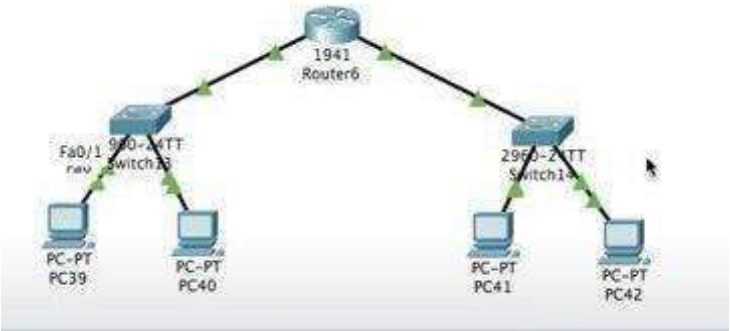
TITLE: Network Model	GPREC-D/CS/EXPT-DCCN-02

AIM: Create a network models using packet tracer.

***TOPOLOGY**



Step 1: Launch Packet Tracer.

Launch Packet Tracer on your PC or laptop computer .Double click on the Packet Tracer icon on desktop or navigate to the directory that contains the Packet Tracer executable file and launch Packet Tracer. Packet Tracer should open with a blank default Logical topology workspace

Step 2: Build the topology

- Add network devices to the workspace

Using the device selection box, add the network devices to the workspace as shown in the topology diagram. To place a device onto the workspace, first choose a device type from the Device-Type Selection box. Then, click on the desired device model from the Device-Specific Selection box. Finally, click on a location in the workspace to put your device in that location. If you want to cancel your selection, click the Cancel icon for that device. Alternatively, you can click and drag a device from the Device-Specific Selection box onto the workspace.

- Change display names of the network devices.

To change the display names of the network devices click on the device icon on the Packet Tracer Logical workspace, then click on the Config tab in the device configuration window. Type the new name of the device into the Display Name box

- Add the physical cabling between devices on the workspace

Using the device selection box, add the physical cabling between devices on the workspace as shown in the topology diagram. The PC will need a copper straight-through cable to connect to the switch.

1. Select the copper straight-through cable in the device selection box and attach it to the FastEthernet 0 interface of the PC1 and the FastEthernet 0/1 interface of the switch0
2. Select the copper straight-through cable in the device selection box and attach it to the FastEthernet 0 interface of the PC2 and the FastEthernet 0/2 interface of the switch0
3. Select the copper straight-through cable in the device selection box and attach it to the FastEthernet 0 interface of the PC3 and the FastEthernet 0/1 interface of the switch1
4. Select the copper straight-through cable in the device selection box and attach it to the FastEthernet 0 interface of the PC4 and the FastEthernet 0/2 interface of the switch1
5. Select the copper straight-through cable in the device selection box and attach it to the FastEthernet 0/3 interface of switch0 and the gigabitethernet 0/0/0 interface of the router
6. Select the copper straight-through cable in the device selection box and attach it to the FastEthernet 0/3 interface of switch1 and the gigabitethernet 0/0/1 interface of the router

Step 3:Configure the Network Devices

Configure PC1.

Click on PC1 on the Packet Tracer Logical workspace and select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, give the ip address as 10.1.1.1

Configure PC2.

Click on PC2 on the Packet Tracer Logical workspace and select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, give the ip address as 10.1.1.2

Configure PC3.

Click on PC3 on the Packet Tracer Logical workspace and select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, give the ip address as 192.168.1.1

Configure PC4.

Click on PC4 on the Packet Tracer Logical workspace and select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, give the ip address as 192.168.1.2

Configure router.

Click on router on the Packet Tracer Logical workspace and select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, select gigabitethernet 0/0/0 and give the ip address as 10.1.1.3 and enable the port status.

Click on router on the Packet Tracer Logical workspace and select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, select gigabitethernet 0/0/1 and give the ip address as 192.168.1.3 and enable the port status.

Click on PC1 select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, give the default gateway as 10.1.1.3

Click on PC2 select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, give the default gateway as 10.1.1.3

Click on PC3 select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, give the default gateway as 192.168.1.3

Click on PC4 select the Desktop tab and then the IP Configuration icon. In the IP Configuration window, give the default gateway as 192.168.1.3

Step 4:Verifying Connectivity

Click on simulation.Select packets and assigned to PC0(Source) in LAN1 and PC3(Destination) in LAN2 and click on play button

1. packet is moved from PC0 to switch0
2. packet is moved from switch0 to router
3. packet is moved from router to switch1
4. packet is moved from switch1 to PC3

Acknowledgement:

5. packet is moved from PC3 to switch1
6. packet is moved from switch1 to router
7. packet is moved from router to switch0
8. packet is moved from switch0 to PC1