

LAB WEEK 3

To demonstrate configuration of default and static routes through a connection of routers.

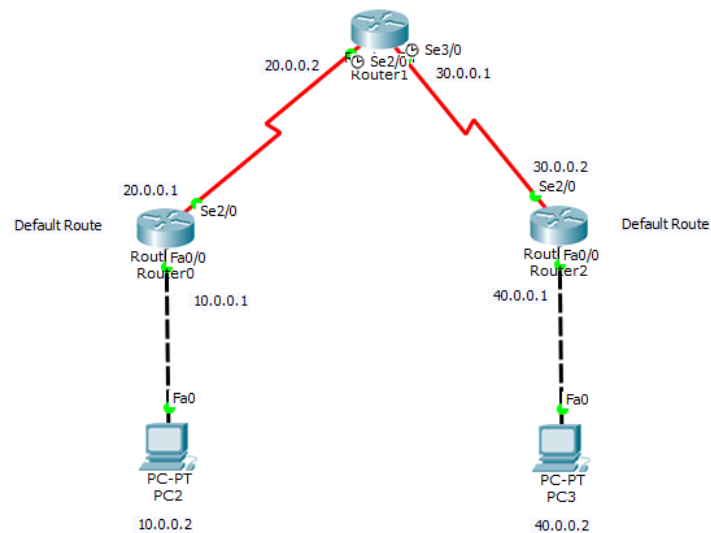


Figure 1: Topology

```
Command Prompt

PC>ping 40.0.0.2

Pinging 40.0.0.2 with 32 bytes of data:

Reply from 40.0.0.2: bytes=32 time=21ms TTL=123
Reply from 40.0.0.2: bytes=32 time=16ms TTL=123
Reply from 40.0.0.2: bytes=32 time=9ms TTL=123
Reply from 40.0.0.2: bytes=32 time=9ms TTL=123

Ping statistics for 40.0.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 9ms, Maximum = 21ms, Average = 13ms
```

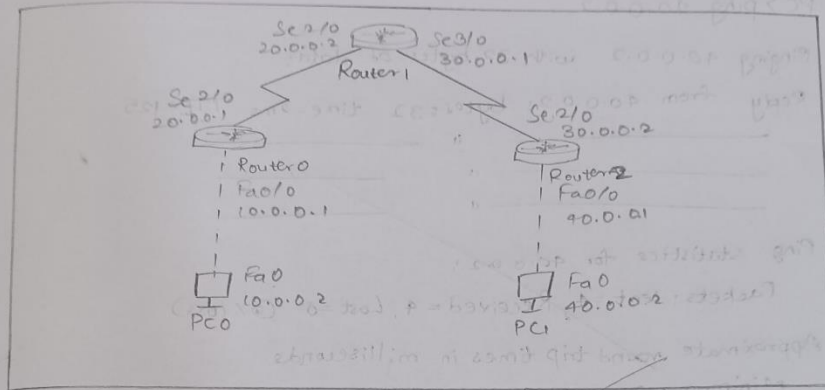
Figure 2: ping command output

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To demonstrate Configuration of default & static routes through a connection of routers.

* Topology :



* Configuration Steps :

- Step 1: Select 2 PC's "Generic PC-PT" from the end devices and 3 "Generic Router-PT" from Routers.
- Step 2: Connect the PCs and the routers to each other using "Automatically chosen-cable".
- Step 3: ~~Step~~ Set the IP addresses "10.0.0.2" and "40.0.0.2" to the PCs respectively, default gateway: 10.0.0.1 and 40.0.0.1
- Step 4: Go to the routers and select CLI, enter the commands:
- Router 0:
- ```
(config)# ip route 0.0.0.0 0.0.0.0 20.0.0.2
```
- Router 2:
- ```
(config)# ip route 0.0.0.0 0.0.0.0 30.0.0.1
```
- Router 1:
- ```
(config) # ip route 40.0.0.0 255.0.0.0 30.0.0.2
(config) # ip route 10.0.0.0 255.0.0.0 20.0.0.1
```
- Step 5: Check the connection through ping command from cmd prompt.

\* Observation:  
The cmd prompt of 10.0.0.2 PC when pinged command to 40.0.0.2 PC.

PC> ping 40.0.0.2

Pinging 40.0.0.2 with 32 bytes of data:

Reply from 40.0.0.2: bytes=32 time=2ms TTL=125

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ping statistics for 40.0.0.2:

Packets: sent = 4, Received = 4, Lost = 0 (0% loss)

Approximate round trip times in milliseconds

Minimum = 2ms, Maximum = 9ms, Average = 4ms

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