

Program 1

Aim: Create a topology and simulate sending a simple PDU from source to destination using hub and switch as connecting devices and demonstrate ping messages.

Topology , Procedure and Observation:

Experiment 1
Date ___/___/___

1) PC to Server

PC-PT
PC-0
10.0.0.1

Server-PT
Server 0
10.0.0.2

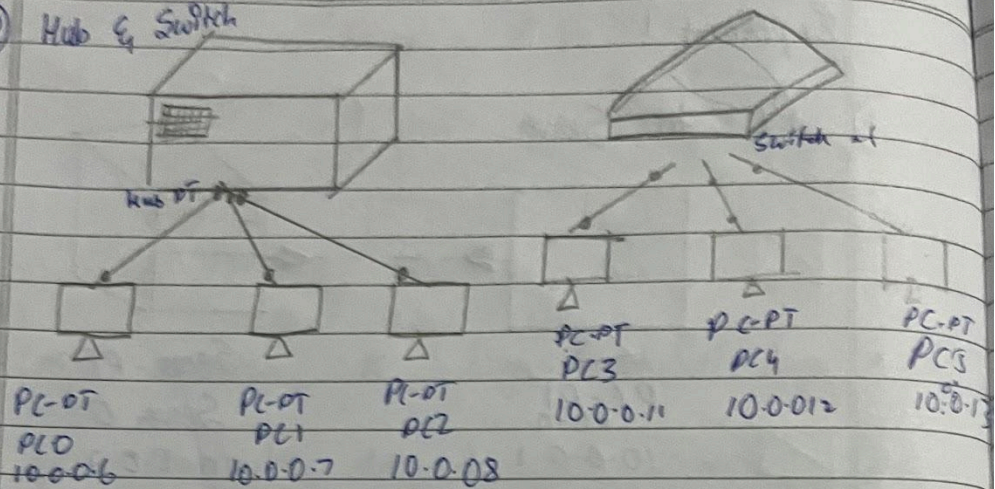
Aim:- To set up a point to point network b/w a PC and a server, facilitating direct communication to observe data exchange

Topology:- A PC is connected to server using a crossover ethernet cable.

IP address of PC- 10.0.0.1, Server - 10.0.0.2

Observation:-
Direct communication allows PC to communicate with server, which is typically in small networks for tasks such as file sharing, service requests or testing server response to client response.

2) Hub & Switch



Aim:- To create sample network consisting of 3 PC connected to a central hub and another network with 3 PC's connected to switch. This connection will help observe the behavior of data transmission using hub & switch.

Topology:- 3 PC's are connected to a hub & switch using straight through ethernet cables.

Observation:- Hub broadcasts packets to all devices which may cause through unnecessary traffic.

Switch forwards packets only to appropriate device by learning its address, using it more efficient in reducing traffic.

Screen Shots:

