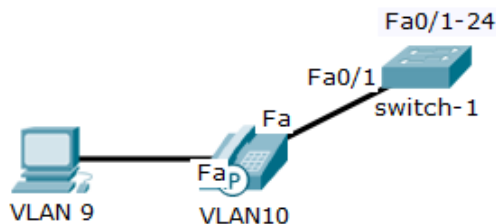


# IP Phone QoS

## Lab Summary

Enable switch ports with trusted state for IP phone voice traffic with Class of Service (CoS) marking.

**Figure 1** Lab Topology



## Lab Configuration

Start Packet Tracer File: **IP Phone QoS**

Click on the *switch-1* icon and select the *CLI* folder. Hit the <enter> key for user mode prompt (>).

Step 1: Enter global configuration mode

```
switch-1> enable  
Password: cisco  
switch-1# configure terminal
```

Step 2: Enable QoS on switch-1.

```
switch-1(config)# mls qos
```

Step 3: Configure all interfaces as access ports and assign to data VLAN 9.

```
switch-1(config)# interface range fastethernet0/1 - 24  
switch-1(config-if)# switchport mode access  
switch-1(config-if)# switchport access vlan 9
```

Step 4: Configure voice VLAN on all switch interfaces and assign VLAN 10.

```
switch-1(config-if)# switchport voice vlan 10
```

Step 5: Enable trust state to trust voice traffic on all switch interfaces.

```
switch-1(config-if)# mls qos trust cos  
switch-1(config-if)# end  
switch-1# copy running-config startup-config
```

### Verify Lab:

```
switch-1# show mls qos interface fastethernet0/1
```

```
FastEthernet0/1
```

```
trust state: trust cos
```

```
trusted mode: trust cos
```

```
trust enabled flag: ena
```

```
COS override: dis
```

```
default COS: 0
```

```
DSCP Mutation Map: Default DSCP Mutation Map
```

```
Trust device: none
```

```
qos mode: port-based
```

```
switch-1# show cdp neighbor detail
```

```
Device ID: Switch
```

```
Entry address(es):
```

```
Platform: cisco 7960, Capabilities: Host Phone
```

```
Interface: FastEthernet0/1, Port ID (outgoing port): Switch
```

```
Holdtime: 156
```

```
Version :
```

```
P00303020214
```

```
advertisement version: 2
```

```
Duplex: full
```

### Lab Notes:

PortFast is automatically enabled when voice VLAN is configured on a switch interface.