**11.1.10. Packet Tracer - Implement Port Security**

**Part 1: Configure Port Security**

S1>enable

S1#configure terminal

S1(config)#interface range f0/1-2

S1(config-if-range)#switchport port-security

S1(config-if-range)#switchport port-security maximum 1

S1(config-if-range)#switchport port-security mac-address sticky

S1(config-if-range)#switchport port-security violation restrict

S1(config-if-range)#interface range f0/3 - 24, g0/1 - 2

S1(config-if-range)#shutdown

S1(config-if-range)#exit

S1(config)#exit

**Part 2: Verify Port Security**

S1#show run | begin interface

S1# show port-security

S1# show port-security address

S1(config)#interface fa0/3

S1(config-if)#no shutdown

**11.6.1. Packet Tracer - Switch Security Configuration**

**Part 1: Create a Secure Trunk**

SW-1(config)#interface range g0/1-2

SW-1(config-if-range)#switchport mode trunk

SW-1(config-if-range)#end

SW-1#show interface trunk

SW-2(config)#interface range g0/1-2

SW-2(config-if-range)#switchport mode trunk

SW-2(config-if-range)#end

SW-2#show interface trunk

SW-1(config)#interface range g0/1-2

SW-1(config-if-range)#switchport nonegotiate

SW-2(config)#interface range g0/1-2

SW-2(config-if-range)#switchport nonegotiate

SW-1(config)#vlan 100

SW-1(config-vlan)#name Native

SW-2(config)#vlan 100

SW-2(config-vlan)#name Native

SW-1(config)#interface range g0/1-2

SW-1(config-if-range)#switchport trunk native vlan 100

SW-2(config-if-range)#interface range g0/1-2

SW-2(config-if-range)#switchport trunk native vlan 100

**Part 2: Secure Unused Switchports**

SW-1(config)#interface range fa0/3-9,fa0/11-23

SW-1(config-if-range)#shutdown

SW-1(config-vlan)#vlan 999

SW-1(config-vlan)#name BlackHole

SW-1(config)#interface range fa0/3-9,fa0/11-23

SW-1(config-if-range)#switchport access vlan 999

SW-1(config-if-range)#end

**Part 3: Implement Port Security**

SW-1(config)#interface fa 0/2

SW-1(config-if)#switchport mode access

SW-1(config-if)#switchport access vlan 10

SW-1(config)#interface range fa0/1-2,fa0/10,fa0/24

SW-1(config-if-range)#switchport port-security

SW-1(config-if-range)#switchport port-security maximum 4

SW-1(config)#interface fa 0/1

SW-1(config-if)#switchport port-security mac-address 0010.11E8.3CBB

SW-1(config)#interface range fa0/1-2, fa 0/10

SW-1(config-if-range)#interface range fa0/1-2, fa 0/10, fa0/24

SW-1(config-if-range)#switchport port-security mac-address sticky

SW-1(config-if-range)#switchport port-security violation restrict

**Part 4: Enable DHCP Snooping**

SW-1(config)#interface range fa0/1-2, fa0/10, fa0/24

SW-1(config-if-range)#ip dhcp snooping limit rate 5

SW-2(config)#ip dhcp snooping

SW-2(config)#ip dhcp snooping vlan 10,20,99

SW-1(config)#interface range fa0/1-2, fa0/10, fa0/24

SW-1(config-if-range)#ip dhcp snooping limit rate 5

SW-1(config-if-range)#interface range fa0/1-2, fa0/10,fa0/24

SW-1(config)#interface range fa0/1-2, fa0/10,fa0/24

SW-1(config-if-range)#spanning-tree portfast

SW-2(config)#ip dhcp snooping

SW-2(config)#ip dhcp snooping vlan 10,20,99

SW-2(config)#spanning-tree portfast default

**Part 5: Configure Rapid PVST PortFast and BPDU Guard**

SW-1(config)#interface range fa0/1-2, fa0/10,fa0/24

SW-1(config-if-range)#spanning-tree portfast

SW-1(config-if-range)#spanning-tree bpduguard enable