Ex. No: 04

DATE: 06-08-24

AIM:

Setup & configure a LAN using a Switch & Ethernet cables in your lab.

What is LAN?

A Local Area Network (LAN) refers to a network that connects device within a limited area, such as an office building, school or home.

How to set up a LAN

Step-1: Plan & design an appropriate network topology taking into account network requirements & 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 & 4 Ethernet cables.

Step-3: Connect your computers to network switch via an Ethernet cable, which is as simple as plugging one of end of the Ethernet cable into your computer & the other end into your network switch.

Step-4: Assign IP address to your PC's
i) Logon to the client computer as Administrator or as Owner
ii) Click Network & Internet Connections.

iii) Right Click Local Area Connection / Ethernet → Go to Properties
→ Select Internet Protocol (TCP/IPv4) → Click on Properties
→ Select Use the following ip address option & assign ip address.

Step-5: Configure a network switch.

Step-6: Check the connectivity between switch & 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 it with everyone on the same LAN.

Step-8: Try to access the shared folder from others Computers of the network.
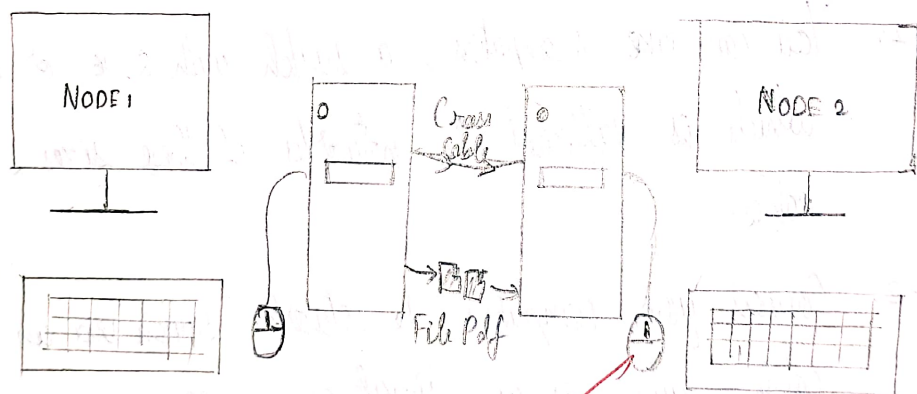
STUDENT OBSERVATION:

Diagram of the LAN

IP CONFIGURATION:

Node-1: IPv4 Address: 10.1.1.1

Node-2: IPv4 Address: 10.1.1.2

OUTCOME:

The file that sent through [Click Run : [\\10.1.1.2] →
[Type/users // REC// desktop] is sent successfully.

RESULT:

Set up for LAN is successfully done & the result are verified observed & studied.

6/8/24