

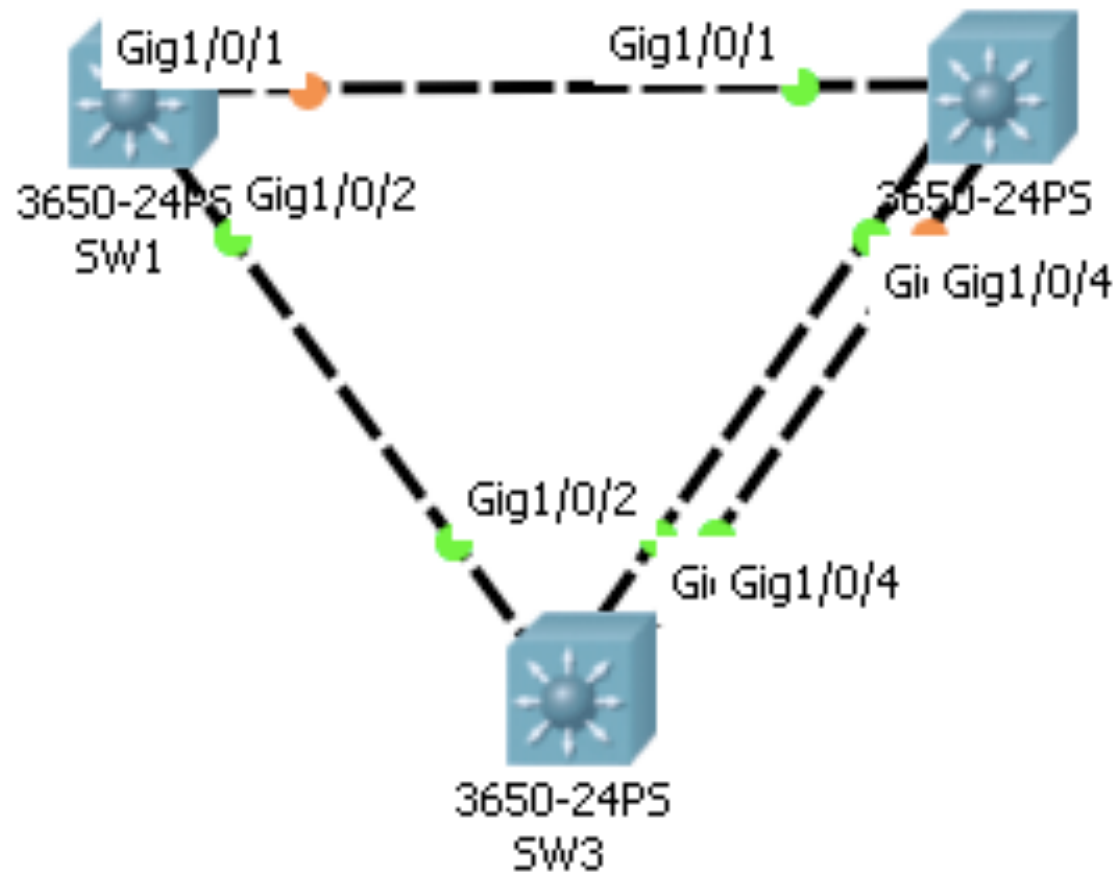
# RSTP/PVRST LAB

## Lab Activity



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# Topology



# Task 0: Troubleshooting Basics

# Verification

- show vlan brief
- show interface trunk
- show spanning-tree vlan <number>
- show spanning-tree brief
- show spanning-tree

# Task 1: Basic Configuration

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- Configure trunk ports.

## Example:

```
int range gi1/0/1-2
  switchport trunk encapsulation dot1q
  switchport mode trunk
```

- Create VLAN 10 and 20 on all switches.

## Example:

```
vlan 10
vlan 20
```

- Configure RSTP/PVRST on all switches.

## Example:

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

## Task 2: RSTP Configuration

# Task 2: RSTP Configuration

- Who is the root bridge for VLAN 10 and why?

```
show spanning-tree brief
```

```
show spanning-tree vlan 10
```

- For VLAN 10:

- Make SW1 as the root bridge and SW2 as backup. Do not use the **priority** command.

```
SW1 (config) # spanning-tree vlan 10  
root primary
```

- For VLAN 20:

- Make SW2 as the root bridge and SW1 as backup. Do not use the **spanning-tree root** command.

```
SW2 (config) # spanning-tree vlan 20  
priority 8192
```



## Task 3: RSTP Tuning

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- **(Won't work in Packet Tracer)** Configure SW3 so that SW3's Gi1/0/2 is not used to reach the root bridge in VLAN 10 without shutdown the interfaces. Do not change the **port-priority** of any interface.

```
SW3(config)# int gi1/0/2
```

```
SW3(config-if)# spanning-tree vlan 10 cost 100
```

- Configure SW2 so that Gi1/0/4 is used to reach the root bridge in VLAN 20. Do not change the **cost** of any interface.

```
SW2(config)# int gi1/0/4
```

```
SW2(config-if)# spanning-tree vlan 20 port-priority 64
```

# Question?