

Experiment - 4

Aim:
Set up and configuration LAB
using a switch and Ethernet cables
in your LAB

What is a LAN

A local area network that connects devices within a limited area, such as an office building, school or home. It enables users to share resources, including data, printers, and internet access. LAN connects devices to promote collaboration and transfer information between users such as computers, printers, switches. 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 a computer and 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 which is a simple as plugging one end of the Ethernet cable into your computer and the other end to your network switch

Step 4: Assign IP address to your PC

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 > click on properties > select use the following IP address, enter and assign IP address.



- similarly assign IP address to all the
- PCs connected to Switch
- PC 1 IP address 10.1.1 Subnet mask 255.0.0
- PC 2 IP address 10.1.1.2 Subnet mask 255.0.0

Step 5: Configure network Switch

1. Connect your computer to the Switch

To access the switch's web interface you still need to connect your computer to the switch

2. Log in to the web interface. open a web browser and enter the IP address

3) Configure basic settings

- A. Assign IP address as 10.1.1.5

Step 6: Check the connectivity between switch and other machine by using Ping Command.

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 other computers of the Network

Student Observation

Draw a neat diagram of the LAN in configuration of observation book. that you have implemented in your lab, write the IP configuration of each and every device. Write the

Outcome

Result:

Thus the setup and configuration of LAN is studied and observed

8/8/24