Lab-4 Configuring default route to the router (Aim)

Adithya N
1BM18CS128

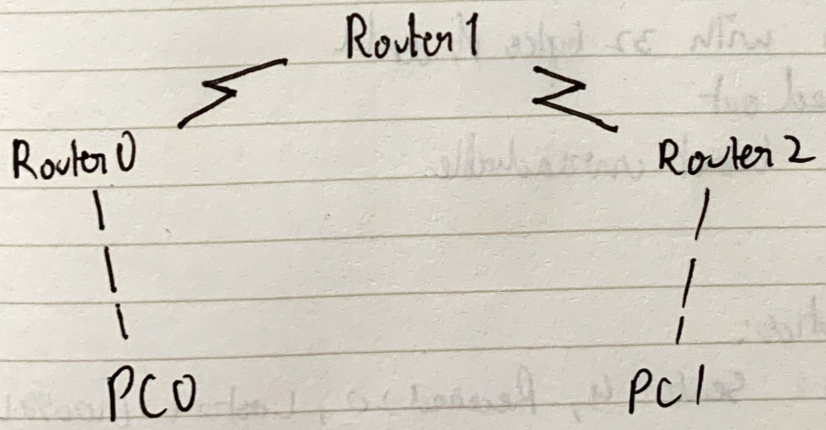
Procedure

1. Connect 2 PCs with three routers in between.
2. Configure IP addresses as in previous experiment: with default gateway and unique ip address for PCs. and through CLI for routers
3. Default route is configured for router 0 and 2 using: 'ip route 0.0.0.0 0.0.0.0 nexthop
4. Static ip route is configured for router 1 using other routers as destination and source.
5. Pinging PC1 from PC0 gives the required reply.

Observation:

Initial ping gives destination host unreachable.
Ping after configuring default routes gives expected

Topology



CLI

Router

> enable

config t

(config) # interface FastEthernet 0/0

(config-if) # ~~interface~~ ip address 10.0.0.10 255.0.0.0

(config-if) # no shut

#exit

(config) # interface serial 2/0

(config-if) # ip address 20.0.0.1 255.0.0.0.

no shut

#exit

(config) # ip ~~address~~ route 0.0.0.0 0.0.0.0 20.0.0.2

#exit

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

Initial ping

:C\> ping 40.0.0.1

Ping 40.0.0.1 with 32 bytes of data

Request timed out

Destination host unreachable

//

//

Ping statistics:

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

Final ping

> ping 40.0.0.1

Ping 40.0.0.1 with 32 bytes.

Reply from 40.0.0.1: bytes = 32 time = 6ms TTL = 125
bytes = 32 time = 3ms TTL = 125
bytes = 32 time = 18ms TTL = 125
bytes = 32 time = 4ms TTL = 125

Ping statistics:

Sent = 4, Received = 4, Lost = 0 (0% loss)

Approx. round trip times:

Min = 3ms, Max = 18ms, Average = 7ms