



St. Clare College

Reaccredited 'A+' Grade by NAAC | Affiliated to Bangalore University

NURTURING VALUES AND EXCELLENCE

Computer Networks Lab Manual

IV Semester BCA-NEP

Program 12: Configuration of switches

Program 15: Configure VLAN using Packet Tracer/GNS3

In the Cisco Packet Tracer Home Screen

Step 1: insert 6 PCs, 2 switches, 1 router as shown in the diagram.

Select end devices to get the PC icon on screen

Take 2 switches (by click on switch icon)

Take 1 router

Connect all the devices

Select cable

Left Side Topology Connections:

PC0: Fast Ethernet 0 to fast ethernet0/1

PC1: Fast Ethernet 0 to fast ethernet0/2

PC2: Fast Ethernet 0 to fast ethernet0/3

Right Side Topology Connections:

Fast Ethernet 0 to fast ethernet0/1

Fast Ethernet 0 to fast ethernet0/2

Fast Ethernet 0 to fast ethernet0/3

Connect switch to router

1. Fast Ethernet from switch side to gigabit Ethernet 0/0 towards router side on left side
2. Fast Ethernet from switch side to router side using Gigabit Ethernet 0/1 towards the router side on the right side

Topology is ready

Start configure the devices

Click on the PC0 and select config or Desktop->IP Configuration

Class A range [*Subnet mask appear automatically*]

PC0: 192.168.1.1

PC1: 192.168.1.2

PC2: 192.168.1.3

Gateway can be

192.168.1.254

Repeat the same steps PC3 to PC5

Click on PC3 and select config or Desktop->IP Configuration

Class B range

PC3: 172.16.1.1

PC4: 172.16.1.2

PC5: 172.16.1.3

Gateway can be 172.16.1.254

Click on router-> Config

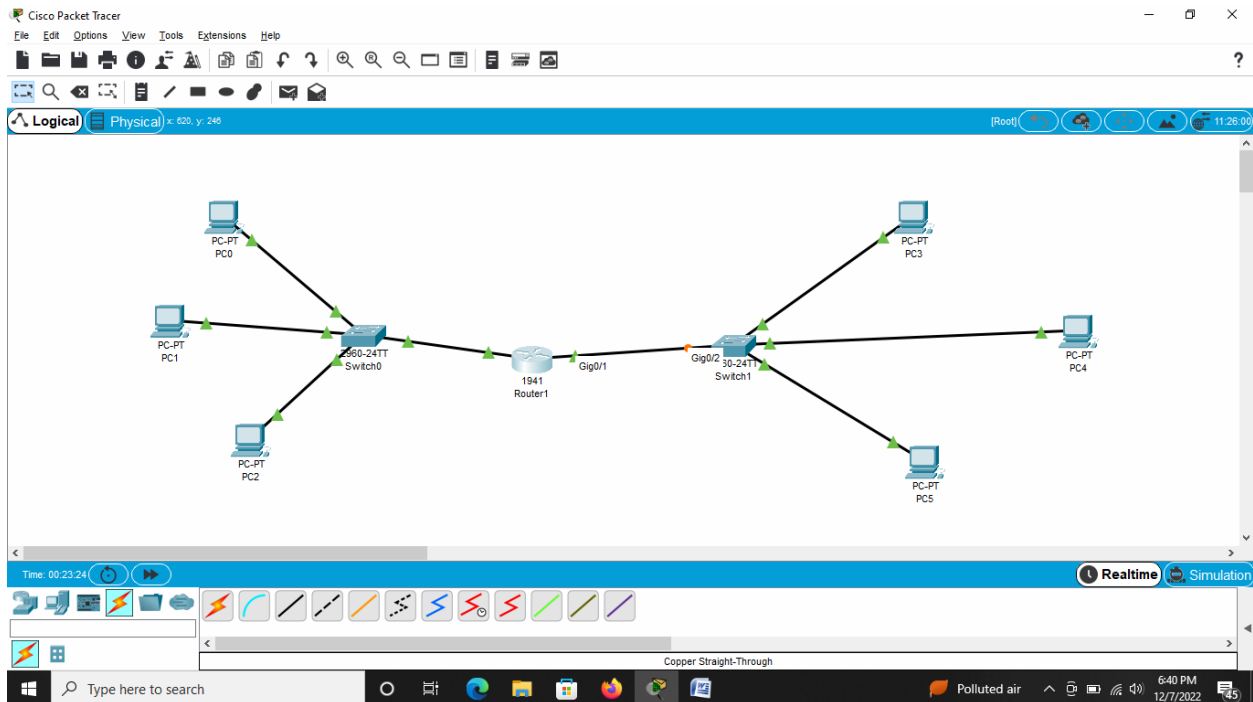
Under the Interface option Gigabit Ethernet 0/0 : IP Address as 192.168.1.254

Gigabit Ethernet 0/1: IP Address as 172.16.1.254

Configure the router

Config--→ top-right corner enable ON *[Both Gigabit Ethernet 0/0 and Gigabit Ethernet 0/1]*

If the topology is correct all small icons turned into **green color**



Click on the top of PC0

Select desktop--→ command prompt

C:\>ping 192.168.1.2

OUTPUT:

