Exp. no: 11   Practical - 11

Date:

Aim:

a) Simulate static routing configuration using cisco packet tracer

b) Simulate RIP using cisco packet tracer

a) 1. Adding Static Routes: each router knows only the networks directly connected to it. add static route to reach a network not directly connected.

eg: Routers, networks 10.0.0.0/1 20.0.0.0/8, 40.0.0.0/3 are directly connected but 30.0.0.0.8

2) Creating Main Backup route. Administrative Distance decides of routes the lowers the AD, the higher the preferences

3) Router configuration.

Configure static routes on each router for network not directly connected.

4. Verifying Routes:

Verify routes by using commands, shows ip route static.

5) Testing Route. Fail over:

Test connectivity using traced or ping from a device on a connected network.

Disconnect "break" the link on the main route.

b) Deleting a static route

show ip route static

Router 4
   gig 0/0 - 217.1.1.2
      0/1 - 222.2.2.12

3. Click on router 3

→ click config → RIP

→ Enter network 10.0.0.0 → Add

→ Enter network 20.0.0.0 → Add

This step is done inorder to add the neighbouring network
address for router 3.

4. Do same for router 3, 1, 2, 4. .

  Router 2 → config → RIP

→ 20.0.0.0 — add

→ 172.1.0.0 - add

→ 200.1.1.0 - add.

router 1 → config → RIP

→ 172.1.0.0 - add

→ 192.168.1.0 - add

→ 217.1.1.0 - add.

5) Now to display the routing table
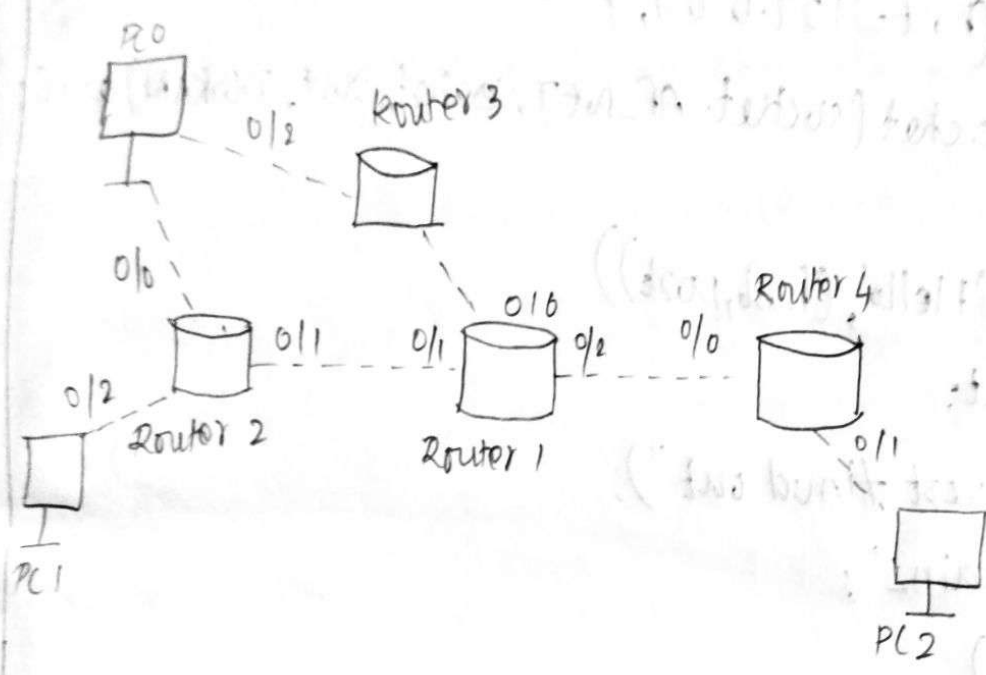click on router (say router 1)

→ them on CIP & type the command

  # exit
  # exit
  # show ip route.

O/P:

R. 10.0.0.0/8 via 192.168.1.1 gig 0/0

R. 20.0.0.0/8 via 192.168.1.1 gig 0/0

172.10.0/16 is variable connected 2 subnet 2 mask.

C-172.1.0.0/16 is directly connected gig 0/1

L-172.1.1.2/32 is directly connected gig 0/1

Result:

Thus RIP is simulated using cisco packet tracer successfully

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