Computer Communication & Networking

Practical # 05

Object:

Introduction to Packet Tracer

What is Packet Tracer?

Packet Tracer is a protocol simulator developed by Dennis Frezzo and his team at Cisco Systems. Packet Tracer (PT) is a powerful and dynamic tool that displays the various protocols used in networking, in either Real Time or Simulation mode. This includes layer 2 protocols such as Ethernet and PPP, layer 3 protocols such as IP, ICMP, and ARP, and layer 4 protocols such as TCP and UDP. Routing protocols can also be traced.

Introduction to the Packet Tracer Interface using a Hub Topology:

Step 1: Start Packet Tracer

You will see the start screen as shown below.

Choosing Devices and Connections

We will begin building our network topology by selecting devices and the media in which to connect them. Several types of devices and network connections can be used. For this lab we will keep it simple by using End Devices, Switches, Hubs, and Connections.

Step 2: Choose "Hub" and then select "Generic"

Step 3: After selecting "Generic" click on the main area.

You will see a Hub.

Step 4: Select "End Devices" and then click at "Generic"

Step 5: Click at the workspace to see the PC.

Repeat the above process to place as many PCs as you want.

Computer Communication & Networking

Practical # 05

Step 6: Select "Connections" from Power Cycle Devices and click on "Automatically choose Connection Type"

Step 7: Draw connections from Hub to PCs

Step 8: Double click on a PC, a box will appear. Click on the "Desktop" tab.

Step 9: Then select "IP configuration"

Step 10: Write the IP address of your network and click at the Subnet mask filed. Subnet Mask will appear automatically.

Step 11: Repeat Step 10 to set the IPs for all the PCs.

Step 12: Select "Add simple message"

Step 13: Drag and Drop the message to the source device and then to the Destination device

In this case my source device is PC1 and destination device is PC4.

Step 14: Select the Simulation Mode at the bottom right corner

Step 15: Click at "Auto Capture / Play"

Step 16: Observe the path of the Message from source to Hub, then to all devices. And then from Destination to Hub then back to the source.

Step 17: Finally observe the marks. If the source PC is marked correct it means you have successfully established the connection.

Conclusion:

Connection established successfully between Source and Destination.