

EXPNO:06

DATE:29.08.2024

Customize Switch with Network Modules using Cisco Packet Tracer AIM:

To Customize Switch with Network Modules using Cisco Packet Tracer

1. Open Cisco Packet Tracer

- Launch Cisco Packet Tracer on your computer.

2. Add a Switch to Your Workspace □ In the device toolbar (usually on the left side of the screen), locate the "Switches" section.

- Drag and drop a switch model onto the workspace. For instance, you might choose a model like the "2950" or "2960."

3. Access the Switch's Physical Layout

- Click on the switch in the workspace to open its configuration window.
- Navigate to the "Physical" tab to see the switch's physical layout and modules.

4. Add Network Modules

- In the "Physical" tab, you might see options to add or modify network modules.
- Click on the slot where you want to add a module. You can choose from available modules such as different types of Ethernet or Fiber modules.
- Drag the module from the list of available modules and drop it into the slot on the switch.

5. Configure the Modules □ After adding the module, switch to the "Config" tab in the switch's configuration window.

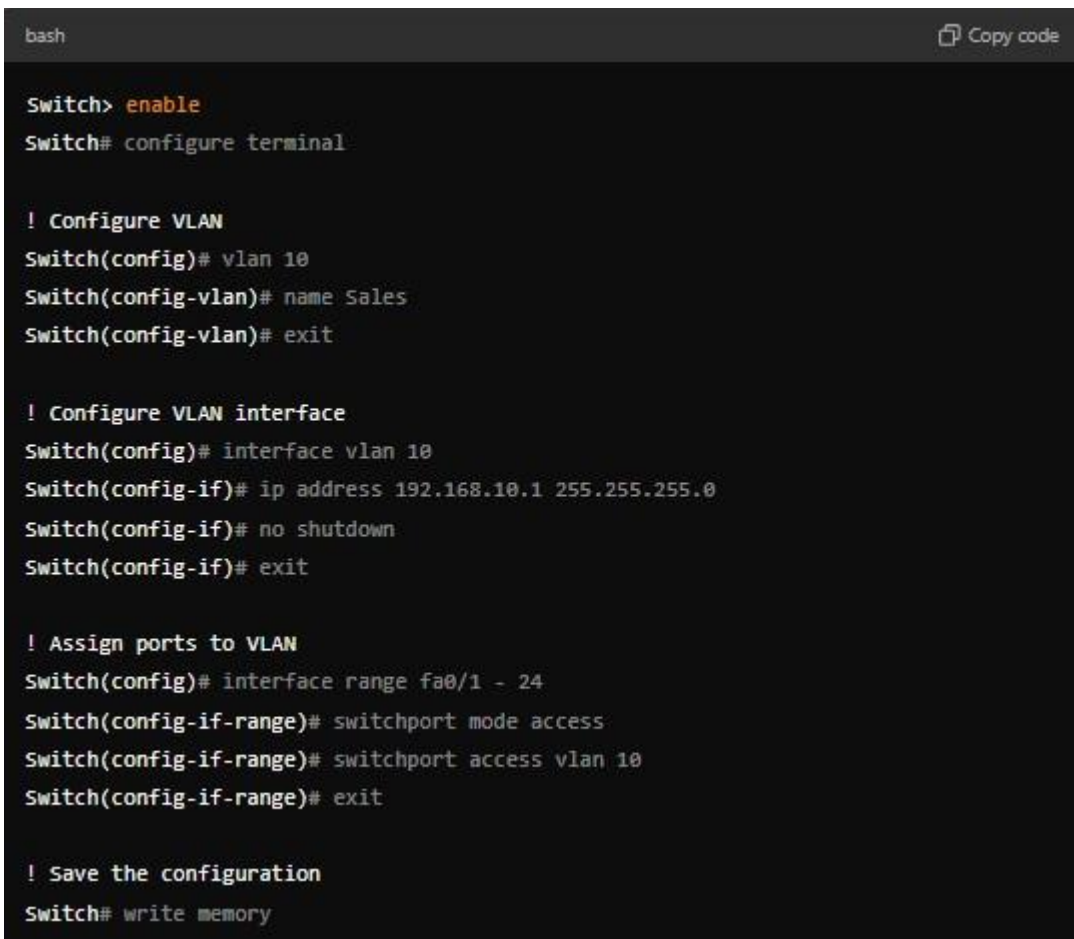
- Here, you can configure the ports provided by the module. For example, you can set IP addresses, VLAN configurations, and other settings for the new interfaces.

6. Configure the Switch Ports

- Switch to the "Config" tab to configure ports on the switch. Here, you can set parameters for each port.
- Select the specific port or range of ports you want to configure. You can set parameters such as VLAN assignments, port descriptions, and more.
- For example:
 - o To configure a port to be in a specific VLAN:
 - Select the port or range of ports.
 - Assign the VLAN ID under the VLAN settings.
 - o To set a description for the port:
 - Enter a description in the "Description" field.

7. Using the CLI for Detailed Configuration

- Switch to the "CLI" tab for command-line interface access.
- Enter configuration commands to set up the switch. Here's an example of how to configure VLANs and interface settings via CLI:

A terminal window with a dark background and light text. The title bar at the top says 'bash' on the left and 'Copy code' on the right. The terminal content shows a sequence of commands for configuring a switch. It starts with 'Switch> enable' and 'Switch# configure terminal'. Then, it enters VLAN configuration mode: 'Switch(config)# vlan 10', 'Switch(config-vlan)# name Sales', and 'Switch(config-vlan)# exit'. Next, it enters interface configuration mode: 'Switch(config)# interface vlan 10', 'Switch(config-if)# ip address 192.168.10.1 255.255.255.0', 'Switch(config-if)# no shutdown', and 'Switch(config-if)# exit'. Then, it assigns ports to the VLAN: 'Switch(config)# interface range fa0/1 - 24', 'Switch(config-if-range)# switchport mode access', 'Switch(config-if-range)# switchport access vlan 10', and 'Switch(config-if-range)# exit'. Finally, it saves the configuration: 'Switch# write memory'.

```
bash                                                                    Copy code

Switch> enable
Switch# configure terminal

! Configure VLAN
Switch(config)# vlan 10
Switch(config-vlan)# name Sales
Switch(config-vlan)# exit

! Configure VLAN interface
Switch(config)# interface vlan 10
Switch(config-if)# ip address 192.168.10.1 255.255.255.0
Switch(config-if)# no shutdown
Switch(config-if)# exit

! Assign ports to VLAN
Switch(config)# interface range fa0/1 - 24
Switch(config-if-range)# switchport mode access
Switch(config-if-range)# switchport access vlan 10
Switch(config-if-range)# exit


! Save the configuration
Switch# write memory
```

8. Save Your Configuration

□ Once you've configured the modules and ports, be sure to save your configuration. Use commands in the CLI (Command Line Interface) if you're using a model that supports CLI commands.

For example:

bash

 Copy code

```
Switch> enable
Switch# configure terminal
Switch(config)# interface range fa0/1 - 24
Switch(config-if-range)# description Connected to LAN
Switch(config-if-range)# no shutdown
Switch(config-if-range)# exit
Switch(config)# vlan 10
Switch(config-vlan)# name Sales
Switch(config-vlan)# exit
Switch(config)# interface vlan 10
Switch(config-if)# ip address 192.168.10.1 255.255.255.0
Switch(config-if)# no shutdown
Switch(config-if)# exit
Switch# write memory
```

9. Test Your Configuration

- Use the simulation mode to test the network configuration.
- Add devices (PCs, routers, etc.) and connect them to the switch to ensure that everything is working as expected.

Output:

Cisco Packet Tracer - C:\Users\REC\Cisco Packet Tracer 8.2.2\saves\expno_06.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 844, y: 298 Root 09:27:30

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

```
SW1#
SW1#
SW1#
SW1#
SW1#
SW1#config t
Enter configuration commands, one per line. End with CNTL/Z.
SW1(config)#line con 0
SW1(config-line)#password India@123
SW1(config-line)#login
SW1(config-line)#exit
SW1(config)#enable secret cisco@123
SW1(config)#exit
SW1#
%SYS-5-CONFIG_I: Configured from console by console

SW1#
SW1#
SW1#
SW1#exit

SW1 con0 is now available
```

Copy Paste

Top

Time: 00:18:58

Realtime Simulation

Scenario 0

New Delete

Toggle PDU List Window

Fire Last Status

Cisco Packet Tracer - C:\Users\REC\Cisco Packet Tracer 8.2.2\saves\expno_06.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 889, y: 338 Root 10:10:30

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

Examining

User Access Verification

Password:

SW1>enable

Password:

SW1#sh run

Building configuration...

Current configuration : 1179 bytes

!

version 15.0

no service timestamps log datetime msec

no service timestamps debug datetime msec

no service password-encryption

!

hostname SW1

!

enable secret 5 \$1\$mERz\$607HXbIpaOLamSXRNemy0.

!

!

!

!

!

spanning-tree mode pvst

spanning-tree extend system-id

!

interface FastEthernet0/1

!

interface FastEthernet0/2

!

Copy Paste

☐ Top

Time: 00:20:24

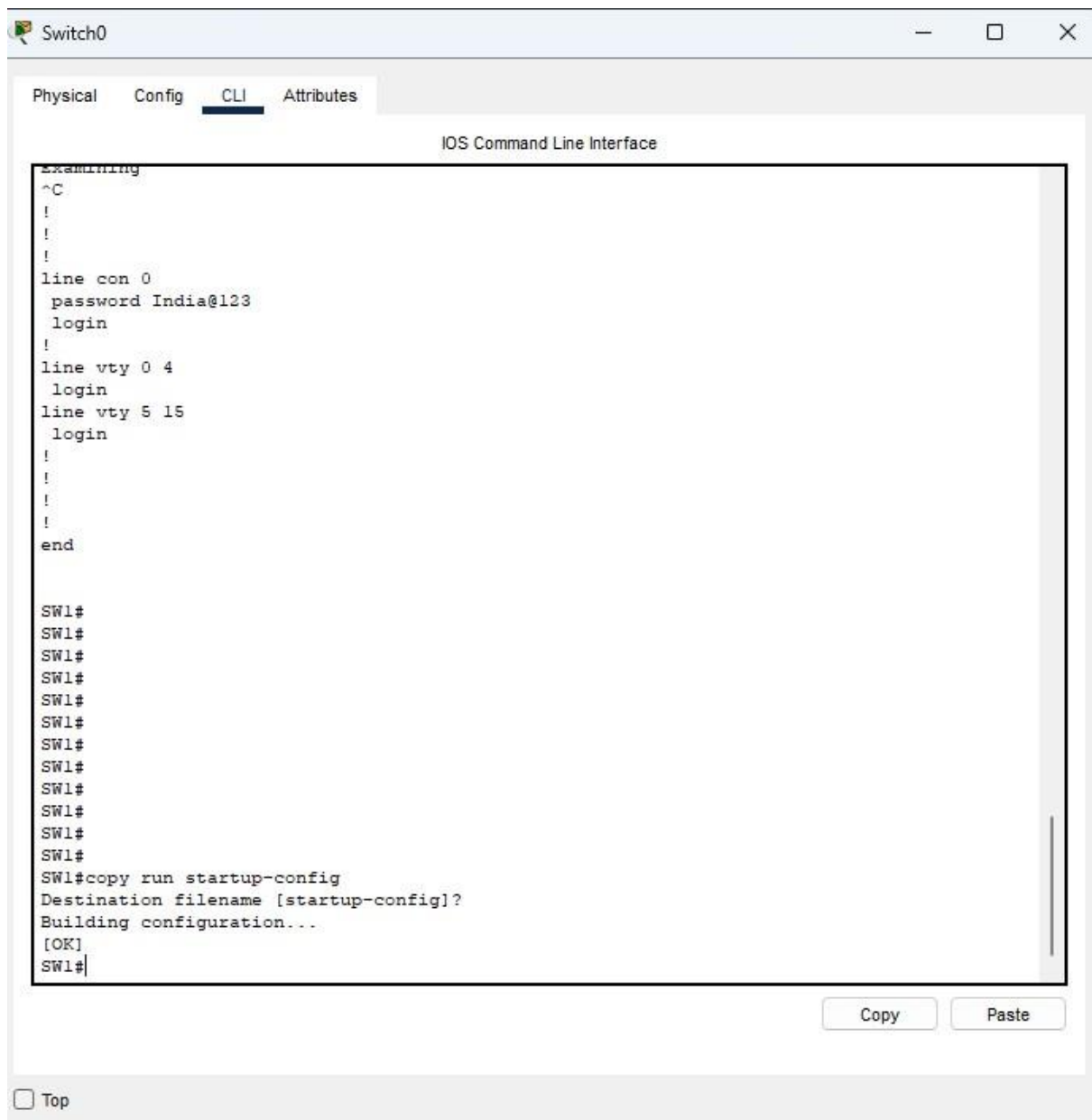
Realtime Simulation

Scenario 0

New Delete

Toggle PDU List Window

2950-24



Result:

Switch with Network Modules using Cisco Packet Tracer is Customized.