

EXPERIMENT-5

Question 5:

Configure RIP routing Protocol in Routers.

Observation:

Lab 02
EXPERIMENT 0001
Date: / /

Question configure routing information protocol (RIP) on Router

Aim to configure RIP.

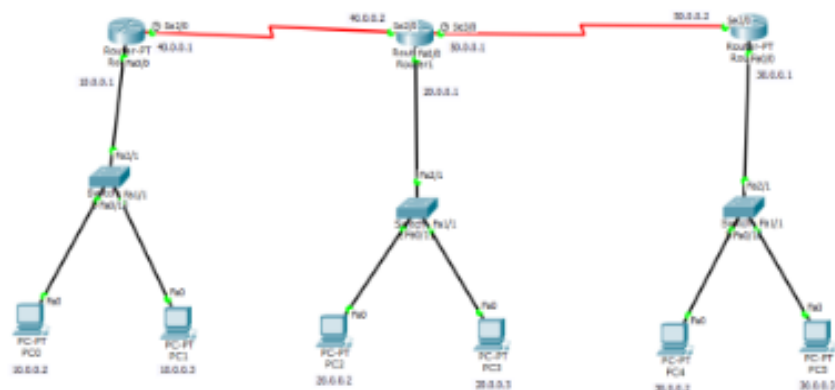
Topology

Procedure

- 1) Setup the devices as shown above
- 2) configure the PC and router by assigning the IP addresses and the connection of the network to another.
- 3) for routing by RIP:
Go to Router 0:
CLI → Router(config)# mode
and follow the below commands
Router(config)# router rip
Router(config-router)# network 10.0.0.0
Router(config-router)# network 10.0.0.0
exit
- 4) when show ip route is given as the next command there is a new routing connection "R".

a) Repeat the same commands for the other two routers but the network address is 40.0.0.0, 30.0.0.0 and 50.0.0.0 for Router1 and 30.0.0.0 and 30.0.0.0 for Router2.
 b) This completes the routing in the topology.
 c) Ping a message from PC0 (10.0.0.2) to PC4 (30.0.0.2).
 Output:
 - also provide:
 C 10.0.0.0/8 is directly connected, FastEthernet0/0
 R 10.0.0.0/8 [120/0] via 40.0.0.1, 00:00:07, Serial2/0
 R 30.0.0.0/8 [120/0] via 40.0.0.1, 00:00:07, Serial2/0
 C 40.0.0.0/8 is directly connected, Serial2/0
 R 40.0.0.0/8 [120/0] via 40.0.0.1, 00:00:07, Serial2/0
 3. ping 30.0.0.2
 Pinging 30.0.0.2 with 32 bytes of data:
 Reply from 30.0.0.2: bytes=32 time=10ms TTL=125
 Reply from 30.0.0.2: bytes=32 time=2ms TTL=125
 Reply from 30.0.0.2: bytes=32 time=1ms TTL=125
 Reply from 30.0.0.2: bytes=32 time=2ms TTL=125
 Ping statistics for 30.0.0.2:
 Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)

Screenshot of the topology:



Screenshot of the output:

```

R 10.0.0.0/8 [120/2] via 50.0.0.1, 00:00:07, Serial2/0
R 20.0.0.0/8 [120/1] via 50.0.0.1, 00:00:07, Serial2/0
C 30.0.0.0/8 is directly connected, FastEthernet0/0
R 40.0.0.0/8 [120/1] via 50.0.0.1, 00:00:07, Serial2/0
C 50.0.0.0/8 is directly connected, Serial2/0
  
```

```
PC>ping 30.0.0.2
```

```
Pinging 30.0.0.2 with 32 bytes of data:
```

```
Reply from 30.0.0.2: bytes=32 time=10ms TTL=125
```

```
Reply from 30.0.0.2: bytes=32 time=2ms TTL=125
```

```
Reply from 30.0.0.2: bytes=32 time=12ms TTL=125
```

```
Reply from 30.0.0.2: bytes=32 time=2ms TTL=125
```

```
Ping statistics for 30.0.0.2:
```

```
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
Approximate round trip times in milli-seconds:
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    Minimum = 2ms, Maximum = 12ms, Average = 6ms
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