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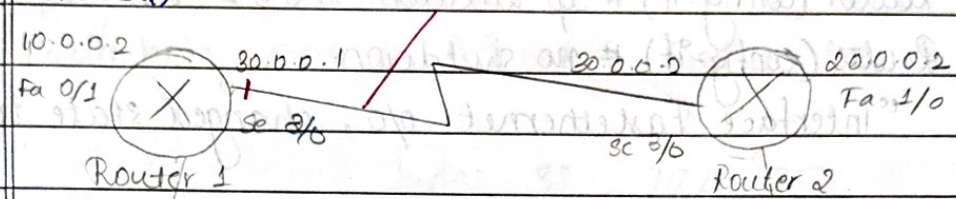
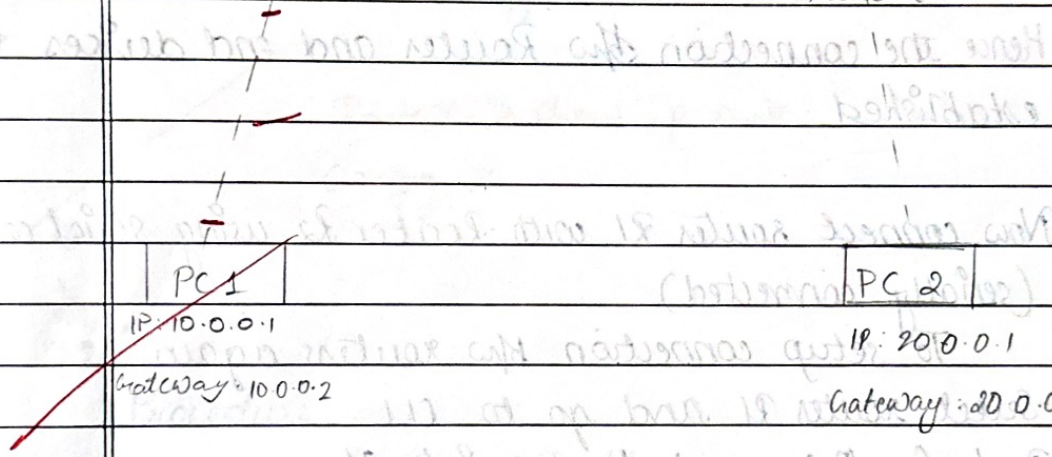
Aim: Configuse default route, static route to the routes

Devices used : 2 routers and 2 end routers

TOPOLOGY





PROCEDURE :

1. Select a genric router R1
2. Connect an end device PC1 to router R1. Through parallel connection. fast ethernet 0/0
3. Configure PC 1 with ip address 10.0.0.1 and gateway 10.0.0.2
4. Similarly select another generic router R2 and connect an end device PC2. fastethernet 2/0.
5. Configure PC2 with ip address 20.0.0.1 and gateway 20.0.0.2

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Now select router R1 go to CLI and execute the following

Router > enable
Router # configure terminal
Router (config) # interface Fastethernet 0/0
Router (config-if) # ip address 10.0.0.2 255.0.0.0
Router (config-if) # no shutdown
"Interface Fastethernet 0/0, changed state to up"

Hence the connection b/w Router and end devices is established.

Now connect router R1 with Router R2 using serial cable (serially connected)

To setup connection b/w routers again

-Select router R1 and go to CLI
Router (config) # interface serial 2/0
Router (config-if) # ip address 30.0.0.1 255.0.0.0
Router (config-if) # no solution

-Select router R2 and go to CLI
Router (config) # interface serial 3/0
Router (config-if) # ip address 30.0.0.2 255.0.0.0
Router (config-if) # no shutdown

"Interface serial 2/0 changed state to up"
3/0

OBSERVATIONS :

1. After setting up mentioned topology
2. Now try to ping PC2 with PC1
   Open command prompt for PC1 type ping 20.0.0.1
3. Destination host unreachable

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Packets sent : 4 Recieved : 0 lost : 4 loss : 100 %.

It is also observed that the end system PC 1 was pinged with router R1 only

ping 30.0.0.1 → successful
packets sent : 4 Recieved : 4 lost : 0 loss = 0 0 %.

bytes = 32 TTL = 255

Router > show ip route
config >

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Procedure
steps : go to PC0 → Desktop → command prompt and run
ping 20.0.0.10
ping 30.0.0.2
ping 30.0.0.1
and observe the output.