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## CN LAB 4

AIM: TO DEMONSTRATE THE CONFIGURATION OF THE DEFAULT AND STATIC ROUTES

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Aim: To demonstrate the configuration steps of default & static routes

Topology

Steps to Config :-

- 1) Select PC0 enter the IP address as 10.0.0.1
- 2) select Router 0 and go to CLI, enter CLI commands to config router with IP address as 10.0.0.2 for interface fastEthernet 0/0
- 3) select PC0 again enter gateway as 10.0.0.2
- 4) Select PC1 enter IP address as 40.0.0.1
- 5) select Router 1 enter CLI commands and config Router1 with IP address as 40.0.0.1
- 6) select PC1 again enter gateway as 40.0.0.1
- 7) Now, setting connection b/w -
- 8) Router 0 and Router 1
- 9) click on router 0 go to CLI enter CLI commands choose interface serial 0/0 with IP address 30.0.0.1
- 10) click on router 1 go to CLI enter CLI commands interface as serial 0/0 IP address as 30.0.0.2
- 11) click on router 0 again choose interface
- 12) Router 0 and Router 1
- 13) click on router 2, go to CLI → interface serial 0/0 IP address 30.0.0.1
- 14) click on router 1 go to CLI → interface serial 0/0 IP address 30.0.0.2

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from router 1 to PC1

- 1) click on router 1 go to config → CLI
- 2) interface fastEthernet 0/0, IP address = 40.0.0.1
- 3) click on PC1 go to IP address = 40.0.0.1

Now to set default route b/w Router 0 and router 1

- 1) click on PC0, go to CLI → keep in config mode & write following command -

Router(config)# ip route 0.0.0.0 0.0.0.0 30.0.0.2

It defines default static path (data can go anywhere)

- 2) click on PC1 go to CLI → keep in config mode & write Router(config)# ip route 0.0.0.0 0.0.0.0 30.0.0.1

Now for setting static route

- 1) click on router 2 go to CLI → config mode & type -

# ip route 40.0.0.0 255.0.0.0 30.0.0.2

# ip route 10.0.0.0 255.0.0.0 30.0.0.1

Now all routes are config. and set, try ping

Output: PC > ping 40.0.0.1

pinging 40.0.0.1 with 32 bytes of data:

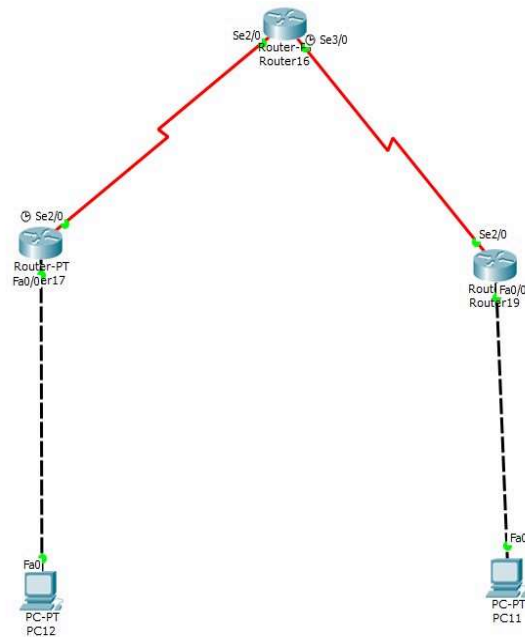
Reply from 40.0.0.1: byte = 32 time = 8ms TTL = 125

Ping statistics for 40.0.0.1

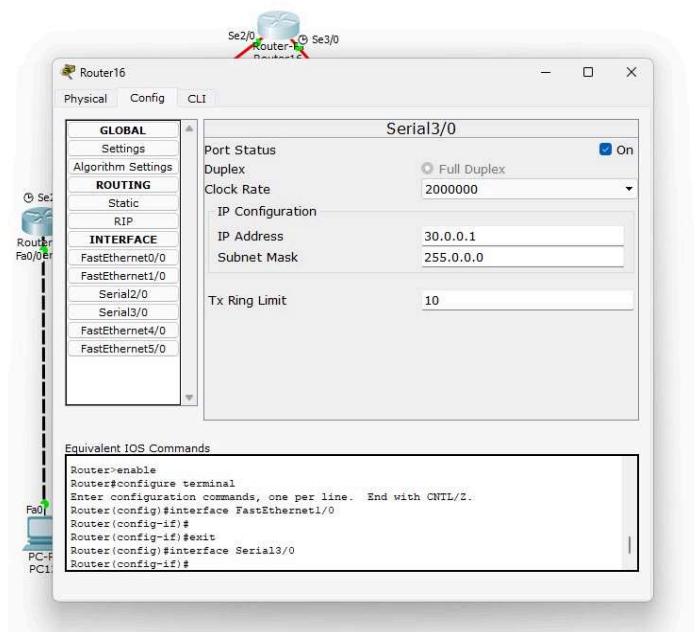
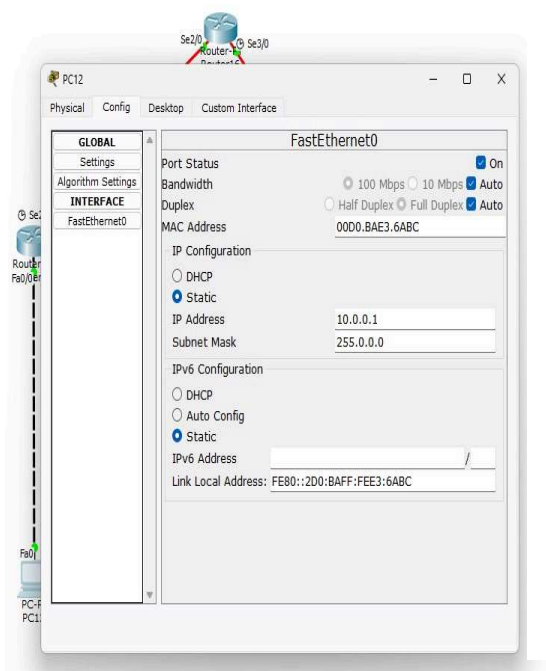
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)

Min = 8ms Max = 10ms Avg = 8ms

## NETWORK TOPOLOGY :



## CONNECTIONS ACROSS NETWORK :



## PING COMMAND

