Spanning Tree Related Enhancements

An Ethernet network functions properly if there is only one active path between two stations. Spanning Tree Protocol (STP) is a link management protocol that provides path redundancy while preventing undesirable loops in the network.

Multiple active paths between stations cause loops in the network. If a loop exists in the network topology, it might duplicate messages.

To provide path redundancy STP spans all switches in an extended network. STP forces certain redundant data paths into a standby (blocked) state.

STP operation is transparent to end stations. These end stations are unaware whether they are connected to a single LAN segment or to a switched LAN of multiple segments.

STP Filters in Switch Cloud View

Spanning Tree Filter is available in Switch Cloud View in Topology Services. Switch Cloud View displays the Layer 2 devices between Layer 3 devices in your network.

Spanning Tree Filter was available only in VTP-VLAN view. The STP details such as root for the VLAN were not displayed in VTP-VLAN view since they could be in a different VTP domain.

Spanning Tree information in a switch cloud provides a better picture of the Spanning Tree than displaying Spanning Tree information in the VTP domain map. Sometimes, the Spanning Tree root might not be part of VTP domain. The availability of STP Filters on Switch Cloud View resolves this problem.

To view Spanning Tree details:

Step 1 Invoke Switch Cloud Map View from Topology Services.

Step 2 Click **Spanning Tree Filter**.

Step 3 Enable VLAN checkbox.

Step 4 Select the VLAN.

If you select the filter, it displays the list of VLANs that are applicable to all switches in the switch cloud, in a popup dialog box.

The following information is provided for VLAN in the Topology Map for VLAN:

- Port states (forwarding or blocking) of Bridges
- Highlighted Root Bridge.