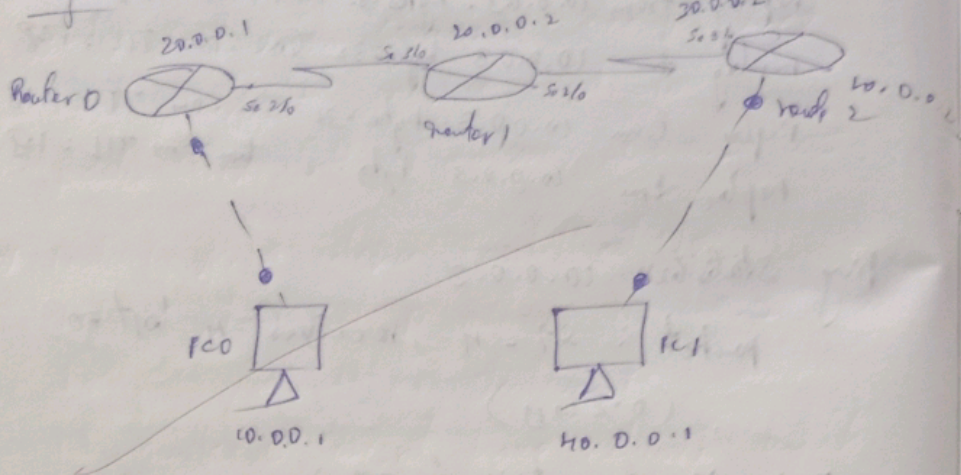Lab #4

Configuring default router to the router

Diagram?

given   IP address   to PC 0   as   10.0.0.1
given   IP address   to PC 1   as   110.0.0.1

> click router 0, CLI

Router > enable

Router # configure terminal

Router (config) # interface Fast ethernet 0/0

Router (config if) # ip address 10.0.0.2 255.0.0.0

Router (config if) # no shutdown

Router (config if) #

% Link 5 -changed : Interface fastethernet 0/0

Router (config -if) # exit

\# Router

* IP address serial 2/0   20.0.0.1
   Router (Config) # interface serial 2/0
   Router (config-if) # ip address 20.0.0.1   255.0.0.0
   Router (config-if) #   No shutdown
   % link 5. changed : Interface serial 2/0

* Router 1 Serial 3/0   20.0.0.2
   Router > enable
   Router # configure terminal
   Router (config) # interface serial 3/0
   Router (config-if) # IP address 20.0.0.2 . 255.0.0.0
   Router (config-if) # exit

* Router 1 Serial 2/0   30.0.0.1
   Router (config) # interface serial 2/0
   Router (config-if) # ip address 30.0.0.1   255.0.0.0
   Router (config-if) # no shutdown.
   % link - 5 changed : Interface serial 2/0
     changed state to down.

* Router >

Router > enable

Router # Configure terminal

enter configuration commands, one per line.

Router (config)#: interface Serial 3/0

Router (config-if)# ip address 30.0.0.2 255.0.0.0

* Router (config)# interface Fastethernet 1/0

Router (config-if)# ip address 40.0.0.2 255.0.0.0

Router (config-if)# no shutdown

=> The router 0 doesn't have network with
30.0.0.0 and 40.0.0.0

To see connection of router.

CLI > Router > Show ip router

PC > ping 40.0.0.1

pinging 40.0.0.1 with 32 bytes of data

reply from 10.0.0.2 destination host unreachable

reply from 10.0.0.2 destination host
unreable

Request time out

Reply from 10.0.0.2 destination
host unreach.

packets   Sent = 4   received = 0   lost = 4

(100% loss)

To the connection

Router > show ip router

C 10.0.0.0/8 is directly connected

Fastethernet 0/0

C 20.0.0.18 is directly connected

serial 2/0

=> Router # config t

Router (config) # ip route 20.0.0.0 255.0.0.0 20.0.0.2

Router (config) # ip route 40.0.0.0 255.0.0.0 20.0.0.2

exit

Router # show ip route

C   10.0.0.0   Fastethernet 0/0

C   20.0.0.0   Serial 2/0

S   30.0.0.0   Via 20.0.0.2

S   40.0.0.0   Via 20.0.0.2

Route 1

Router (config) # ip route 10.0.0.0 255.0.0.0

20.0.0.1

Router (config) # ip route 40.0.0.0 255.0.0.0

30.0.0.2

Router # show ip route

S 10.0.0.0/8 Via 20.0.0.1

C 20.0.0.0   Serial 2/0

C 30.0.0.0   Serial 2/0

S 40.0.0.0   Via 30.0.0.2

observations:

Observation?

Since the static route was not set destination host was unreachable as we have sent static route now we get reply.