

Comware V7 STP NETCONF XML API Configuration Reference

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STP

STP/Base

This table contains information about global STP functions.

XML structure

```
<STP>
  <Base>
    <Enable></Enable>
    <BPDUProtect></BPDUProtect>
    <Mode></Mode>
    <TcProtect></TcProtect>
    <TcThreshold></TcThreshold>
    <PathCostMethod></PathCostMethod>
  </Base>
</STP>
```

Table description

Item	Description
Feature name	STP
Table name	Base
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global functions.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Global STP feature	N/A	Boolean: • true—Enables STP. • false—Disables STP.
BPDUProtect	Global BPDU guard function	N/A	Boolean: • true—Enables BPDU guard. • false—Disables BPDU guard (default).

Column name	Column description	Column type	Data type and restrictions
Mode	Working mode of the spanning tree protocol	N/A	Enumeration: • 0—STP. • 2—RSTP. • 3—MSTP(default). • 4—PVST.
TcProtect	Global TC-BPDU guard function	N/A	Boolean: • true—Enables TC guard (default). • false—Disables TC guard.
Tcthreshold	Maximum number of TC-BPDUs that can be processed within an interval	N/A	Unsigned integer. • Value range:1-255. Default: 6.
PathCostMethod	Path cost calculation method	N/A	Enumeration: • 0—Legacy (default). • 1—802.1D-1998. • 2—802.1t.

STP/Region

This table contains information about MST region configuration.

XML structure

```

<STP>
  <Region>
    <Name></Name>
    <RevisionLevel></RevisionLevel>
  </Region>
</STP>

```

Table description

Item	Description
Feature name	STP
Table name	Region
Table type	Single-instance table
Row name	None
Restrictions	This table supports only global functions.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
Name	MST region name	N/A	String. Length: 1 to 32 characters. • Default: Hex-string of the bridge MAC address.	When a new region name is configured, the active region configuration will be changed.
RevisionLevel	Revision level of the MST region	N/A	Unsigned integer • Value range: 0-65535. • Default: 0.	When a new revision level is configured, the active region configuration will be changed.

STP/StiVlans

This table contains information about the VLAN allocation of an MST region.

XML structure

```
<STP>
  <StiVlans>
    <StiVlan>
      <StiId></StiId>
      <VlanList></VlanList>
    </StiVlan>
  </StiVlans>
</STP>
```

Table description

Item	Description
Feature name	STP
Table name	StiVlans
Table type	Multi-instance table
Row name	StiVlan
Restrictions	All rows should be wrapped within a whole configuration message, following the region table above.
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StiId	Spanning tree index	Index	Unsigned integer. • Value range: 1-4094.	
VlanList	List of VLANs allocated to the MST instance	N/A	Number string. It is a comma-separated list of VLAN items. • The string must not end with a comma or hyphen, or include any whitespace characters. • Default: All VLANs are allocated to spanning tree instance 0(CIST).	• Each VLAN can only be allocated to one MST instance . • Each item can be an individual VLAN ID or a VLAN ID range. A hyphen (-) indicates a VLAN range from the start VLAN ID to end VLAN ID. For example: 1, 2, 3, 5-8, and 10-20. • VLAN ID range: 1-4094

STP/STIs

This table contains information about STP functions for a spanning tree.

XML structure

```
<STP>
  <STIs>
    <STI>
      <StiId></StiId>
      <Priority></Priority>
    </STI>
  </STIs>
</STP>
```

Table description

Item	Description
Feature name	STP
Table name	STIs
Table type	Multi-instance table
Row name	STI
Restrictions	No

Item	Description
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions
Stild	Spanning tree index	Index	Unsigned integer. Value range: 0-4094.
Priority	Bridge priority of the spanning tree	N/A	Unsigned integer. Value range: 0-61440, in increments of 4096 (as in 0, 4096, 8192). Default: 32768.

STP/Interfaces

This table contains information about interface-level STP functions.

XML structure

```

<STP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <EdgedPort></EdgedPort>
      <PointToPoint></PointToPoint>
      <RootProtect></RootProtect>
      <LoopProtect></LoopProtect>
    </Interface>
  </Interfaces>
</STP>

```

Table description

Item	Description
Feature name	STP
Table name	Interfaces
Table type	Multi-instance table
Row name	Interface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.
Support for row creation and deletion	No

Columns

Column name	Column description	Column type	Data type and restrictions
IfIndex	Interface index	Index	Unsigned integer. Length: 32 bits.
Enable	Interface STP feature	N/A	Boolean: true—Enables STP (default). false—Disables STP.
EdgedPort	Interface edge port configuration	N/A	Boolean: true—Configures the interface as an edge port. It should not be configured while the loop protection is enabled. false—Configures the interface as a non-edge port (default).
PointToPoint	Interface point-to-point configuration status	N/A	Enumeration: 1—Force-true. 2—Force-false. 3—Auto (default).
LoopProtect	Interface loop guard function	N/A	Boolean: true—Enables loop protection. It should not be configured whether the root protection or edge-port is enabled. false—Disables loop protection (default).
RootProtect	Interface root guard function	N/A	Boolean: true—Enables root protection. It should not be configured while the loop protection is enabled. false—Disables root protection (default).

STP/StiInterfaces

This table contains information about interface-level STP functions for a spanning tree.

XML structure

```

<STP>
  <StiInterfaces>
    <StiInterface>
      <StiId></StiId>
      <IfIndex></IfIndex>
    
```



```

    <Priority></Priority>
    <PathCost></PathCost>
  </StiInterface>
</StiInterfaces>
</STP>

```

Table description

Item	Description
Feature name	STP
Table name	StiInterfaces
Table type	Multi-instance table
Row name	StiInterface
Restrictions	This table supports only Layer 2 Ethernet interfaces and Layer 2 aggregate interfaces.
Support for row creation and deletion	Yes

Columns

Column name	Column description	Column type	Data type and restrictions
Stild	Spanning tree index	Index	Unsigned integer. Value range: 0-4094.
IfIndex	Interface index	Index	Unsigned integer.
Priority	Spanning tree priority of an interface	N/A	Unsigned integer. Value range: 0-240, in increments of 16 (as in 0, 16, 32). Default: 128.
PathCost	Spanning tree path cost of an interface	N/A	Unsigned integer. Legacy value range: 0-200000. 802.1D-1998 value range: 0-65535. 802.1t value range: 0-200000000. Default: 0. The actual cost will be automatically calculated according to the calculation method configured in STP Base table.