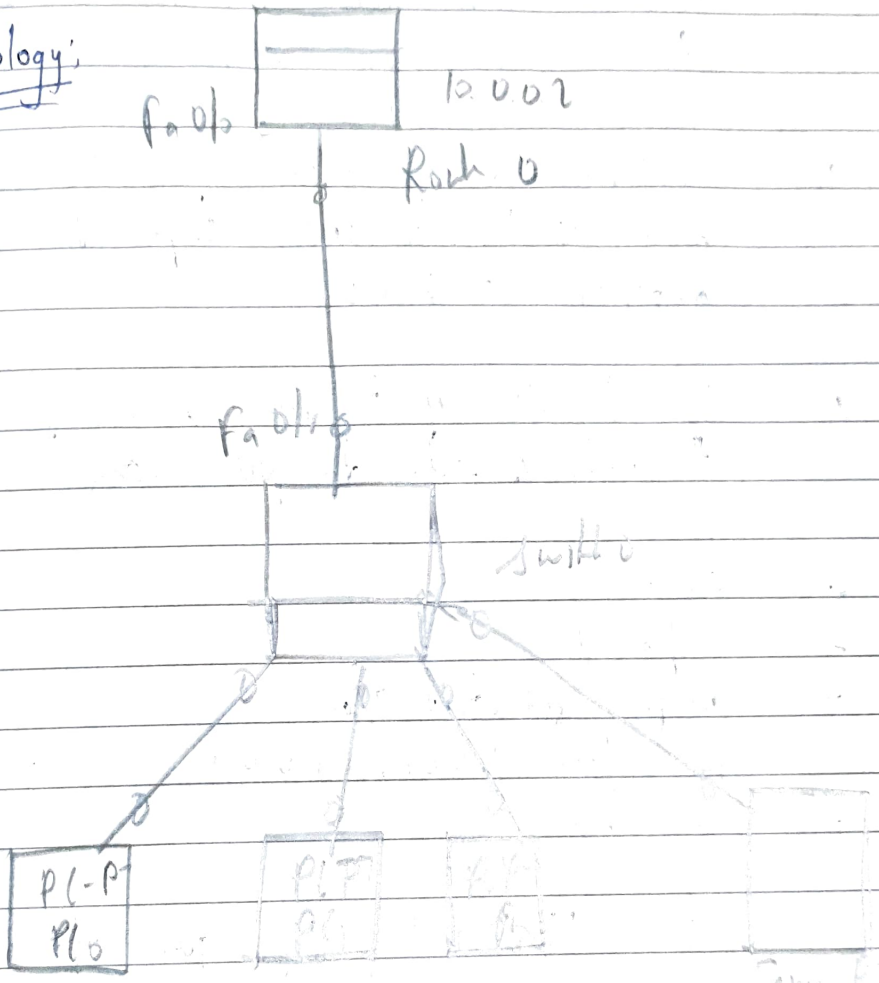
Lab 4

13/12/22

Aim: Configure DHCP within a LAN in a packet tracer.

Topology:



Procedure:

1) Place a generic router, a generic switch, 3 generic PC's from the workspace as shown in the given topology.

2) Connect the PC's to the switch through the straight cable.

3) Connect the server to the switch & switch to the router using the straight through

4) Place a note below the server with the ip address as 10.0.0.1

5) Configure the ip address of the server as 10.0.0.1 and configure the gateway as 10.0.0.1

6) Open the CLI of the router or click the router & enter the following command

- enable
- config t
- interface fast ethernet 0/0
- ip address 10.0.0.2 255.0.0.0
- no shut

The light will turn green of router 4 arrow for the switch After some time, the arrow color also change the green.

Note: Click on the server

Open the services tab
click on DHCP.
Turn the switch ON

set default gateway ip 10.0.0.1
DNS server as 10.0.0.1 (same as IP address)
TFTP server as 10.0.0.1 (same as IP address)
keep the start IP address as 10.0.0.26
subnet mask as 255.0.0.0 &,
After the procedure, save the port.
Now, click on PCV and under the dialog box
Go to IP configuration & click on DHCP.
If there are no errors, it will show
'DCHP req. successful' and the IP add will
be 10.0.0.3

Simulation mode:

Add PDU by selecting the PCs & click
on add option for sight panel

Realtime mode: Select the PC PC0 &:
play the PC in the command prompt.
Once the pkts statuses are successfully
displayed, we can depict this high PCs
as well.

Observation:

Learning Outcomes:

The semi automatic set the IP
add & subnet, & gateway to all the PCs
& IP address is allotted in DHCP pool.

Result

1) PC > 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 = 64
Reply from 10.0.0.5: bytes = 32 time = 0ms TTL = 64
Reply from 10.0.0.5: bytes = 32 time = 0ms TTL = 64
Reply from 10.0.0.5: bytes = 32 time = 0ms TTL = 64

Ping Statistics for 10.0.0.5:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms

2) PC > Ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:

Reply from 10.0.0.4: bytes = 32 time = 0ms TTL = 64
Reply from 10.0.0.4: bytes = 32 time = 0ms TTL = 64
Reply from 10.0.0.4: bytes = 32 time = 0ms TTL = 64
Reply from 10.0.0.4: bytes = 32 time = 0ms TTL = 64

Ping Statistics for 10.0.0.4:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms

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