

### Lab 2:Objective:

Part A: Establish Connectivity between End Devices

Part B: Establish Connectivity between a Client & Server

## Lab 2 Connectivity between Devices

### Part A: Establish Connectivity between End Devices

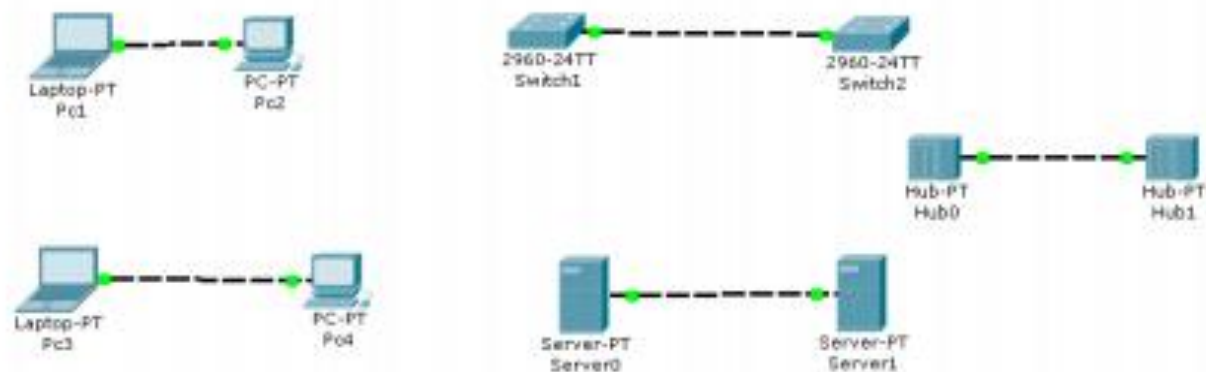


Figure1:Topology Diagram

Refer to figure 1,

#### Task-1, Drag & Drop

Drag & Drop All the END devices & Intermediary devices

#### Task-2,Connectivity

Connect these Devices with Copper Cross over cable

#### Task-3, Checking the Connectivity

After establishing the connectivity between all the devices check that all devices must be Showing GREEN signal.

### Part B: Establish Connectivity between a Client & Server

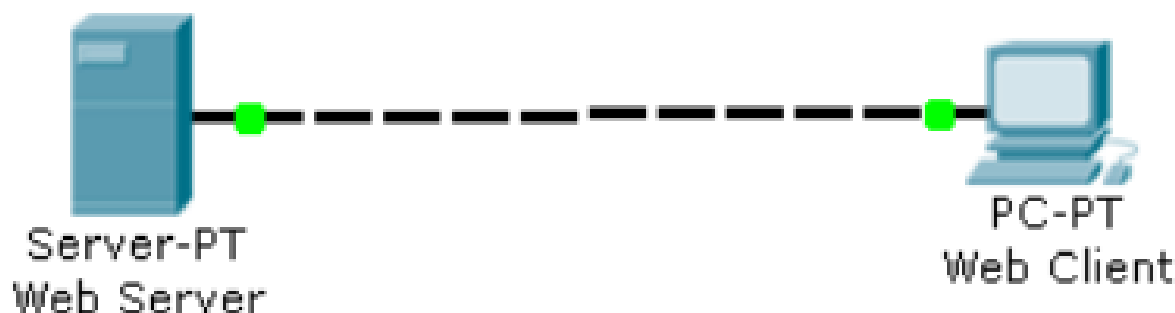


Figure 2: Topology Diagram

Refer to figure 2,

#### Task -1, Configure Server

Configure Server-Pt with the following

**IP address: 192.168.1.254**

**Subnet Mask: 255.255.255.0**

Click on the Server-PT icon Then Select from the Upper menu "Desktop" After selecting the desktop select "IP CONFIGURATION". Place the above Address with respect to their names.

#### Task-2, IP Configuration on PC

Click on the PC-PT icon then select from the upper Menu "Desktop" After selecting desktop, select IP CONFIGURATION. Place the following address

**IP Address: 192.168.1.1**

**Subnet Mask: 255.255.255.0**

#### Task- 3, IP in URL

Go to the PC-PT icon then select from the upper Menu "Desktop" After selecting desktop, click on the "WEB BROWSER" place the following IP in the "URL"

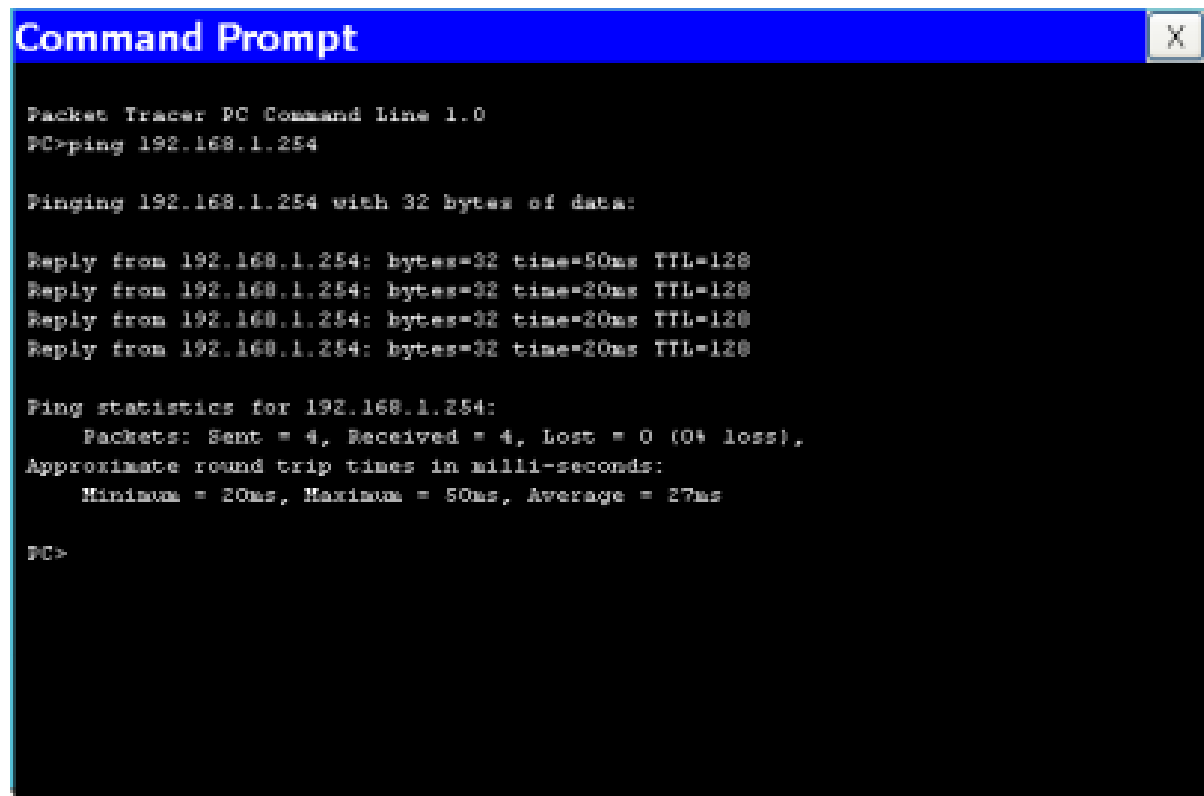
**192.168.1.254**

When you hit enter a message will arrive "Welcome to Packet Tracer"

#### Task- 4, Command Prompt

Finally Again click on the PC-PT icon then select from the upper Menu “Desktop” After selecting desktop, click on “Command Prompt” to check the connectivity between the client & server put the following command in Command Prompt

PC>ping 192.168.1.254

A screenshot of the 'Command Prompt' window in Packet Tracer. The window has a blue title bar with the text 'Command Prompt' and a close button. The background is black with white text. The text shows the command 'PC>ping 192.168.1.254' being entered and executed. The output shows four successful replies from 192.168.1.254 with varying times (50ms, 20ms, 20ms, 20ms) and a TTL of 128. Below this, the ping statistics are displayed: 4 packets sent, 4 received, 0% loss, with minimum, maximum, and average round trip times of 20ms, 50ms, and 27ms respectively. The prompt 'PC>' is visible at the bottom.

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.1.254

Pinging 192.168.1.254 with 32 bytes of data:

Reply from 192.168.1.254: bytes=32 time=50ms TTL=128
Reply from 192.168.1.254: bytes=32 time=20ms TTL=128
Reply from 192.168.1.254: bytes=32 time=20ms TTL=128
Reply from 192.168.1.254: bytes=32 time=20ms TTL=128

Ping statistics for 192.168.1.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 20ms, Maximum = 50ms, Average = 27ms

PC>
```

Figure 3: Command Prompt

This would be your Final Result after completing the whole activity.



### Lab-2 Exercise:

Design a bus network which consists of 2 routers. Attach 3 PC's and a Server with router 1 switch. At the end of the configuration, any of the attached users can access the Server.