

LogicalPhysicalx: 427, y: 249

Router-PT  
Router0

10.0.0.2

30.0.0.1

PC-PT  
PC0

10.0.0.1

Router-PT  
Router1

20.0.0.2

30.0.0.2

PC-PT  
PC1

20.0.0.1

PC0

PhysicalConfigDesktopProgrammingAttributes

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 20.0.0.1

Pinging 20.0.0.1 with 32 bytes of data:

Reply from 10.0.0.2: Destination host unreachable.
Reply from 10.0.0.2: Destination host unreachable.
Reply from 10.0.0.2: Destination host unreachable.
Reply from 10.0.0.2: Destination host unreachable.

Ping statistics for 20.0.0.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

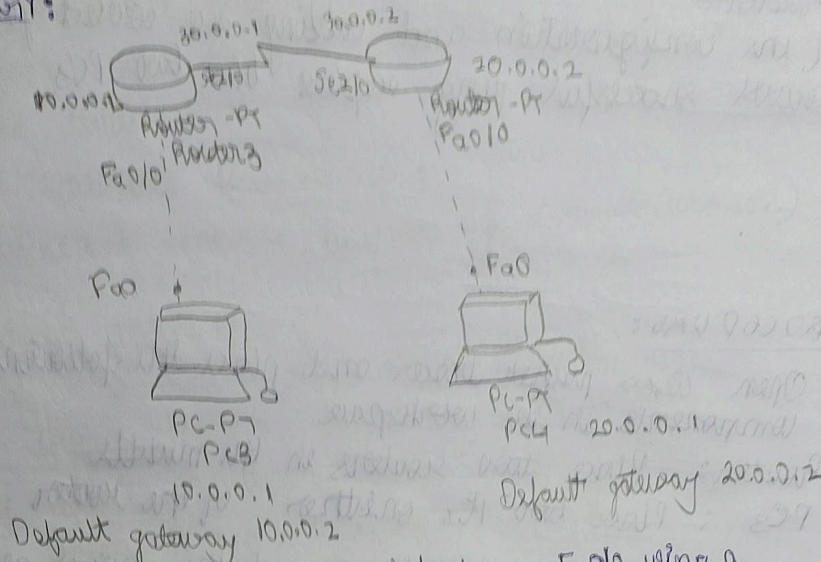
Top

### LAB-3 = EXPERIMENT 2-b

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AIM: To connect 2 PC's and 2 different routers via two different routers - STATIC ROUTING

#### Topology:



1) PC3: Connected to routers interface Fa0/0 using a cross-over cable

IP address: 10.0.0.1

Default gateway: 10.0.0.2

2) PC4: Connected to routers interface Fa0/0 using a cross-over cable

IP address: 20.0.0.1

Default gateway: 20.0.0.2

3) Router 3: Interface Fa0/0 connected to PC3

Interface Se2/0 connected to Router 4

IP address of Fa0/0: 10.0.0.2

IP address of Se2/0: 30.0.0.1

4) Router 4: Interface Fa0/0 connected to PC4

Interface Se2/0 connected to Router 3

IP address of Fa0/0: 20.0.0.2

IP address of Se2/0: 30.0.0.2



## OBSERVATION:

- 1) PC3 and PC4 are connected to different subnets  
PC3 is on the 10.0.0.0/24 network while PC4  
is on the 20.0.0.0/24 network

~~Router 3~~

If the configuration and cabling are correct you will receive successful ping replies b/w two PCs

## PROCEDURE:

- 1) Open Cisco packet tracer and place the following components in the workspace

Router: Place two routers in the middle

PCs: Place two PCs on either of the router

- 2) Use UTPs over cables to connect the devices as follows

PC3 → Router 2 Fa0/0 interface

PC4 → Router 3 Fa0/0 interface

Router 2 and Router 3 → S0/0 interface using  
Serial DCE

- 3) Configure Router 3 by clicking on the router and enter cli

Assign IP addresses to the router interfaces:

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) # 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



The ping results are as follows:

PC > ping 20.0.0.1

Pinging 20.0.0.1 with 32 bytes of data:

Request timed out

Request timed out

Request timed out

Request timed out

Ping statistics for 20.0.0.1

Packet sent = 4, Received = 0, Loss = 4 (100% Loss)

PC > ping 20.0.0.1

Pinging 20.0.0.1 with 32 bytes of data:

Reply from 10.0.0.2: Destination host unreachable

Reply from 10.0.0.2: Destination host unreachable

Reply from 10.0.0.2: Destination host unreachable

Request timed out

Ping statistics for 20.0.0.1:

Packet: sent = 4, received = 0, loss = 4 (100% Loss)

Router# show ip route

Gateway of last resort is not set

10.0.0.0/8 is directly connected, FastEthernet 0/0

20.0.0.0/8 [1/0] via 30.0.0.2

30.0.0.0/8 is directly connected, Serial 2/0