

## Configuring VPLS Root Protection Topology Change Actions to Control Global Spanning Tree Behavior

---

To configure VPLS root protection topology change actions to control global spanning tree behavior:

1. Enable configuration of the spanning-tree protocol:

```
[edit]
user@host# edit protocols (mstp | rstp | vstp)
```

2. (Optional) Change the priority of the backup bridge in a VPLS multihomed Layer 2 ring with MPLS infrastructure:

```
[edit protocols (rstp | mstp | vstp)]
user@host# set backup-bridge-priority vpls-ring-backup-bridge-priority
```

3. (Optional) Change number of seconds to hold before switching to the primary priority when the first core domain comes up:

```
[edit protocols (rstp | mstp | vstp)]
user@host# set priority-hold-time seconds
```

4. Configure the system identifier for bridges in the ring:

```
[edit protocols (rstp | mstp | vstp)]
user@host# set system-id system-id-value bridge-host-ip-address(es)
```

The *system-id-value* is configured in the format *nnnnnn:nnnnnn*, where *n* = any digit from 0 to 9.

Each *bridge-host-ip-address* is a valid host IP address with a /32 mask.



**NOTE:** There are no default values for the system identifier or host IP addresses.

---

5. Configure bridges to flush the MAC address cache (of the MAC addresses learned when other interfaces ports were blocked) when the spanning-tree topology changes:

```
[edit protocols (rstp | mstp | vstp)]
user@host# set vpls-flush-on-topology-change
```

6. Verify the configuration of VPLS root protection topology change actions to control global spanning tree behavior:

```
[edit]
protocols {
  (mstp | rstp | vstp) {
    backup-bridge-priority priority; # Default is 32,768.
    priority-hold-time seconds; # Default is 2 seconds.
    system-id system-id-value {
      ip-address;
    }
    vpls-flush-on-topology-change;
  }
}
```

}  
}

- Related Topics**
- VPLS Multihomed Layer 2 Ring and MPLS Infrastructure Overview
  - VPLS Multihomed Layer 2 Ring and MPLS Infrastructure Topology
  - Configuring VPLS Root Protection Topology Change Actions to Control VLAN Spanning Tree Behavior
  - Example: Configuring VPLS Root Topology Change Actions

---

Published: 2010-05-11