EX. NO.:10 Customize Switch with Network Modules using Cisco Packet Tracer
DATE:15.09.2025

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. 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

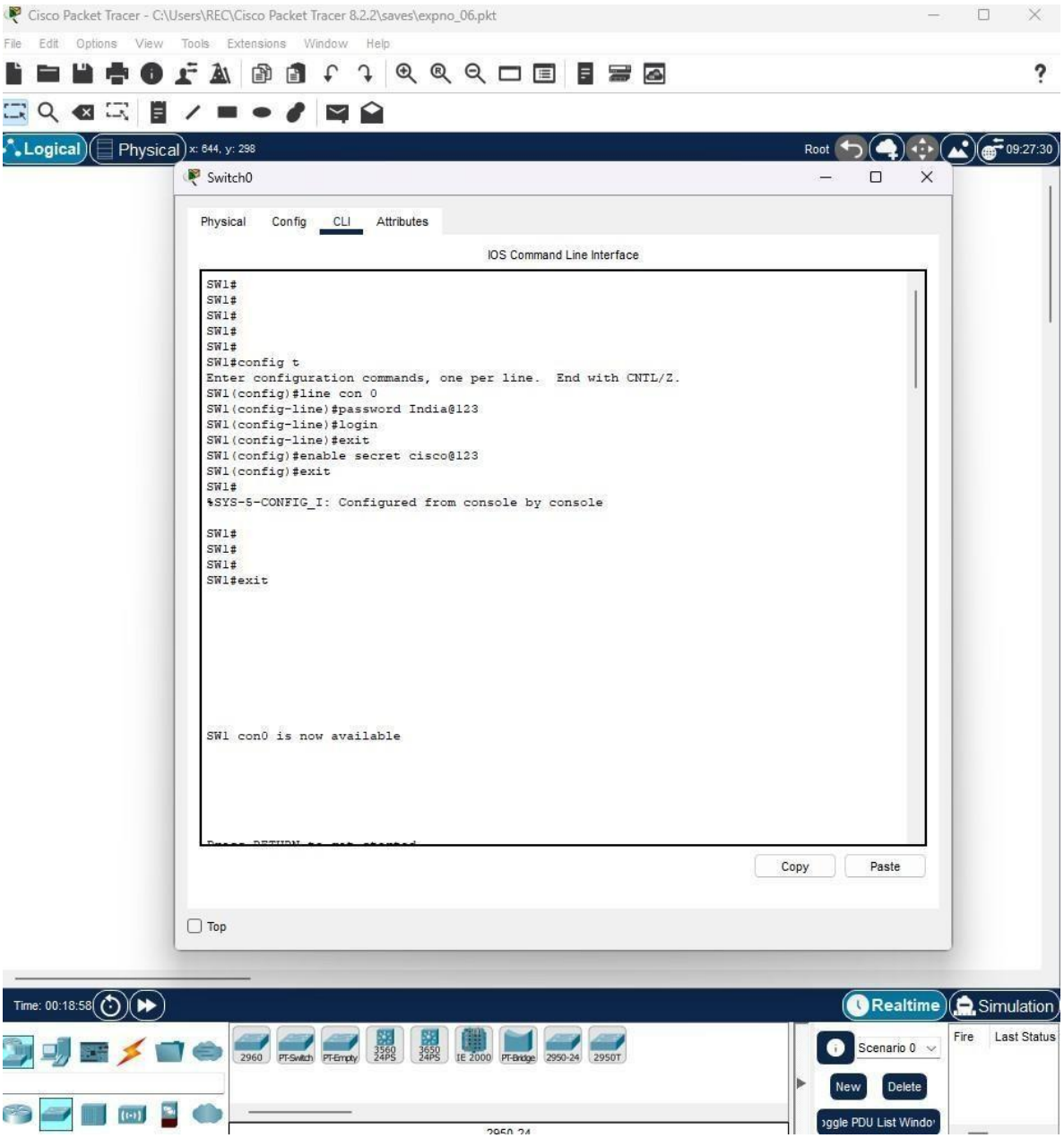
Once you've configured the modules and ports, be sure to save your configuration. Use commands in the CLI (Command Line Interface) if you're using a model that supports CLI commands.

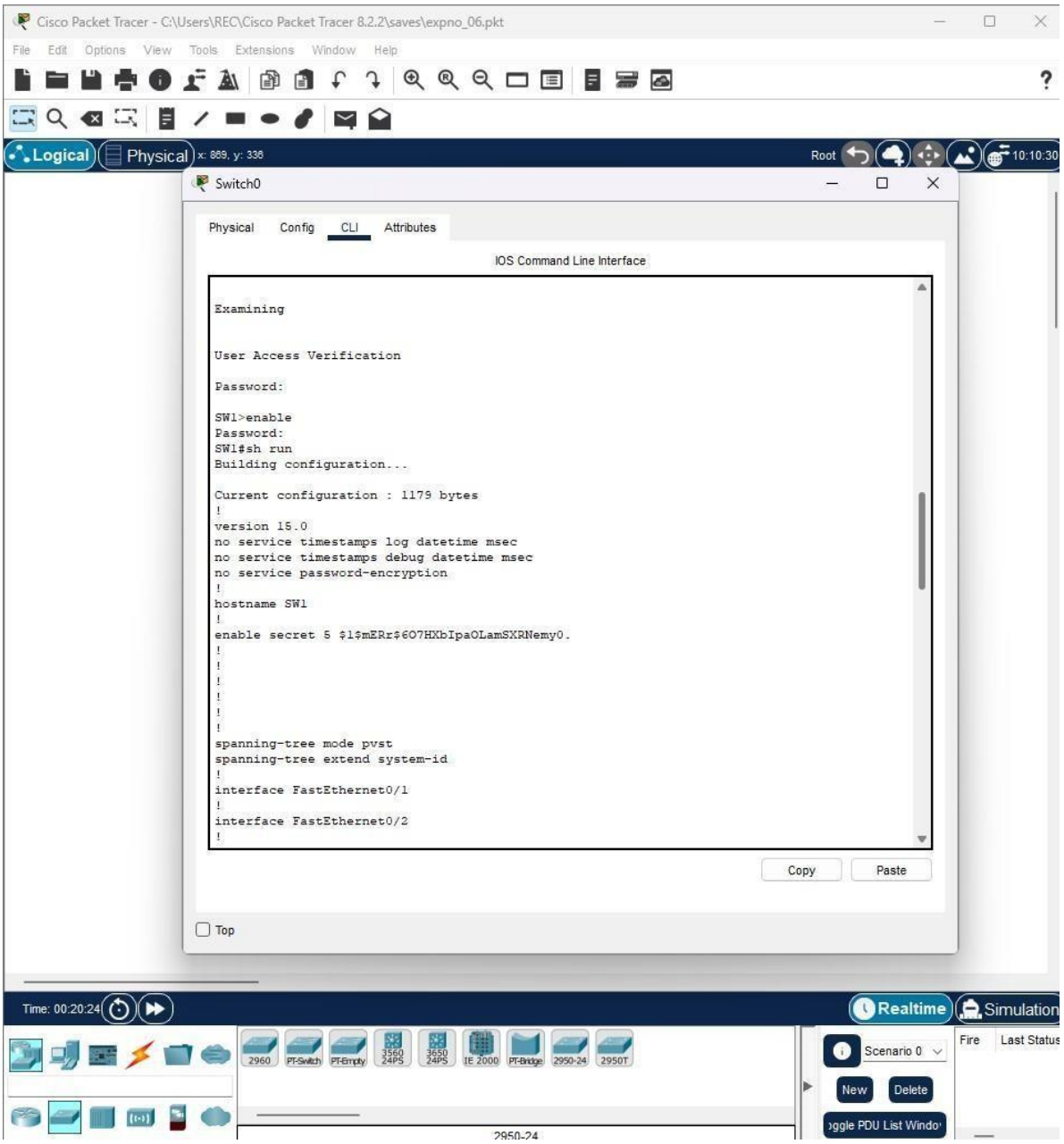
For example:

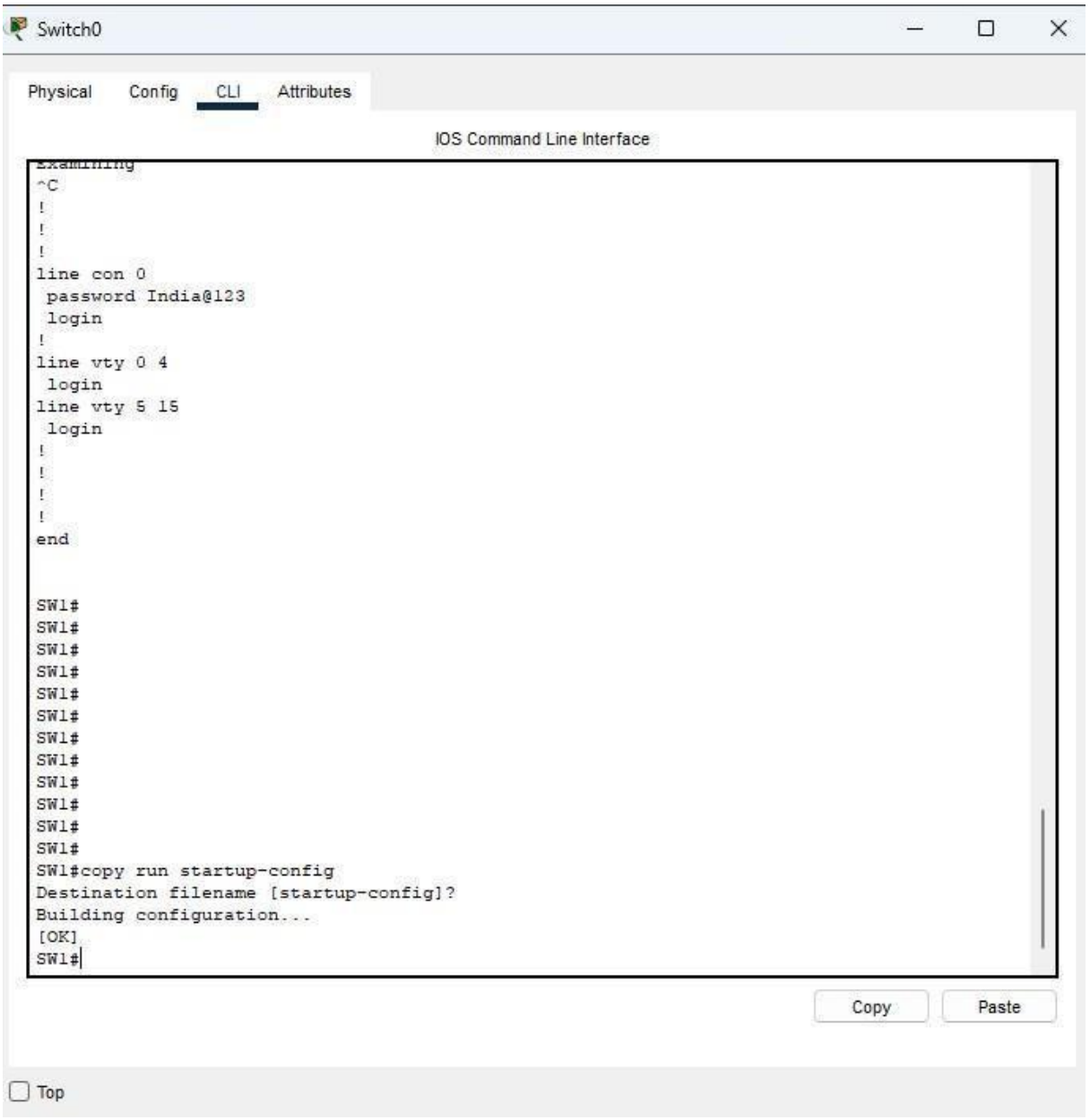
```bash
Switch> enable
Switch# configure terminal
Switch(config)# interface range fa0/1 - 24
Switch(config-if-range)# description Connected to LAN
Switch(config-if-range)# no shutdown
Switch(config-if-range)# exit
Switch(config)# vlan 10
Switch(config-vlan)# name Sales
Switch(config-vlan)# exit
Switch(config)# 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: 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 24PS
3650 24PS
IE 2000
PT-Bridge
2950-24
2950T
Scenario 0
New
Delete
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: 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 1mERr$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 24PS
3650 24PS
IE 2000
PT-Bridge
2950-24
2950T
Scenario 0
New
Delete
Fire
Last Status
2950-24



Result:
Switch with Network Modules using Cisco Packet Tracer is Customized.