

24/09/2020

Thursday

LAB-1

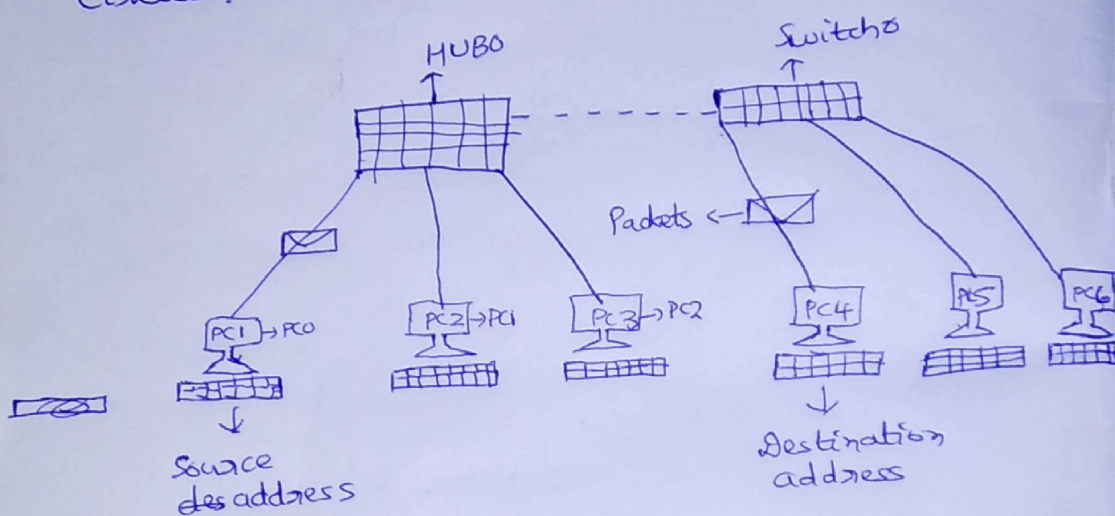
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IBM18CS049

Create a PDA topology and simulate sending a simple PDU from source to destination using hub and switch as connecting device.

Aim:- To demonstrate how hubs and switches are used to send packets from source address to destination address.

Circuit:-



Learning outcomes:-

A hub is a physical layer networking device which is used to connect multiple devices in a network. They are generally used to connect computers in a LAN.

A hub has many ports in it. A computer which intends to be connected to the network is plugged in to one of these ports. When a data frame arrives at a port, it is broadcast to

every other port, without considering whether it is destined for a particular destination or not.

A switch is a data link networking device which connects devices in a network and uses packet switching

Steps involved:-

1. Topology is created using hub which are connected to 3 PCs and switch which are connected to another 3 PCs

2. Hub is a device works as broadcasting device and switch which works as unicasting device.

3. PC0 acts as a source and PC3 acts as a destination.

4. Click on each PC → config → fastethernet0 → set ip address ex:- 10.0.0.1, 10.0.0.2 and so on.

5. A simple PDU is sent from source of Hub to destination of switch.

6. Network is ready

7. Using Hub and switch that is we have implemented.