

Comware V7 STP NETCONF XML API Data Reference

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STP

STP/Base

This table contains global STP information.

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 configurations.

Columns

Column name	Column description	Column type	Data type and restrictions
Enable	Global STP feature	N/A	Boolean: • true—Enabled. • false—Disabled.
BPDUProtect	Global BPDU guard function	N/A	Boolean: • true—Enabled. • false—Disabled.

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. • 4—PVST.
TcProtect	Global TC-BPDU guard function	N/A	Boolean: • true—Enabled. • false—Disabled.
Tcthreshold	Maximum number of TC-BPDUs that can be processed within an interval	N/A	Unsigned integer. Value range: 1-255.
PathCostMethod	Path cost calculation method	N/A	Enumeration: • 0—Legacy. • 1—802.1D-1998. • 2—802.1t.

STP/Region

This table contains MST region configuration information.

XML structure

```

<STP>
  <Region>
    <Name></Name>
    <RevisionLevel></RevisionLevel>
    <FormatSelector></FormatSelector>
    <ConfigDigest></ConfigDigest>
  </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 configurations.

Columns

Column name	Column description	Column type	Data type and restrictions
Name	The active MST region name	N/A	String. Length: 1 to 32 characters.
RevisionLevel	The active revision level of the MST region	N/A	Unsigned integer • Value range: 0-65535.
FormatSelector	The configuration Identifier Format selector	N/A	Enumeration: 0 —Indicates the format specified in 802.1Q.
ConfigDigest	Digest of VLAN-to-instance mappings for the MST region	N/A	Octet string. Length: 34 octets.

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	No

Columns

Column name	Column description	Column type	Data type and restrictions	Remarks
StiId	Spanning tree index	Index	Unsigned integer. Value range: 0-4094.	
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.	- 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 the 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

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

STP/Interfaces

This table contains interface-level STP information.

XML structure

```
<STP>
  <Interfaces>
    <Interface>
      <IfIndex></IfIndex>
      <Enable></Enable>
      <EdgedPort></EdgedPort>
      <OperEdgedPort></OperEdgedPort>
      <PointToPoint></PointToPoint>
      <OperPointToPoint></OperPointToPoint>
      <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.

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—Enabled. • false—Disabled.
EdgedPort	Interface edge port configuration	N/A	Boolean: • true—Edge port. • false—Non-edge port.
OperEdgedPort	Interface operational edge port status	N/A	Boolean: • true—Edge port. • false—Non-edge port.
PointToPoint	Interface point-to-point configuration status	N/A	Enumeration: • 1—Force-true. • 2—Force-false. • 3—Auto.
OperPointToPoint	Interface operational point-to-point status	N/A	Boolean: • true—Point-to-Point. • false—Not point-to-point.
LoopProtect	Interface loop guard function	N/A	Boolean: • true—Enabled. • false—Disabled.
RootProtect	Interface root guard function	N/A	Boolean: • true—Enabled. • false—Disabled.

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>
      <Role></Role>
      <State></State>
```



```

    <ProtectBlock></ProtectBlock>
  </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.

Columns

Column name	Column description	Column type	Data type and restrictions
StId	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
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.
Role	Port role of a spanning tree	N/A	Enumeration: • 0: Disabled port. • 1: Alternate port. • 2: Backup port. • 3: Root port. • 4: Designated port. • 5: Master port.
State	Port state of a spanning tree	N/A	Enumeration: • 1: Discarding. • 2: Learning. • 3: Forwarding.

Column name	Column description	Column type	Data type and restrictions
ProtectBlock	Reason for blocking a protection function	N/A	Unsigned integer. • 0x01: Root protect. • 0x02: Loop protect. • 0x04: Loopback protect. • 0x08: Dispute protect. • 0x10: Port type inconsistent. • 0x20: PVID inconsistent.