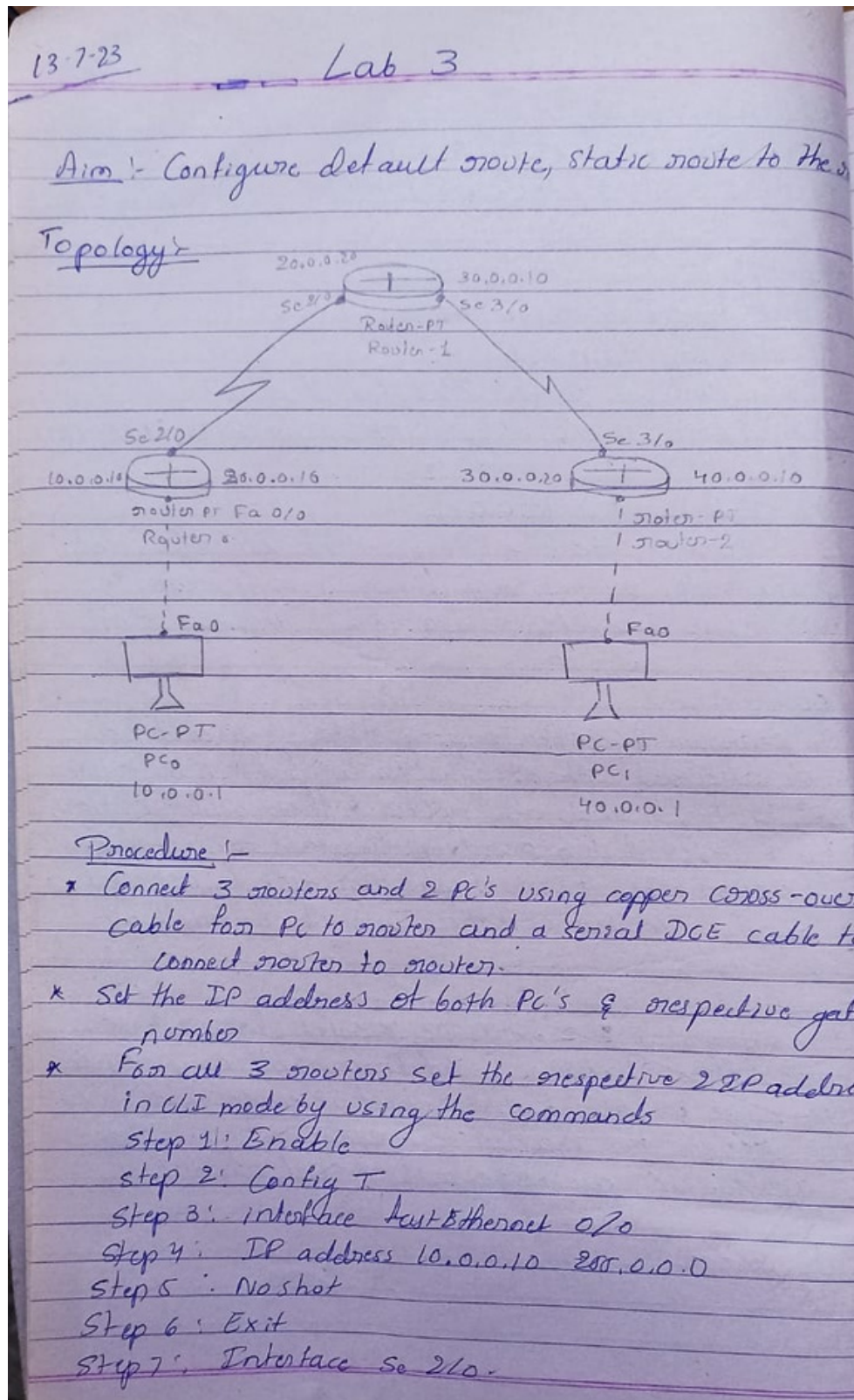


WEEK 3

Configure default route, static route to the

Router. OBSERVATION:



Step 8: IP address 20.0.0.10 255.0.0.0
Step 9: No shut
Step 10: Exit
Step 11: Exit

* Repeat these commands for other 2 routers with their respective IP address.

* For Router 1, set the IP route of other IP addresses, statically, by using following steps.

Step 1: Config T
Step 2: IP route 10.0.0.0 255.0.0.0 20.0.0.10.
Step 3: IP route 40.0.0.0 255.0.0.0 30.0.0.20.
Step 4: Exit
Step 5: Exit
Step 6: Show IP route.

* For Router 0 & Router 2 we set default IP route, which means it can access any IP address with any Subnet mask.

* Set the default IP route by following these commands
Step 1: Config T

Step 2: IP route 0.0.0.0 0.0.0.0 20.0.0.20.

Step 3: IP route 0.0.0.0 0.0.0.0 30.0.0.10.

* Step 2 is given for Router 0 & Step 3 command for Router 1.

* Go to PC's command Prompt & type ping message to send packets across.

Ping output

Packet traces 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 = 120

Reply from 40.0.0.1 : bytes = 32 time = 16ms TTL = 120

Reply from 40.0.0.1 : bytes = 32 time = 2ms TTL = 120

Ping statistics for 40.0.0.1 :

packets : sent = 4, received = 3, lost = 1 (25% loss)

Approximate round trip times in milliseconds:

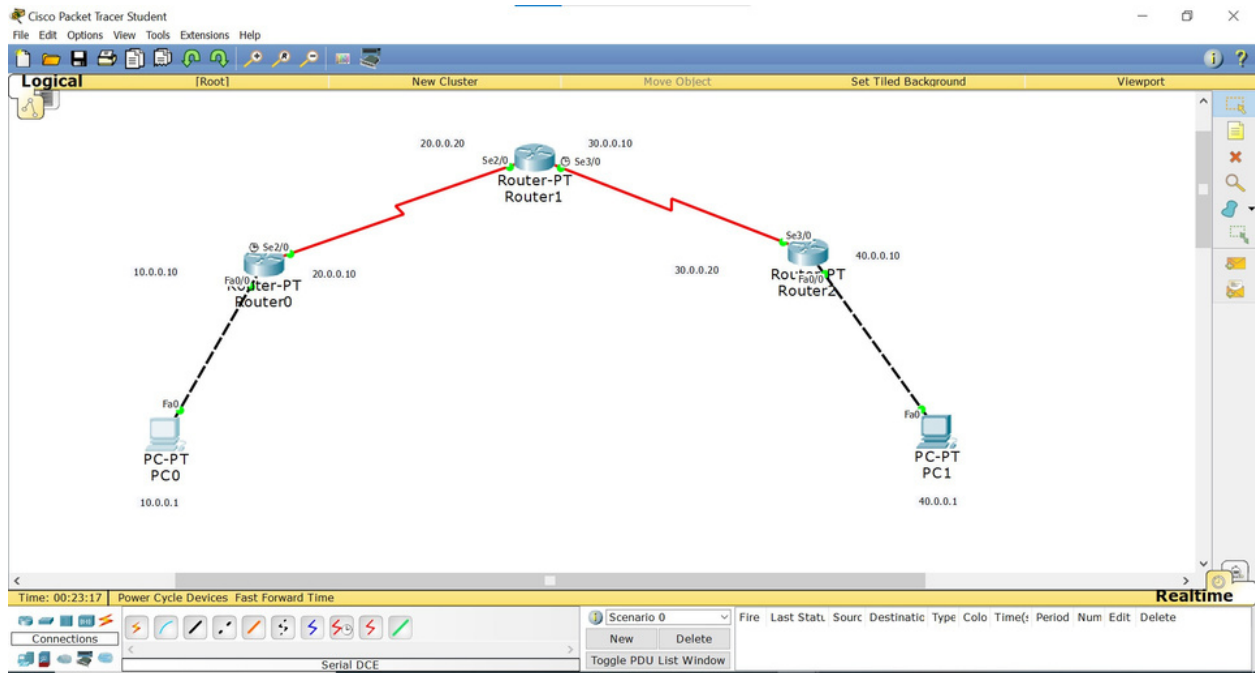
minimum = 2ms, Maximum = 16ms, Average = 6ms

Observation :

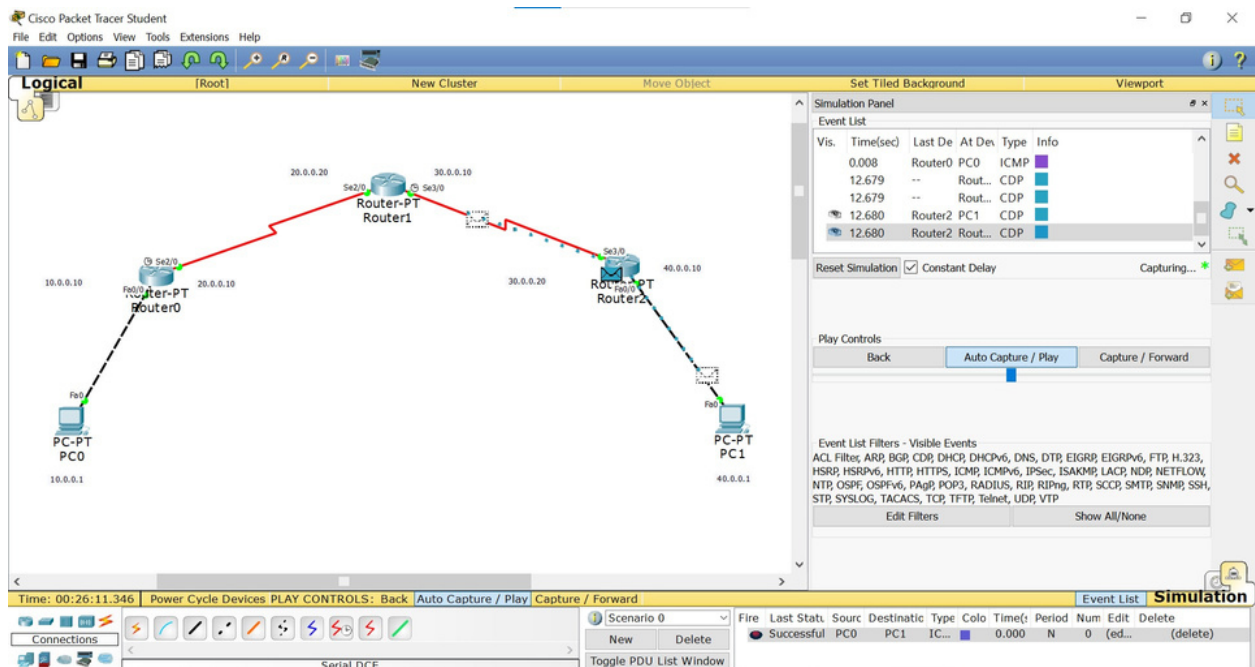
- * A default route is the route which takes effect when no other route is available for an IP address destination.
- * If a packet is received, the device first checks the destination address, if the IP destination address is not local the device checks its routing table.
- * If the remote destination subnet is not listed, the packet is forwarded to the next hop towards the destination using the default route.
- * The process repeats until the packet is delivered.

NP
3/8/2023

TOPOLOGY:



OUTPUT:



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>|
```