LAB-3

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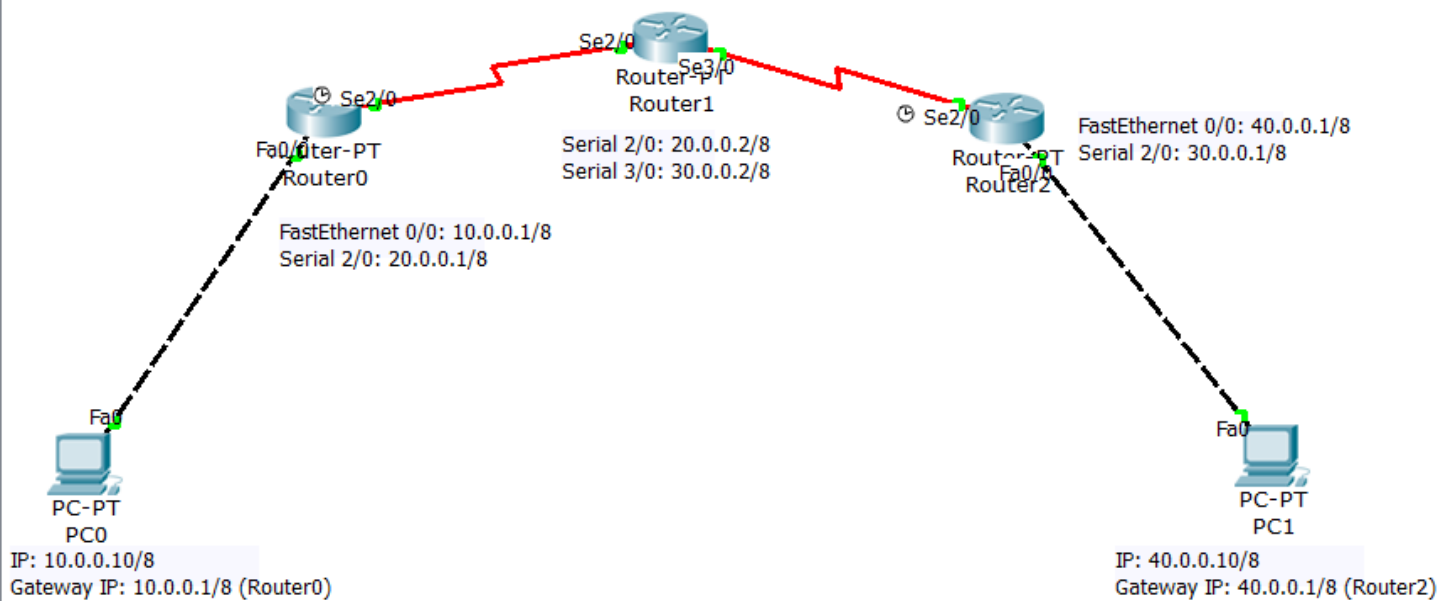LAB-3

Serial 2/0: 20.0.0.2/8
Serial 3/0: 30.0.0.2/8

Se2/0   Se 03/0
Router1

Fast Ethernet 0/0:
10.0.0.1/8
Serial 2/0:
20.0.0.1/8   Se 2/0

Fa 0/0
Router0
Se 2/0

Fast Ethernet 0/0:
40.0.0.10/8
Serial 2/0:
30.0.0.1/8   Se 2/0

Router 2   Se 2/0 Fa 0/0

Fa 0/0

FA 0/0

PCO

IP : 10.0.0.10/8
Gateway IP: 10.0.0.1/8
        (Router0)

PC1

IP: 40.0.0.10/8
Gateway IP: 40.0.0.1/8
        (Router 2)
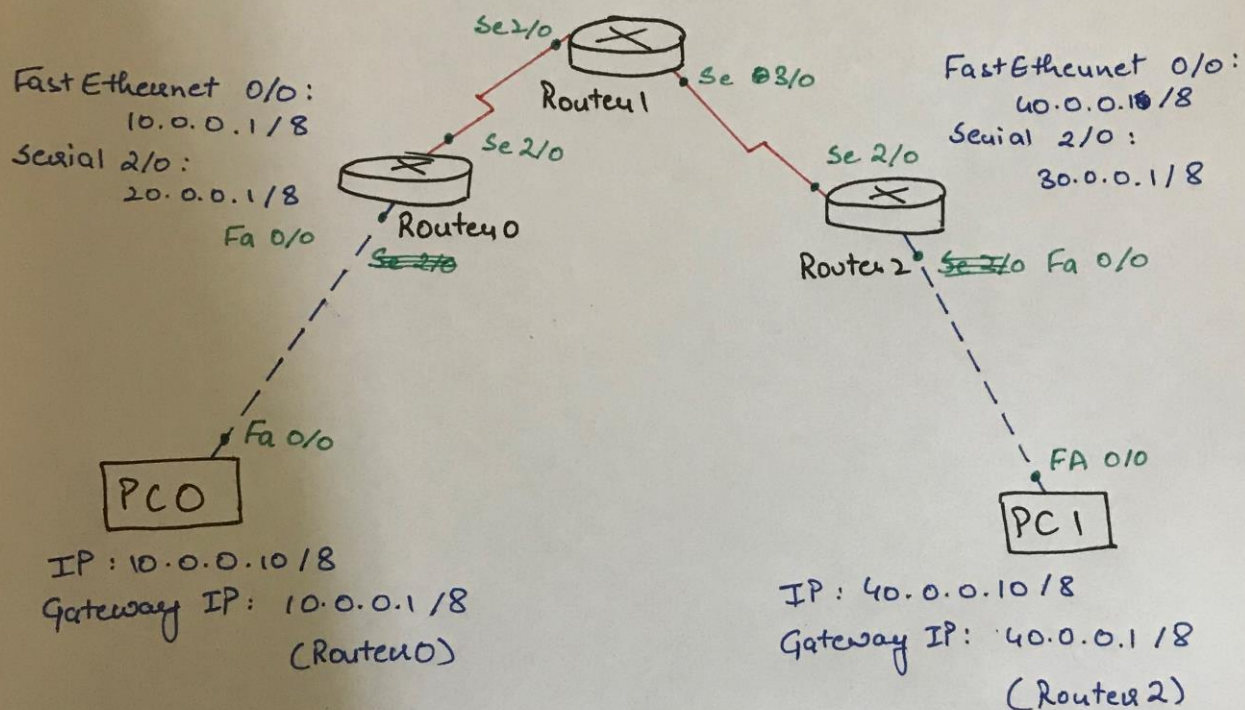
\# Router can only know about
  the devices directly connected to it.
  Unless you use ip route command to
  make it aware of different devices.

Router0 will know about Router1 and PC0 but won't know about Router2 and PC1

FastEthernet 0/0: 10.0.0.1/8
Serial 2/0: 20.0.0.1/8

Router1
Serial 2/0: 20.0.0.2/8
Serial 3/0: 30.0.0.2/8

FastEthernet 0/0: 40.0.0.1/8
Serial 2/0: 30.0.0.1/8

PC0
IP: 10.0.0.10/8
Gateway IP: 10.0.0.1/8 (Router0)

PC1
IP: 40.0.0.10/8
Gateway IP: 40.0.0.1/8 (Router2)

Router0

```
Router> enable
Router#show ip route
C   10.0.0.0/8 is directly connected, FastEthernet0/0
C   20.0.0.0/8 is directly connected, Serial2/0
Router# config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)# ip route 30.0.0.0 255.0.0.0 20.0.0.2
Router(config)# ip route 40.0.0.0 255.0.0.0 20.0.0.2
Router(config)# exit
Router# show ip route
C   10.0.0.0/8 is directly connected, FastEthernet0/0
C   20.0.0.0/8 is directly connected, Serial2/0
S   30.0.0.0/8 [1/0] via 20.0.0.2
S   40.0.0.0/8 [1/0] via 20.0.0.2
```

Router2

```
Router> enable
Router# show ip route
C   30.0.0.0/8 is directly connected, Serial2/0
C   40.0.0.0/8 is directly connected, FastEthernet0/0
Router# config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)# ip route 20.0.0.0 255.0.0.0 30.0.0.2
Router(config)# ip route 10.0.0.0 255.0.0.0 30.0.0.2
Router(config)# exit
Router# show ip route
S   10.0.0.0/8 [1/0] via 30.0.0.2
S   20.0.0.0/8 [1/0] via 30.0.0.2
C   30.0.0.0/8 is directly connected, Serial2/0
C   40.0.0.0/8 is directly connected, FastEthernet0/0
```

Router1

```
Router> enable
Router# show ip route
C   20.0.0.0/8 is directly connected, Serial2/0
C   30.0.0.0/8 is directly connected, Serial3/0
Router# config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)# ip route 10.0.0.0 255.0.0.0 20.0.0.1
Router(config)# ip route 40.0.0.0 255.0.0.0 30.0.0.1
Router(config)# exit
Router# show ip route
S   10.0.0.0/8 [1/0] via 20.0.0.1
C   20.0.0.0/8 is directly connected, Serial2/0
C   30.0.0.0/8 is directly connected, Serial3/0
S   40.0.0.0/8 [1/0] via 30.0.0.1
```

Pc0 -> Desktop-> command prompt

```
PC> ping 40.0.0.10

Pinging 40.0.0.10 with 32 bytes of data:
Request timed out.
Reply from 40.0.0.10: bytes=32 time=6ms TTL=125
Reply from 40.0.0.10: bytes=32 time=3ms TTL=125
Reply from 40.0.0.10: bytes=32 time=9ms TTL=125

Ping statistics for 40.0.0.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 3ms, Maximum = 9ms, Average = 6ms
```

PC0

Physical | Config | Desktop | Custom Interface

Command Prompt   X

```
Packet Tracer PC Command Line 1.0
PC>ping 40.0.0.10

Pinging 40.0.0.10 with 32 bytes of data:

Request timed out.
Reply from 40.0.0.10: bytes=32 time=6ms TTL=125
Reply from 40.0.0.10: bytes=32 time=3ms TTL=125
Reply from 40.0.0.10: bytes=32 time=9ms TTL=125

Ping statistics for 40.0.0.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 3ms, Maximum = 9ms, Average = 6ms

PC>
```