Experiment 3: Setup & Configure a Simple Enterprise Network

1. Aim: To create & configure a DNS, DHCP & Web servers in an Enterprise network.

2. Tools Used: Cisco Packet Tracer

3. Related Theory:

A simple enterprise network consist of hosts connected with each other using LAN technology. The network also consist of various servers mainly DHCP, DNS and Web severs to share information in LAN. The DHCP server will provide the configuration needed by hosts to connect on the network. DNS server will help resolve the domain names to corresponding IP addresses. The web servers will share the web pages (information) requested by hosts in the LAN.

4. Laboratory Exercise:

Implement the network shown in figure below using Cisco Packet Tracer. Connect the devices as shown in figure and configure thee hosts and servers as per strategy given below.

Network address: **192.168.10.0/24**

After the network is configured, check the connectivity of hosts and servers. Once connectivity is verified, access the web pages stored on servers using their domain names. Observe the flow of packets using simulation mode.

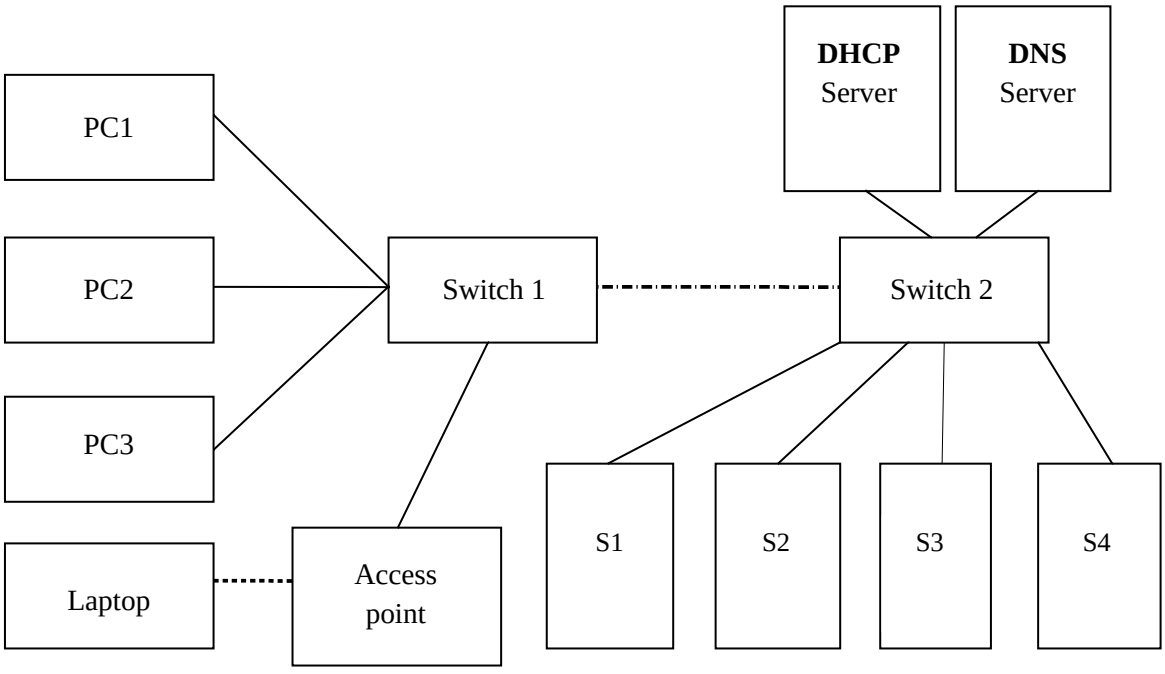

Fig: A Simple Enterprise Network

5. Post-Experiment Exercise:

A. Conclusion

B. Questions

a. What is Name Server?

b. What is DNS Spoofing?

c. What is difference between URL and Domain Name?

d. What are the port numbers used by DNS, DHCP and web servers? Is it possible to change these numbers?