MSTP for ENCS 5400 8-Port Switch

Multiple Spanning Trees Protocol (MSTP) is introduced to the 8-port switch on ENCS 5400. MSTP enables multiple VLANs to be mapped to the same spanning tree instance, which reduces the number of spanning-tree instances needed to support a large number of VLANs.

ENCS 5400 switch supports 15 instances. Each spanning tree instance is identified by an instance ID from 1 to 15.

To enable MST:

```
configure terminal
switch
    spanning-tree mode mst
    commit
```

To configure VLAN-to-instance mapping:

```
configure terminal
switch
    spanning-tree mst configuration
        instance 1 vlan 15
        name mst_test
        revision 2
        commit
```

To configure the switch priority:

```
configure terminal
switch
    spanning-tree mst 1 priority 0
    commit
```

To configure the path cost per interface's mst instance:

```
configure terminal
switch
    interface gigabitEthernet 1/1
    spanning-tree mst 1 port-priority 96
    spanning-tree mst 1 cost 2
    commit
```

To configure the maximum hop count for all MST instances:

```
configure terminal
```

```
switch
    spanning-tree mst max-hops 10
    commit
```

Use the **show switch spanning-tree mstp configuration global** command to verify the MSTP configuration.

```
nfvis# show switch spanning-tree mstp configuration global
spanning-tree mstp configuration global name transit-net
spanning-tree mstp configuration global revision 2
spanning-tree mstp configuration global max-hops 20
```

Use the **show switch spanning-tree mstp configuration instance-list** command to verify the MSTP instance configuration.

```
nfvis# show switch spanning-tree mstp configuration instance-list
INSTANCE   VLANS MAPPED       STATE
------------------------------------
0          1,2350-2353,2363   enabled
1          15                 enabled
```

To display the global information for MSTP instance 2 use **show switch spanning-tree mstp summary instance-global-info** command.

To display interface information for MSTP instance 2 use **show switch spanning-tree mstp summary instance-interface-info 2** command