

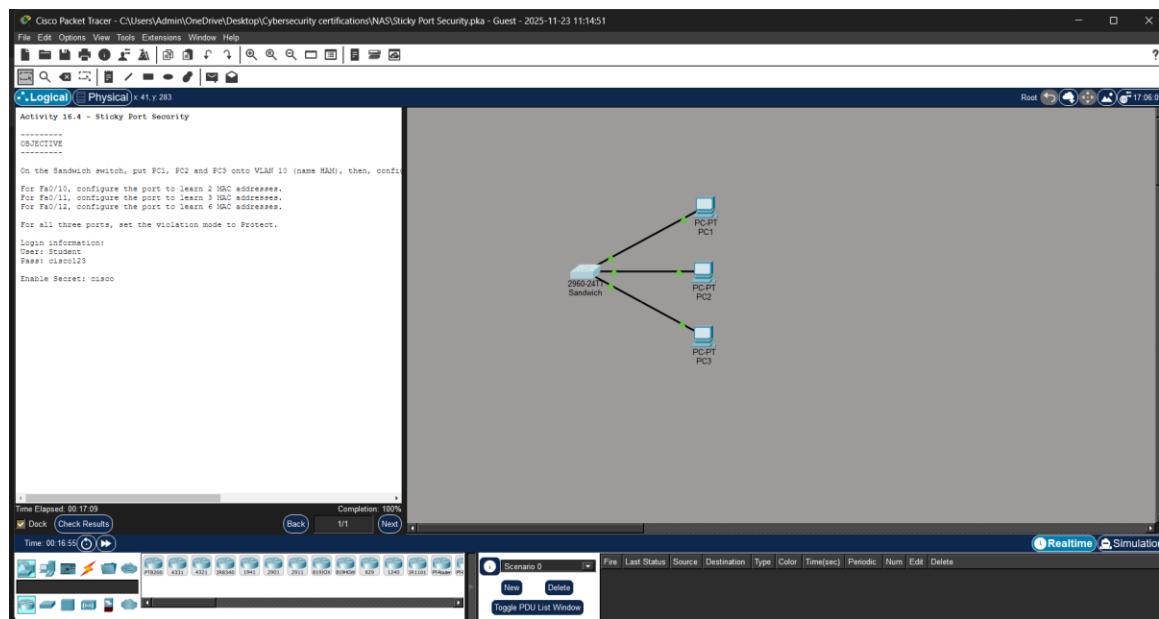
Lab Report — VLAN & Port Security Configuration

1. Objective

The purpose of this lab was to configure VLAN segmentation and apply sticky port security on designated FastEthernet ports of the Sandwich switch.

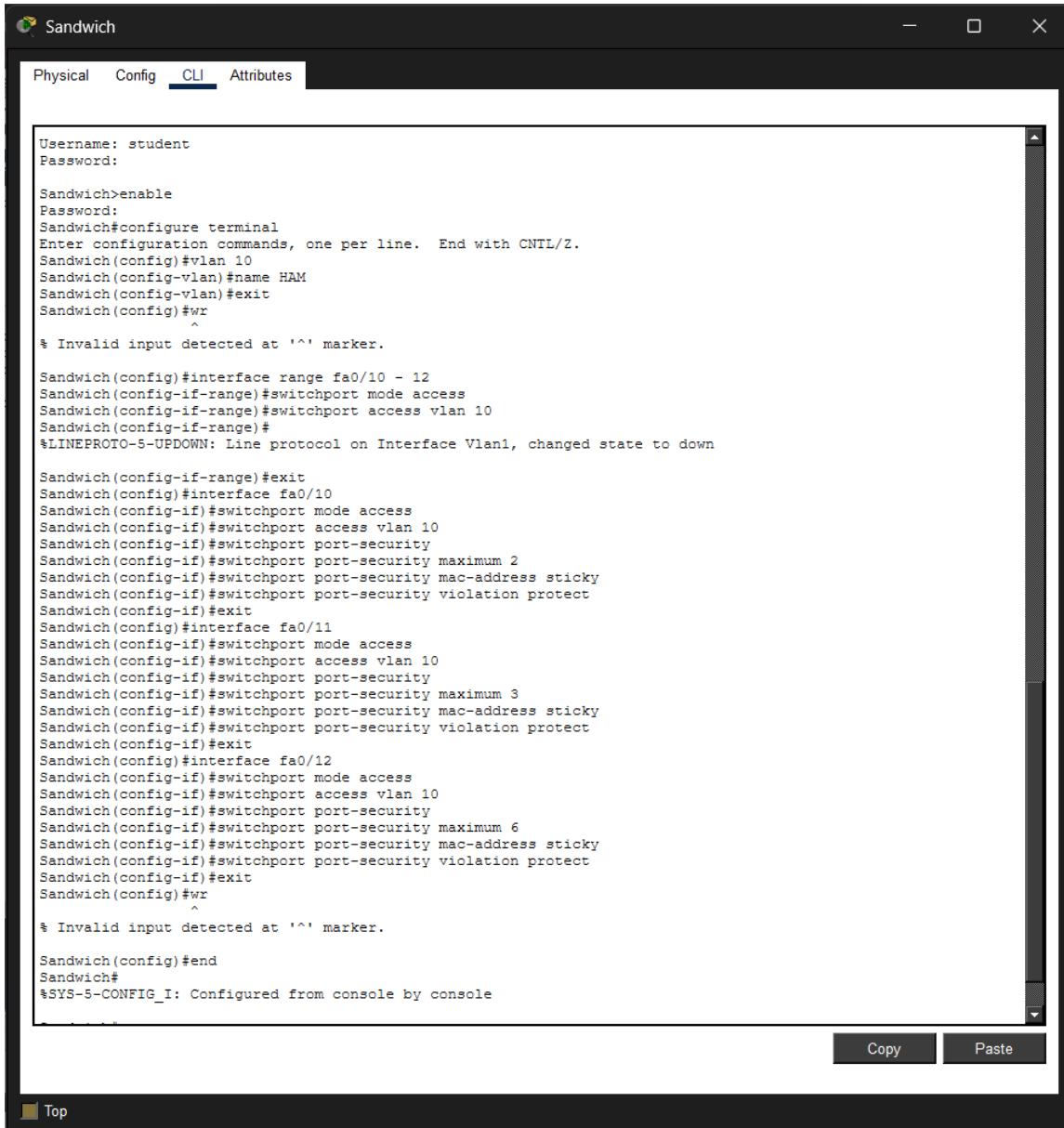
2. Topology Overview

The following screenshot shows the Packet Tracer topology:



3. CLI Configuration

The screenshot below shows the CLI configuration process on the Sandwich switch:



The screenshot shows a window titled "Sandwich" with a tab bar at the top containing "Physical", "Config", "CLI" (which is selected), and "Attributes". The main area of the window displays a command-line interface session. The session starts with a password entry, followed by enabling the terminal configuration mode. It creates a VLAN named HAM, exits configuration mode, saves the configuration, and then enters interface configuration mode for ports fa0/10 through fa0/12, setting them to access mode and applying port-security rules. Finally, it exits interface configuration mode and ends the session.

```
Username: student
Password:

Sandwich>enable
Password:
Sandwich#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Sandwich(config)#vlan 10
Sandwich(config-vlan)#name HAM
Sandwich(config-vlan)#exit
Sandwich(config)#wr
^
* Invalid input detected at '^' marker.

Sandwich(config)#interface range fa0/10 - 12
Sandwich(config-if-range)#switchport mode access
Sandwich(config-if-range)#switchport access vlan 10
Sandwich(config-if-range)#
*LINERPROT0-5-UPDOWN: Line protocol on Interface Vlan1, changed state to down
Sandwich(config-if-range)#exit
Sandwich(config)#interface fa0/10
Sandwich(config-if)#switchport mode access
Sandwich(config-if)#switchport access vlan 10
Sandwich(config-if)#switchport port-security
Sandwich(config-if)#switchport port-security maximum 2
Sandwich(config-if)#switchport port-security mac-address sticky
Sandwich(config-if)#switchport port-security violation protect
Sandwich(config-if)#exit
Sandwich(config)#interface fa0/11
Sandwich(config-if)#switchport mode access
Sandwich(config-if)#switchport access vlan 10
Sandwich(config-if)#switchport port-security
Sandwich(config-if)#switchport port-security maximum 3
Sandwich(config-if)#switchport port-security mac-address sticky
Sandwich(config-if)#switchport port-security violation protect
Sandwich(config-if)#exit
Sandwich(config)#interface fa0/12
Sandwich(config-if)#switchport mode access
Sandwich(config-if)#switchport access vlan 10
Sandwich(config-if)#switchport port-security
Sandwich(config-if)#switchport port-security maximum 6
Sandwich(config-if)#switchport port-security mac-address sticky
Sandwich(config-if)#switchport port-security violation protect
Sandwich(config-if)#exit
Sandwich(config)#wr
^
* Invalid input detected at '^' marker.

Sandwich(config)#end
Sandwich#
*SYS-5-CONFIG_I: Configured from console by console
```

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4. VLAN Configuration

Commands used to create VLAN 10 (HAM) and assign the switchports connected to PC1, PC2, and PC3:

```
vlan 10  
  name HAM  
exit
```

```
interface range fa0/10 - 12  
  switchport mode access  
  switchport access vlan 10  
exit
```

5. Port Security Configuration

Sticky port security was configured on Fa0/10, Fa0/11, and Fa0/12 with varying MAC limits.

6. Verification

Relevant verification commands were used to confirm proper configuration.