus>
      <ReportInterval></ReportInterval>
      <RssiThresholdStatus></RssiThresholdStatus>
      <RssiThreshold></RssiThreshold>
      <VendorPort></VendorPort>
      <CmdPasswdSimple></CmdPasswdSimple>
      <CmdPasswdCipher></CmdPasswdCipher>
      <RealTimeReportStatus></RealTimeReportStatus>
      <RealTimeReportPrefix></RealTimeReportPrefix>
      <RealTimeReportInterval></RealTimeReportInterval>
      <RealTimeReportEngineAddress></RealTimeReportEngineAddress>
      <RealTimeReportEnginePort></RealTimeReportEnginePort>
      <ReportMode></ReportMode>
      <ReportFormat></ReportFormat>
    </APGroup>
  </BLEOfApgroup>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC

Table name	BLEOfApGroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Wireless locating through the BLE protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
AgingTime	Specify a neighbour aging time for BLE location	N/A	Unsigned integer. Value range: 60 to 3600.	N/A
EngineAddress	Specify the locating server IP address, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
ReportStatus	Specify the status of client list report	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 86400.	N/A
RssiThresholdStatus	Specify the Rssi-Threshold value	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RssiThreshold	Specify the Rssi-Threshold value	N/A	Unsigned integer. Value range: 5 to 255.	N/A
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
CmdPasswd	Specify the	N/A	String.	N/A

Simple	simple Command password		Length: 12	
CmdPasswd Cipher	Specify the cipher cipher Command password	N/A	String. Length: 49	N/A
RealTimeReportStatus	Specify the RSSI threshold status	N/A	Enumeration: • 1—enable • 2—disable	N/A
RealTimeReportPrefix	Specify the prefix of manufacturers	N/A	String. Hexadecimal Length: 8 to 18(even number)	N/A
RealTimeReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 30	N/A
RealTimeReportEngineAddress	Specify the locating server IP address to which the AP sends packets, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
RealTimeReportEnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
ReportMode	Specify the module of report to the server	N/A	Enumeration: • 1—local • 2—central	N/A
ReportFormat	Frame format	N/A	Enumeration: • 1—general • 2—lightweight	N/A

## WLOC/CUPIDOfApgroup

This table contains CUPID of APGroup protocol related parameters information.

### XML structure

```

<WLOC>
  <CUPIDOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <Status></Status>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
    </APGroup>
  </CUPIDOfApgroup>
</WLOC>

```

```

<VendorPort></VendorPort>
<ReportStatus></ReportStatus>
<ReportInterval></ReportInterval>
<UnassociateReportStatus></UnassociateReportStatus>
<UnassoMeasStatus></UnassoMeasStatus>
<ReportMode></ReportMode>
<ReportFormat></ReportFormat>
<LocalCalculate></LocalCalculate>
</APGroup>
</CUPIDOfApgroup>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	CUPIDOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Wireless locating through the Cupid protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
EngineAddress	Specify the locating server IP address, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535.	N/A



ReportStatus	Specify the status of client list report	N/A	Enumeration: • 1—enable • 2—disable	N/A
ReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 10.	N/A
UnassociateReportStatus	Unassociated report to the server	N/A	Enumeration: • 1—enable • 2—disable	N/A
UnassoMeasStatus	Unassociated measurement report to the server	N/A	Enumeration: • 1—enable • 2—disable	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: • 1—local • 2—central	N/A
ReportFormat	Frame format	N/A	Enumeration: • 1—general • 2—lightweight	N/A
LocalCalculate	Participate in local calculating	N/A	Enumeration: • 1—enable • 2—disable	N/A

## WLOC/FingerPrintOfApgroup

This table contains FingerPrint of APGroup protocol related parameters information.

### XML structure

```

<WLOC>
  <FingerPrintOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <Status></Status>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <VendorPort></VendorPort>
      <RawFrameStatus></RawFrameStatus>
      <MuReportStatus></MuReprotStatus>
      <ReportMode></ReportMode>
      <ReportFormat></ReportFormat>
      <MulticastAddress></MulticastAddress>
    </APGroup>
  </FingerPrintOfApgroup>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	FingerPrintOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Wireless locating through the FingerPrint protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
EngineAddress	Specify the locating server IP address, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
RawFrameStatus	Specify the status of report raw frame information	N/A	Enumeration <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
MuReprotStatus	Specify the status of report MU information	N/A	Enumeration <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—local</li> <li>2—central</li> </ul>	N/A
ReportFormat	Frame format	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—general</li> </ul>	N/A

			<ul style="list-style-type: none"> <li>• 2—lightweight</li> <li>• 3—cupid-hybrid</li> </ul>	
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/CommonConfOfApgroup

This table contains CommonConf of APGroup protocol related parameters information.

### XML structure

```

<WLOC>
  <CommonConfOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <ClientRateLimitStatus></ClientRateLimitStatus>
      <ClientRateLimitCir></ClientRateLimitCir>
      <ClientRateLimitCbs></ClientRateLimitCbs>
      <DilutionStatus></DilutionStatus>
      <DilutionFactor></DilutionFactor>
      <DilutionTimeout></DilutionTimeout>
      <IgnoreBeaconStatus></IgnoreBeaconStatus>
      <RateLimitStatus></RateLimitStatus>
      <RateLimitCir></RateLimitCir>
      <RateLimitCbs></RateLimitCbs>
      <RssiStatus></RssiStatus>
      <RssiThreshold></RssiThreshold>
      <IgnoreApFrameStatus></IgnoreApFrameStatus>
      <KeepAliveStatus></KeepAliveStatus>
    </APGroup>
  </CommonConfOfApgroup>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	CommonConfOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None
Support for row creation and deletion	No

# Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ClientRateLimitStatus	Limit the rate for clients to send locating packets to the AP status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ClientRateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 1 to 1300000.	N/A
ClientRateLimitCbs	Configure the committed burst size, this column must configure with ClientRateLimitCir	N/A	Unsigned integer. Value range: 80 to 130000000.	Otional parameter
DilutionStatus	Configure dilution for locating packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
DilutionFactor	Configure the dilution factor, this column must configure with DilutionTimeout	N/A	Unsigned integer. Value range: 1 to 10000.	DilutionFactor and DilutionTimeout must set together.
DilutionTimeout	Configure the dilution timeout, this column must configure with DilutionFactor	N/A	Unsigned integer. Value range: 1 to 60.	DilutionFactor and DilutionTimeout must set together.
IgnoreBeaconStatus	Ignore beacon frames	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RateLimitStatus	Limit the rate for sending locating packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 8 to 1300000.	N/A
RateLimitCbs	Configure the committed burst size, this column must configure with RateLimitCir	N/A	Unsigned integer. Value range: 500 to 130000000.	Optional parameter
RssiStatus	Configure Rssi-Threshold status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RssiThreshold	Specify the Rssi-Threshold	N/A	Unsigned integer	N/A

d	value		Value range: 5 to 100.	
IgnoreApFrameStatus	Ignore Ap frames	N/A	Enumeration: • 1—enable • 2—disable	N/A
KeepAliveStatus	Configure wireless location keepalive	N/A	Enumeration: • 1—enable • 2—disable	N/A

## WLOC/AeroScoutOfGlobal

This table contains AeroScout of Global protocol related parameters information.

### XML structure

```

<WLOC>
  <AeroScoutOfGlobal>
    <Status></Status>
    <VersionID></VersionID>
    <EngineDetectionMode></EngineDetectionMode>
    <EngineAddress></EngineAddress>
    <EnginePort></EnginePort>
    <VendorPort></VendorPort>
    <TimeStamp></TimeStamp>
    <ReportMode></ReportMode>
    <MulticastAddress></MulticastAddress>
  </AeroScoutOfGlobal>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	AeroScoutOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Wireless locating through the AeroScout	N/A	Enumeration: • 1—enable • 2—disable(default)	N/A

	protocol			
VersionID	Specify the AeroScout version ID	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—V2(default)</li> <li>3—V3</li> </ul>	N/A
EngineDetectionMode	Specify the AeroScout engine address mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—static</li> <li>2—dynamic(default)</li> </ul>	N/A
EngineAddress	Specify the locating server IP address, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535. Default:1144	N/A
TimeStamp	Configure the timestamp field in MU reports	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—absolute</li> <li>2—relative(default)</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—local(default)</li> <li>2—central</li> </ul>	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/BLEOfGlobal

This table contains BLE of Global protocol related parameters information.

### XML structure

```

<WLOC>
  <BLEOfGlobal>
    <Status></Status>
    <AgingTime></AgingTime>
    <EngineAddress></EngineAddress>
    <EnginePort></EnginePort>
    <ReportStatus></ReportStatus>
    <ReportInterval></ReportInterval>
    <RssiThresholdStatus></RssiThresholdStatus>
    <RssiThreshold></RssiThreshold>

```

```

<VendorPort></VendorPort>
<CmdPasswdSimple></CmdPasswdSimple>
<CmdPasswdCipher></CmdPasswdCipher>
<RealTimeReportStatus></RealTimeReportStatus>
<RealTimeReportPrefix></RealTimeReportPrefix>
<RealTimeReportInterval></RealTimeReportInterval>
<RealTimeReportEngineAddress></RealTimeReportEngineAddress>
<RealTimeReportEnginePort></RealTimeReportEnginePort>
<ReportMode></ReportMode>
<ReportFormat></ReportFormat>
</BLEOfGlobal>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	BLEOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Wireless locating through the BLE protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A
AgingTime	Specify a neighbour aging time for BLE location	N/A	Unsigned integer. Value range: 60 to 3600. Default:180	N/A
EngineAddress	Specify the locating server IP address, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
ReportStatus	Specify the	N/A	Enumeration:	N/A

	status of client list report		<ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	
ReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 86400. Default:900	N/A
RssiThresholdStatus	Configure Rssi-Threshold status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A
RssiThreshold	Specify the Rssi-Threshold value	N/A	Unsigned integer. Value range: 5 to 255. Default:5	N/A
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535. Default:1144	N/A
CmdPasswdSimple	Specify the simple Command password	N/A	String. Length: 12	N/A
CmdPasswdCipher	Specify the cipher Command password	N/A	String. Length: 49	N/A
RealTimeReportStatus	Specify the status of real-time wireless locating	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A
RealTimeReportPrefix	Specify the prefix of manufacturers	N/A	String. Hexadecimal Length: 8 to 18 (even number)	N/A
RealTimeReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 30	N/A
RealTimeReportEngineAddress	Specify the locating server IP address to which the AP sends packets, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
RealTimeReportEnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—local(default)</li> <li>2—central</li> </ul>	N/A



ReportFormat	Frame format	N/A	Enumeration: • 1—general(default) • 2—lightweight	N/A
--------------	--------------	-----	---	-----

## WLOC/CUPIDOfGlobal

This table contains CUPID of Global protocol related parameters information.

### XML structure

```

<WLOC>
  <CUPIDOfGlobal>
    <Status></Status>
    <EngineAddress></EngineAddress>
    <EnginePort></EnginePort>
    <VendorPort></VendorPort>
    <ReportStatus></ReportStatus>
    <ReportInterval></ReportInterval>
    <UnassociateReportStatus></UnassociateReportStatus>
    <UnassoMeasStatus></UnassoMeasStatus>
    <ReportMode></ReportMode>
    <ReportFormat></ReportFormat>
    <LocalCalculate></LocalCalculate>
  </CUPIDOfGlobal>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	CUPIDOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Wireless locating through the Cupid protocol	N/A	Enumeration: • 1—enable • 2—disable(default)	N/A
EngineAddress	Specify the locating server IP	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set

	address, this column must configure with EnginePort			together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535. Default:1144	N/A
ReportStatus	Specify the status of client list report	N/A	Enumeration: • 1—enable • 2—disable(default)	N/A
ReportInterval	Specify the interval for sending client list	N/A	Unsigned integer. Value range: 1 to 10. Default:1	N/A
UnassociateReportStatus	Specify the status of Unassociated measurement	N/A	Enumeration: • 1—enable • 2—disable(default)	N/A
UnassoMeasStatus	Specify the status of Unassociated measurement	N/A	Enumeration: • 1—enable(default) • 2—disable	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: • 1—local(default) • 2—central	N/A
ReportFormat	Frame format	N/A	Enumeration: • 1—general(default) • 2—lightweight	N/A
LocalCalculate	Participate in local calculating	N/A	Enumeration: • 1—enable • 2—disable	N/A

## WLOC/FingerPrintOfGlobal

This table contains FingerPrint of Global protocol related parameters information.

### XML structure

```

<WLOC>
  <FingerPrintOfGlobal>
    <Status></Status>
    <EngineAddress></EngineAddress>
    <EnginePort></EnginePort>
  
```

```

<VendorPort></VendorPort>
<RawFrameStatus></RawFrameStatus>
<MuReportStatus></MuReportStatus>
<ReportMode></ReportMode>
<ReportFormat></ReportFormat>
<MulticastAddress></MulticastAddress>
</FingerPrintOfGlobal>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	FingerPrintOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Wireless locating through the FingerPrint protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A.
EngineAddress	Specify the locating server port to which the AP sends packets, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify the Vendor portnum of AP	N/A	Unsigned integer. Value range: 1 to 65535. Default:1144	N/A
RawFrameStatus	Specify the status of report raw frame information	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A

MuReprotStatus	Specify the status of report MU information	N/A	Enumeration: • 1—enable • 2—disable(default)	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: • 1—local(default) • 2—central	N/A
ReportFormat	Frame format	N/A	Enumeration: • 1—general(default) • 2—lightweight • 3—cupid-hybrid	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/CommonConfOfGlobal

This table contains CommonConf of location protocol related parameters information.

### XML structure

```

<WLOC>
  <CommonConfOfGlobal>
    <ClientRateLimitStatus></ClientRateLimitStatus>
    <ClientRateLimitCir></ClientRateLimitCir>
    <ClientRateLimitCbs></ClientRateLimitCbs>
    <DilutionStatus></DilutionStatus>
    <DilutionFactor></DilutionFactor>
    <DilutionTimeout></DilutionTimeout>
    <IgnoreBeaconStatus></IgnoreBeaconStatus>
    <RateLimitStatus></RateLimitStatus>
    <RateLimitCir></RateLimitCir>
    <RateLimitCbs></RateLimitCbs>
    <RssiStatus></RssiStatus>
    <RssiThreshold></RssiThreshold>
    <IgnoreApFrameStatus></IgnoreApFrameStatus>
    <KeepAliveStatus></KeepAliveStatus>
  </CommonConfOfGlobal>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	CommonConfOfGlobal
Table type	Single-instance table
Row name	None

Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientRateLimitStatus	Limit the rate for clients to send locating packets to AP	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A
ClientRateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 1 to 1300000.	N/A
ClientRateLimitCbs	Configure the committed burst size, this column must configure with ClientRateLimitCir	N/A	Unsigned integer. Value range: 80 to 130000000.	Optional parameter
DilutionStatus	Dilution for locating packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A
DilutionFactor	Configure the dilution factor, this column must configure with DilutionTimeout	N/A	Unsigned integer. Value range: 1 to 10000.	DilutionFactor and DilutionTimeout must set together.
DilutionTimeout	Configure the dilution timeout, this column must configure with DilutionFactor	N/A	Unsigned integer. Value range: 1 to 60.	DilutionFactor and DilutionTimeout must set together.
IgnoreBeaconStatus	Ignore beacon frames	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A
RateLimitStatus	Limit the rate for sending locating packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A
RateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 8 to 1300000.	N/A
RateLimitCbs	Configure the committed burst size, this column must configure with RateLimitCir	N/A	Unsigned integer. Value range: 500 to 130000000.	Optional parameter
RssiStatus	Configure rssi-threadhold status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A
RssiThreshold	Specify the	N/A	Unsigned integer.	N/A

d	rss-threshold value		Value range: 5 to 100. Default:5.	
IgnoreApFrameStatus	Ignore Ap frames	N/A	Enumeration: • 1—enable • 2—disable	N/A
KeepAliveStatus	Configure wireless location keepalive	N/A	Enumeration: • 1—enable • 2—disable	N/A

## WLOC/RadioConf

This table contains Radio related parameters information.

### XML structure

```

<WLOC>
  <RadioConf>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <RadioStatus></RadioStatus>
      <ModeMu></ModeMu>
      <ModeTag></ModeTag>
    </Radio>
  </RadioConf>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	RadioConf
Table type	Multi-instance table
Row name	Radio
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer.	N/A

			Value range: 1 to 4.	
RadioStatus	Radio status	N/A	Enumeration: • 1—enable • 2—disable	N/A
ModeMu	Locate all 802.11 clients	N/A	Enumeration: • 2—mu	N/A
ModeTag	Locate AeroScout clients	N/A	Enumeration: • 1—tag	N/A

## WLOC/RadioConfOfApgroup

This table contains Radio of Apgroup related parameters information.

### XML structure

```

<WLOC>
  <RadioConfOfApgroup>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModelName></ApModelName>
      <RadioID></RadioID>
      <RadioStatus></RadioStatus>
      <ModeMu></ModeMu>
      <ModeTag></ModeTag>    </Radio>
    </RadioConfOfApgroup>
  </WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	RadioConfOfApgroup
Table type	Multi-instance table
Row name	Radio
Restrictions	None
Support for row creation and deletion	No

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	Configure an AP group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A

ApModelName	Specify an AP model	Index	String, lowercase. Length: 1 to 31 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 2.	N/A
RadioStatus	Radio status	N/A	Enumeration: • 1—enable • 2—disable(default)	N/A
ModeMu	Specify the type of Mu	N/A	Enumeration: • 0—disable(default) • 2—enable	N/A
ModeTag	Specify the type of Tag	N/A	Enumeration: • 0—disable(default) • 1—enable	N/A

## WLOC/ModuleConf

This table contains Module of AP related parameters information.

### XML structure

```

<WLOC>
  <ModuleConf>
    <Module>
      <ApName></ApName>
      <ModuleID></ModuleID>
      <ModuleStatus></ModuleStatus>
      <Type></Type>
      <TxPower></TxPower>
      <FwUpgrade></FwUpgrade>
    </Module>
  </ModuleConf>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	ModuleConf
Table type	Multi-instance table
Row name	Module
Restrictions	None
Support for row creation and deletion	No



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
ModuleStatus	Module status	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—enable</li><li>• 2—disable</li></ul>	N/A
Type	Specify the Type of module	N/A	Enumeration: <ul style="list-style-type: none"><li>• 0—NotConfig</li><li>• 1—BLE</li><li>• 2—IOT</li></ul>	N/A
TxPower	Specify a power for sending advertisement reports	N/A	Unsigned integer. Value range:1 to 4.	N/A
FwUpgrade	Specify the firmware upgrade status for this module	N/A	Enumeration: <ul style="list-style-type: none"><li>• 1—enable</li><li>• 2—disable</li></ul>	N/A

## WLOC/ModuleConfOfApgroup

This table contains Module of AP group related parameters information.

## XML structure

```
<WLOC>
  <ModuleConfOfApgroup>
    <Module>
      <ApGroupName></ApGroupName>
      <ApModelName></ApModelName>
      <ModuleID></ModuleID>
      <ModuleStatus></ModuleStatus>
      <Type></Type>
      <TxPower></TxPower>
      <FwUpgrade></FwUpgrade>
    </Module>
  </ModuleConfOfApgroup>
</WLOC>
```

## Table description

Item	Description
Feature name	WLOC
Table name	ModuleConfOfApgroup
Table type	Multi-instance table
Row name	Module
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ApModelName	AP model	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModuleID	AP group module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
ModuleStatus	AP module status	N/A	Enumeration: <ul style="list-style-type: none"><li>1—enable</li><li>2—disable(default)</li></ul>	N/A
Type	Specify the Type of module	N/A	Enumeration: <ul style="list-style-type: none"><li>0—NotConfig(default)</li><li>1—BLE</li><li>2—IOT</li></ul>	N/A
TxPower	Specify a power for sending advertisement reports	N/A	Unsigned integer. Value range:1 to 4. Default:1.	N/A
FwUpgrade	Specify the firmware upgrade status for this module	N/A	Enumeration: <ul style="list-style-type: none"><li>1—enable</li><li>2—disable(default)</li></ul>	N/A

## WLOC/BLEModuleConf

This table contains Module of AP related parameters information.

## XML structure

```
<WLOC>
  <BLEModuleConf>
    <Module>
```

```

    <ApName></ApName>
    <ModuleID></ModuleID>
    <AdvertisementStatus></AdvertisementStatus>
    <AdvertisementInterval></AdvertisementInterval>
    <AdvertisementUUID></AdvertisementUUID>
    <AdvertisementMajorID></AdvertisementMajorID>
    <AdvertisementMinorID></AdvertisementMinorID>
    <AdvertisementMeaPower></AdvertisementMeaPower>
  </Module>
</BLEModuleConf>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	BLEModuleConf
Table type	Multi-instance table
Row name	Module
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
AdvertisementStatus	Specify the Advertisement transmit by the BLE module	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
AdvertisementInterval	Specify the interval for sending advertisement reports	N/A	Unsigned integer. Value range: 50 to 1000.	Interval value in centiseconds, in steps of 10
AdvertisementUUID	Specify the universally unique identifier for sending advertisement reports	N/A	String. Length:32.	N/A
AdvertisementMajorID	Specify the major identifier for sending	N/A	Unsigned integer. Value range: 0 to 65535. Default: 4294967295	N/A

	advertisement reports			
AdvertisementMinorID	Specify the minor identifier for sending advertisement reports	N/A	Unsigned integer. Value range: 0 to 65535. Default: 4294967295	N/A
AdvertisementMeaPower	Specify the measure power in the BLE advertisements	N/A	Unsigned integer. Value range: 0 to 127.	N/A

## WLOC/BLEModuleConfOfApgroup

This table contains Module of AP group related parameters information.

### XML structure

```

<WLOC>
  <BLEModuleConfOfApgroup>
    <Module>
      <ApGroupName></ApGroupName>
      <ApModelName></ApModelName>
      <ModuleID></ModuleID>
      <AdvertisementStatus></AdvertisementStatus>
      <AdvertisementInterval></AdvertisementInterval>
      <AdvertisementUUID></AdvertisementUUID>
      <AdvertisementMajorID></AdvertisementMajorID>
      <AdvertisementMinorID></AdvertisementMinorID>
      <AdvertisementMeaPower></AdvertisementMeaPower>
    </Module>
  </BLEModuleConfOfApgroup>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	BLEModuleConfOfApgroup
Table type	Multi-instance table
Row name	Module
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ApModelName	AP model	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModuleID	AP group module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
AdvertisementStatus	Specify the Advertisement transmit by the BLE module	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable(default)</li> </ul>	N/A
AdvertisementInterval	Specify the interval for sending advertisement reports	N/A	Unsigned integer. Value range: 50 to 1000. Default:100.	Interval value in centiseconds, in steps of 10
AdvertisementUUID	Specify the universally unique identifier for sending advertisement reports	N/A	String. Length:32.	N/A
AdvertisementMajorID	Specify the major identifier for sending advertisement reports	N/A	Unsigned integer. Value range: 0 to 65535. Default:1.	N/A
AdvertisementMinorID	Specify the minor identifier for sending advertisement reports	N/A	Unsigned integer. Value range: 0 to 65535. Default:1.	N/A
AdvertisementMeaPower	Specify the measure power in the BLE advertisements	N/A	Unsigned integer. Value range: 0 to 127.	N/A

## WLOC/IOTConf

This table contains IOT server of AP related parameters information.

## XML structure

```

<WLOC>
  <IOTConf>
    <AP>
      <ApName></ApName>
      <IoTAddress></IoTAddress>
    </AP>
  </IOTConf>
</WLOC>

```

```

        <IOTPort></IOTPort>
    </AP>
</IOTConf>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	IOTConf
Table type	Multi-instance table
Row name	AP
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
IOTAddress	IP Address of IOTserver, this column must configure with IOTPort	N/A	String, dotted decimal notation.	IOTAddress and IOTPort must set together. Example: 1.1.1.1.
IOTPort	PortNum of IOT server, this column must configure with IOTAddress	N/A	Unsigned integer. Value range: 1 to 65535.	IOTAddress and IOTPort must set together.

## WLOC/IOTConfOfApgroup

This table contains IOT server of AP group related parameters information.

## XML structure

```

<WLOC>
  <IOTConfOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <IOTAddress></IOTAddress>
      <IOTPort></IOTPort>
    </APGroup>
  </IOTConfOfApgroup>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	IOTConfOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
IOTAddress	IP Address of IOTserver, this column must configure with IOTPort	N/A	String, dotted decimal notation.	IOTAddress and IOTPort must set together. Example: 1.1.1.1.
IOTPort	PortNum of IOT server, this column must configure with IOTAddress	N/A	Unsigned integer. Value range: 1 to 65535.	IOTAddress and IOTPort must set together.

## WLOC/IOTConfOfGlobal

This table contains IOT server of global related parameters information.

## XML structure

```
<WLOC>
  <IOTConfOfGlobal>
    <IOTAddress></IOTAddress>
    <IOTPort></IOTPort>
  </IOTConfOfGlobal>
</WLOC>
```

## Table description

Item	Description
Feature name	WLOC
Table name	IOTConfOfGlobal

Table type	Single-instance table
Row name	None
Restrictions	None
Support for row creation and deletion	No

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IOTAddress	IP Address of IOTserver, this column must configure with IOTPort	N/A	String, dotted decimal notation.	IOTAddress and IOTPort must set together. Example: 1.1.1.1.
IOTPort	PortNum of IOT server, this column must configure with IOTAddress	N/A	Unsigned integer. Value range: 1 to 65535.	IOTAddress and IOTPort must set together.



# Contents

WLOC .....	1
WLOC/AeroScout .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
WLOC/BLE .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
WLOC/CUPID .....	5
XML structure .....	5
Table description .....	5
Columns .....	6
WLOC/FingerPrint .....	7
XML structure .....	7
Table description .....	7
Columns .....	7
WLOC/CommonConf .....	8
XML structure .....	8
Table description .....	9
Columns .....	9
WLOC/AeroScoutOfApgroup .....	10
XML structure .....	10
Table description .....	11
Columns .....	11
WLOC/BLEOfApgroup .....	12
XML structure .....	12
Table description .....	13
Columns .....	13
WLOC/CUPIDOfApgroup .....	15
XML structure .....	15
Table description .....	15
Columns .....	15
WLOC/FingerPrintOfApgroup .....	16
XML structure .....	16
Table description .....	17
Columns .....	17
WLOC/CommonConfOfApgroup .....	18
XML structure .....	18
Table description .....	19
Columns .....	19
WLOC/AeroScoutOfGlobal .....	20
XML structure .....	20
Table description .....	20
Columns .....	21
WLOC/BLEOfGlobal .....	21
XML structure .....	21
Table description .....	22
Columns .....	22
WLOC/CUPIDOfGlobal .....	24
XML structure .....	24
Table description .....	24
Columns .....	24
WLOC/FingerPrintOfGlobal .....	25
XML structure .....	25
Table description .....	26
Columns .....	26

WLOC/CommonConfOfGlobal .....	27
XML structure .....	27
Table description .....	27
Columns .....	28
WLOC/RadioConf .....	29
XML structure .....	29
Table description .....	29
Columns .....	29
WLOC/RadioConfOfApgroup .....	30
XML structure .....	30
Table description .....	30
Columns .....	30
WLOC/ModuleConf .....	31
XML structure .....	31
Table description .....	31
Columns .....	31
WLOC/ModuleConfOfApgroup .....	32
XML structure .....	32
Table description .....	32
Columns .....	33
WLOC/BLEModuleConf .....	33
XML structure .....	33
Table description .....	34
Columns .....	34
WLOC/BLEModuleConfOfApgroup .....	35
XML structure .....	35
Table description .....	35
Columns .....	35
WLOC/ModuleInfo//暂时不做 .....	36
XML structure .....	36
Table description .....	37
Columns .....	37
WLOC/IOTConf .....	38
XML structure .....	38
Table description .....	38
Columns .....	39
WLOC/IOTConfOfApgroup .....	39
XML structure .....	39
Table description .....	39
Columns .....	40
WLOC/IOTConfOfGlobal .....	40
XML structure .....	40
Table description .....	40
Columns .....	40

# WLOC

## WLOC/AeroScout

This table contains AeroScout of AP protocol related parameters information.

### XML structure

```
<WLOC>
  <AeroScout>
    <AP>
      <ApName></ApName>
      <Status></Status>
      <VersionID></VersionID>
      <EngineDetectionMode></EngineDetectionMode>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <VendorPort></VendorPort>
      <TimeStamp></TimeStamp>
      <ReportMode></ReportMode>
      <MulticastAddress></MulticastAddress>
    </AP>
  </AeroScout>
</WLOC>
```

### Table description

Item	Description
Feature name	WLOC
Table name	AeroScout
Table type	Multi-instance table
Row name	AP
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
Status	Wireless locating through the AeroScout protocol	N/A	Enumeration: <ul style="list-style-type: none"><li>0—inherit</li><li>1—enable</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—disable</li> </ul>	
VersionID	Specify the AeroScout version ID	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>2—V2</li> <li>3—V3</li> </ul>	N/A
EngineDetectionMode	Specify the AeroScout engine address mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—static</li> <li>2—dynamic</li> </ul>	N/A
EngineAddress	Specify the locating server IP address to which the AP sends packets	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1. Zero means inherited.
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 0 to 65535.	EngineAddress and EnginePort must set together. Zero means inherited.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 0 to 65535.	Zero means inherited.
TimeStamp	Configure the timestamp field in MU reports	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—absolute</li> <li>2—relative</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—local</li> <li>2—central</li> </ul>	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/BLE

This table contains BLE of AP protocol related parameters information.

## XML structure

```

<WLOC>
  <BLE>
    <AP>
      <ApName></ApName>
      <Status></Status>
      <AgingTime></AgingTime>
      <EngineAddress></EngineAddress>

```

```

    <EnginePort></EnginePort>
    <ReportStatus></ReportStatus>
    <ReportInterval></ReportInterval>
    <RssiThresholdStatus></RssiThresholdStatus>
    <RssiThreshold></RssiThreshold>
    <VendorPort></VendorPort>
    <CmdPasswdSimple></CmdPasswdSimple>
    <CmdPasswdCipher></CmdPasswdCipher>
    <RealTimeReportStatus></RealTimeReportStatus>
    <RealTimeReportPrefix></RealTimeReportPrefix>
    <RealTimeReportInterval></RealTimeReportInterval>
    <RealTimeReportEngineAddress></RealTimeReportEngineAddress>
    <RealTimeReportEnginePort></RealTimeReportEnginePort>
    <ReportMode></ReportMode>
    <ReportFormat></ReportFormat>
  </AP>
</BLE>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	BLE
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
Status	Wireless locating through the BLE protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
AgingTime	Specify a neighbour aging time for BLE location	N/A	Unsigned integer. Value range:0 or 60 to 3600.	Zero means inherited.
EngineAddress	Specify the locating server IP address to which the AP sends packets	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1. Zero means inherited.

Column name	Column description	Column type	Data type and restrictions	Remarks
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 0 to 65535.	EngineAddress and EnginePort must set together. Zero means inherited.
ReportStatus	Specify the status of neighbor list report	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportInterval	Set the interval for sending client list report	N/A	Unsigned integer. Value range: 0 to 86400.	N/A
RssiThresholdStatus	Specify the Rssi-Threshold status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RssiThreshold	Specify the RSSI threshold value	N/A	Unsigned integer. Value range: 0 or 5 to 255.	Zero means inherited.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 0 to 65535.	Zero means inherited.
CmdPasswd Simple	Specify the simple Command password	N/A	String. Length: 12	N/A
CmdPasswd Cipher	Specify the cipher Command password	N/A	String. Length: 49	N/A
RealTimeReportStatus	Specify the status of Real-time wireless locating	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RealTimeReportPrefix	Specify the prefix of manufacturers	N/A	String. Hexadecimal Length: 8to 18(even number)	N/A
RealTimeReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 0 to 30	N/A
RealTimeReportEngineAddress	Specify the locating server IP address to which the AP sends packets, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1. Zero means inherited.
RealTimeReportEnginePort	Specify the locating server port to which the	N/A	Unsigned integer. Value range: .0 to 65535.	EngineAddress and EnginePort must set together.

Column name	Column description	Column type	Data type and restrictions	Remarks
	AP sends packets, this column must configure with EngineAddress			Zero means inherited.
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—local</li> <li>2—central</li> </ul>	N/A
ReportFormat	Frame format	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—general</li> <li>2—lightweight</li> </ul>	N/A

## WLOC/CUPID

This table contains CUPID of AP protocol related parameters information.

### XML structure

```

<WLOC>
  <CUPID>
    <AP>
      <ApName></ApName>
      <Status></Status>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <VendorPort></VendorPort>
      <ReportStatus></ReportStatus>
      <ReportInterval></ReportInterval>
      <UnassociateReportStatus></UnassociateReportStatus>
      <UnassoMeasStatus></UnassoMeasStatus>
      <ReportMode></ReportMode>
      <ReportFormat></ReportFormat>
      <LocalCalculate></LocalCalculate>
    </AP>
  </CUPID>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	CUPID
Table type	Multi-instance table

Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
Status	Wireless locating through the Cupid protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
EngineAddress	Specify the locating server IP address	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1. Zero means inherited.
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 0 to 65535.	EngineAddress and EnginePort must set together. Zero means inherited.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 0 to 65535.	Zero means inherited.
ReportStatus	Specify the status client list report	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportInterval	Set the interval for sending client list report	N/A	Unsigned integer. Value range: 0 to 10.	Zero means inherited.
UnassociateReportStatus	Unassociated report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
UnassoMeasStatus	Unassociated measurement report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—local</li> <li>2—central</li> </ul>	N/A
ReportFormat	Frame format	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—general</li> <li>2—lightweight</li> </ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
LocalCalculate	Participate in local calculating	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A

## WLOC/FingerPrint

This table contains FingerPrint of AP protocol related parameters information.

### XML structure

```

<WLOC>
  <FingerPrint>
    <AP>
      <ApName></ApName>
      <Status></Status>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <VendorPort></VendorPort>
      <RawFrameStatus><RawFrameStatus>
      <MuReportStatus></MuReportStatus>
      <ReportMode></ReportMode>
      <ReportFormat></ReportFormat>
      <MulticastAddress></MulticastAddress>
    </AP>
  </FingerPrint>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	FingerPrint
Table type	Multi-instance table
Row name	AP
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Wireless locating through the FingerPrint protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
EngineAddress	Specify the locating server IP address	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1. If it is 0, it means inherited
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 0 to 65535.	EngineAddress and EnginePort must set together. Zero means inherited.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 0 to 65535.	Zero means inherited.
RawFrameStatus	Specify the status of report raw frame information	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
MuReportStatus	Specify the status of report MU information	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—local</li> <li>2—central</li> </ul>	N/A
ReportFormat	Frame format	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—general</li> <li>2—lightweight</li> <li>3—cupid-hybrid</li> </ul>	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/CommonConf

This table contains CommonConf of AP protocol related parameters information.

### XML structure

```
<WLOC>
  <CommonConf>
```

```

<AP>
  <ApName></ApName>
  <ClientRateLimitStatus></ClientRateLimitStatus>
  <ClientRateLimitCir></ClientRateLimitCir>
  <ClientRateLimitCbs></ClientRateLimitCbs>
  <DilutionStatus></DilutionStatus>
  <DilutionFactor></DilutionFactor>
  <DilutionTimeout></DilutionTimeout>
  <IgnoreBeaconStatus></IgnoreBeaconStatus>
  <RateLimitStatus></RateLimitStatus>
  <RateLimitCir></RateLimitCir>
  <RateLimitCbs></RateLimitCbs>
  <RssiStatus></RssiStatus>
  <RssiThreshold></RssiThreshold>
  <IgnoreApFrameStatus></IgnoreApFrameStatus>
  <KeepAliveStatus></KeepAliveStatus>
</AP>
</CommonConf>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	CommonConf
Table type	Multi-instance table
Row name	AP
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ClientRateLimitStatus	Limit the rate for clients to send locating packets to the AP status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ClientRateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 0 to 1300000.	Zero means inherited.
ClientRateLimitCbs	Configure the committed burst size	N/A	Unsigned integer. Value range: 0 or 80 to 130000000.	Optional parameter Zero means inherited.
DilutionStatus	Configure	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	dilution for locating packets		<ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	
DilutionFactor	Configure the dilution factor	N/A	Unsigned integer. Value range: 0 to 10000.	DilutionFactor and DilutionTimeout must set together. Zero means inherited.
DilutionTimeout	Configure the dilution timeout	N/A	Unsigned integer. Value range: 0 to 60.	DilutionFactor and DilutionTimeout must set together. Zero means inherited.
IgnoreBeaconStatus	Ignore beacon frames	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RateLimitStatus	Limit the rate for sending locating packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 0 or 8 to 1300000.	Zero means inherited.
RateLimitCbs	Configure the committed burst size	N/A	Unsigned integer. Value range: 0 or 500 to 130000000.	Optional parameter Zero means inherited.
RssiStatus	Specify the Rssi-Threshold status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RssiThreshold	Set the RSSI threshold	N/A	Unsigned integer. Value range: 0 or 5 to 100.	Zero means inherited.
IgnoreApFrameStatus	Ignore AP frames	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
KeepAliveStatus	Configure wireless location keepalive	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A

## WLOC/AeroScoutOfApgroup

This table contains AeroScout of APGroup protocol related parameters information.

### XML structure

<WLOC>

```

<AeroScoutOfApgroup>
  <APGroup>
    <ApGroupName></ApGroupName>
    <Status></Status>
    <VersionID></VersionID>
    <EngineDetectionMode></EngineDetectionMode>
    <EngineAddress></EngineAddress>
    <EnginePort></EnginePort>
    <VendorPort></VendorPort>
    <TimeStamp></TimeStamp>
    <ReportMode></ReportMode>
    <MulticastAddress></MulticastAddress>
  </APGroup>
</AeroScoutOfApgroup>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	AeroScoutOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Wireless locating through the AeroScout protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
VersionID	Specify the AeroScout version ID	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>2—V2</li> <li>3—V3</li> </ul>	N/A
EngineDetectionMode	Specify the AeroScout engine address mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—static</li> <li>2—dynamic</li> </ul>	N/A
EngineAddress	Specify the locating server IP address	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
				Zero means inherited.
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 0 to 65535.	EngineAddress and EnginePort must set together. Zero means inherited.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 0 to 65535.	Zero means inherited.
TimeStamp	Configure the timestamp field in MU reports	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—absolute</li> <li>2—relative</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—local</li> <li>2—central</li> </ul>	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/BLEOfApgroup

This table contains Ble of APGroup protocol related parameters information.

### XML structure

```

<WLOC>
  <BLEOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <Status></Status>
      <AgingTime></AgingTime>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <ReportStatus></ReportStatus>
      <ReportInterval></ReportInterval>
      <RssiThresholdStatus></RssiThresholdStatus>
      <RssiThreshold></RssiThreshold>
      <VendorPort></VendorPort>
      <CmdPasswdSimple></CmdPasswdSimple>
      <CmdPasswdCipher></CmdPasswdCipher>
      <RealTimeReportStatus></RealTimeReportStatus>
      <RealTimeReportPrefix></RealTimeReportPrefix>
      <RealTimeReportInterval></RealTimeReportInterval>
      <RealTimeReportEngineAddress></RealTimeReportEngineAddress>
      <RealTimeReportEnginePort></RealTimeReportEnginePort>

```

```

    <ReportMode></ReportMode>
    <ReportFormat></ReportFormat>
  </APGroup>
</BLEOfApgroup>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	BLEOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Wireless locating through the BLE protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
AgingTime	Specify a neighbour aging time for BLE location	N/A	Unsigned integer. Value range: 0 or 60 to 3600.	Zero means inherited.
EngineAddress	Specify the locating server IP address	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1. Zero means inherited.
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 0 to 65535.	EngineAddress and EnginePort must set together. Zero means inherited.
ReportStatus	Specify the status of neighbor list report	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportInterval	Set the interval for sending client list report	N/A	Unsigned integer. Value range: 0 to 86400.	Zero means inherited.
RssiThresholdStatus	Specify the Rssi-Threshold status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—disable</li> </ul>	
RssiThreshold	Limit the RSSI of locating packets	N/A	Unsigned integer. Value range: 0 or 5 to 255.	Zero means inherited.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 0 to 65535.	Zero means inherited.
CmdPasswd Simple	Specify the simple Command password	N/A	String. Length: 12	N/A
CmdPasswd Cipher	Specify the cipher Command password	N/A	String. Length: 49	N/A
RealTimeReportStatus	Specify the status of Real-time wireless locating	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RealTimeReportPrefix	Specify the prefix of manufacturers	N/A	String. Hexadecimal Length: 8 to 18(even number)	N/A
RealTimeReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 0 to 30	N/A
RealTimeReportEngineAddress	Specify the locating server IP address to which the AP sends packets, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1. Zero means inherited.
RealTimeReportEnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 0 to 65535.	EngineAddress and EnginePort must set together. Zero means inherited.
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—local</li> <li>2—central</li> </ul>	N/A
ReportFormat	Frame format	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—general</li> <li>2—lightweight</li> </ul>	N/A



# WLOC/CUPIDOfApgroup

This table contains CUPID of APGroup protocol related parameters information.

## XML structure

```
<WLOC>
  <CUPIDOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <Status></Status>
      <EngineAddress></EngineAddress>
      <EnginePort></EnginePort>
      <VendorPort></VendorPort>
      <ReportStatus></ReportStatus>
      <ReportInterval></ReportInterval>
      <UnassociateReportStatus></UnassociateReportStatus>
      <UnassoMeasStatus></UnassoMeasStatus>
      <ReportMode></ReportMode>
      <ReportFormat></ReportFormat>
      <LocalCalculate></LocalCalculate>
    </APGroup>
  </CUPIDOfApgroup>
</WLOC>
```

## Table description

Item	Description
Feature name	WLOC
Table name	CUPIDOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Wireless locating through the Cupid protocol	N/A	Enumeration: <ul style="list-style-type: none"><li>0—inherit</li><li>1—enable</li><li>2—disable</li></ul>	N/A
EngineAddress	Specify the	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set

Column name	Column description	Column type	Data type and restrictions	Remarks
ss	locating server IP address			together. Example: 1.1.1.1. Zero means inherited.
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 0 to 65535.	EngineAddress and EnginePort must set together. Zero means inherited.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 0 to 65535.	Zero means inherited.
ReportStatus	Specify the status of client list report	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportInterval	Set the interval for sending client list report	N/A	Unsigned integer. Value range: 0 to 10.	Zero means inherited.
UnassociateReportStatus	Unassociated report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
UnassoMeasStatus	Unassociated measurement report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—local</li> <li>2—central</li> </ul>	N/A
ReportFormat	Frame format	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—general</li> <li>2—lightweight</li> </ul>	N/A
LocalCalculate	Participate in local calculating	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A

## WLOC/FingerPrintOfApgroup

This table contains FingerPrint of APGroup protocol related parameters information.

### XML structure

```
<WLOC>
  <FingerPrintOfApgroup>
```

```

<APGroup>
  <ApGroupName></ApGroupName>
  <Status></Status>
  <EngineAddress></EngineAddress>
  <EnginePort></EnginePort>
  <VendorPort></VendorPort>
  <RawFrameStatus><RawFrameStatus>
  <MuReportStatus></MuReportStatus>
  <ReportMode></ReportMode>
  <ReportFormat></ReportFormat>
  <MulticastAddress></MulticastAddress>
</APGroup>
</FingerPrintOfApgroup>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	FingerPrintOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
Status	Wireless locating through the FingerPrint protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
EngineAddress	Specify the locating server IP address	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1. Zero means inherited.
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 0 to 65535.	EngineAddress and EnginePort must set together. Zero means inherited.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 0 to 65535.	Zero means inherited.

Column name	Column description	Column type	Data type and restrictions	Remarks
RawFrameStatus	Specify the status of report raw frame information	N/A	Enumeration: • 0—inherit • 1—enable • 2—disable	N/A
MuReportStatus	Specify the status of report MU information	N/A	Enumeration: • 0—inherit • 1—enable • 2—disable	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: • 0—inherit • 1—local • 2—central	N/A
ReportFormat	Frame format	N/A	Enumeration: • 0—inherit • 1—general • 2—lightweight • 3—cupid-hybrid	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/CommonConfOfApgroup

This table contains CommonConf of APGroup protocol related parameters information.

### XML structure

```

<WLOC>
  <CommonConfOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <ClientRateLimitStatus></ClientRateLimitStatus>
      <ClientRateLimitCir></ClientRateLimitCir>
      <ClientRateLimitCbs></ClientRateLimitCbs>
      <DilutionStatus></DilutionStatus>
      <DilutionFactor></DilutionFactor>
      <DilutionTimeout></DilutionTimeout>
      <IgnoreBeaconStatus></IgnoreBeaconStatus>
      <RateLimitStatus></RateLimitStatus>
      <RateLimitCir></RateLimitCir>
      <RateLimitCbs></RateLimitCbs>
      <RssiStatus></RssiStatus>
      <RssiThreshold></RssiThreshold>
      <IgnoreApFrameStatus></IgnoreApFrameStatus>
      <KeepAliveStatus></KeepAliveStatus>
    </APGroup>
  </CommonConfOfApgroup>

```

</WLOC>

## Table description

Item	Description
Feature name	WLOC
Table name	CommonConfOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	APGroup Name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ClientRateLimitStatus	Limit the rate for clients to send locating packets to the AP status	N/A	Enumeration: <ul style="list-style-type: none"><li>0—inherit</li><li>1—enable</li><li>2—disable</li></ul>	N/A
ClientRateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 0 to 1300000.	Zero means inherited.
ClientRateLimitCbs	Configure the committed burst size	N/A	Unsigned integer. Value range: 0 or 80 to 130000000.	Optional parameter Zero means inherited.
DilutionStatus	Configure dilution for locating packets	N/A	Enumeration: <ul style="list-style-type: none"><li>0—inherit</li><li>1—enable</li><li>2—disable</li></ul>	N/A
DilutionFactor	Configure the dilution factor	N/A	Unsigned integer. Value range: 0 to 10000.	DilutionFactor and DilutionTimeout must set together. Zero means inherited.
DilutionTimeout	Configure the dilution timeout	N/A	Unsigned integer. Value range: 0 to 60.	DilutionFactor and DilutionTimeout must set together. Zero means inherited.
IgnoreBeaconStatus	Ignore beacon frames	N/A	Enumeration: <ul style="list-style-type: none"><li>0—inherit</li><li>1—enable</li><li>2—disable</li></ul>	N/A
RateLimitStatus	Limit the rate for sending locating packets	N/A	Enumeration: <ul style="list-style-type: none"><li>0—inherit</li><li>1—enable</li><li>2—disable</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
RateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 0 or 8 to 1300000.	Zero means inherited.
RateLimitCbs	Configure the committed burst size	N/A	Unsigned integer. Value range: 0 or 500 to 130000000.	Optional parameter Zero means inherited.
RssiStatus	Specify the Rssi-Threshold status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RssiThreshold	Set the RSSI threshold	N/A	Unsigned integer. Value range: 0 or 5 to 100.	Zero means inherited.
IgnoreApFrameStatus	Ignore AP frames	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
KeepAliveStatus	Configure wireless location keepalive	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A

## WLOC/AeroScoutOfGlobal

This table contains AeroScout of Global protocol related parameters information.

### XML structure

```

<WLOC>
  <AeroScoutOfGlobal>
    <Status></Status>
    <VersionID></VersionID>
    <EngineDetectionMode></EngineDetectionMode>
    <EngineAddress></EngineAddress>
    <EnginePort></EnginePort>
    <VendorPort></VendorPort>
    <TimeStamp></TimeStamp>
    <ReportMode></ReportMode>
    <MulticastAddress></MulticastAddress>
  </AeroScoutOfGlobal>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC

Table name	AeroScoutOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Wireless locating through the AeroScout protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
VersionID	Specify the AeroScout version ID	N/A	Enumeration: <ul style="list-style-type: none"> <li>2—V2</li> <li>3—V3</li> </ul>	N/A
EngineDetectionMode	Specify the AeroScout engine address mode	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—static</li> <li>2—dynamic</li> </ul>	N/A
EngineAddress	Specify the locating server IP address	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
TimeStamp	Configure the timestamp field in MU reports	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—absolute</li> <li>2—relative</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—local</li> <li>2—central</li> </ul>	N/A
MulticastAddress	MACAddress of tag multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/BLEOfGlobal

This table contains BLE of Global protocol related parameters information.

## XML structure

<WLOC>

```

<BLEOfGlobal>
  <Status></Status>
  <AgingTime></AgingTime>
  <EngineAddress></EngineAddress>
  <EnginePort></EnginePort>
  <ReportStatus></ReportStatus>
  <ReportInterval></ReportInterval>
  <RssiThresholdStatus></RssiThresholdStatus>
  <RssiThreshold></RssiThreshold>
  <VendorPort></VendorPort>
  <CmdPasswdSimple></CmdPasswdSimple>
  <CmdPasswdCipher></CmdPasswdCipher>
  <RealTimeReportStatus></RealTimeReportStatus>
  <RealTimeReportPrefix></RealTimeReportPrefix>
  <RealTimeReportInterval></RealTimeReportInterval>
  <RealTimeReportEngineAddress></RealTimeReportEngineAddress>
  <RealTimeReportEnginePort></RealTimeReportEnginePort>
  <ReportMode></ReportMode>
  <ReportFormat></ReportFormat>
</BLEOfGlobal>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	BLEOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Wireless locating through the BLE protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
AgingTime	Specify a neighbour aging time for BLE location	N/A	Unsigned integer Value range: 60 to 3600.	N/A
EngineAddress	Specify the locating server IP address	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server	N/A	Unsigned integer.	EngineAddress and EnginePort must set



Column name	Column description	Column type	Data type and restrictions	Remarks
	port to which the AP sends packets		Value range: 1 to 65535.	together.
ReportStatus	Specify the status of neighbor list report	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportInterval	Set the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 86400.	N/A
RssiThresholdStatus	Specify the Rssi-Threshold status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RssiThreshold	Limit the RSSI of locating packets	N/A	Unsigned integer. Value range: 5 to 255.	N/A
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
CmdPasswdSimple	Specify the simple Command password	N/A	String. Length: 12	N/A
CmdPasswdCipher	Specify the cipher Command password	N/A	String. Length: 49	N/A
RealTimeReportStatus	Specify the status of Real-time wireless locating	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RealTimeReportPrefix	Specify the prefix of manufacturers	N/A	String. Hexadecimal Length: 8 to 18(even number)	N/A
RealTimeReportInterval	Specify the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 30	N/A
RealTimeReportEngineAddress	Specify the locating server IP address to which the AP sends packets, this column must configure with EnginePort	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example:1.1.1.1.
RealTimeReportEnginePort	Specify the locating server port to which the AP sends packets, this column must configure with EngineAddress	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.

Column name	Column description	Column type	Data type and restrictions	Remarks
ReportMode	Specify the module of report to the server	N/A	Enumeration: • 1—local • 2—central	N/A
ReportFormat	Frame format	N/A	Enumeration: • 1—general • 2—lightweight	N/A

## WLOC/CUPIDOfGlobal

This table contains CUPID of Global protocol related parameters information.

### XML structure

```

<WLOC>
  <CUPIDOfGlobal>
    <Status></Status>
    <EngineAddress></EngineAddress>
    <EnginePort></EnginePort>
    <VendorPort></VendorPort>
    <ReportStatus></ReportStatus>
    <ReportInterval></ReportInterval>
    <UnassociateReportStatus></UnassociateReportStatus>
    <UnassoMeasStatus></UnassoMeasStatus>
    <ReportMode></ReportMode>
    <ReportFormat></ReportFormat>
    <LocalCalculate></LocalCalculate>
  </CUPIDOfGlobal>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	CUPIDOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Wireless locating	N/A	Enumeration:	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
	through the Cupid protocol		<ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	
EngineAddress	Specify the locating server IP address	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
ReportStatus	Specify the status of client list report	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportInterval	Set the interval for sending client list report	N/A	Unsigned integer. Value range: 1 to 10.	N/A
UnassociateReportStatus	Unassociated report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
UnassoMeasStatus	Unassociated measurement report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—local</li> <li>2—central</li> </ul>	N/A
ReportFormat	Frame format	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—general</li> <li>2—lightweight</li> </ul>	N/A
LocalCalculate	Participate in local calculating	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A

## WLOC/FingerPrintOfGlobal

This table contains FingerPrint of Global protocol related parameters information.

### XML structure

```

<WLOC>
  <FingerPrintOfGlobal>
    <Status></Status>
    <EngineAddress></EngineAddress>
    <EnginePort></EnginePort>
  </FingerPrintOfGlobal>
</WLOC>

```

```

<VendorPort></VendorPort>
<RawFrameStatus><RawFrameStatus>
<MuReportStatus></MuReportStatus>
<ReportMode></ReportMode>
<ReportFormat></ReportFormat>
<MulticastAddress></MulticastAddress>
</FingerPrintOfGlobal>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	FingerPrintOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Status	Wireless locating through the FingerPrint protocol	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
EngineAddress	Specify the locating server IP address	N/A	String, dotted decimal notation.	EngineAddress and EnginePort must set together. Example: 1.1.1.1.
EnginePort	Specify the locating server port to which the AP sends packets	N/A	Unsigned integer. Value range: 1 to 65535.	EngineAddress and EnginePort must set together.
VendorPort	Specify an AP port for the locating server vendor	N/A	Unsigned integer. Value range: 1 to 65535.	N/A
RawFrameStatus	Specify the status of report raw frame information	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
MuReportStatus	Specify the status of report MU information	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ReportMode	Specify the module of report to the server	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—local</li> <li>2—central</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ReportFormat	Frame format	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—general</li> <li>2—lightweight</li> <li>3—cupid-hybrid</li> </ul>	N/A
MulticastAddress	MACAddress of tag Multicast	N/A	Six groups of two hexadecimal digits, hyphen-separated.	Example: 01-34-ED-66-89-23.

## WLOC/CommonConfOfGlobal

This table contains CommonConf of Global protocol related parameters information.

### XML structure

```

<WLOC>
  <CommonConfOfGlobal>
    <ClientRateLimitStatus></ClientRateLimitStatus>
    <ClientRateLimitCir></ClientRateLimitCir>
    <ClientRateLimitCbs></ClientRateLimitCbs>
    <DilutionStatus></DilutionStatus>
    <DilutionFactor></DilutionFactor>
    <DilutionTimeout></DilutionTimeout>
    <IgnoreBeaconStatus></IgnoreBeaconStatus>
    <RateLimitStatus></RateLimitStatus>
    <RateLimitCir></RateLimitCir>
    <RateLimitCbs></RateLimitCbs>
    <RssiStatus></RssiStatus>
    <RssiThreshold></RssiThreshold>
    <IgnoreApFrameStatus></IgnoreApFrameStatus>
    <KeepAliveStatus></KeepAliveStatus>
  </CommonConfOfGlobal>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	CommonConfOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ClientRateLimitStatus	Limit the rate for clients to send locating packets to the AP status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
ClientRateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 1 to 1300000.	N/A
ClientRateLimitCbs	Configure the committed burst size	N/A	Unsigned integer. Value range: 80 to 130000000.	Optional parameter
DilutionStatus	Configure dilution for locating packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
DilutionFactor	Configure the dilution factor	N/A	Unsigned integer. Value range: 1 to 10000.	DilutionFactor and DilutionTimeout must set together.
DilutionTimeout	Configure the dilution timeout	N/A	Unsigned integer. Value range: 1 to 60.	DilutionFactor and DilutionTimeout must set together.
IgnoreBeaconStatus	Ignore beacon frames	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RateLimitStatus	Limit the rate for sending locating packets	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RateLimitCir	Configure the committed information rate	N/A	Unsigned integer. Value range: 8 to 1300000.	N/A
RateLimitCbs	Configure the committed burst size	N/A	Unsigned integer. Value range: 500 to 130000000.	Optional parameter
RssiStatus	Specify the Rssi-Threshold status	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
RssiThreshold	Set the RSSI threshold	N/A	Unsigned integer. Value range: 5 to 100.	N/A
IgnoreApFrameStatus	Ignore AP frames	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
KeepAliveStatus	Configure wireless location keepalive	N/A	Enumeration: <ul style="list-style-type: none"> <li>1—enable</li> <li>2—disable</li> </ul>	N/A

# WLOC/RadioConf

This table contains Radio related parameters information.

## XML structure

```
<WLOC>
  <RadioConf>
    <Radio>
      <ApName></ApName>
      <RadioID></RadioID>
      <RadioStatus></RadioStatus>
      <ModeMu></ModeMu>
      <ModeTag></ModeTag>
    </Radio>
  </RadioConf>
</WLOC>
```

## Table description

Item	Description
Feature name	WLOC
Table name	RadioConf
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP Name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 2.	N/A
RadioStatus	Radio status	N/A	Enumeration: <ul style="list-style-type: none"><li>0—inherit</li><li>1—enable</li><li>2—disable</li></ul>	N/A
ModeMu	Locate all 802.11 clients	N/A	Enumeration: <ul style="list-style-type: none"><li>0—inherit</li><li>2—mu</li></ul>	N/A
ModeTag	Locate AeroScout clients	N/A	Enumeration: <ul style="list-style-type: none"><li>0—inherit</li><li>1—tag</li></ul>	N/A

# WLOC/RadioConfOfApgroup

This table contains Radio of Apgroup related parameters information.

## XML structure

```
<WLOC>
  <RadioConfOfApgroup>
    <Radio>
      <ApGroupName></ApGroupName>
      <ApModelName></ApModelName>
      <RadioID></RadioID>
      <RadioStatus></RadioStatus>
      <ModeMu></ModeMu>
      <ModeTag></ModeTag>
    </Radio>
  </RadioConfOfApgroup>
</WLOC>
```

## Table description

Item	Description
Feature name	WLOC
Table name	RadioConfOfApgroup
Table type	Multi-instance table
Row name	Radio
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	Configure an AP group	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
ApModelName	Specify an AP model and enter AP model view	Index	String, lowercase. Length: 1 to 31 characters.	N/A
RadioID	Radio ID	Index	Unsigned integer. Value range: 1 to 2.	N/A
RadioStatus	Radio status	N/A	Enumeration: <ul style="list-style-type: none"><li>1—enable</li><li>2—disable</li></ul>	N/A
ModeTag	Locate AeroScout clients	N/A	Enumeration: <ul style="list-style-type: none"><li>0—disable</li><li>1—enable</li></ul>	N/A



Column name	Column description	Column type	Data type and restrictions	Remarks
ModeMu	Locate all 802.11 clients	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—disable</li> <li>2—enable</li> </ul>	N/A

## WLOC/ModuleConf

This table contains Module of AP related parameters information.

### XML structure

```

<WLOC>
  <ModuleConf>
    <Module>
      <ApName></ApName>
      <ModuleID></ModuleID>
      <ModuleStatus></ModuleStatus>
      <Type></Type>
      <TxPower></TxPower>
      <FwUpgrade></FwUpgrade>
    </Module>
  </ModuleConf>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	ModuleConf
Table type	Multi-instance table
Row name	Module
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
ModuleStatus	AP module status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherited</li> <li>1—enable</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
			<ul style="list-style-type: none"> <li>2—disable</li> </ul>	
Type	Specify a module type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—BLE</li> <li>2—IOT</li> </ul>	N/A
TxPower	Specify a power for sending advertisement reports	N/A	Unsigned integer. Value range:0 to 4.	If it is 0, it means inherited
FwUpgrade	Specify the firmware upgrade status for this module	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A

## WLOC/ModuleConfOfApgroup

This table contains Module of AP group related parameters information.

### XML structure

```

<WLOC>
  <ModuleConfOfApgroup>
    <Module>
      <ApGroupName></ApGroupName>
      <ApModelName></ApModelName>
      <ModuleID></ModuleID>
      <ModuleStatus></ModuleStatus>
      <Type></Type>
      <TxPower></TxPower>
      <FwUpgrade></FwUpgrade>
    </Module>
  </ModuleConfOfApgroup>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	ModuleConfOfApgroup
Table type	Multi-instance table
Row name	Module
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ApModelName	AP model	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
ModuleStatus	AP module status	N/A	Enumeration: • 1—enable • 2—disable	N/A
Type	Specify a module type	N/A	Enumeration: • 0—NotConfig • 1—BLE • 2—IOT	N/A
TxPower	Specify a power for sending advertisement reports	N/A	Unsigned integer. Value range:1 to 4.	N/A
FwUpgrade	Specify the firmware upgrade status for this module	N/A	Enumeration: • 1—enable • 2—disable	N/A

## WLOC/BLEModuleConf

This table contains Module of AP related parameters information.

## XML structure

```

<WLOC>
  <BLEModuleConf>
    <Module>
      <ApName></ApName>
      <ModuleID></ModuleID>
      <AdvertisementStatus></AdvertisementStatus>
      <AdvertisementInterval></AdvertisementInterval>
      <AdvertisementUUID></AdvertisementUUID>
      <AdvertisementMajorID></AdvertisementMajorID>
      <AdvertisementMinorID></AdvertisementMinorID>
      <AdvertisementMeaPower></AdvertisementMeaPower>
    </Module>
  </BLEModuleConf>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	BLEModuleConf
Table type	Multi-instance table
Row name	Module
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
Advertisemen tStatus	Specify the Advertisement transmit by the BLE module	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—inherit</li> <li>1—enable</li> <li>2—disable</li> </ul>	N/A
Advertisemen tInterval	Specify the interval for sending advertisement reports	N/A	Unsigned integer. Value range: 0 or 50 to 1000.	Interval value in centiseconds, in steps of 10
Advertisemen tUUID	Specify the universally unique identifier for sending advertisement reports	N/A	String. Length:32.	N/A
Advertisemen tMajorID	Specify the major identifier for sending advertisement reports	N/A	Unsigned integer. Value range: 0 to 65535. 4294967295	N/A
Advertisemen tMinorID	Specify the minor identifier for sending advertisement reports	N/A	Unsigned integer. Value range: 0 to 65535. 4294967295	N/A
Advertisemen tMeaPower	Specify the measure power in the BLE advertisements	N/A	Unsigned integer. Value range: 0 to 127.	N/A

# WLOC/BLEModuleConfOfApgroup

This table contains Module of AP group related parameters information.

## XML structure

```
<WLOC>
  <BLEModuleConfOfApgroup>
    <Module>
      <ApGroupName></ApGroupName>
      <ApModelName></ApModelName>
      <ModuleID></ModuleID>
      <AdvertisementStatus></AdvertisementStatus>
      <AdvertisementInterval></AdvertisementInterval>
      <AdvertisementUUID></AdvertisementUUID>
      <AdvertisementMajorID></AdvertisementMajorID>
      <AdvertisementMinorID></AdvertisementMinorID>
      <AdvertisementMeaPower></AdvertisementMeaPower>
    </Module>
  </BLEModuleConfOfApgroup>
</WLOC>
```

## Table description

Item	Description
Feature name	WLOC
Table name	BLEModuleConfOfApgroup
Table type	Multi-instance table
Row name	Module
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApGroupName	AP group name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ApModelName	AP model	Index	String, lowercase. Length: 1 to 31 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
AdvertisementStatus	Specify the Advertisement transmit by the BLE module	N/A	Enumeration: <ul style="list-style-type: none"><li>1—enable</li><li>2—disable</li></ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
AdvertisementInterval	Specify the interval for sending advertisement reports	N/A	Unsigned integer. Value range: 50 to 1000.	Interval value in centiseconds, in steps of 10
AdvertisementUUID	Specify the universally unique identifier for sending advertisement reports	N/A	String. Length:32.	N/A
AdvertisementMajorID	Specify the major identifier for sending advertisement reports	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
AdvertisementMinorID	Specify the minor identifier for sending advertisement reports	N/A	Unsigned integer. Value range: 0 to 65535.	N/A
AdvertisementMeaPower	Specify the measure power in the BLE advertisements	N/A	Unsigned integer. Value range: 0 to 127.	N/A

## WLOC/ModuleInfo//暂时不做

This table contains Module status of AP related parameters information.

## XML structure

```

<WLOC>
  <ModuleInfo>
    <Module>
      <ApName></ApName>
      <ModuleID></ModuleID>
      <ModuleAdminType></ModuleAdminType>
      <ModuleType></ModuleType>
      <ModuleChipType></ModuleChipType>
      <HWVersion></HWVersion>
      <SWVersion></SWVersion>
      <SequenceID></SequenceID>
      <ModuleStatus></ModuleStatus>
      <ModuleAdminStatus></ModuleAdminStatus>
      <RF1Status></RF1Status>
      <RF2Status></RF2Status>
      <RF3Status></RF3Status>
      <ZIGBEEStatus></ZIGBEEStatus>
    
```

```

    </Module>
  </ModuleInfo>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	ModuleInfo
Table type	Multi-instance table
Row name	Module
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
ModuleID	Module ID	Index	Unsigned integer. Value range: 1 to 5.	N/A
ModuleAdmin Type	Module administrate type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—NotConfig</li> <li>1—BLE</li> <li>2—IOT</li> </ul>	N/A
ModuleType	Module physical Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—N/A</li> <li>1—H3C</li> <li>2—IOT</li> </ul>	N/A
ModuleChipType	Module Chip Type	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—N/A</li> <li>1—BLE</li> <li>2—RFID</li> <li>3—ZIGBEE</li> </ul>	N/A
HWVersion	HardWare Version	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
SWVersion	SoftWare Version	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
SequenceID	Sequence ID	N/A	String, case-insensitive. Length: 1 to 31 characters.	N/A
ModuleStatus	Module Status	N/A	Enumeration: <ul style="list-style-type: none"> <li>0—unavailable</li> <li>1—norma</li> <li>2—absent</li> </ul>	N/A

Column name	Column description	Column type	Data type and restrictions	Remarks
ModuleAdmin Status	Module Admin Status	N/A	Enumeration: • 1—enable • 2—disable	N/A
RF1Status	RF1 Status	N/A	Enumeration: • 1—enable • 2—disable	Only IOT module supported.
RF2Status	RF2 Status	N/A	Enumeration: • 1—enable • 2—disable	Only IOT module supported.
RF3Status	RF3 Status	N/A	Enumeration: • 1—enable • 2—disable	Only IOT module supported.
ZIGBEEStatus	ZIGBEE Status	N/A	Enumeration: • 1—enable • 2—disable	Only IOT module supported.

## WLOC/IOTConf

This table contains IOT server of AP related parameters information.

### XML structure

```

<WLOC>
  <IOTConf>
    <AP>
      <ApName></ApName>
      <IoTAddress></IoTAddress>
      <IoTPort></IoTPort>
    </AP>
  </IOTConf>
</WLOC>

```

### Table description

Item	Description
Feature name	WLOC
Table name	IOTConf
Table type	Multi-instance table
Row name	AP
Restrictions	None



## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
ApName	AP name	Index	String, case-insensitive. Length: 1 to 64 characters.	N/A
IOTAddress	IP Address of IOTserver	N/A	String, dotted decimal notation.	IOTAddress and IOTPort must set together. Example: 1.1.1.1. If it is 0, it means inherited
IOTPort	PortNum of IOT server	N/A	Unsigned integer. Value range: 0 to 65535.	IOTAddress and IOTPort must set together. If it is 0, it means inherited

## WLOC/IOTConfOfApgroup

This table contains IOT server of AP group related parameters information.

## XML structure

```
<WLOC>
  <IOTConfOfApgroup>
    <APGroup>
      <ApGroupName></ApGroupName>
      <IOTAddress></IOTAddress>
      <IOTPort></IOTPort>
    </APGroup>
  </IOTConfOfApgroup >
</WLOC>
```

## Table description

Item	Description
Feature name	WLOC
Table name	IOTConfOfApgroup
Table type	Multi-instance table
Row name	APGroup
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
APGroupName	AP group name	Index	String, case-insensitive. Length: 1 to 31 characters.	N/A
IOTAddress	IP Address of IOTserver	N/A	String, dotted decimal notation.	IOTAddress and IOTPort must set together. Example: 1.1.1.1. If it is 0, it means inherited
IOTPort	PortNum of IOT server	N/A	Unsigned integer. Value range: 0 to 65535.	IOTAddress and IOTPort must set together. If it is 0, it means inherited

## WLOC/IOTConfOfGlobal

This table contains IOT server of global related parameters information.

## XML structure

```

<WLOC>
  <IOTConfOfGlobal>
    <IOTAddress></IOTAddress>
    <IOTPort></IOTPort>
  </IOTConfOfGlobal>
</WLOC>

```

## Table description

Item	Description
Feature name	WLOC
Table name	IOTConfOfGlobal
Table type	Single-instance table
Row name	None
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IOTAddress	IP Address of IOTserver	N/A	String, dotted decimal notation.	IOTAddress and IOTPort must set together. Example: 1.1.1.1.

Column name	Column description	Column type	Data type and restrictions	Remarks
IOTPort	PortNum of IOT server	N/A	Unsigned integer. Value range: 1 to 65535.	IOTAddress and IOTPort must set together.

# Contents

WRED .....	1
WRED/Tables .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
WRED/DropParameter .....	1
XML structure .....	1
Table description .....	2
Columns .....	2
WRED/QueueParameter .....	2
XML structure .....	3
Table description .....	3
Columns .....	3
WRED/IfApplyTable .....	3
XML structure .....	4
Table description .....	4
Columns .....	4

# WRED

## WRED/Tables

This table contains information about WRED tables.

### XML structure

```
<WRED>
  <Tables>
    <Table>
      <Name></Name>
    </Table>
  </Tables>
</WRED>
```

### Table description

Item	Description
Feature name	WRED
Table name	Tables
Table type	Multi-instance table
Row name	Table
Restrictions	None
Support for row creation and deletion	Yes

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	WRED table name	Index	String. Length: 1 to 32 characters.	N/A

## WRED/DropParameter

This table contains information about WRED drop parameters.

### XML structure

```
<WRED>
  <DropParameter>
    <Parameter>
```

```

    <Name></Name>
    <QueueID></QueueID>
    <DropLevel></DropLevel>
    <LowLimit></LowLimit>
    <HighLimit></HighLimit>
    <DiscardProbability></DiscardProbability>
  </Parameter>
</DropParameter>
</WRED>

```

## Table description

Item	Description
Feature name	WRED
Table name	DropParameter
Table type	Multi-instance table
Row name	Parameter
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	WRED table name	Index	String. Length: 1 to 32 characters.	N/A
QueueID	Queue ID	Index	Unsigned integer.	The value range for this column depends on the device model.
DropLevel	Packet drop level	Index	Unsigned integer.	The value range for this column depends on the device model.
LowLimit	Queue length low limit	N/A	Unsigned integer.	The value range for this column depends on the device model.
HighLimit	Queue length high limit	N/A	Unsigned integer.	The value range for this column depends on the device model.
DiscardProbability	Packet discard probability	N/A	Unsigned integer.	The value range for this column depends on the device model.

## WRED/QueueParameter

This table contains information about WRED queue parameters.

## XML structure

```
<WRED>
  <QueueParameter>
    <Queue>
      <Name></Name>
      <QueueID></QueueID>
      <WeightingConstant></WeightingConstant>
      <Ecn></Ecn>
    </Queue>
  </QueueParameter>
</WRED>
```

## Table description

Item	Description
Feature name	WRED
Table name	QueueParameter
Table type	Multi-instance table
Row name	Queue
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	WRED table name	Index	String. Length: 1 to 32 characters.	N/A
QueueID	Queue ID	Index	Unsigned integer.	The value range for this column depends on the device model.
WeightingConstant	Queue length weighting constant	N/A	Unsigned integer.	The value range for this column depends on the device model.
Ecn	Enable explicit congestion notification	N/A	Boolean: <ul style="list-style-type: none"><li><b>true</b>—Enable.</li><li><b>false</b>—Disable (default).</li></ul>	N/A

## WRED/IfApplyTable

This table contains information about WRED table applications.

## XML structure

```
<WRED>
  <IfApplyTable>
    <Table>
      <IfIndex></IfIndex>
      <Name></Name>
    </Table>
  </IfApplyTable>
</WRED>
```

## Table description

Item	Description
Feature name	WRED
Table name	IfApplyTable
Table type	Multi-instance table
Row name	Table
Restrictions	None
Support for row creation and deletion	Yes

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Name	WRED table name	N/A	String. Length: 1 to 32 characters.	N/A



# Contents

WRED .....	1
WRED/DefDropParameter .....	1
XML structure .....	1
Table description .....	1
Columns .....	1
WRED/DefWeightingConstant .....	2
XML structure .....	2
Table description .....	2
Columns .....	2
WRED/Tables .....	2
XML structure .....	2
Table description .....	3
Columns .....	3
WRED/DropParameter .....	3
XML structure .....	3
Table description .....	3
Columns .....	4
WRED/QueueParameter .....	4
XML structure .....	4
Table description .....	4
Columns .....	5
WRED/IfApplyTable .....	5
XML structure .....	5
Table description .....	5
Columns .....	6

# WRED

## WRED/DefDropParameter

This table contains information about default WRED drop parameters.

### XML structure

```
<WRED>
  <DefDropParameter>
    <Parameter>
      <QueueID></QueueID>
      <DropLevel></DropLevel>
      <LowLimit></LowLimit>
      <HighLimit></HighLimit>
      <DiscardProbability></DiscardProbability>
    </Parameter>
  </DefDropParameter>
</WRED>
```

### Table description

Item	Description
Feature name	WRED
Table name	DefDropParameter
Table type	Multi-instance table
Row name	Parameter
Restrictions	None

### Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
QueueID	Queue ID	Index	Unsigned integer.	N/A
DropLevel	Packet drop level	Index	Unsigned integer.	N/A
LowLimit	Queue length low limit	N/A	Unsigned integer.	N/A
HighLimit	Queue length high limit	N/A	Unsigned integer.	N/A
DiscardProbability	Packet discard probability	N/A	Unsigned integer.	N/A

# WRED/DefWeightingConstant

This table contains information about the default WRED weighting constant parameter.

## XML structure

```
<WRED>
  <DefWeightingConstant>
    <Queue>
      <QueueID></QueueID>
      <WeightingConstant></WeightingConstant>
    </Queue>
  </DefWeightingConstant>
</WRED>
```

## Table description

Item	Description
Feature name	WRED
Table name	DefWeightingConstant
Table type	Multi-instance table
Row name	Queue
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
QueueID	Queue ID	Index	Unsigned integer.	N/A
WeightingConstant	Queue length weighting constant	N/A	Unsigned integer.	N/A

## WRED/Tables

This table contains information about WRED tables.

## XML structure

```
<WRED>
  <Tables>
    <Table>
      <Name></Name>
```

```

    </Table>
  </Tables>
</WRED>

```

## Table description

Item	Description
Feature name	WRED
Table name	Tables
Table type	Multi-instance table
Row name	Table
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	WRED table name	Index	String. Length: 1 to 32 characters.	N/A

## WRED/DropParameter

This table contains information about WRED drop parameters.

## XML structure

```

<WRED>
  <DropParameter>
    <Parameter>
      <Name></Name>
      <QueueID></QueueID>
      <DropLevel></DropLevel>
      <LowLimit></LowLimit>
      <HighLimit></HighLimit>
      <DiscardProbability></DiscardProbability>
    </Parameter>
  </DropParameter>
</WRED>

```

## Table description

Item	Description
Feature name	WRED

Table name	DropParameter
Table type	Multi-instance table
Row name	Parameter
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	WRED table name	Index	String. Length: 1 to 32 characters.	N/A
QueueID	Queue ID	Index	Unsigned integer.	N/A
DropLevel	Packet drop level	Index	Unsigned integer.	N/A
LowLimit	Queue length low limit	N/A	Unsigned integer.	N/A
HighLimit	Queue length high limit	N/A	Unsigned integer.	N/A
DiscardProbability	Packet discard probability	N/A	Unsigned integer.	N/A

## WRED/QueueParameter

This table contains information about WRED queue parameters.

## XML structure

```

<WRED>
  <QueueParameter>
    <Queue>
      <Name></Name>
      <QueueID></QueueID>
      <WeightingConstant></WeightingConstant>
      <Ecn></Ecn>
    </Queue>
  </QueueParameter>
</WRED>

```

## Table description

Item	Description
Feature name	WRED
Table name	QueueParameter

Table type	Multi-instance table
Row name	Queue
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	WRED table name	Index	String. Length: 1 to 32 characters.	N/A
QueueID	Queue ID	Index	Unsigned integer.	N/A
WeightingConstant	Queue length weighting constant	N/A	Unsigned integer.	N/A
Ecn	Enable explicit congestion notification	N/A	Boolean: <ul style="list-style-type: none"> <li><b>true</b>—Enable.</li> <li><b>false</b>—Disable.</li> </ul>	N/A

## WRED/IfApplyTable

This table contains information about WRED table applications.

## XML structure

```

<WRED>
  <IfApplyTable>
    <Table>
      <IfIndex></IfIndex>
      <Name></Name>
    </Table>
  </IfApplyTable>
</WRED>

```

## Table description

Item	Description
Feature name	WRED
Table name	IfApplyTable
Table type	Multi-instance table
Row name	Table
Restrictions	None

## Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
IfIndex	Interface index	Index	Unsigned integer.	For relevant information, see the XSD document of your product. For information about IfIndex, see "Appendix" in Ifmgr NETCONF XML API Configuration Reference.
Name	WRED table name	N/A	String. Length: 1 to 32 characters.	N/A