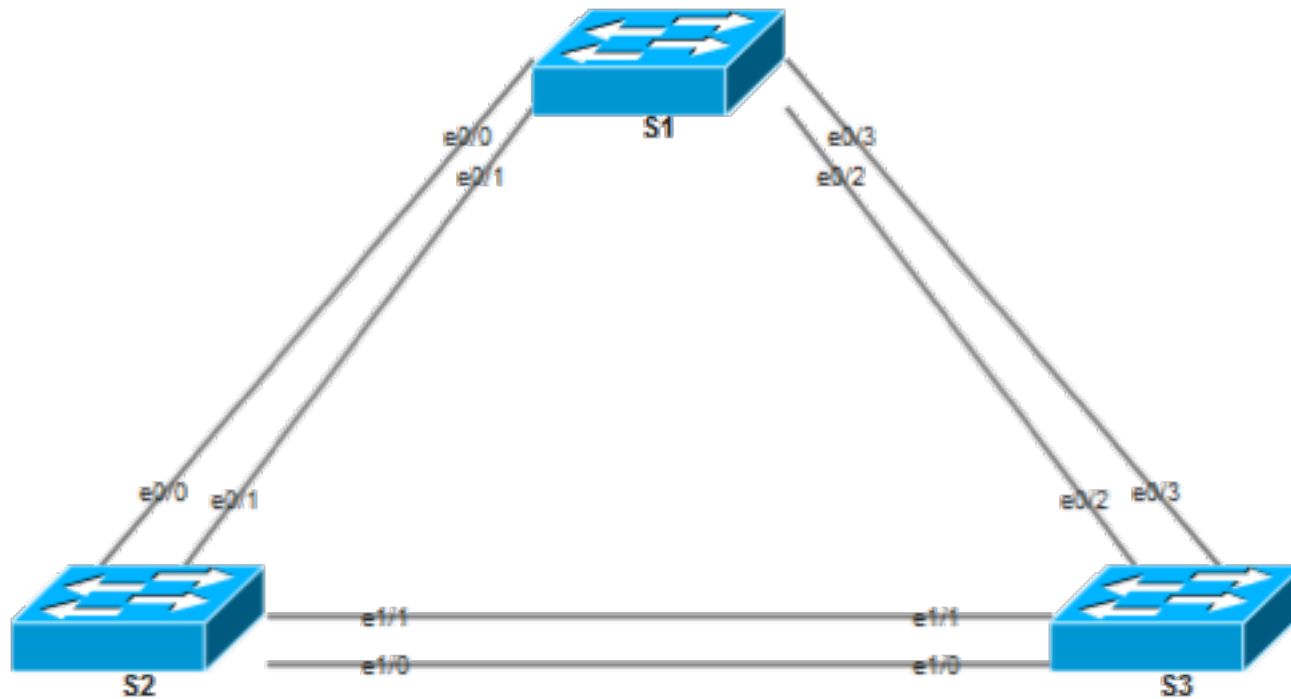


PVRSST/RSTP LAB

Lab Activity

Topology



Goals

- Make sure that all switches run PVRST/RSTP.
- Create VLAN 10, 20 and 30 on all switches.
- Make sure S1 is the root bridge for VLAN 10. You are not allowed to use priority command.
- Make sure S2 is the root bridge for VLAN 20. You are not allowed to use root primary command.
- Make sure S3 is the root bridge for VLAN 30.
- Ensure S2 prefers the path through S3 to reach the root bridge in VLAN 10. You are only allowed to change the cost.
- Ensure S3 prefers e0/3 to reach the root bridge in VLAN 10. You are only allowed to change the port priority.
- Ensure e1/3 interface on all switches is seen as edge port for PVRST/RSTP.

Config

- Check: show vlan-switch
- Create VLAN
 - vlan <number>, <number>.....
- Configure trunk
 - switchport mode trunk
 - sh int trunk
- Verify
 - show spanning-tree vlan <number>
 - show spanning-tree vlan <number> detail

Sample Configuration: S1

```
spanning-tree mode rapid-pvst
```

```
vlan 10
```

```
vlan 20
```

```
vlan 30
```

```
int range e0/0 - 3
```

```
    switchport trunk encapsulation dot1q
```

```
    switchport mode trunk
```

```
Spanning-tree vlan 10 root primary
```

```
int e0/2
```

```
    spanning-tree vlan 10 port-priority 192
```

Sample Configuration: S2

```
Spanning-tree vlan 20 priority 8192
```

```
int e0/0
```

```
    spanning-tree vlan 10 cost 300
```

```
int e0/1
```

```
    spanning-tree vlan 10 cost 300
```

Sample Configuration: S3

```
int e1/3  
    spanning-tree portfast
```