

Week-3

Configure default route. static to route.
ip address to router in packet tracer.
explore the following messages: ping responses, unreachable, request timed out.

→ Steps:

- 1) Add 2 PC's & connect them to a generic router.
 - 2) Configure the PCs by setting their IP address to 10.0.0.1 & 20.0.0.1 respectively.
 - 3) Set the gateway as 10.0.0.2 & 20.0.0.2 respectively.
 - 4) Go to command line interface in the router & enter 'no' for continue with configuration dialogue.
 - 5) Type 'config terminal' & enter twice.
 - 6) Type 'interface fastEthernet 0/0' & enter.
 - 7) Type IP address 10.0.0.2 & 255.0.0.0.
 - 8) Type 'no shut' & connection is now established.
 - 9) Repeat steps ① to ⑧ for PC3 & PC4.
 - 10) Connect router 1 & router 2 via a router 3.
 - 12) All router to router connections via ~~router 3~~.
- serial DTE & PC to router via copper cross-over.
- 13) Go to router 1 CLI & type:

```
enable ↵  
config terminal ↵  
interface serial 2/0 ↵  
IP address 10.0.0.2 255.0.0.0 ↵  
no shut ↵
```

- 14) Go to router 3 CLI & type:

```
enable ↵  
config t ↵  
interface serial 2/0 ↵  
IP address 10.0.0.1 255.0.0.0 ↵  
no shut ↵
```

The connections b/w router 1 & 3 are green.

15) Repeat steps 13 & 14 for router 2 & router 3

16) Go to router 1 CLI & type:

show ip route
which show all direct connections.

→ o/p?

17) We statically connect routers to PC's by typing

IP route 30.0.0.0 255.0.0.0 50.0.0.6

IP route 40.0.0.0 255.0.0.0 50.0.0.1

(for router 2):

IP route 10.0.0.0 255.0.0.0 60.0.0.1

IP route 20.0.0.0 255.0.0.0 60.0.0.2

(for router 3):

IP route 10.0.0.0 255.0.0.0 50.0.0.4

IP route 20.0.0.0 255.0.0.0 50.0.0.1

IP route 30.0.0.0 255.0.0.0 60.0.0.1

IP route 40.0.0.0 255.0.0.0 60.0.0.1

18) Now data transfer b/w PC's are possible

19) Before step 17 we can't send packets from one end PC to other end.

PC > Ping 30.0.0.1

Pinging 30.0.0.1 with 32 bytes of data:

reply from 20.0.0.2: Destination host unreachable

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reply from 20.0.0.2: Destination host unreachable

Ping statistics:

Packets: Sent = 4, received = 0, lost = 4 (100% loss)

After statically defining the route:

PC > ping 40.0.0.1

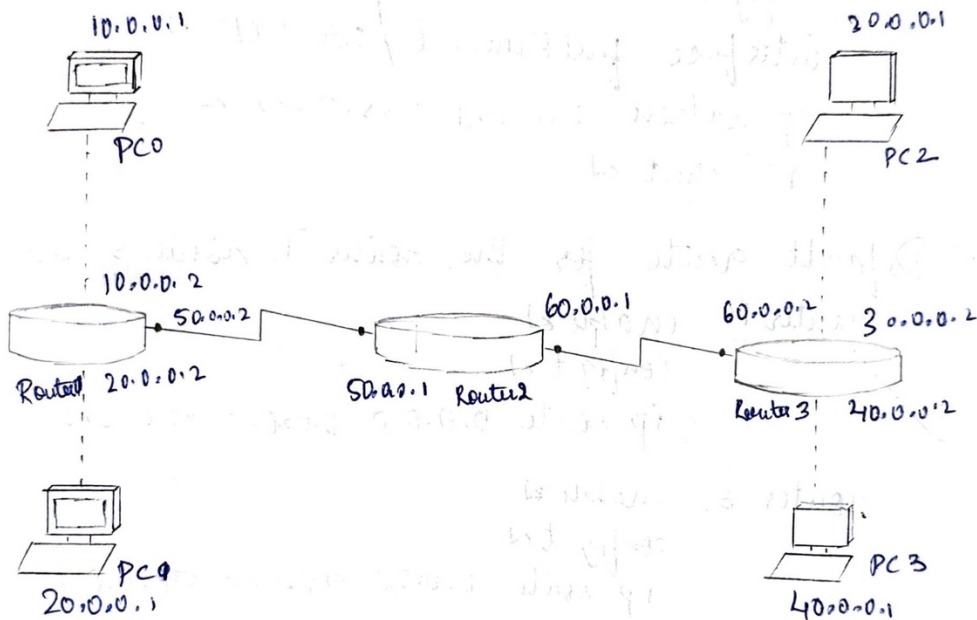
pinging 40.0.0.1 with 32 bytes of data:

reply from 40.0.0.1: byte = 32 time = 2ms TTL = 125.

reply from 40.0.0.1: byte = 32 time = 4ms TTL = 125

reply from 40.0.0.1: byte = 32 time = 6ms TTL = 125

reply from 40.0.0.1: byte = 32 time = 2ms TTL = 125



observation

8/10 LS

N
20/6/23

Topology and Output:

