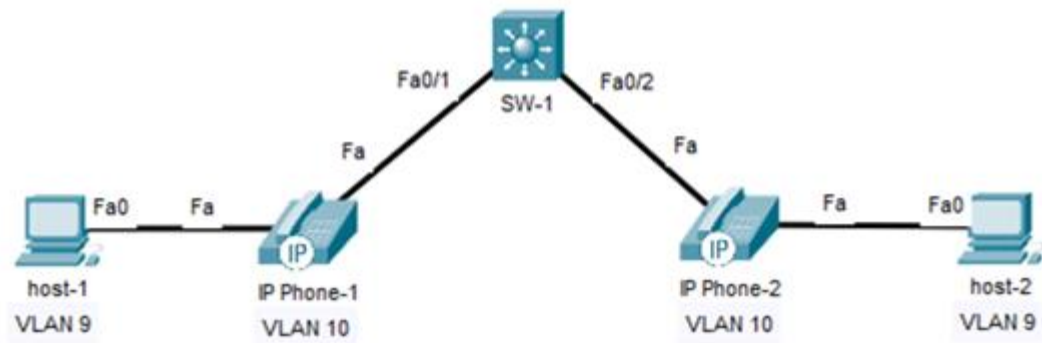


Power over Ethernet (PoE)

Lab Summary

Configure Power over Ethernet on all SW-1 interfaces with auto negotiation for IP phones and wireless access points.

Figure 1 Lab Topology



Lab Configuration

Start Packet Tracer File: **poe.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: Configure all switch ports for access mode and assign to data VLAN 9.

```
SW-1(config)# interface range fastethernet 0/1 - 24  
SW-1(config-if)# switchport mode access  
SW-1(config-if)# switchport access vlan 9
```

Step 3: Assign all switch ports to voice VLAN 10 for IP phones and enable PoE.

```
SW-1(config-if)# switchport voice vlan 10  
SW-1(config-if)# power inline auto  
SW-1(config)# end  
SW-1# copy running-config startup-config
```

Step 4: Verify Lab

Verify the trunk is operational, native VLAN is 999 and only VLAN 10,11,100 are allowed across the trunk.

SW-1# **show power inline**

Available: 370.0 (w) Used: 20.0 (w) Remaining: 350.0 (w)

Interface	Admin	Oper	Power	Device	Class	Max (Watts)
Fa0/1	auto	on	10.0	IP Phone 7960	3	15.4
Fa0/2	auto	on	10.0	IP Phone 7960	3	15.4
Fa0/3	auto	off	0.0	n/a	n/a	15.4
Fa0/4	auto	off	0.0	n/a	n/a	15.4
Fa0/5	auto	off	0.0	n/a	n/a	15.4
Fa0/6	auto	off	0.0	n/a	n/a	15.4
Fa0/7	auto	off	0.0	n/a	n/a	15.4
Fa0/8	auto	off	0.0	n/a	n/a	15.4
Fa0/9	auto	off	0.0	n/a	n/a	15.4

SW-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	