

## WEEK-2

2. Configure IP address to routers in packet tracer. Explorer the following messages: ping responses, destination unreachable, request timeout, reply.

LAB-02

9/10/24

(3)

Aim:-

2. Configure IP address to routers in packet tracer.
- Explore the following messages: ping responses, destination unreachable, request timeout, reply.

Steps are as follows

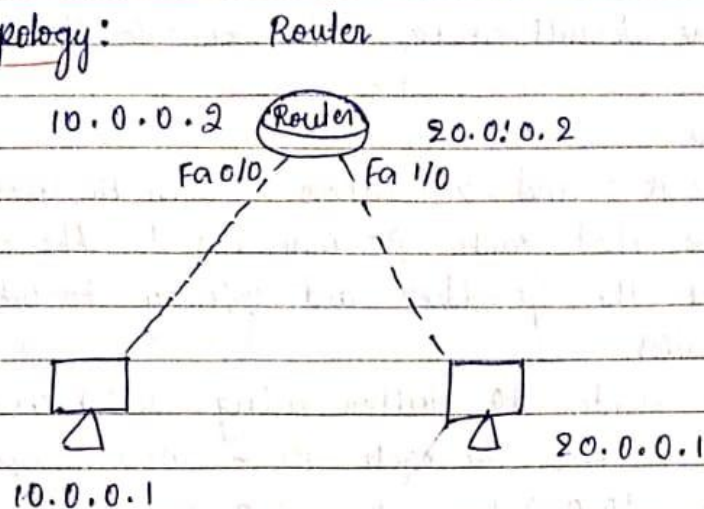
- 1) Click on end devices & drag & drop the 22 end devices & one generic router in the router section.
- 2) Then set the IP address to that both end devices & also set the gateway.
- 3) In router click on config tab then click on fastEthernet 0/0 then set the IP address & subnet mask do the same thing for fastEthernet 1/0 also.
- 4) In Router, click on CLI tab then run the below commands.
  - 1) enable
  - 2) Config terminal
  - 3) interface fastEthernet 0/0
  - 4) ip address 10.0.0.1 255.0.0.0
  - 5) no shutdown
  - 6) exit

\* enable

\* show ip route : It will show the number of connected LAN's.

- 5) Next click on End devices, then click on Desktop → Command prompt → run ping command.

Topology:



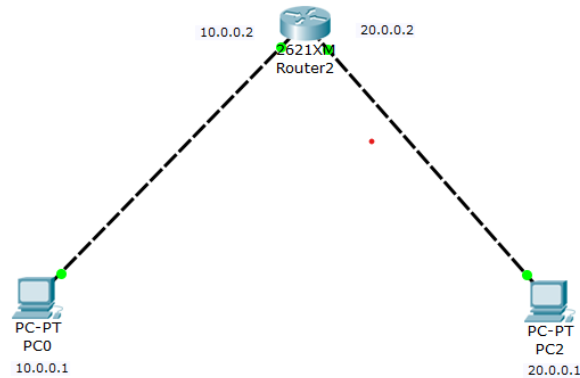
Show ip Route:

C 10.0.0.0/8 is directly connected, FastEthernet0/0  
C 20.0.0.0/8 is directly connected, FastEthernet1/0.

Observation:

- we observed how ping command will be work &
- how the Show ip Route command works
- how the Router will work & what is the function of Router.

## ROUTER:



## PING RESPONSES:

```
Packet Tracer PC Command Line 1.0
C:\>ping 10.0.0.1
```

Pinging 10.0.0.1 with 32 bytes of data:

```
Reply from 10.0.0.1: bytes=32 time=1ms TTL=127
Reply from 10.0.0.1: bytes=32 time=1ms TTL=127
Reply from 10.0.0.1: bytes=32 time=3ms TTL=127
Reply from 10.0.0.1: bytes=32 time=1ms TTL=127
```

Ping statistics for 10.0.0.1:

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

```
C:\>ping 20.0.0.1
```

Pinging 20.0.0.1 with 32 bytes of data:

```
Reply from 20.0.0.1: bytes=32 time=1ms TTL=127
Reply from 20.0.0.1: bytes=32 time<1ms TTL=127
Reply from 20.0.0.1: bytes=32 time<1ms TTL=127
Reply from 20.0.0.1: bytes=32 time<1ms TTL=127
```

Ping statistics for 20.0.0.1:

```
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

```
enable
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fastEthernet0/1
Router(config-if)#ip address 20.0.0.2 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
enable
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

C    10.0.0.0/8 is directly connected, FastEthernet0/0
C    20.0.0.0/8 is directly connected, FastEthernet0/1
```