

QUESTION: Demonstrating IP Routing by using 3 Routers

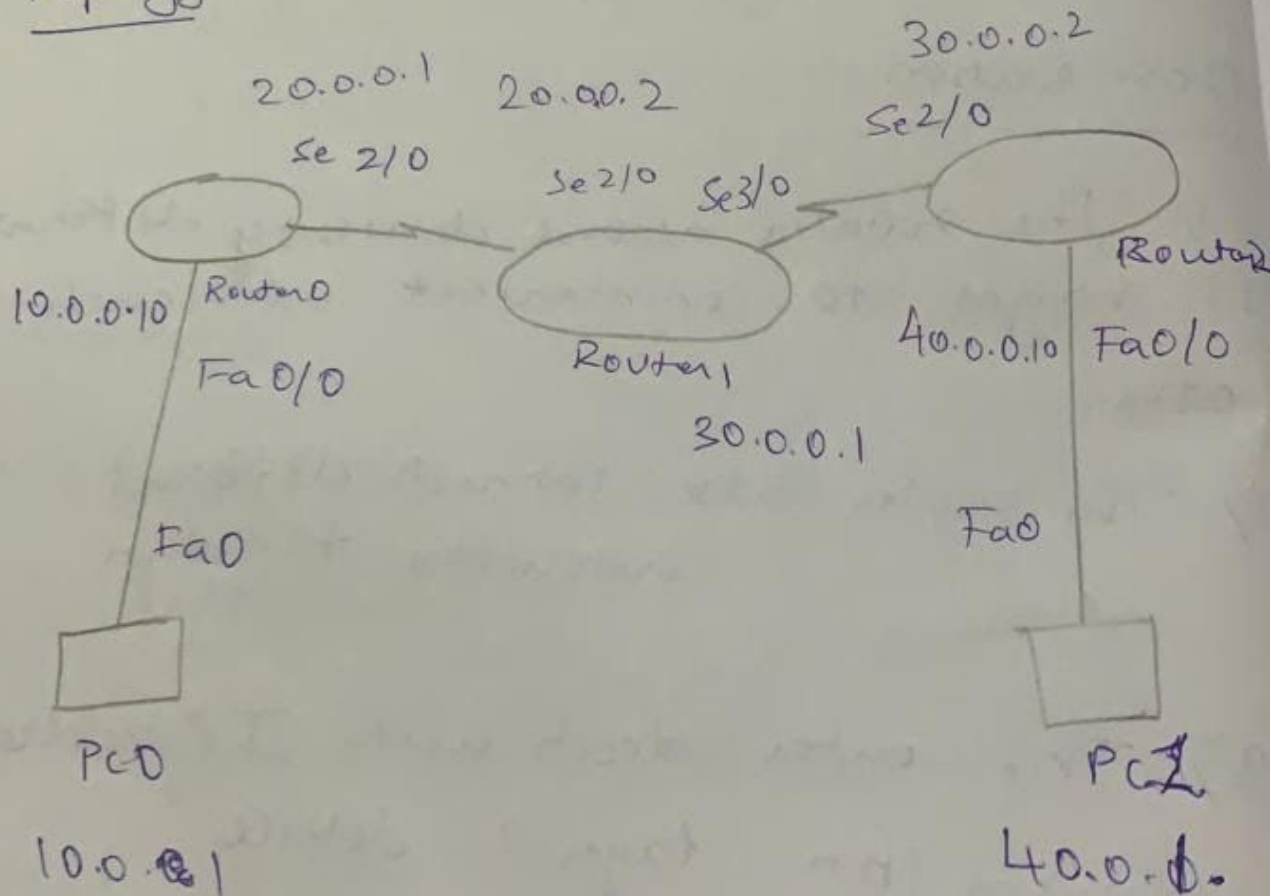
AIM: By Using IP Route command, Connect two different Networks over 3 Routers

EXP-3

Question:- Demonstrating IP routing by using 3 routers.

Aim:- By using IP Route command, connect two different networks over 3 routers.

Topology:-



Procedure:-

- i) connect the two PC's to their respective routers
- ii) config the IPv4 & default gateways for the PC's
- iii) Connect the routers with DCE Cable over Serial interfaces
- iv) Configure IP routing for each router

CLI Commands - for one router

- 1.) config t
- 2.) interface FastEthernet0/0
- 3) ip address 10.0.0.10 255.0.0.0
- 4) no shut

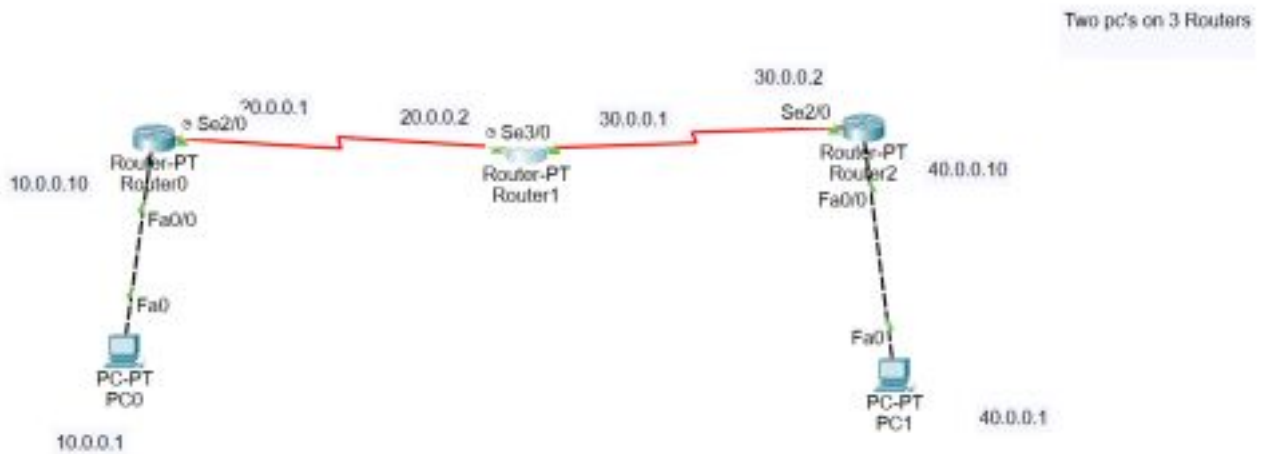
VARAD
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- 5) Interface Serial2/0
- 6) ip address ~~40.0.0.0~~ 20.0.0.1 255.0.0.0 1BM18S122
~~100.~~
- 7) no shut
- 8) ip route 20.0.0.0 255.0.0.0 30.0.0.1
- 9) Exit
- 10) Show ip route

Observation:-

The router forwards the data to Serial
IP range over the specified serial
interface of the next router

TOPOLOGY:



PROCEDURE:

1. Connect the two computers to their respective routers
2. Configure the IP and default gateways for the PC's
3. Connect the routers with a DCE cable over Serial Interfaces
4. Configure IP Routing for each Router

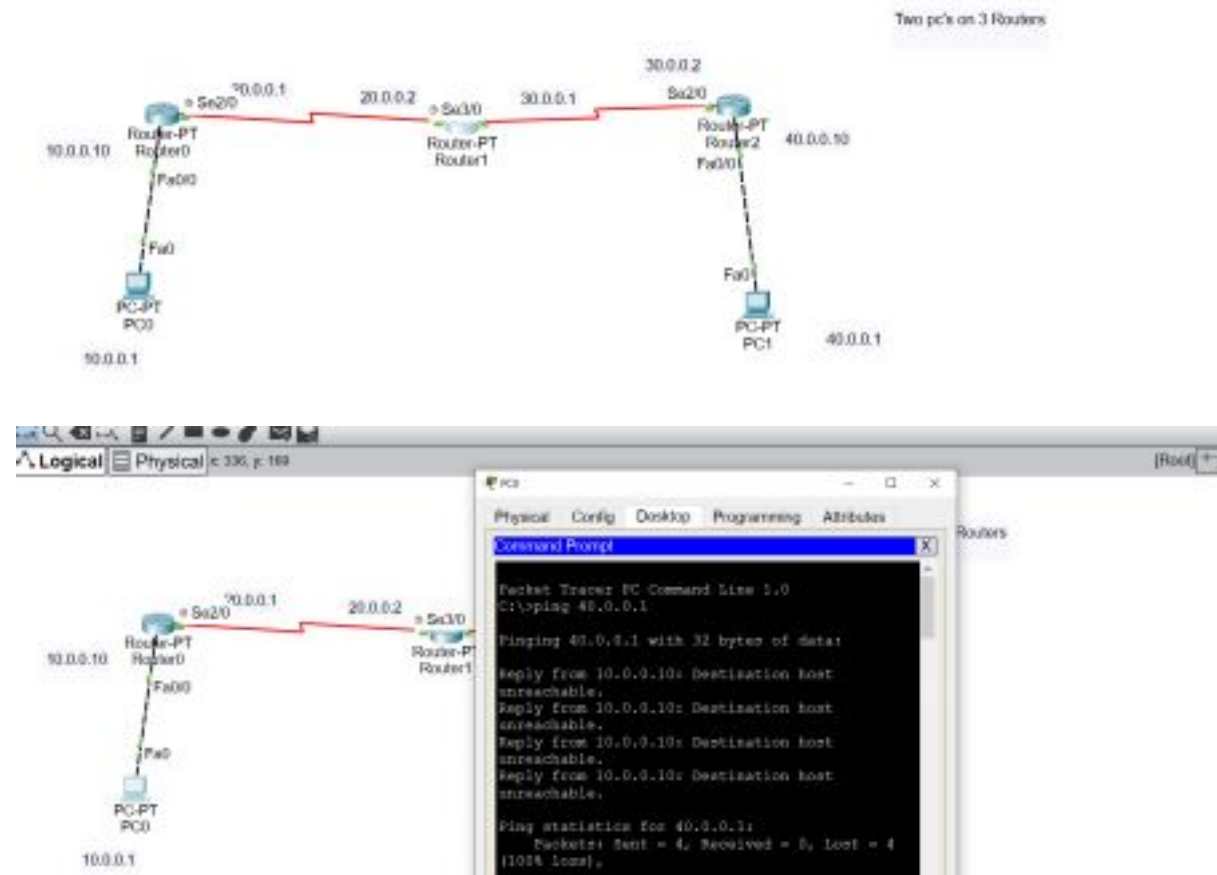
CLI COMMANDS – FOR ONE ROUTER –

1. config t
2. interface FastEthernet0/0
3. ip address 40.0.0.10 255.0.0.0
4. no shut
5. interface serial2/0
6. ip address 30.0.0.2 255.0.0.0
7. no shut
8. show ip route
9. ip route 20.0.0.0 255.0.0.0 30.0.0.1
10. exit

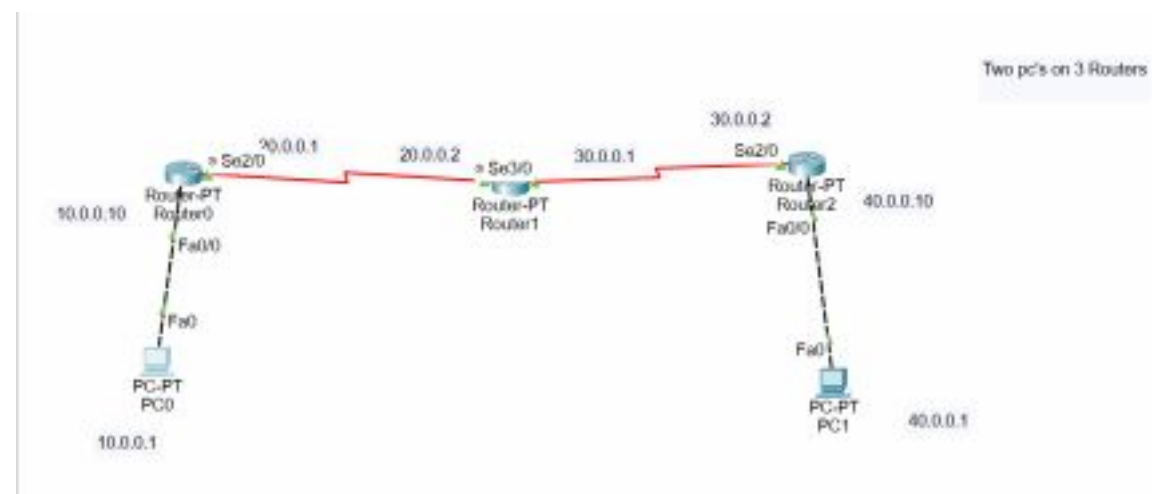
OBSERVATION –

The router forwards the data to said IP range over the Specified Serial Interface of the next router

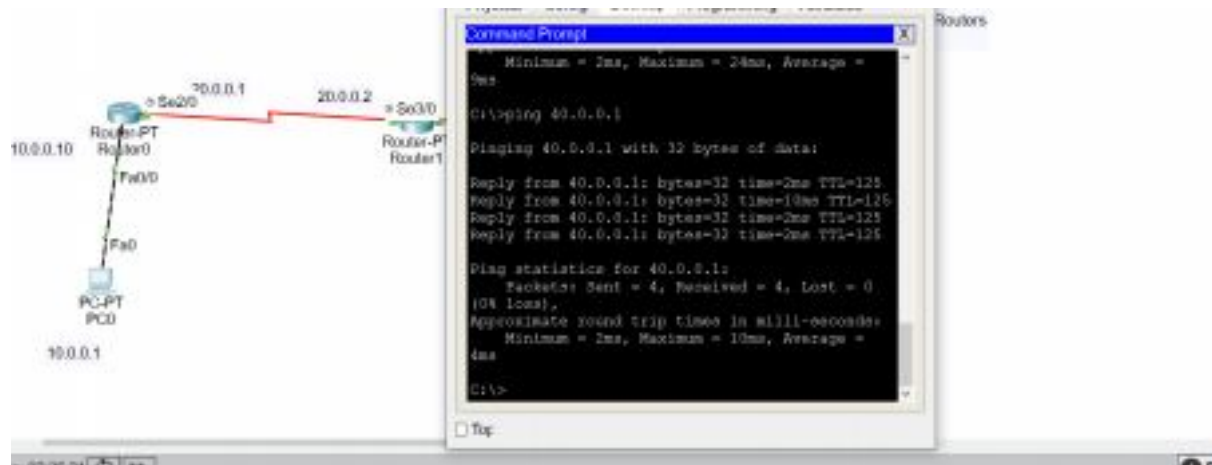
SCREENSHOTS –



TOPOLOGY



PING



RESULTS