

Program-3

Configure default route, static route to the Router

Topology, Procedure and Observation:

2) Lab-2 (EXP-2)

Aim: Configure IP address to routers in packet tracer. Explain the following messages: ping response, destination unreachable, request timed out, reply.

Topology:

The diagram illustrates a network topology with two routers, Router 1 and Router 2, connected via their serial ports. Router 1 is on the left, and Router 2 is on the right. They are connected by a serial link labeled with IP addresses 30.0.0.1 and 30.0.0.2 on their respective serial 2/0 ports. Router 1 has a fast ethernet 0/0 port connected to PC1 (10.0.0.1). Router 2 has a fast ethernet 0/0 port connected to PC2 (20.0.0.1). The routers are labeled 'Router-PT' and 'Router 2' respectively.

Procedure:

- 1) Create a 2 network of 10.0.0.0 and 20.0.0.0 by connecting a end device to the router.
- 2) Set up IP address, gateway, subnet mask of both networks.
- 3) In router set up its IP address (fast ethernet)
- 4) Set up another network 30.0.0.0 by connecting the 2 routers.

In CLI of router enter,

```
Router # enable
Router # config terminal
Router (config) # interface fast ethernet 0/0
Router (config) # no shutdown
exit
do the same for router 2
# Router (config) # interface serial 2/0
```

#Route (config-76) #ip address

#Route (config) #no shutdown

#Route (config-76) #exit

OBSERVATION:

- On pinging Pco to PCs, it shows that it is unable to ping and shows the devices are not reachable shows - "destination host unreachable"
- On pinging Pco to Fa 0/0 part of route the message is pinged (pinging 10.0.0.2)
- On ping Pco to Se 2/0 route 2, the message is not pinged.

Screenshots

