Exp: 3

Dt: 08-29

CISCO PACKET TRACER

Aim:

To study packet tracer tool installation and user interface overview

a) Cisco Packet tracer got successfully installed.

b) Analyse behaviour of network devices using Cisco Packet tracer simulator.

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 PC and connect it to HUB using the cable. The link LED should glow in green indicating that the link is up to so 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.

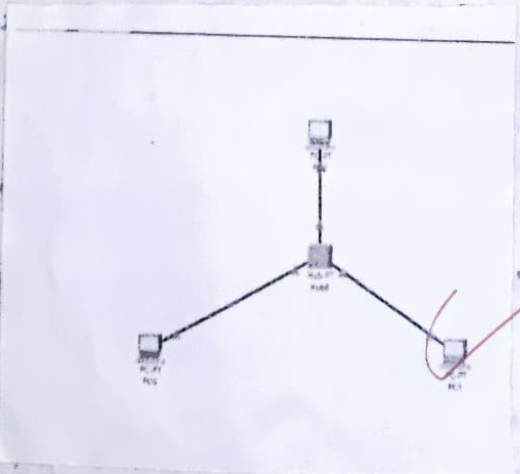
click on the PDU (message icon) from the common tool bar.

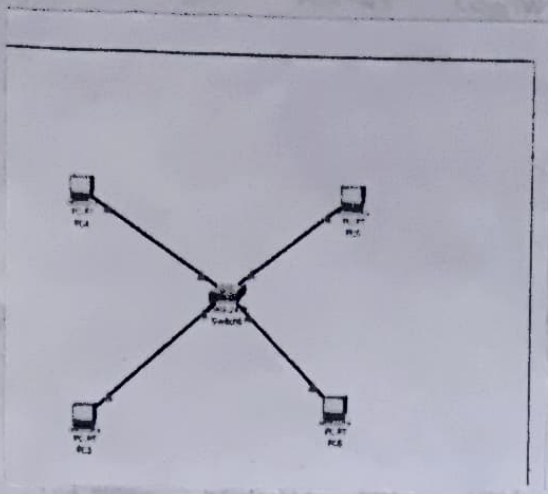
Drag and drop either on one of the PC (source machine) and then drop it on another PC (destination machine) connected to the HUB.

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 PC's connected to the switch.

Observe the HUB and switch are forwarding the PDU to all ports and write your observation and Conclusion about the behaviors of switch and HUB.





Student observation:

1) From your observation write down the behaviour of switch and hub in terms of forwarding the packet received by them?

A switch forwards packet only to the specific devices based on the MAC address, which a hub broadcasts packets to all the connected devices.

2) Find out the network topology implemented in your college and draw and label that topology in your observation book.

The network topology commonly used in colleges is star topology, where all devices are connected to a central switch or hub.

Result:

The packet tracer tool is installed and the overview of user interface layer is studied.

9/10/17