

3. Configuration of basic switch setup using Huawei/Cisco network switch using cisco packet tracer.

Procedure:

Step 1: Setting Up the Network Topology

- 1. Open Cisco Packet Tracer.**
- 2. Add devices:**
 - Drag and drop a Cisco switch (e.g., 2960) onto the workspace.
 - Drag and drop two or more PCs onto the workspace.
- 3. Connect devices:**
 - Use the `Connections` option to select the `Copper Straight-Through cable`.
 - Connect each PC to the switch using the FastEthernet ports (e.g., PC0 to FastEthernet0/1, PC1 to FastEthernet0/2).

Step 2: Configuring the Switch

- 1. Open the CLI (Command-Line Interface) of the switch:**
 - Click on the switch and go to the `CLI` tab.

```
Switch0
Physical Config CLI Attributes
IOS Command Line Interface

Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname s1
s1(config)#interface vlan 1
s1(config-if)#ip address 192.168.1.1 255.255.255.0
s1(config-if)#no shutdown

s1(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1,
changed state to up

s1(config-if)#exit
s1(config)#exit
s1#
%SYS-5-CONFIG_I: Configured from console by console

s1#write memory
Building configuration...
[OK]
s1#
~1#
```

Router Configuration process

1. Enter privileged EXEC mode:

Switch> enable

Switch#

2. Enter global configuration mode:

Switch# configure terminal

Switch(config)#

3. Configure the switch hostname (optional):

Switch(config)# hostname s1

S2(config)#

4. Configure VLAN 1 (default VLAN) interface with an IP address

S1(config)# interface vlan 1

S1(config-if)# ip address 192.168.1.1 255.255.255.0

S1(config-if)# no shutdown

S1(config-if)# exit

S1(config)#

5. Save the configuration:

S1(config)# exit

S1# write memory

Step 3: Configuring PCs

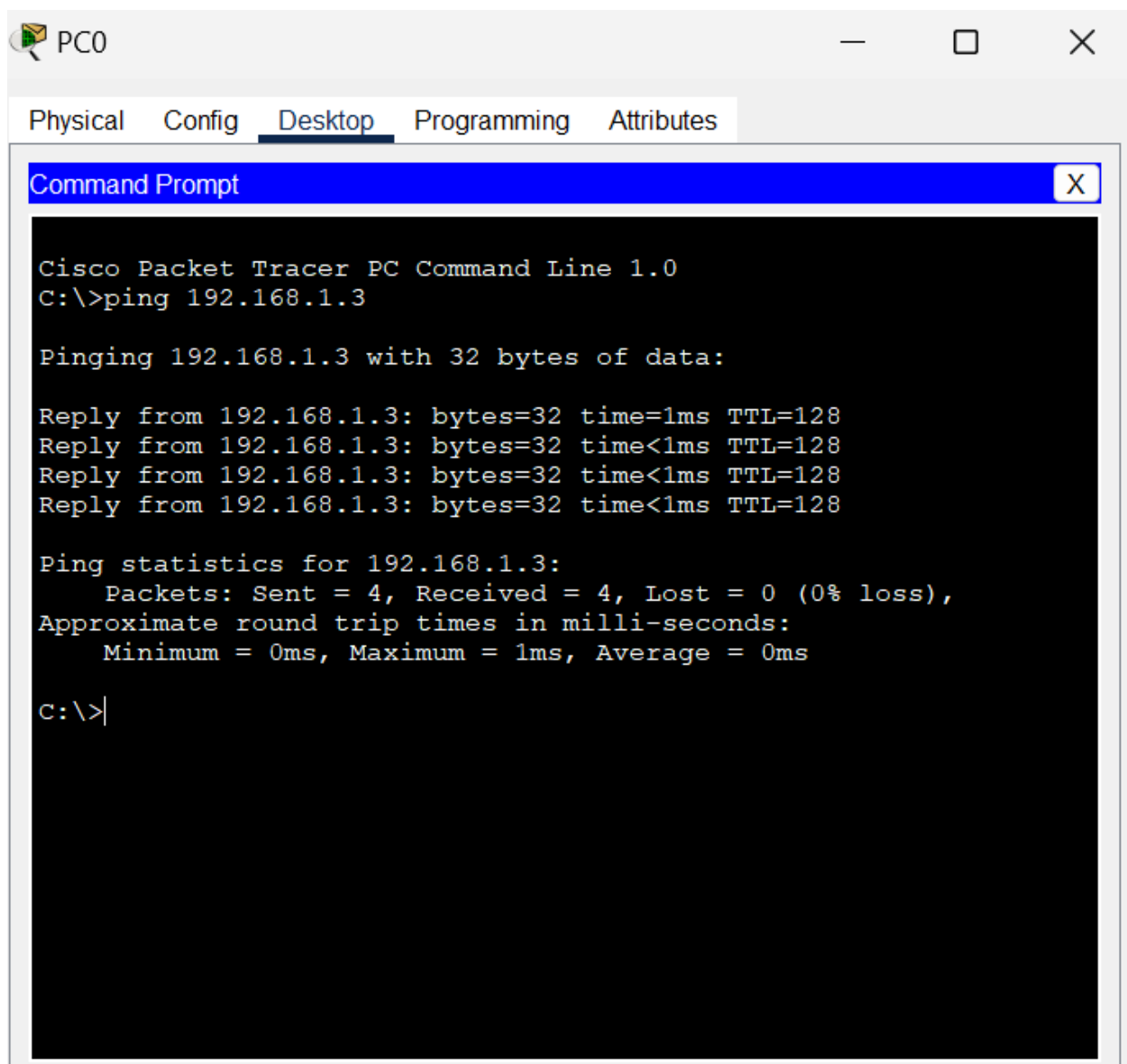
1. Assign IP addresses to PCs:

- Click on each PC and go to the Desktop tab.
- Open the IP Configuration and assign an IP address within the same subnet as the switch's VLAN 1 interface. For example:
 - PC0: IP Address: 192.168.1.2, Subnet Mask: 255.255.255.0
 - PC1: IP Address: 192.168.1.3, Subnet Mask: 255.255.255.0

Step 4: Testing Connectivity

1. Ping between PCs:

- Open the Command Prompt on one of the PCs (e.g., PC0).
- Use the ping command to check connectivity to the other PC (e.g., ping 192.168.1.3).



The screenshot shows a window titled 'PC0' with tabs for Physical, Config, Desktop, Programming, and Attributes. The 'Desktop' tab is active, displaying a 'Command Prompt' window. The command prompt shows the execution of the 'ping 192.168.1.3' command, resulting in four successful replies and a summary of ping statistics.

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time=1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>|
```