Date:

EXPERIMENT-3

IMPLEMENTATION OF BUS TOPOLOGY USING PACKET TRACER

Aim: To Implement a Bus topology using packet tracer and hence to transmit data between the devices connected using Bus topology.

Software / Apparatus required: Packet Tracer / End devices, Hubs, connectors.

Steps for building topology:

Step 1: Start Packet Tracer

Step 2: Choosing Devices and Connections

Step 3: Building the Topology – Adding Hosts

Single click on the **End Devices**.

Single click on the **Generic** host.

Move the cursor into topology area.

Single click in the topology area and it copies the device.

Step 4: Building the Topology – Connecting the Hosts to Switches

Select a switch, by clicking once on **Switches** and once on a **2950-24** switch.

Add the switch by moving the pointer sign "+"

Step 5: Connect PCs to switch by first choosing connections

Click once on the **Copper Straight-through** cable

Click once on **PC2**

Choose **FastEthernet**

Drag the cursor to **Switch0**

Click once on **Switch0**

Notice the green link lights on **PC** Ethernet NIC and amber light **Switch** port. The switch port is temporarily not forwarding frames, while it goes through the stages for the Spanning Tree Protocol (STP) process. After about 30 seconds the amber light will change to green indicating that the port has entered the forwarding stage. Frames can now forward out the switch port.

Step 6: Configuring IP Addresses and Subnet Masks on the Hosts

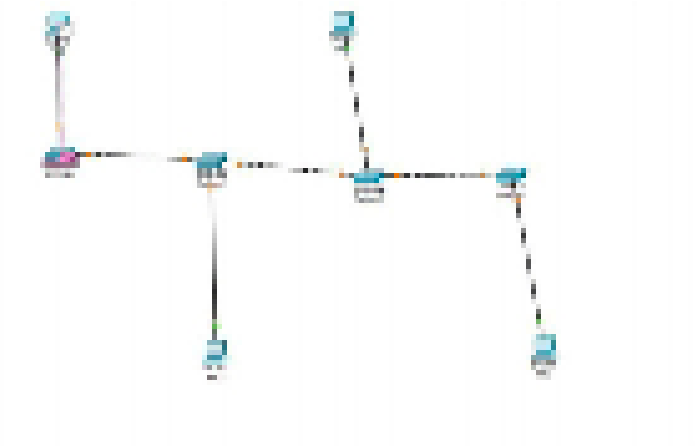
To start communication between the hosts IP Addresses and Subnet Mask should to be configured on the devices. Click once on PC0. Choose the Config tab and click on FastEthernet0. Type the IP address in its field. Click on the subnet mask it will

be generated automatically.

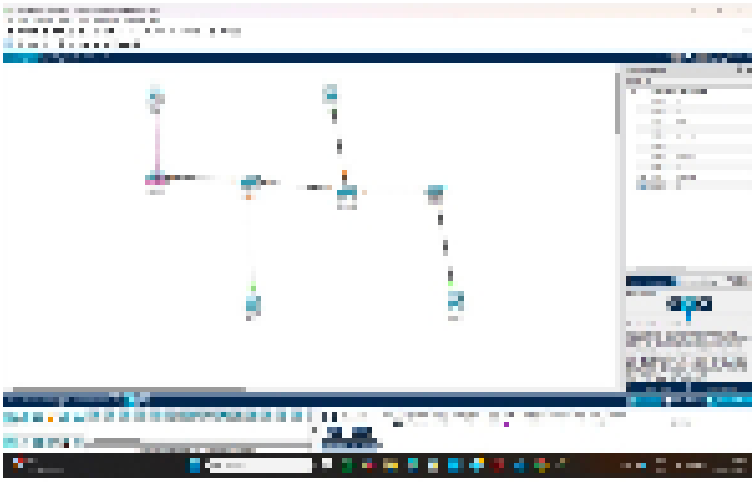
Step 7: To confirm Data transfer between the devices

Click on the node. Select Desktop option and then command prompt. Once the window pops up, ping the IP address of the device to which node is connected. Ping statistics will be displayed.

Diagram:



Output:



Result: Thus the Bus topology is implemented with Packet Tracer simulation tool.