Default IP address

Topology Similar to that of Lab-2 that contain 3 routers 2 PC's connected as shown in that.

Procedure

→ Select PC's & router & configure them with suitable IP address.

→ Make connections to all the devices using suitable connection links.

→ For the routers to link b/w PC's & other routers use CL2 mode & start typing the commands.

→ Now Enter Enable → Enter

→ Config I enter

→ Interface first ethernet 0/0

→ IP address 10.0.0.1 0 255.0.0.0.

- Now Shut

Repeat this step similarly to all the routers, In order to make default path.

type in config I.

IP route dest Subnet mask Intermediate device

IP route 0.0.0.0 0.00.0 20.00.10

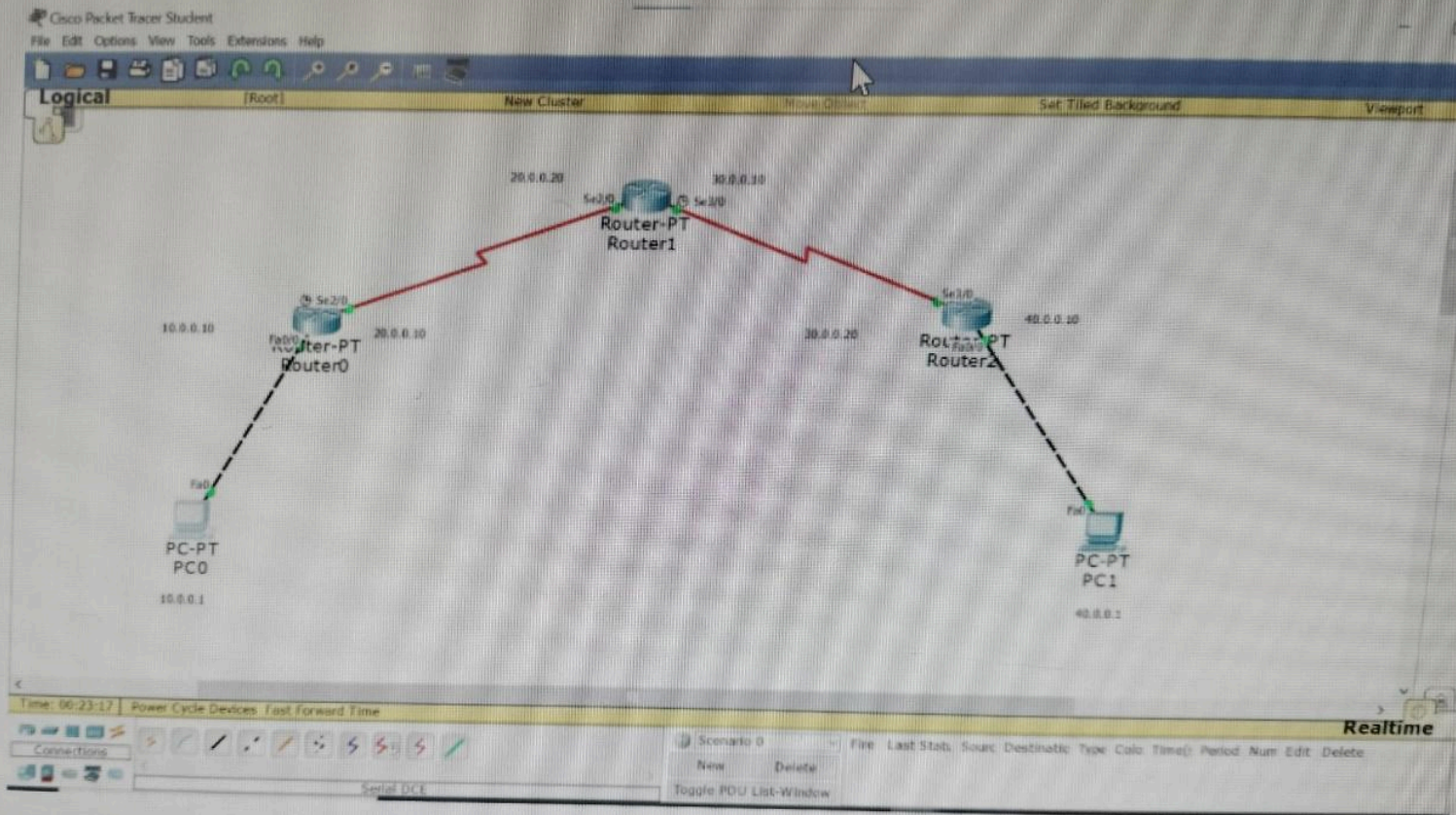Similarly perform this to all the routers

→ Show IP route entry

10.0.0.0/8 is directly connected to first ethernet 0/0 : 20.0.0.0/8 is directly connected Serial 2/0 D.0.0.0/0 [1/0] via 20.0.0.t0.

≈ all the routers are connected.

Observation

In the previous one, we have given the IP address to all the routers with destination Subnet.4 intermediate IP address of those particular device. But here in this Exp we use a default IP address in 0.0.0.0 & Subnet Mask: 0.0.0.0 so that it can create a pass through channel to all the packets that are sent will be transferred by the intermediate device. This is generally used in large no of device connection.

TOPOLOGY:

Logical   [Root]   New Cluster   Move Object   Set Tiled Background   Viewport

20.0.0.20   10.0.0.10
Se2/0   Se3/0
Router-PT
Router1

Se2/0   Se3/0
10.0.0.10   40.0.0.10
Fa0/0 Router-PT   20.0.0.10   30.0.0.20   Router-PT
Router0   Router2

Fa0
PC-PT   PC-PT
PC0   PC1

10.0.0.1   40.0.0.1

Time: 00:23:17   Power Cycle Devices Fast Forward Time
                                                                                               Realtime
Connections
                                                              Scenario 0   Fire Last Stat Sourc Destinatio Type Colo Time(Period Num Edit Delete
                                                              New   Delete
Serial DCE   Toggle PDU List-Window

PC0

Physical   Config   Desktop   Custom Interface

Command Prompt

```
Packet Tracer PC Command Line 1.0
PC>ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

Request timed out.
Reply from 40.0.0.1: bytes=32 time=2ms TTL=125
Reply from 40.0.0.1: bytes=32 time=16ms TTL=125
Reply from 40.0.0.1: bytes=32 time=2ms TTL=125

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 16ms, Average = 6ms

PC>ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

Reply from 40.0.0.1: bytes=32 time=21ms TTL=125
Reply from 40.0.0.1: bytes=32 time=9ms TTL=125
Reply from 40.0.0.1: bytes=32 time=2ms TTL=125
Reply from 40.0.0.1: bytes=32 time=4ms TTL=125

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 21ms, Average = 9ms

PC>
```