

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.

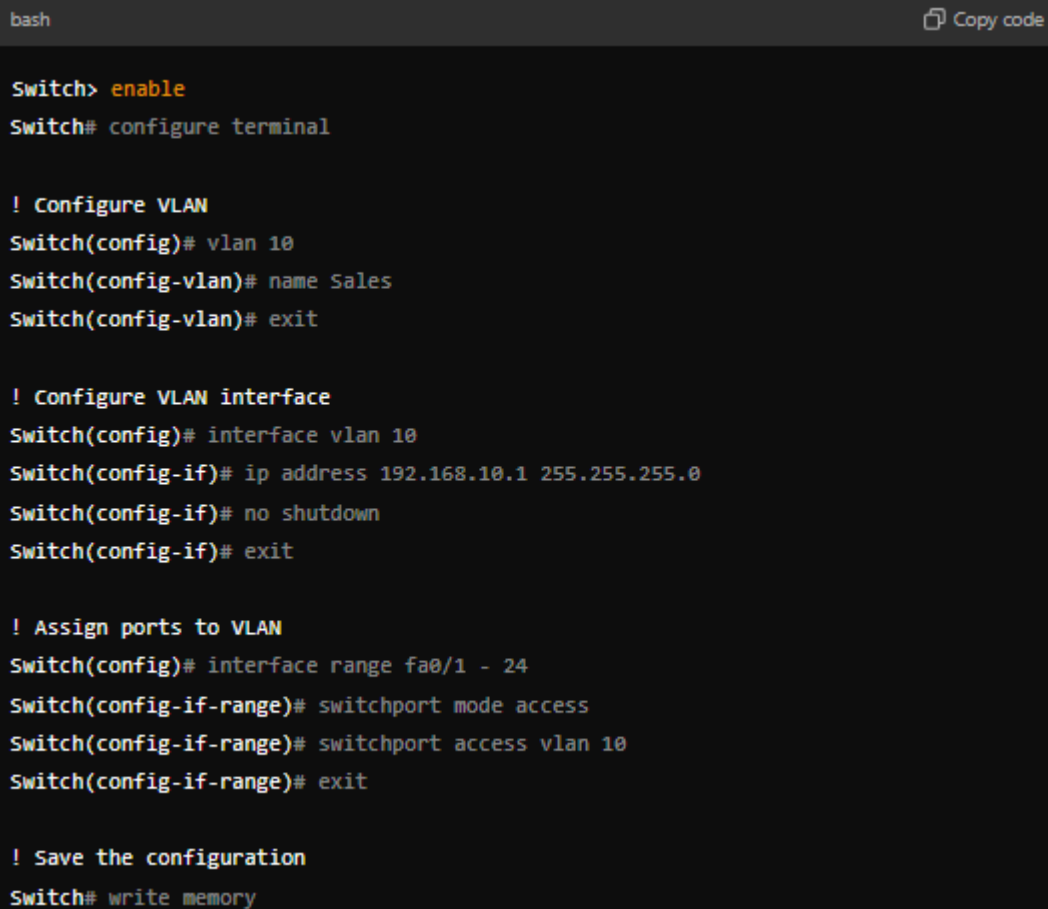
6. Configure the Switch Ports

- 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:
 - 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.
- 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-colored text. The window title is "bash" and there is a "Copy code" button in the top right corner. The terminal shows a series of commands and prompts for configuring a switch. The commands are: enable, configure terminal, ! Configure VLAN, vlan 10, name Sales, exit, ! Configure VLAN interface, interface vlan 10, ip address 192.168.10.1 255.255.255.0, no shutdown, exit, ! Assign ports to VLAN, interface range fa0/1 - 24, switchport mode access, switchport access vlan 10, exit, ! Save the configuration, write memory.

```
bash
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:

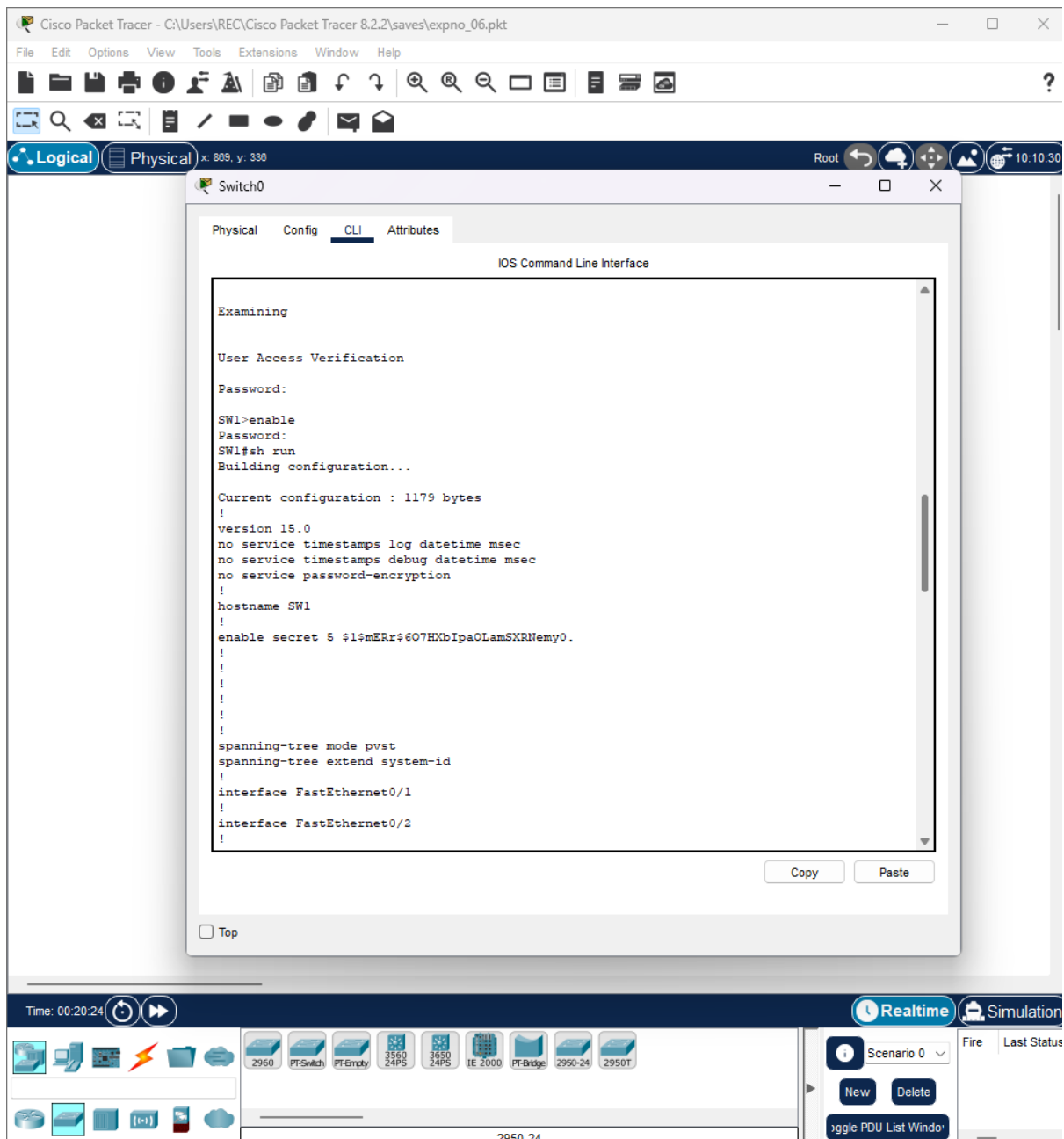
The screenshot displays the Cisco Packet Tracer 8.2.2 interface. The main window shows the CLI for Switch0, with the following commands and output:

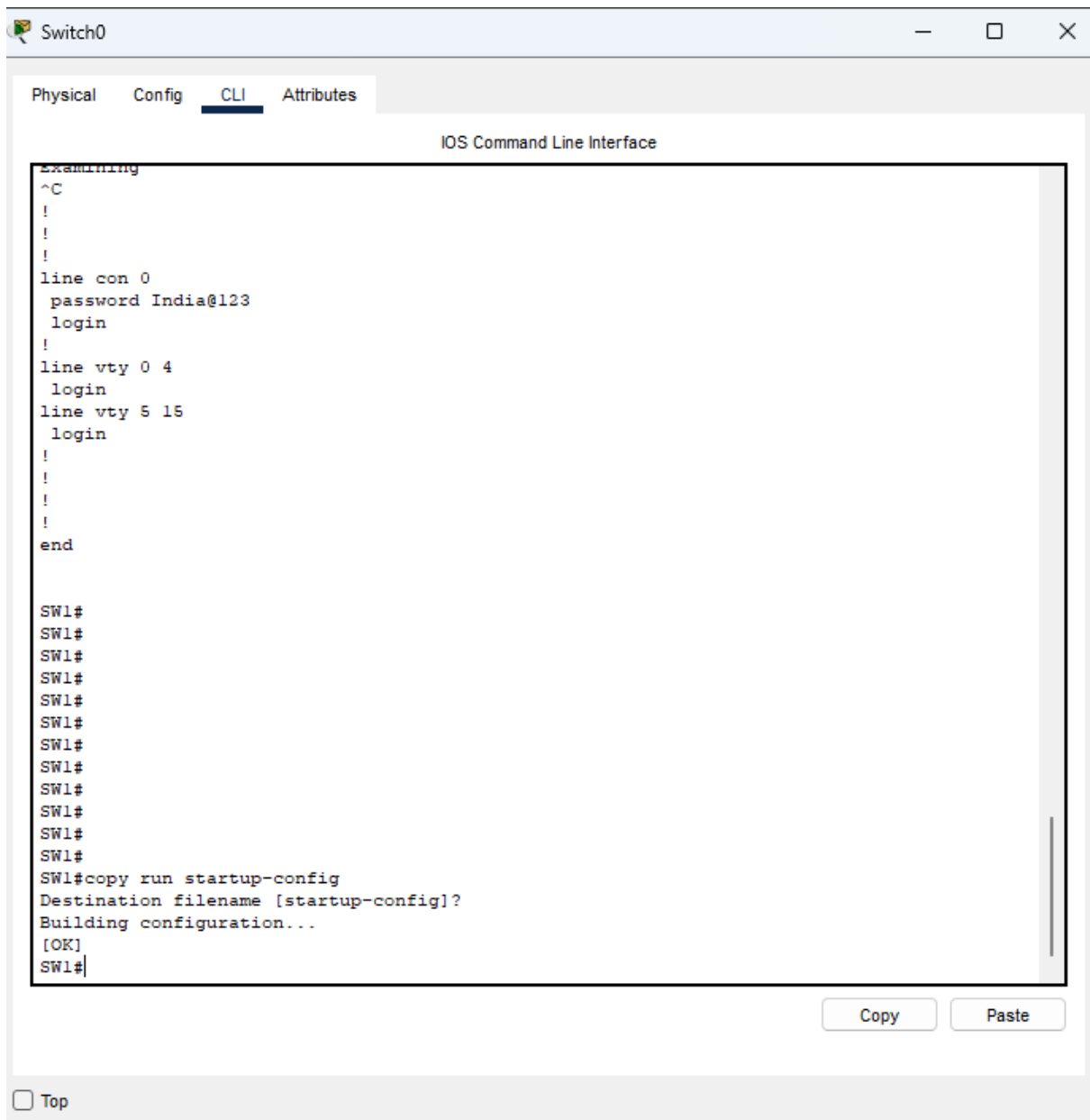
```
SW1#
SW1#
SW1#
SW1#
SW1#
SW1#config t
Enter configuration commands, one per line. End with CNTL/Z.
SW1(config)#line con 0
SW1(config-line)#password India@123
SW1(config-line)#login
SW1(config-line)#exit
SW1(config)#enable secret cisco@123
SW1(config)#exit
SW1#
%SYS-5-CONFIG_I: Configured from console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

SW1#
SW1#
SW1#
SW1#exit

SW1 con0 is now available
```

The interface includes a top menu bar (File, Edit, Options, View, Tools, Extensions, Window, Help), a toolbar with various icons, and a status bar at the bottom showing the time (00:18:58) and simulation status (Realtime). The bottom right corner features a 'Scenario 0' dropdown menu and buttons for 'New', 'Delete', and 'Toggle PDU List Window'.





Result:

Switch with Network Modules using Cisco Packet Tracer is Customized.