2) config IP address to routers in packet tracer. Explore the following msg: ping responses, destination unreachable, request timed out, reply
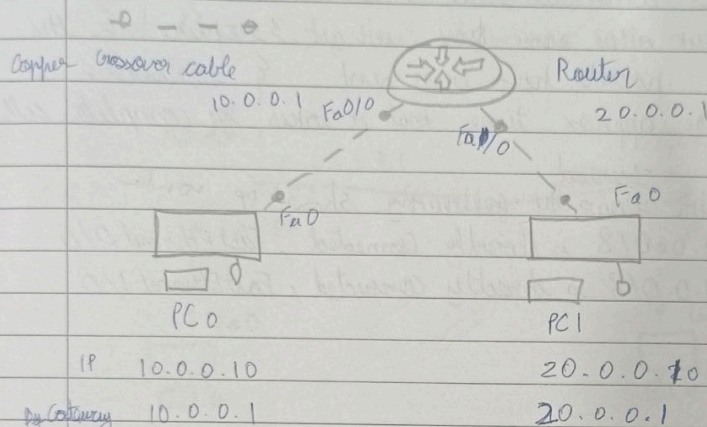
Single Router

9/10/24

Connect 2 PC using router

Aim: To demonstrate the connection between two routers and end devices in two different networks using the router.

Copper Crossover cable

Router

10.0.0.1 Fa0/0   20.0.0.1

Fa0/0

Fa0   Fa0

PC0   PC1

IP   10.0.0.10   20.0.0.10

Py Gateway 10.0.0.1   20.0.0.1

Procedure

1) Open Cisco package tracer.

2) Add the end devices & the router from the left hand icon menu

3) connect the device: use a copper Crossover cable to connect each PC to the router.

4) ip config: on each device → go to config → fast ethernet enter IP

PC0   10.0.0.10   255.0.0.0
PC1   20.0.0.10   255.0.0.0

change Gate way

PC0   10.0.0.1
PC1   20.0.0.1

5) Router config → go to Cli → type Enter the following commands to → Enable → Config terminal → interface fastethernet 0/0 → ip address 10.0.0.1 255.0.0.0 → no shutdown → exit (repeat for second device) output show IP Route.

6) Setup is Complete.   C 10.0.0.0/8 is directly connected, fastethernet 0/0
                             C 20.0.0.0/8 is directly connected, fastethernet 1/0

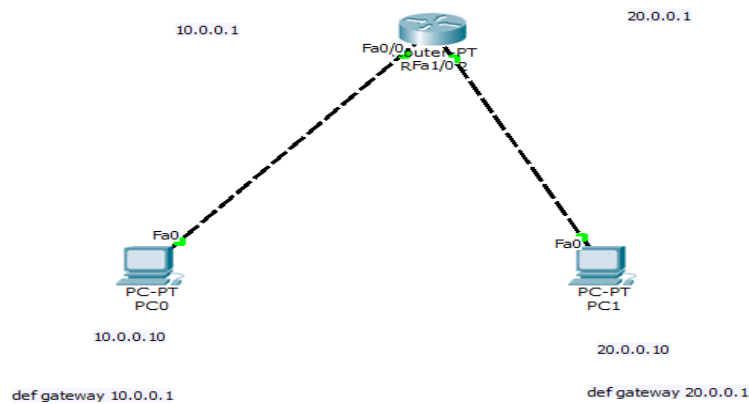7) ⓐ Select a device → go to destop → command prompt →
ping (ip of second device)

Observation

We Observe that initially when the ping request is sent
we get a time out error (Router locates the second
device) but after some time we get 3 replies & the
msg that packets have been sent & received. &
displays the approx time that it takes to complete all
this.   Observed.
Routing table shows the following show ip route
C   10.0.0.0/8 is directly connected, Fast Ethernet 0/0
C   20.0.0.0/8 is directly connected, Fast Ethernet 1/0

10.0.0.1   20.0.0.1

Fa0/0 Router PT
RFa1/0

Fa0   Fa0

PC-PT   PC-PT
PC0   PC1

10.0.0.10   20.0.0.10

def gateway 10.0.0.1   def gateway 20.0.0.1

PC0

Physical | Config | Desktop | Custom Interface

Command Prompt X

```
Packet Tracer PC Command Line 1.0
PC>ping 20.0.0.10

Pinging 20.0.0.10 with 32 bytes of data:

Request timed out.
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127

Ping statistics for 20.0.0.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 20.0.0.10

Pinging 20.0.0.10 with 32 bytes of data:

Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127

Ping statistics for 20.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

PC2

Physical | Config | Desktop | Custom Interface

Command Prompt X

```
Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.10

Pinging 10.0.0.10 with 32 bytes of data:

Request timed out.
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127

Ping statistics for 10.0.0.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>
```