

AIM: To study the packet tracer tool, Installation and user interface overview

Installing packet tracer:

- * Go to <https://www.netacad.com>
- * Login with your CISCO academy credentials
- * Click on packet tracer graphics and download

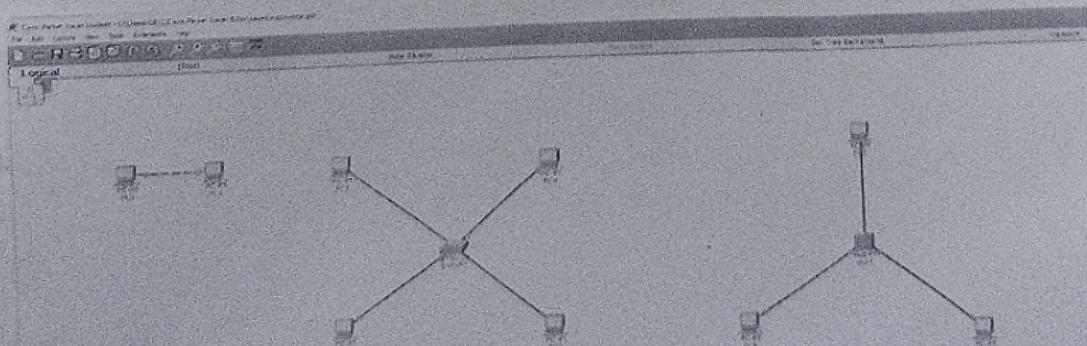
User Interface overview:

The layout of packet tracer is divided into several components

1. menu bar - common menu for open, save etc.
2. MainToolBar - Open, undo, redo and shortcuts
3. Logical / Physical workspace - Toggle between works
4. common tools bar - tools like select, move layout, delete layout
5. simulation tools - used to toggle between real and simulation
6. Network Component Box - contains network & end devices

Analysis of Behavior of network devices using CISCO:

1. From the component box
 - a) 4 generic PCs and one HUB
 - b) 4 Genuine 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 LED should glow
 - c). similarly connect 4 PCs to the switch using copper straight-through cable



3. Click on the PCs connected hub go to the desktop tab, click on IP Config and enter an IP address
4. Observe the flow of PPU from source PC and 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 PPU and write your observations and conclusions about the behavior of Hub & switch.

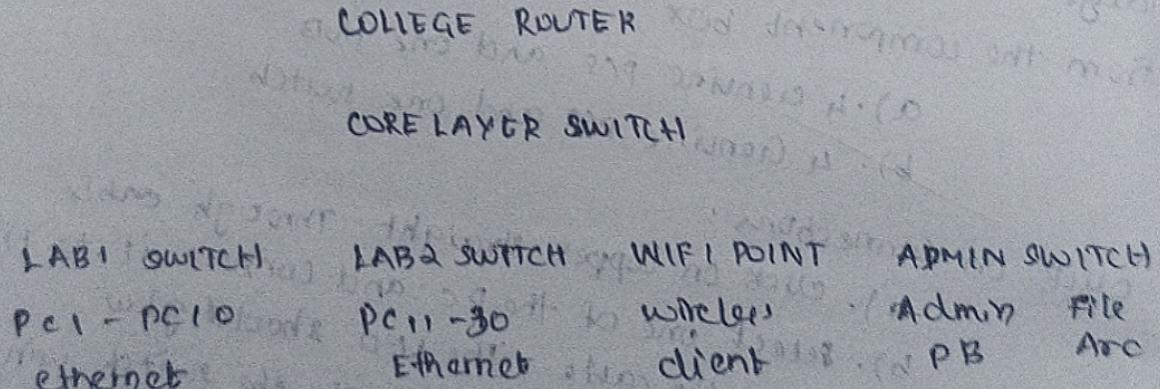
STUDENT OBSERVATION :

- a. Form your observations write down the behavior of switch and hub in terms of forwarding the packet received by them.

HUB : When a PC sends data to another PC through a hub, the hub sends the same data to all connected PCs.

SWITCH : When a PC sends data to another PC through a switch. It checks MAC table and forwards the data.

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



RESULT :

Thus the behavior of network device has been successfully analyzed using Cisco packet tracer simulator.