

3/10/24

Practical - 3 CISCO PACKET TRACER simulator

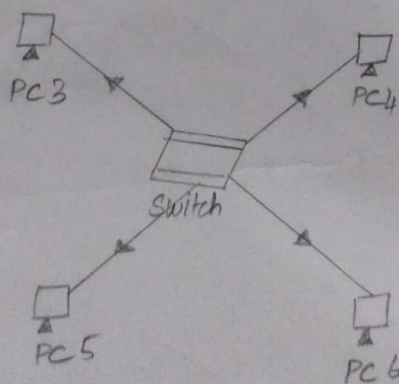
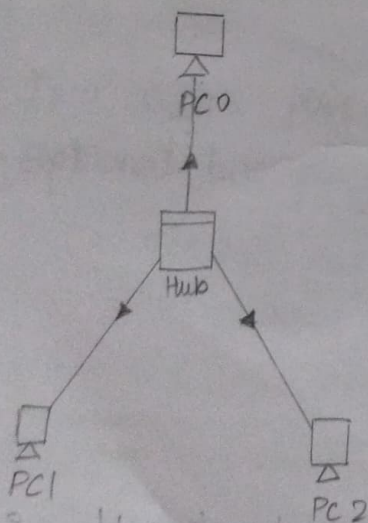
Aim: To understand and study the Packet
= tracer tool installation and user interface

d) 1. From the network component box, click and drag and drop below the 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 PC 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 the PCs connected to hub, go to the desktop tab, click on IP configuration, and enter an IP address and subnet mask. Here, the default gateway and DNS server information is not needed as there are only two end devices in the network.

PC0	
IP configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	10.1.1.1
Subnet Mask	255.0.0.0

PC1	
IP configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	10.1.1.2
Subnet Mask	255.0.0.0

click on the PDU (message icon) from the common tool box,

a. Drag and drop it on one of PC (source machine) and then drop it on another PC (destination machine) 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 connected to the switch

6. Observe how HUB and switch are forwarding the PDU and write your observation and conclusion about the behaviour of switch and HUB

Question 4 Answer

a. Hub: broadcasts packets to all the connected devices

b. ~~Mesh~~ Switch: Forward packets only to the specific ports

b) ~~Mesh~~ topology

Each device connected to every other device in network

Result

3. The experiment was successfully executed and the output is verified