Expno: 1

Date:

AIM: Setup and configure a LAN (local Area Network) using a switch and ethernet cables in your lab.

What is LAN?

LAN (local Area Network) refers to a network that connects device within a limited area, such as an office building, school or home. It enables users to share resources, including data, pointer and internet access.

How to setup a LAN?

1) Plan and design an appropriate network topology taking into account network requirements and equipment location.

2) You can take 4 computers, a switch with 8, 16 or 24 ports which is sufficient for networks of these sizes and 4 ethernet cables.

3) Connect your computers to network switch via a ethernet cable, which is simple as plugging one end of the ethernet cable into your computer and the other end into your computer and the other end into your network switch.

4) Assign Ip address to your PCs

1. Log on to the client computer as Administrator or as owner.

2. click Network and internet connection

3. Right click Local Area Connection (Ethernet → Go to properties → Select Internet protocol (TCP/IPV4) → click on properties → Select use the following ip address option and assign address.
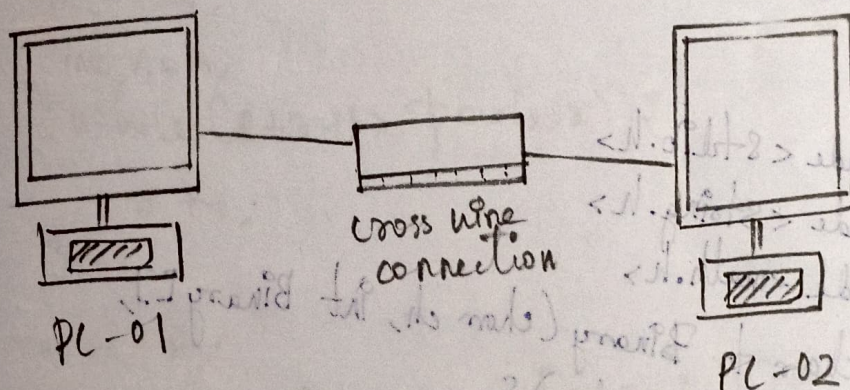
5) Configure a network switch:

1. Connect your computer to the switch: To access the switch's web interface, you will need to connect your computer to the switch using an ethernet cable

2. Login to the web interface: Open a web browser and enter the ip address of the switch in the address bar. This should bring up the login page for the switch web interface. Enter username and password to login

3. Configure basic settings: Once you're logged in, you will be able to configure basic settings for the switch ✓

4. Assign IP address As: 10.1.1.5, subnet mask: 255.0.0.0.

5) Check the connectivity between switch and other machine by using ping command in the command prompt of the device.

7) Select a folder → go to properties → click sharing tab → Sharing it with everyone on the same LAN.

8) Try to access the shared folder from other computers of the network.

PC-01   cross wire
                connection
                            PC-02

Result:
    Thus the setup and configuration of
LAN is studied and observed.

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