

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

Step 1: Setting Up the Network Topology

1. Add devices:
 - Drag and drop a Cisco switch (e.g., 2960) onto the workspace.
 - Drag and drop two or more PCs onto the workspace.
2. 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.

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

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

2. Step 3: Configuring PCs

3. 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:
 1. PC0: IP Address: 192.168.1.2, Subnet Mask: 255.255.255.0
 2. PC1: IP Address: 192.168.1.3, Subnet Mask: 255.255.255.0

Physical
Config
Desktop
Programming
Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

FastEthernet0
Port Status
Bandwidth
Duplex
MAC Address
IP Configuration
IPv4 Address
Subnet Mask
IPv6 Configuration
IPv6 Address
Link Local Address

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

FastEthernet0
Port Status
Bandwidth
Duplex
MAC Address
IP Configuration
IPv4 Address
Subnet Mask
IPv6 Configuration
IPv6 Address
Link Local Address

pc0

pc1

Step 4: Testing Connectivity

1. Ping between PCs:
- o

Open the Command Prompt on one of the PCs (e.g., PC0).
- o

Use the ping command to check connectivity to the other PC (e.g., ping 192.168.1.3).

```
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:\>|
```