

SETUP AND CONFIGURE A LAN (LOCAL AREA NETWORK)

Step 1: Plan Your Network

- Choose a layout (topology) for your network, keeping in mind where the computers and equipment will be placed.

Step 2: Gather Your Equipment

- You'll need:
 - 4 computers
 - A switch with enough ports (8, 16, or 24 will do)
 - 4 Ethernet cables

Step 3: Connect Computers to the Switch

- Plug one end of an Ethernet cable into each computer and the other end into the switch.

Step 4: Assign IP Addresses

1. On each computer, go to Network and Internet Connections.
2. Right-click Local Area Connection or Ethernet, select Properties, then click Internet Protocol (TCP/IPv4).
3. Choose Use the following IP address and assign:
 - PC1: 10.1.1.1, Subnet Mask: 255.0.0.0
 - PC2: 10.1.1.2, Subnet Mask: 255.0.0.0
 - PC3: 10.1.1.3, Subnet Mask: 255.0.0.0
 - PC4: 10.1.1.4, Subnet Mask: 255.0.0.0

Step 5: Configure the Switch

1. Connect your computer to the switch.
2. Open a browser, enter the switch's IP (e.g., 10.1.1.5) and log in.
3. Set the switch IP to 10.1.1.5 with Subnet Mask 255.0.0.0.

Step 6: Test Connectivity

- Open Command Prompt on any computer and use the 'ping' command to check connectivity between the devices (e.g., 'ping 10.1.1.2' to check PC1 and PC2).

