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:

```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
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
```
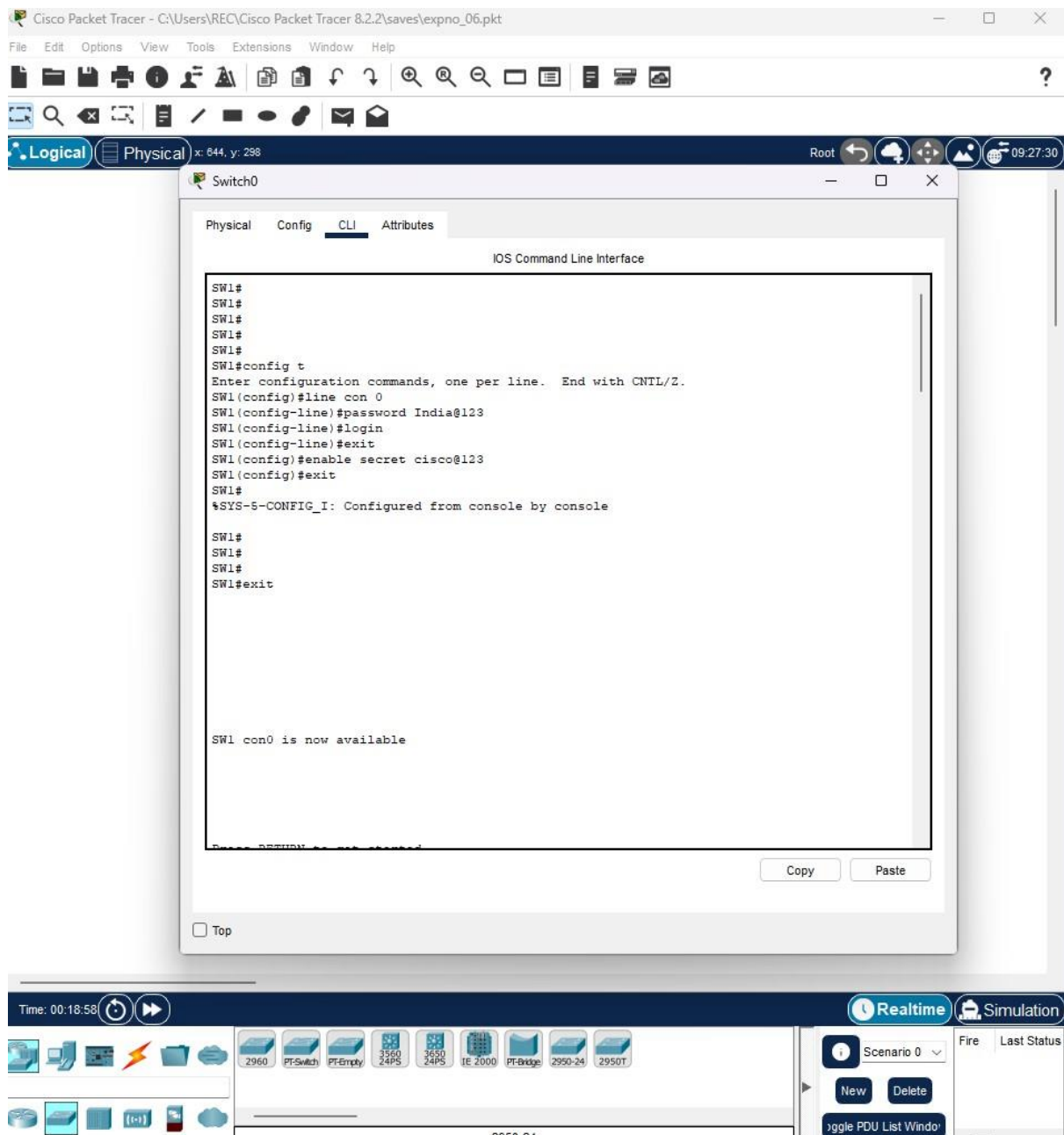
9. Test Your Configuration

- 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:

Logical | Physical   x: 644, 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

2960   PT-Switch   PT-Empty   3560   3650   IE 2000   PT-Bridge   2950-24   2950T
                               24PS   24PS

Scenario 0 ∨

New   Delete

Fire   Last Status

ggle PDU List Windo'

2950-24

File Edit Options View Tools Extensions Window Help

Logical | Physical   x: 869, y: 336   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 $1$mERr$6O7HXbIpaOLamSXRNemy0.
!
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
!
interface FastEthernet0/2
!
```
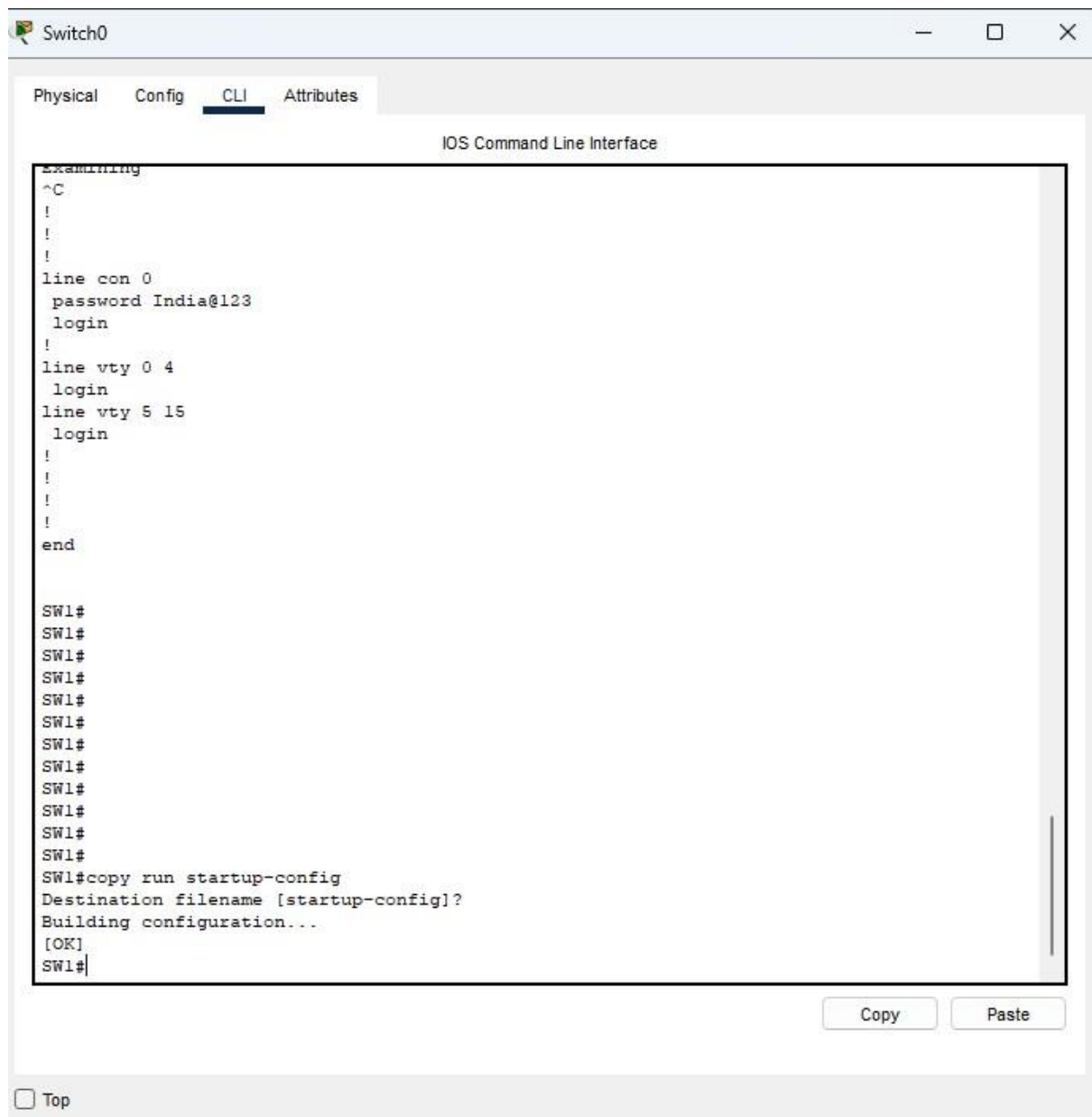
Copy   Paste

☐ Top

Time: 00:20:24   Realtime   Simulation

2960 PT-Switch PT-Empty 3560 3650 IE 2000 PT-Bridge 2950-24 2950T
                          24PS   24PS

Scenario 0

New   Delete

ggle PDU List Windo

Fire   Last Status

2950-24

Result:

Switch with Network Modules using Cisco Packet Tracer is Customized.