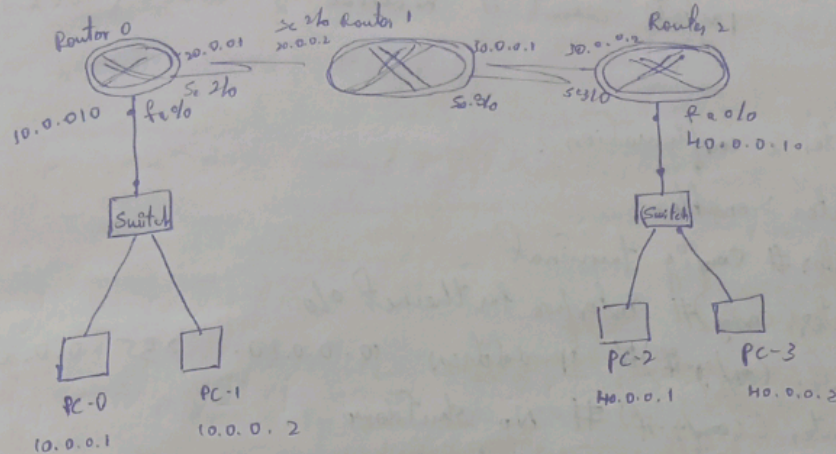


Default Routing

Lab - 5



- 1) Select 4 end devices and 2 switches
- 2) connect 2 end services to each switch
- 3) Add 3 routers to workspace and connect it as shown in topology
- 4) connect two two switches to two routers
- 5) Configure IP address for two end services as 10.0.0.1 and 10.0.0.2 and next two devices as 10.0.0.1 and 10.0.0.2
- 6) ~~Send packets without router~~

Observation

for PC0

PC > ping 10.0.0.1

pinging 10.0.0.1 with 32 bytes of data

Request time out

Request time out

Request time out

Request time out

ping statistics for 10.0.0.1

packets: sent=14 received=50, lost=0 (100% loss)

Router 0 configuration:

Router > enable

Router # config terminal

Router (config) # interface fastethernet 0/0

Router (config-if) # ip address 10.0.0.10 255.0.0.0

Router (config-if) # no shutdown

Router (config-if) # exit

Router (config) # interface serial 2/0

Router (config-if) # ip address 20.0.0.1 255.0.0.0

Router (config-if) # no shutdown

Router (config-if) # exit

Router > show ip route

C 20.0.0.0/8 is directly connected, serial 2/0

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

Router > config t

Router (config) # ip route 0.0.0.0 0.0.0.0 20.0.0.2

Router (config) # exit

Router 2 configuration

Router > enable

Router # config t

Router(Config) # interface serial 2/0

Router(Config-if) # ip address 30.0.0.2 255.0.0.0

Router(Config-if) # no shutdown.

Router(Config-if) # exit

Router(Config) # interface fastethernet 0/0

Router(Config-if) # ip address 10.0.0.10 255.0.0.0

Router(Config-if) # no shutdown.

Router(Config-if) # exit

Router # show ip route

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

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

Router # config terminal

Router(Config) # ip route 0.0.0.0 0.0.0.0 30.0.0.2

Command prompt : for Router

Observation:

PC : ping 10.0.0.1

Pinging with 32 bytes of data

Reply from 10.0.0.1 : bytes=32 time=15ms TTL=128

Reply from 10.0.0.1 : bytes=32 time=4ms TTL=128

Reply from 10.0.0.1 : bytes=32 time=11ms TTL=128

Reply from 10.0.0.1 : bytes=32 time=6ms TTL=128

Ping statistics for 10.0.0.1

Packet sent = 4 Received = 4 Lost = 0

(0% loss)

Approximate round trip times in milliseconds

Minimum = 4ms Maximum = 15ms Avg = 10ms

~~Table~~
~~Observation~~