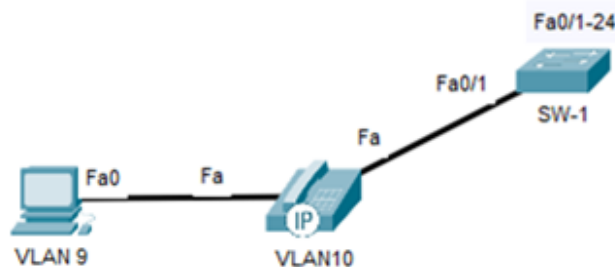


# IP Phone QoS

## Lab Summary

Enable switch ports with data and voice VLAN for IP phones. Enable QoS globally and configure trusted state for voice traffic with class of service (CoS) marking.

**Figure 1** Lab Topology



## Lab Configuration

Start Packet Tracer File: **ip phone qos.pkt**

Click on *SW-1* icon and select *CLI* folder.

Step 1: Enter global configuration mode

```
SW-1> enable  
SW-1# configure terminal
```

Step 2: Enable QoS on SW-1.

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

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

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

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

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

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

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

## Step 6: Verify Lab

SW-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

SW-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.