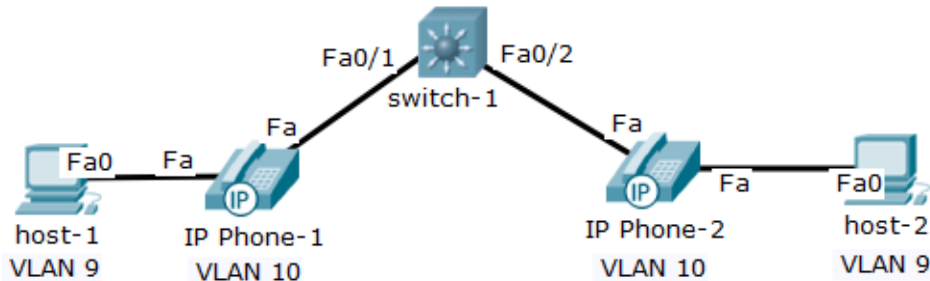


# Power over Ethernet (PoE)

## Lab Summary

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

**Figure 1** Lab Topology



## Lab Configuration

Start Packet Tracer File: **PoE**

### Switch-1

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 all switch ports for access mode and assign to data VLAN 9.

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

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

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

switch-1# **show power inline**

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

Interface	Admin	Oper	Power	Device	Class	Max (Watts)
-----	-----	-----	-----	-----	-----	-----
<b>Fa0/1</b>	<b>auto</b>	<b>on</b>	<b>10.0</b>	<b>IP Phone 7960</b>	<b>3</b>	<b>15.4</b>
<b>Fa0/2</b>	<b>auto</b>	<b>on</b>	<b>10.0</b>	<b>IP Phone 7960</b>	<b>3</b>	<b>15.4</b>
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

switch-1# **show vlan brief**

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