

13/11/2024

Week-5(Experiment 4)

Observation Book:

Experiment-4

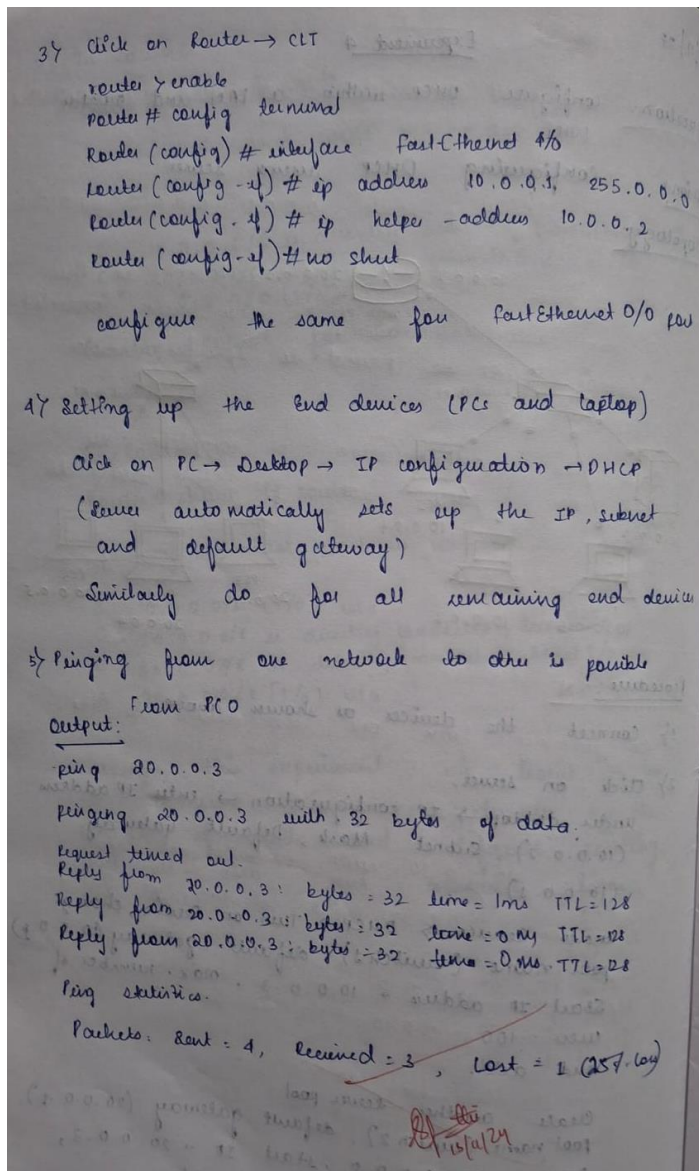
Question: Configure DHCP within a LAN and outside LAN

Aim: Configuring DHCP using server

Topology:

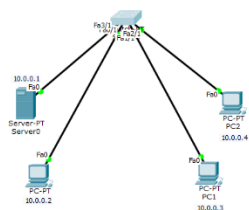
Procedure:

- 1) Connect the devices as shown above
- 2) Click on server,
under desktop → IP configuration → enter IP address (10.0.0.2), Subnet Mask, Default Gateway (10.0.0.1)
under services → DHCP → Turn on Service, change pool name (switch 1), default gateway (10.0.0.1)
Start IP address → 10.0.0.3, max. number of users: 100
and add.
Create another server pool
pool name (switch 2), default gateway (20.0.0.1),
DNS server 0.0.0.0, start IP → 20.0.0.3,
max no. of users: 100 and add
(To edit click on existing pool and press save)

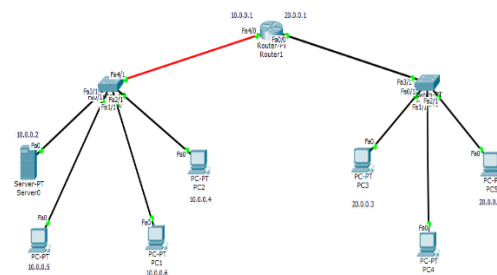


Topology:

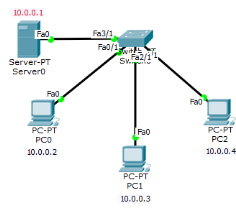
(within Lan)



(outside Lan)

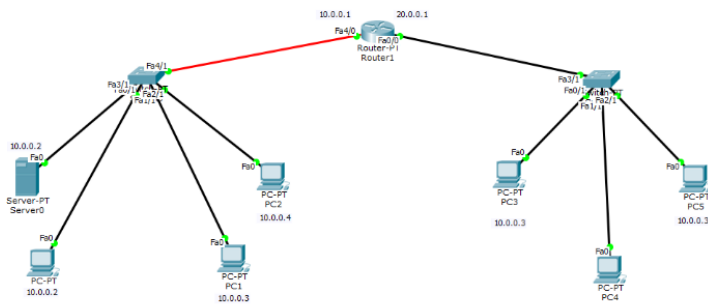


Output:
(within Lan)



```
PC0
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.1
Pinging 10.0.0.1 with 32 bytes of data:
Reply from 10.0.0.1: bytes=32 time=0ms TTL=128
Reply from 10.0.0.1: bytes=32 time=0ms TTL=128
Reply from 10.0.0.1: bytes=32 time=0ms TTL=128
Reply from 10.0.0.1: bytes=32 time=0ms TTL=128
Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
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=1ms TTL=128
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128
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 = 1ms, Average = 0ms
PC>
```

(outside Lan)



PC2
Physical Config Desktop Custom Interface
IP Configuration
IP Configuration
☒ DHCP ☐ Static DHCP request successful.
IP Address 10.0.0.4
Subnet Mask 255.0.0.0
Default Gateway 0.0.0.0
DNS Server
IPv6 Configuration
☐ DHCP ☐ Auto Config ☒ Static
IPv6 Address
Link Local Address FE80::205:SEFF:FE26:1866
IPv6 Gateway
IPv6 DNS Server

