Lab-4

Adora
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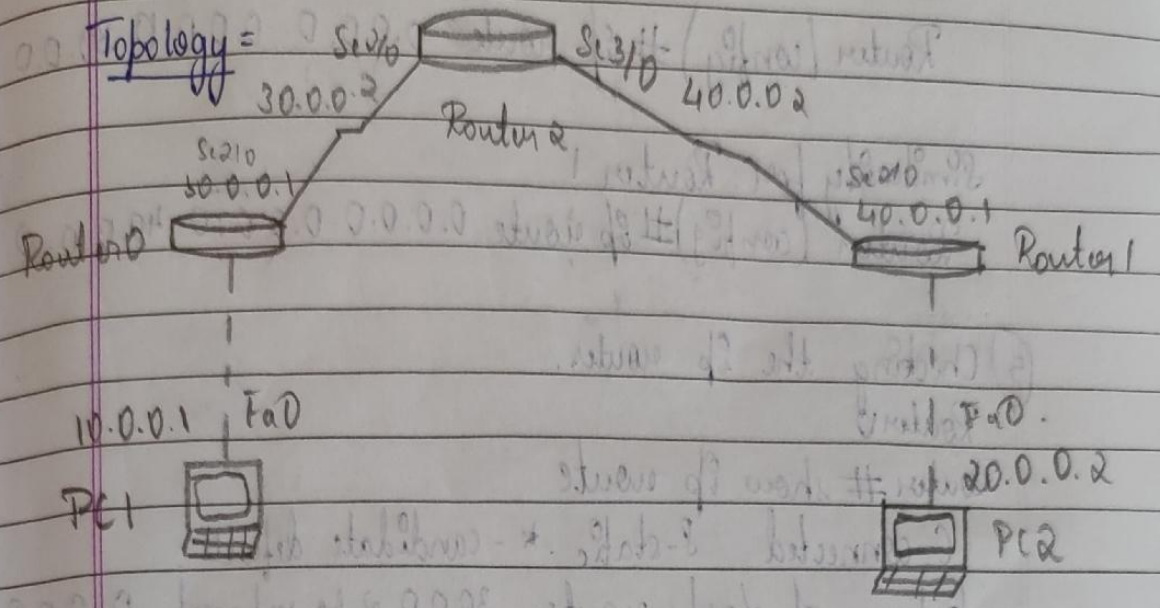
Aim:- To Configure default & static route to router

Topology =



Procedure = (1) Drag and drop 2 PC's & 3 routers from the devices. Connect each PC to one router and the extra router to the both routers.

(2) Set IP addresses of PC1 → 10.0.0.1, PC2 → 20.0.0.1.
Set the Gateway as 10.0.0.2 & 20.0.0.2.

(3) Configure the ports in Router 0 & 1.

```
Router> enable
Router# config t
Router(config)# interface fastEthernet 0/0
Router(config-if)# ip address 10.0.0.2 255.0.0.0
Router(config-if)# no shut
Router(config-if)# exit
Router(config-if)# interface Serial 2/0
Router(config-if)# ip address 30.0.0.1 255.0.0.0
Router(config-if)# no shut
Router(config-if)# exit.
```

Similarly for Router1 & 2

(4) Next we have to perform default routing

Router(config)# ip route 0.0.0.0 0.0.0.0 30.0.0.

Similarly for Router 1

Router(config)# ip route 0.0.0.0 0.0.0.0 40.0.0.2

(5) Checking the ip router.

Router0

Router# show ip route

C-connected S-static *-candidate default.

Gateway of last route = 30.0.0.2 to network 0.0.0.0

C 10.0.0.0/8 is directly connected, FastEthernet 0/0

C 30.0.0.0/8 is directly connected, Serial 2/0

S* 0.0.0.0/0 [1/0] via 30.0.0.1

Router2:

Router# show ip route

C-connected S-static *-candidate default.

S 10.0.0.0/8 [1/0] via 30.0.0.1

S 20.0.0.0/8 [1/0] via 40.0.0.1

C 30.0.0.0/8 directly connected, Serial 2/0

C 40.0.0.0/8 directly connected, Serial 3/0

Output:

Ping Output:

PC > ping 10.0.0.1

pinging 10.0.0.1 with 32 bytes of data

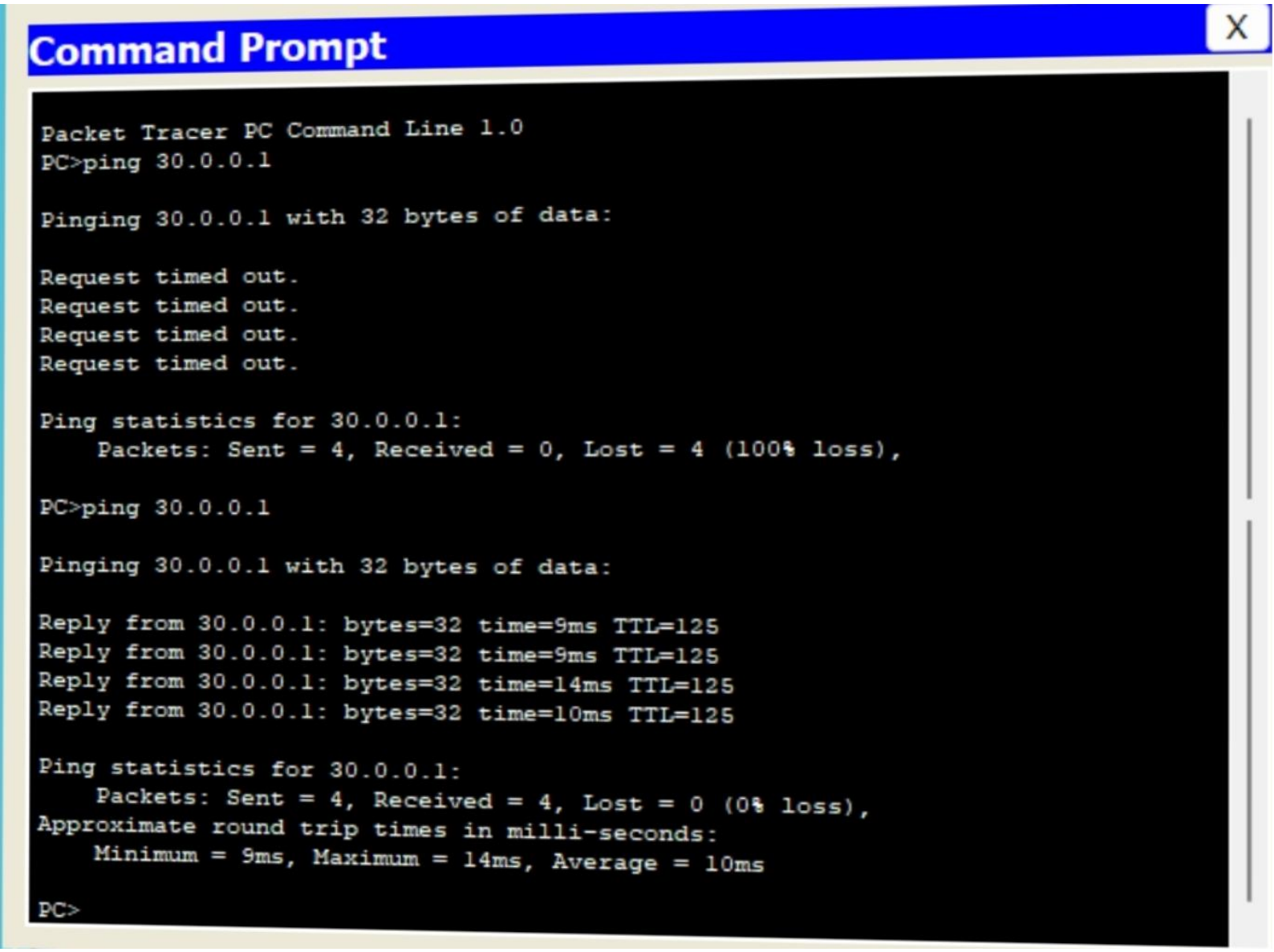
Reply from 10.0.0.1: bytes=32 time=4ms TTL=125
Reply from 10.0.0.1: bytes=32 time=16ms TTL=124
Reply from 10.0.0.1: bytes=32 time=17ms TTL=125
Reply from 10.0.0.1: bytes=32 time=25ms TTL=124

Ping Statistics for 10.0.0.1
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approx round trip times
Minimum = 4ms, Max = 25ms, Avg = 16ms

observation

10/2
17/7/23

Observation = We can observe that the default and static routing both can be done.


Command Prompt
X
Packet Tracer PC Command Line 1.0
PC>ping 30.0.0.1
Pinging 30.0.0.1 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 30.0.0.1:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
PC>ping 30.0.0.1
Pinging 30.0.0.1 with 32 bytes of data:
Reply from 30.0.0.1: bytes=32 time=9ms TTL=125
Reply from 30.0.0.1: bytes=32 time=9ms TTL=125
Reply from 30.0.0.1: bytes=32 time=14ms TTL=125
Reply from 30.0.0.1: bytes=32 time=10ms TTL=125
Ping statistics for 30.0.0.1:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 9ms, Maximum = 14ms, Average = 10ms
PC>