

5/8/24 Practical-4

AIM: Setup and configure a LAN using a switch and Ethernet cables in your lab.

How to setup a LAN

Step 1: Plan and Design an appropriate network topology taking into account network requirement 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 Ethernet cable which is as simple as plugging one end of the Ethernet cable into your computer and the other end into your computer network switch

Step 4: Assign IP addresses to your PC's

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

2. Click Network and Internet Connections

3. Right click Local Area Connection/Ethernet

Step 5: Configure a network switch

1) Connect your computer to switch.

2) Log on to web interface

3. Configure basic settings once you're logged in, you will be able to configure basic settings.

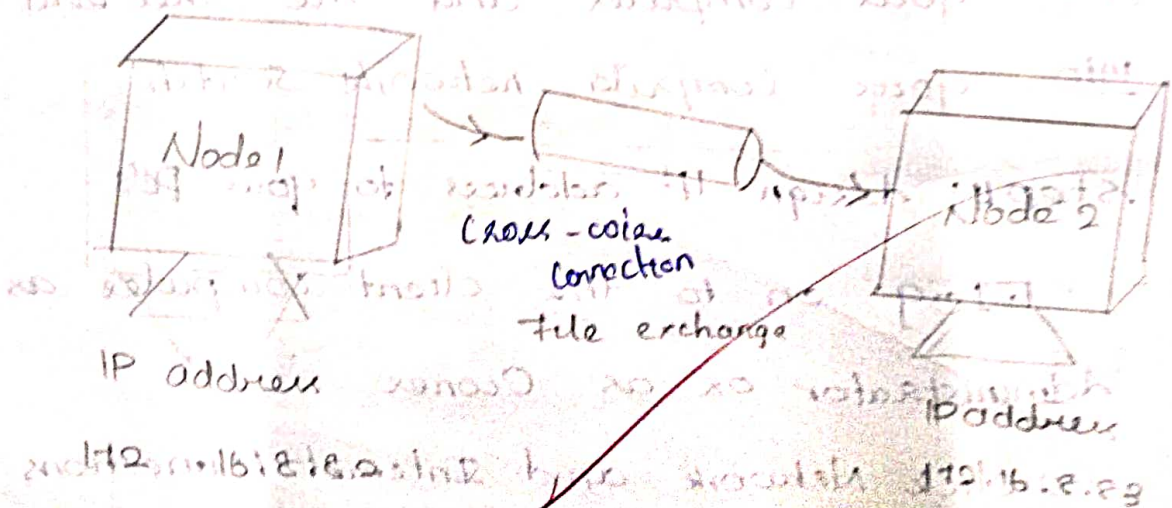
4. Assign IP address as 10.1.1.5 subnet mask 255.0.0.0

Step 6: Check connectivity between switch on other machine by using ping command on the command prompt of device.

Step 7: select a folder → go to properties → click sharing tab → share it with everyone to the same LAN.

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

Student observations:-



Result:-

IP configuration:

Node 1:

IPv4 Address: 172.16.8.82

Node - 2:

IPv4 Address: 172.16.8.83

Outcome:-

The file that sent that through
[click Run, [172.16.8.82] → (user //REC //Desktop)]
is sent successfully.

Result:-

Thus the set up LAN is using switch
and Ethernet cables is successfully connected
and sent files.

