

Lab 3

Aim: Configuring default route to router

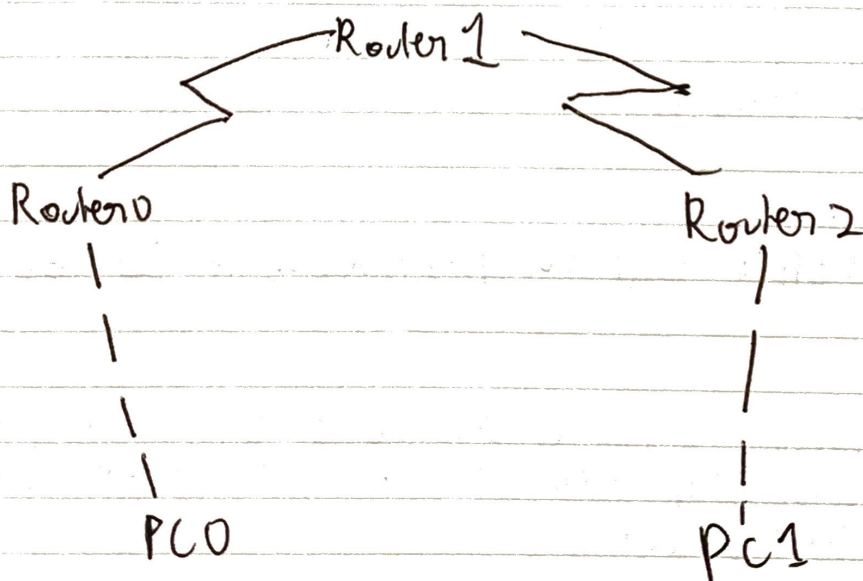
Procedure:

1. 3 routers & 2 PCs are connected as shown in the topology.
2. Pinging PC1 from PC0 shows destination host unreachable.
3. Adding static routes to routers using 'ip route <dest> <subnet mask> <next hop>' in enable, config t mode.

Observation:

Pinging PC1 from PC0 works as expected.

Topology:



Adithyan N
18M18C6128

PC0 to Router1

Router

> enable

config t

(config)# interface FastEthernet 0/0

(config-if)# ip address 10.0.0.10 255.0.0.0

(config-if)# no shut

Initial Ping

cmd

> ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data

Reply from 10.0.0.10: Destination host unreachable

Request timed out.

Ping statistics:

Packets: Sent = 4, Received = 0, Lost = 4 (100%)

Router 0

Router (config)# ip route 30.0.0.0 255.0.0.0 20.0.0.2

Router (config)# ip route 40.0.0.0 255.0.0.0 20.0.0.2

Router #show ip route

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

C 20.0.0.0/8 is directly connected, S2/0

S 30.0.0.0/8 [1/0] via 20.0.0.2

S 40.0.0.0/8 [1/0] via 20.0.0.2

Pinging works as expected

cmd

> ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data

Reply from 40.0.0.1: bytes=32 time=18ms TTL=125

//

//

//

Ping statistics for 40.0.0.1:

Packets sent=4, received=4, Lost=0 (0%)

Approx round trip times:

Min=2ms, Max=21ms, Avg=9ms