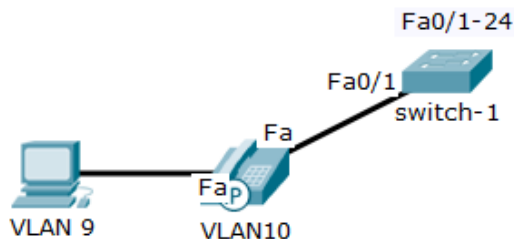# Voice VLAN

Lab Summary

Assign data VLAN and voice VLAN to a range of switch ports for IP phone connectivity and verify.

Figure 1 Lab Topology

Lab Configuration

Start Packet Tracer File: **Voice VLAN**

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: **cisconet**
> switch-1# **configure terminal**

Step 2: Configure interface range Fa0/1-24 as access ports on switch-1 and assign data VLAN 9.

> switch-1(config)# **vlan 9**
> switch-1(config-vlan)# **name data**
> switch-1(config-vlan)# **vlan 10**
> switch-1(config-vlan)# **name voice**
> switch-1(config)# **exit**
> switch-1(config)# **interface range fastethernet0/1 - 24**
> switch-1(config-if)# **switchport mode access**
> switch-1(config-if)# **switchport access vlan 9**

Step 3: Enable voice VLAN on all access ports for IP phones and assign VLAN 10.

> switch-1(config-if)# **switchport voice vlan 10**
> switch-1(config-if)# **end**
> switch-1# **copy running-config startup-config**

Step 4: Verify all VLANs are created, operationally active and assigned to all Fast Ethernet switch ports.

    switch-1# **show running-config**
    switch-1# **show vlan brief**
    switch-1# **show vlan id 10**

switch-1# **show vlan brief**

VLAN	Name	Status	Ports
1	default	active	Gig0/1, Gig0/2
9	**data**	active	**Fa0/1, Fa0/2, Fa0/3, Fa0/4**
			Fa0/5, Fa0/6, Fa0/7, Fa0/8
			Fa0/9, Fa0/10, Fa0/11, Fa0/12
			Fa0/13, Fa0/14, Fa0/15, Fa0/16
			Fa0/17, Fa0/18, Fa0/19, Fa0/20
			Fa0/21, Fa0/22, Fa0/23, Fa0/24
10	**voice**	active	**Fa0/1, Fa0/2, Fa0/3, Fa0/4**
			Fa0/5, Fa0/6, Fa0/7, Fa0/8
			Fa0/9, Fa0/10, Fa0/11, Fa0/12
			Fa0/13, Fa0/14, Fa0/15, Fa0/16
			Fa0/17, Fa0/18, Fa0/19, Fa0/20
			Fa0/21, Fa0/22, Fa0/23, Fa0/24
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

<u>Lab Notes</u>

It is common practice to assign data and voice traffic to separate VLANs. The voice VLAN is the only exception where Cisco permits assigning more than one VLAN to an access port.