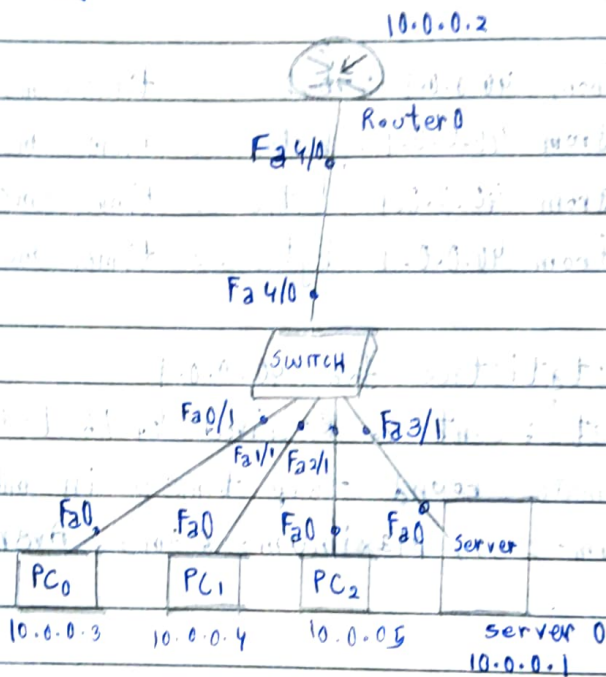


AIM: Configuring DHCP within a LAN in a Packet Tracer

Topology:



Procedure:

- 1) Add 3 PC's, 1 server, 1 switch and 1 Router to workspace. Connect PC, server to switch by using copper straight-through wire.
- 2) Configure the server by giving the IP address and gateway.
- 3) Now go to Router and open CLI and follow these commands



Router > enable

Router # config t

Router (config) # interface FastEthernet 4/0

Router (config-if) # ip address 10.0.0.2 255.0.0.0

Router (config-if) # no shut

Router (config-if) # exit

Router (config) # exit

Router # exit

Router -

4) Now go to Services in Server0 go to DHCP change service from off to on. Now give start IP address 10.0.0.3 and give all servers as 10.0.0.1

5) Now open IP configuration in Desktop change IP configuration from static to DHCP Follow the same for all ~~the~~ other PC's

6) Now Ping can be done from any PC.

Observation

Learning outcome:

Server automatically provides IP address for all the PC's.

Follows below procedure

D - Discover

O - OFFER

R - Request

A - Acknowledgement



Result: Ping 10.0.0.5

Pinging 10.0.0.5 with 32 bytes of data:

Reply from 10.0.0.5: bytes=32 time=0ms TTL=128

Reply from 10.0.0.5: bytes=32 time=0ms TTL=128

Reply from 10.0.0.5: bytes=32 time=0ms TTL=128

Reply from 10.0.0.5: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.5:

Packets: Sent=4, Received=4, Lost=0 (0% loss)

Approximate round trip time in milliseconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

8/12/22