

Lab No: 3
Date: 24/7/24
Aim: To setup and configure LAN using switch and all connected devices.

1) From the network component box, click 'and drag and drop' the below components:

a) 4 generic PCs and One HUB

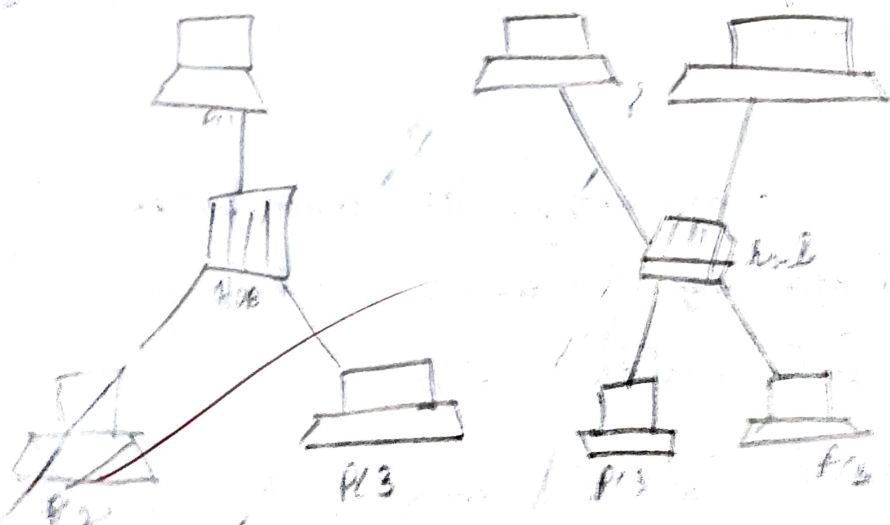
b) 4 generic PCs and One switch

2) Click on Connections:

a) Click on Copper Straight-Through cable

b) Select one of the PCs and connect it to HUB using the cable. The link LED should glow in green, indicating that the link is up. Similarly connect remaining 3 PCs to the HUB.

c) Similarly connect 4 PCs to the switch using copper straight-through cable



- 3) Click on PCs connected to hub, go to the Desktop Tab, click on ~~File~~ configuration, and enter an IP address and subnet mask. Also, the default gateway and DNS server information is not needed as there are only two end devices in the network.

PC0	
IP configuration	
IP configuration	
<input type="radio"/> DHCP	<input type="radio"/> Static
IP Address	10.1.1.1
Subnet Mask	255.0.0.0
Default Gateway	
DNS Server	

Click on PDU (message icon) from the Common Tool bar,

- a) Drag and drop it on one of PC and then drop it on another PC connected to the HUB,

- 4) Observe the flow of PDU from source PC to destination PC by selecting the Realtime mode of simulation.

- 5) Repeat Step #3 to Step #5 for the PCs ~~was~~ connected to switch.
- 6) Observe how HUB and switch are forwarding the PDU and write your observation and conclusion ~~for~~ about the behavior.

Student observations:

a) Ring

transmission
connection

b) Mesh Topology

c) Hub is used for broadcast transmission whereas switches are used for selective forwarding (or) packet.

Result:

Thus the setup and configure of LAN is studied and observed.

[Signature]