

Exp. no : 03

Practical-3

Date : 30/07/24

Aim

TO study the packet tracer tool installation and user interface overview.

Introduction

A simulator, as the name suggests, simulates network devices and its environment. Packet Tracer is an exciting network design, simulation and modelling tool.

1. It allows you to model complex system without the need for dedicated equipment
2. It helps you to practice your network configuration and troubleshooting skills via computer or an android or ios based mobile devices
3. It is available for both Linux and windows desktop environment
4. Protocols in packet tracer are coded to work and behave in the same way as they would on real hardware.

d) Analyse the behaviour of network devices using CISCO PACKET TRACER simulator.

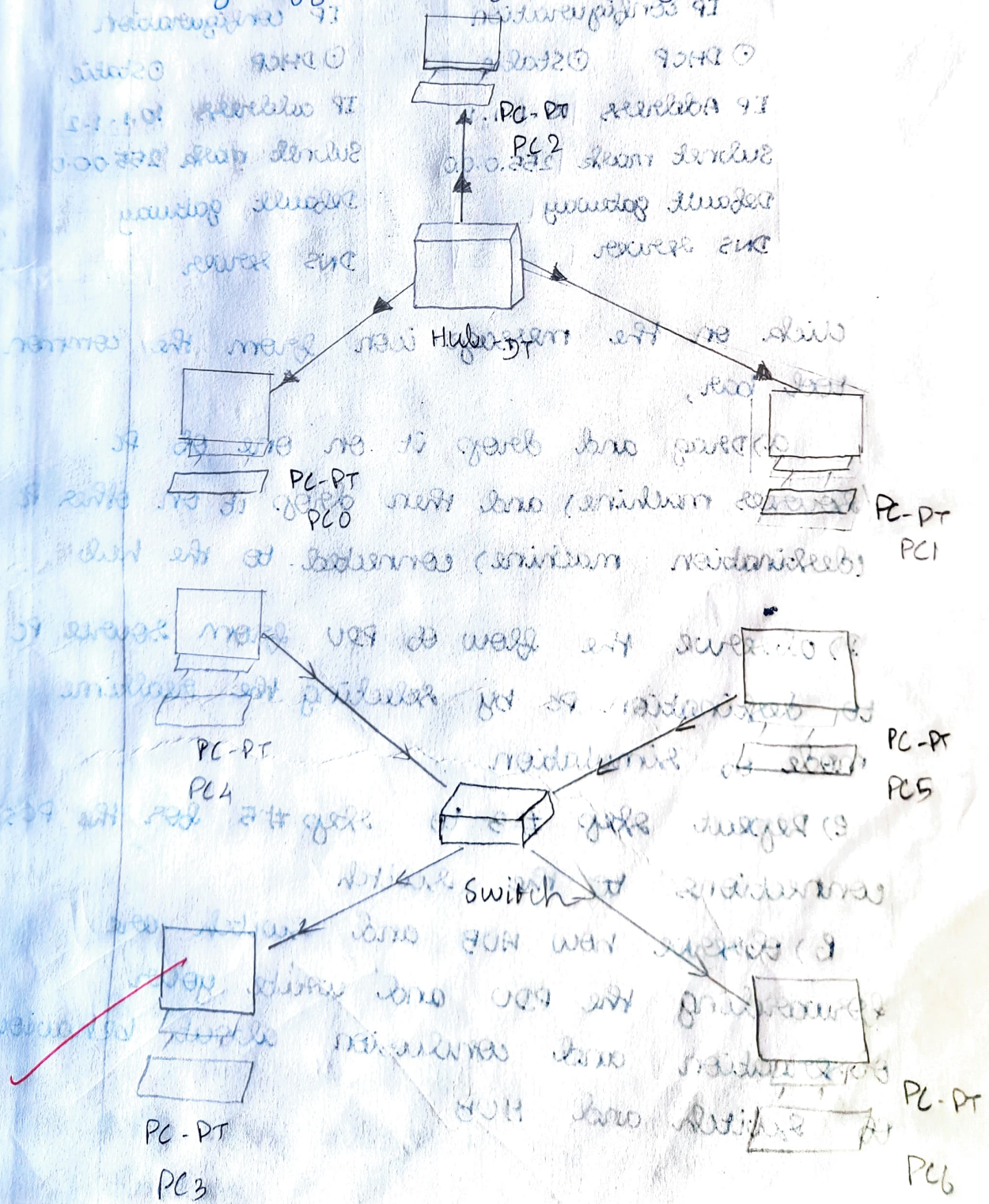
1. From the network component box, click and drag-and-drop the below components
 - a. 4 generic PCs and one HUB
 - b. 4 generic PCs and one switch

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. similarly connect remaining 3 PCs to the HUB

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



c) click on all 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

PC ₀	
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	

PC ₁	
IP configuration	
IP configuration	
<input type="radio"/> DHCP	<input type="radio"/> Static
IP address	10.1.1.2
Subnet mask	255.0.0.0
Default gateway	
DNS server	

click on the message icon from the common tool bar,

a) drag and drop it on one of PC (source machine) and then drop it on other PC (destination machine) connected to the hub

b) observe the flow of PDU from source PC to destination PC by selecting the realtime mode of simulation

c) Repeat step #3 to step #5 for the PCs connections to the switch

d) observe how HUB and switch are forwarding the PDU and write your observation and conclusion about behaviour of switch and HUB

a) Hub is used for Broadcast transmission
whereas switches are used for selective
forwarding i.e. packets

b) ^{Star} Mesh topology

Result

Thus the study of packet tracer
and user interfaces are overviewed and
observed.