

Initially, I set up the IP addresses for each PC.

The screenshot shows the configuration window for PC6. The 'Desktop' tab is selected, displaying the following settings:

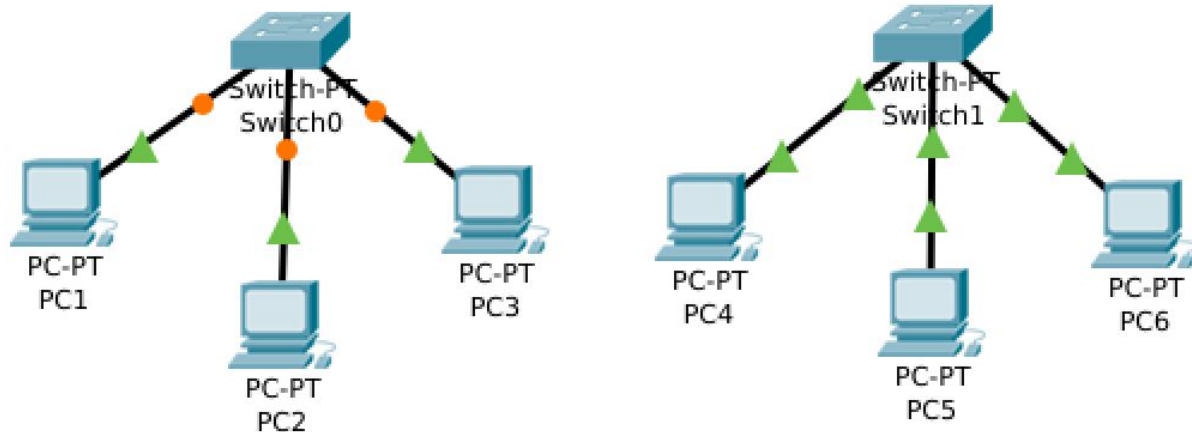
Field	Value
IP Address	192.168.30.60
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0

Below the Desktop tab, the IPv6 Configuration section shows the 'Static' radio button selected. The IPv6 Address field is empty, while the Link Local Address is set to FE80::201:64FF:FEAB:B247. The IPv6 Gateway and IPv6 DNS Server fields are also empty.

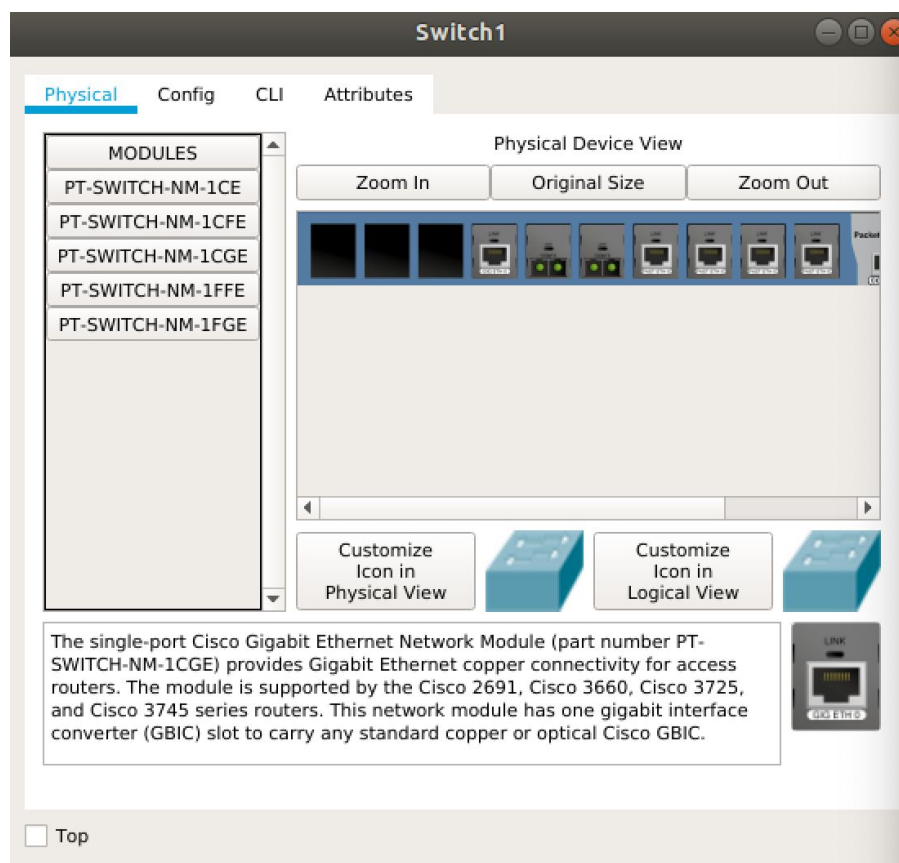
The 802.1X section has the 'Use 802.1X Security' checkbox unchecked. The Authentication dropdown is set to MD5. The Username and Password fields are empty.

At the bottom, there is a 'Top' button with an unchecked checkbox.

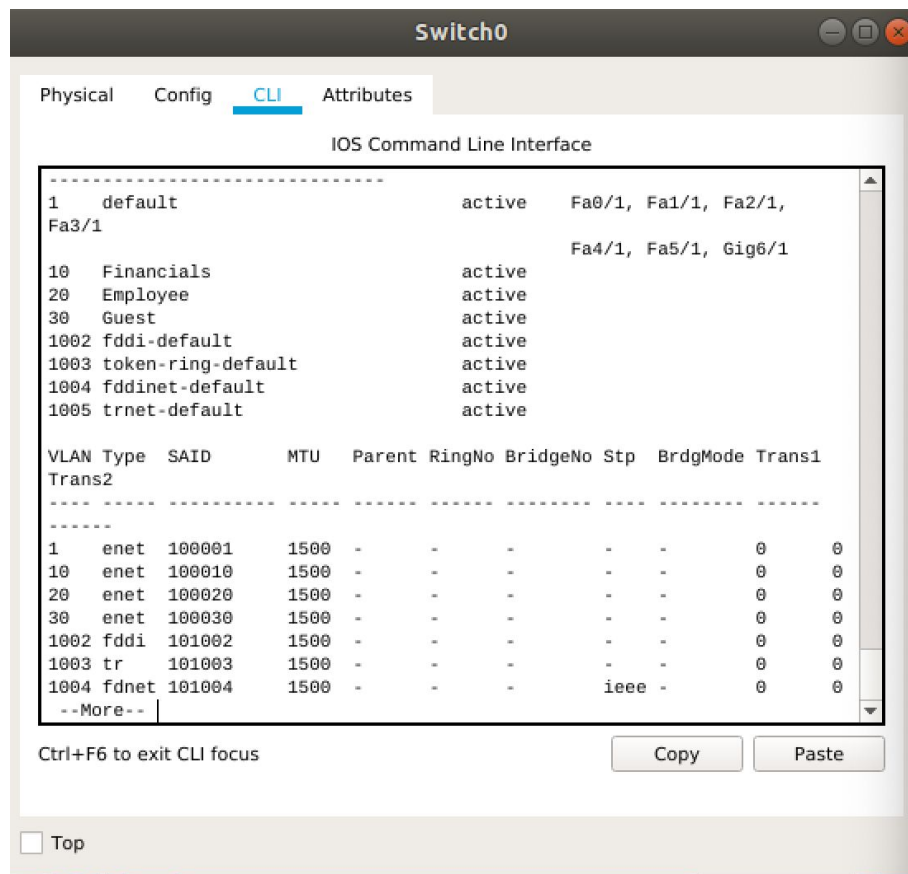
I insert a total of six PCs and two switches. I then connect three PCs to each switch, resulting in the figure below.



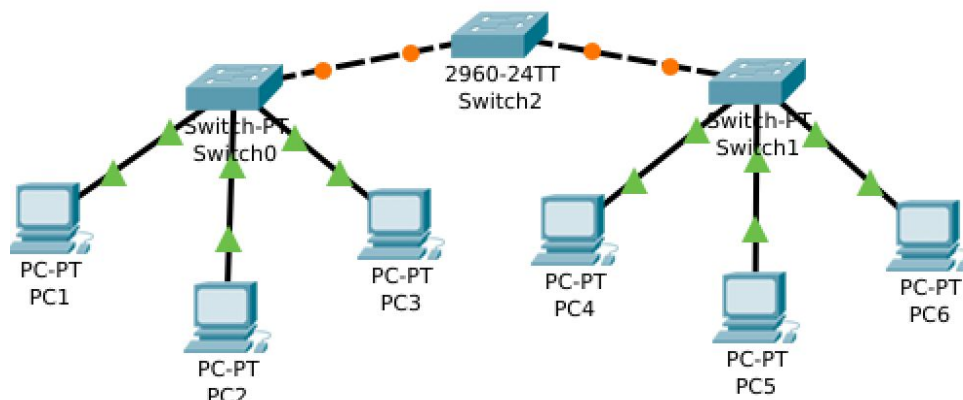
After that, I implemented a Gig port to each switch in order for the switches to connect to the 2960 switch.



Next, I use CLI on both switches to develop VLAN 10,20, and 30 which are Financials, Employee, and Guest. All the configurations are saved to the NVRAM.



I then implement the *copper cross-over* wire to connect the PT switches to the 2960 switches in the Giga port.



After that, I configure the already existing other two switches to the same VLANs as the 2960 switch.

```
exit
Switch(config)#interface FastEthernet1/1
Switch(config-if)#switchport access vlan 20
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed
state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed
state to up
|
```

I then repeat these steps for S2. Finally, I ping different combinations from PC1 to ensure network connectivity.

```
C:\>ping 192.168.10.40

Pinging 192.168.10.40 with 32 bytes of data:

Reply from 192.168.10.40: bytes=32 time<1ms TTL=128
Reply from 192.168.10.40: bytes=32 time<1ms TTL=128
Reply from 192.168.10.40: bytes=32 time<1ms TTL=128
Reply from 192.168.10.40: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.40:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

As a result, I obtain a successful connection with PC 0 to PC 3..