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Practical 1

Aim

Setup and configure a LAN using a Switch and Ethernet cables

How to set up a LAN?

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

Step 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

Step 3: Connect your computers to network switch via an Ethernet cable.

Step 4: Assign IP Address to your PCs

1. Log on the client computer as Administrator or as owner.
2. Click Network and Internet Connections
3. Right click Local Area Connections / Ethernet → Go to properties → Select Internet Protocol (TCP/IPv4) → Click Properties → Select IP address option and assign IP address.

Step 5: Configure a network switch:

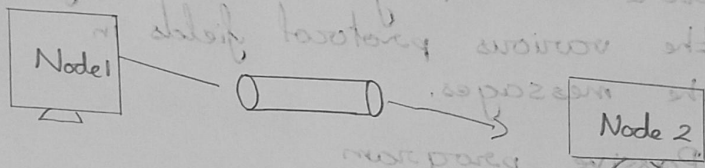
1. Connect your computer to the switch
2. Log in to web interface
3. Configure basic settings
4. Assign IP address

Step 6: Check the connectivity b/w switch and other machine by using ping command in the command prompt of the device.

Step 7: Select a folder → Go to properties → Click Sharing tab → Share with everyone on the same LAN

Step 8: Try to access the shared file folder from other computers in the network.

Observation



IP Configuration:

Node 1: IPV4 Address: 10.1.1.1

Node 2: IPV4 Address: 10.1.1.2

Outcome:

The file has been shared successfully

Result:

Thus the set up of LAN using switch and Ethernet cable is successful and file has been shared.

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