

Program 4

Aim: Configure default route, static route to the Router(Part 2).

Topology, Procedure and Observation:

10/10

Experiment-23. (17)

AIM:- configure default route, static route to router.
configure static connection to router.

TOPOLOGY:- same as Experiment-2.

PROCEDURE:-

- Go to CLI of router 0 and in CLI enter
- Router # enable
- Router # config terminal
- Router (config) # ip route 20.0.0.0 255.0.0.0
- Router (config) # ip route 30.0.0.0 255.0.0.0
- Router (config) # exit
- Repeat the same for router 1 by changing 20 to 10 and 30.0.0.0 to 30.0.0.1.

OBSERVATION:- In CLI

- # show ip route
- (for router 2)
- S 10.0.0.0/8 [1/0] via 30.0.0.1
- C 20.0.0.0/8 is directly connected, fast Ethernet 0/0
- C 30.0.0.0/8 is directly connected, serial 0/0

OUTPUT:- On pinging end devices, the message is sent, also router all also

Router # enable
 Router # config terminal
 Router (config) # interface serial 2/0
 Router (config) # ip address 20.0.0.2 255.0.0.0
 Router (config) # no shutdown
 Router (config) # exit

Now, a serial connection b/w all the routers is established.

Next step is to default route, router 0 and router 2.

In Router 0 CLI enter the below commands:

Router # enable
 Router # config terminal
 Router (config) # ip route 0.0.0.0 0.0.0.0 20.0.0.2
 Router (config) # exit

Repeat the same for the router 2 for ip route 0.0.0.0 0.0.0.0 30.0.0.1.

OBSERVATION:-

In Router 0 CLI:-

Router # show ip route

C 10.0.0.0/8 is directly connected, FastEthernet 0/0
 C 20.0.0.0/8 is directly connected, serial 2/0
 S* 0.0.0.0/0 [1/0] via 20.0.0.2

In Router 2 CLI:-

Router # show ip route

C 30.0.0.0/8 is directly connected, serial 3/0
 C 40.0.0.0/8 is directly connected, FastEthernet 0/0
 S* 0.0.0.0/0 [4/0] via 30.0.0.1

In Router 1 CLI:-

show ip route

S 10.0.0.0/8 [1/0] via 20.0.0.1
 C 20.0.0.0/8 is directly connected, serial 2/0
 C 30.0.0.0/8 is directly connected, serial 3/0
 S 40.0.0.0/8 [1/0] via 30.0.0.2

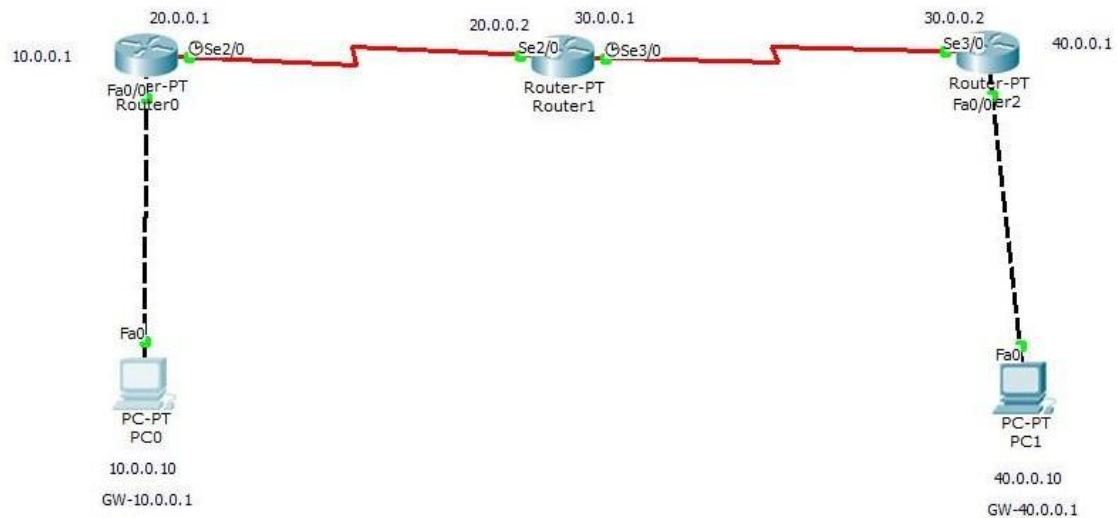
On pinging from one end device to the other,
ping 40.0.0.1:

Pinging 40.0.0.1 with 32 bytes of data:
Reply from 40.0.0.1: bytes = 32 time = 2ms TTL = 253.

"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"

ping statistics for 40.0.0.1:
Packets: sent = 4, Received = 4, lost = 0 (0% loss)

Screen Shots:



PC0

Physical Config Desktop Custom Interface

Command Prompt

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Pinging 40.0.0.10 with 32 bytes of data:

Request timed out.
Reply from 40.0.0.10: bytes=32 time=7ms TTL=125
Reply from 40.0.0.10: bytes=32 time=6ms TTL=125
Reply from 40.0.0.10: bytes=32 time=5ms TTL=125

Ping statistics for 40.0.0.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 5ms, Maximum = 7ms, Average = 6ms

PC>ping 40.0.0.10

Pinging 40.0.0.10 with 32 bytes of data:

Reply from 40.0.0.10: bytes=32 time=8ms TTL=125
Reply from 40.0.0.10: bytes=32 time=7ms TTL=125
Reply from 40.0.0.10: bytes=32 time=9ms TTL=125
Reply from 40.0.0.10: bytes=32 time=6ms TTL=125

Ping statistics for 40.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 6ms, Maximum = 9ms, Average = 7ms

PC>
```

