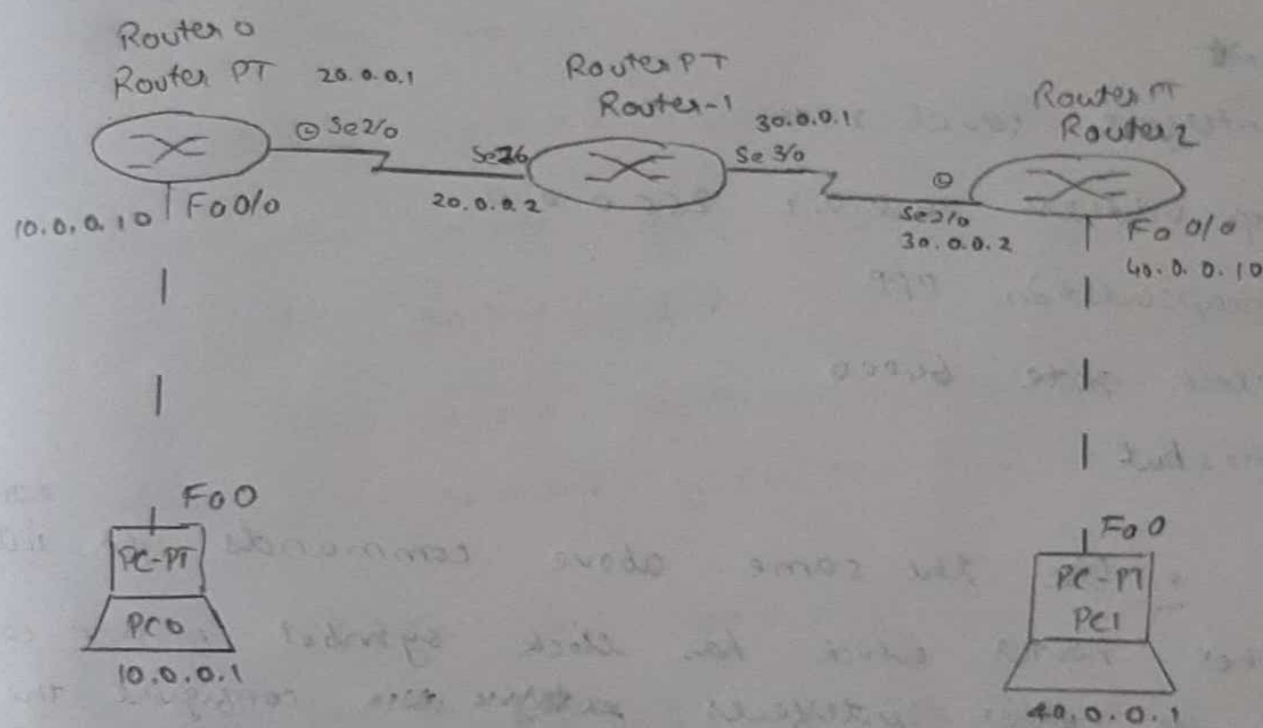


Lab 5

RIP

Aim: Configuring RIP routing Protocol in Routers

Topology:



Procedure:

- Place 3 generic routers, 2 generic PC's and place notes to indicate respective IP addresses.
- Use copper cross over to connect between Router and PC and serial DCE to connect between two routers.
- Set IP address, Subnet and gateway of the PC's as 10.0.0.1, 255.0.0.0, 10.0.0.10 and 40.0.0.1, 255.0.0.0, 40.0.0.10 respectively.

• For interfacing PC0 and routers 3 and serial DCE of router 3 enter the commands in CLI

- > enable
- > config-t
- > interface fastethernet 0/0
- > no shut
- > exit
- > interface serial 2/0
- > ip address 20.0.0.1 255.0.0.0
- > encapsulation PPP
- > clock rate 64000
- > no shut

• Use the same above commands for interfacing another router which has clock symbol in DCE cable and for other interfaces ~~interface the~~ configure the router by entering the same commands except for ~~encapsulation PPP~~ "clock rate 64000" command.

• Set the RIP protocol when the lights turn green.

- > Router RIP
- > network 10.0.0.0
- > network 20.0.0.0
- > exit

• Repeat the commands to all routers with IP address that the router is directly connected to.

Observation:

Learning Outcome:

Instead of using static IP routing for all routers by using RIP protocol routing becomes easy when large number of routers are present.

Result: Ping 40.0.0.1

pinging 40.0.0.1 with 32 bytes of data:

Reply from 40.0.0.1: bytes = 32 time = 14 ms TTL = 125

Reply from 40.0.0.1: bytes = 32 time = 2 ms TTL = 125

Reply from 40.0.0.1: bytes = 32 time = 14 ms TTL = 125

Reply from 40.0.0.1: bytes = 32 time = 12 ms TTL = 125

Ping Statistics for 40.0.0.1:

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

Approximate round trip times in milliseconds:

minimum = 2 ms, maximum = 14 ms, Average = 10 ms

Wait
29-12-2022