

Ex: 04
16/08/24

Practical - 4

Aim:

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

Procedure:

Step-1: Plan and Design an ~~appropriate~~ 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 network of these sizes and 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 and other end into your ~~an~~ network switch.

Step-4: Assign IP address to your PCs

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 (TCP/IP, 4)
→ Click on Properties → Select use the following
ip address option and assign ip address

Simpr Similarly assign IP address to all PCs
connected to switch.

PC1 - IP address: 10.1.1.1, subnet 255.0.0.0

PC2 - IP address: 10.1.1.2, subnet 255.0.0.0

PC3 - IP address: 10.1.1.3, subnet 255.0.0.0

Step-5: Configure a network switch

1) Connect your computer to the switch

2) Log in to the web interface

3) Configure basic setting:

4) Assign IP address as: 10.1.1.5, subnet mask 255.0.0.0

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

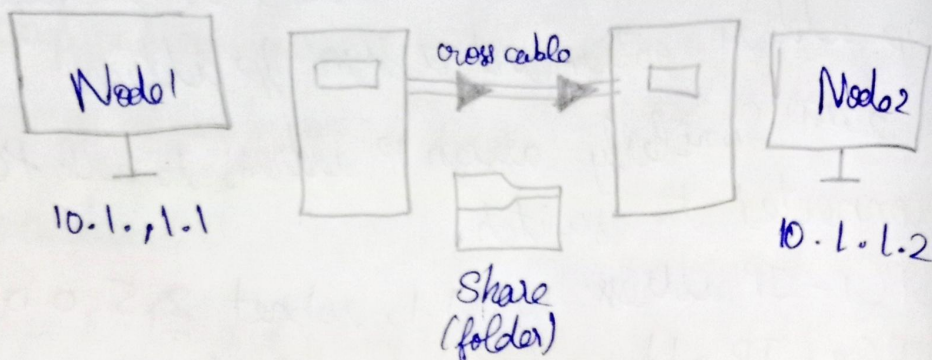
~~Select~~ 7: Select a folder → go to properties

Sharing tab → share it with everyone in the same
LAN

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

Student observation

Diagram of LAN



IP Configuration

Node1 IPv4 Address 10.1.1.1

Node2 IPv4 Address 10.1.1.2

Outcome

The file sent through
click Run: [1/10.1.1.2]/user//REC] is sent
successfully

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Result:

LAN setup in our lab is successfully done
and completed.