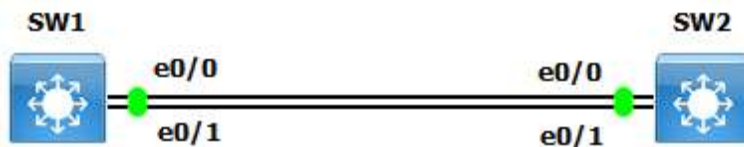


## MST:

- o MST is term which is stands for Multiple Spanning Tree.
- o IEEE 802.1s define multiple Spanning Tree implementation.
- o Common Spanning Tree has a single instance for all VLANs.
- o It is concept of mapping one or more VLANs to single STP instance.
- o For Example, the 1000 VLANs can be mapped to two MST instances.
- o Rather than to maintaining and running 1000 separate Spanning Trees.
- o Each Cisco Switch needs to maintain only two Spanning Trees only.
- o Reducing need for switch resources also converges faster than PVRST+.
- o Multiple Spanning Tree (MST) works with the concept of the regions.
- o A region is defined by the name given in MST configuration mode.
- o Region is group of devices configured together to form logical region.
- o It is similar to administration domain collection of VLANs have same config.
- o Collection of VLANs managed under the same MST umbrella is regions.
- o It have same attributes Configuration Name, Revision Number and Instance.
- o MST configuration name identify MST region & revision number any number.
- o MST revision number is locally significant number signify the MST configuration.
- o MST name, instance and revision number must match to build MST topology.



### SW1 Configuration

```
SW1(config)#interface range e0/0-1
SW1(config-if-range)#switchport trunk encapsulation dot1q
SW1(config-if-range)#switchport mode trunk
SW1(config-if-range)#no shutdown
SW1(config)#vlan 10,20,30,40,50,60
```

### SW2 Configuration

```
SW2(config)#interface range e0/0-1
SW2(config-if-range)#switchport trunk encapsulation dot1q
SW2(config-if-range)#switchport mode trunk
SW2(config-if-range)#no shutdown
SW2(config-if-range)#vlan 10,20,30,40,50,60
```

<b>SW1 MST Configuration</b>
SW1(config)#spanning-tree mode mst
SW1(config)#spanning-tree mst configuration
SW1(config-mst)#name test
SW1(config-mst)#revision 1
SW1(config-mst)#instance 2 vlan 10,20,30
SW1(config-mst)#instance 3 vlan 40,50,60
SW1#show spanning-tree mst
SW1#show spanning-tree mst configuration
SW1# show spanning-tree bridge
SW1#show spanning-tree root
SW1(config)#spanning-tree mst 2 priority 0
SW1(config)#spanning-tree mst 3 priority 4096
<b>SW2 MST Configuration</b>
SW2(config)#spanning-tree mode mst
SW2(config)#spanning-tree mst configuration
SW2(config-mst)#name test
SW2(config-mst)#revision 1
SW2(config-mst)#instance 2 vlan 10,20,30
SW2(config-mst)#instance 3 vlan 40,50,60
SW2#show spanning-tree mst
SW2#show spanning-tree mst configuration
SW2# show spanning-tree bridge
SW2#show spanning-tree root
SW2(config)#spanning-tree mst 3 priority 4096
SW2(config)#spanning-tree mst 2 priority 0

