

Exp No: 2 Configure port security in Cisco Packet Tracer
Date: 21/7/25

Aim:

To configure port security in Cisco packet tracer.

Procedure:

1. Build the network single network topology in packet tracer.
2. Give wired connections for all devices of PC1, PC2, PC3 and Router.
3. Give IP addresses for PC1, PC2, PC3 and Router with default gateway addresses.
4. Click on PC1, goto command prompt and ping the IP address of other PCs.
5. Repeat this step-3 for other two PCs as PC2 and PC3.

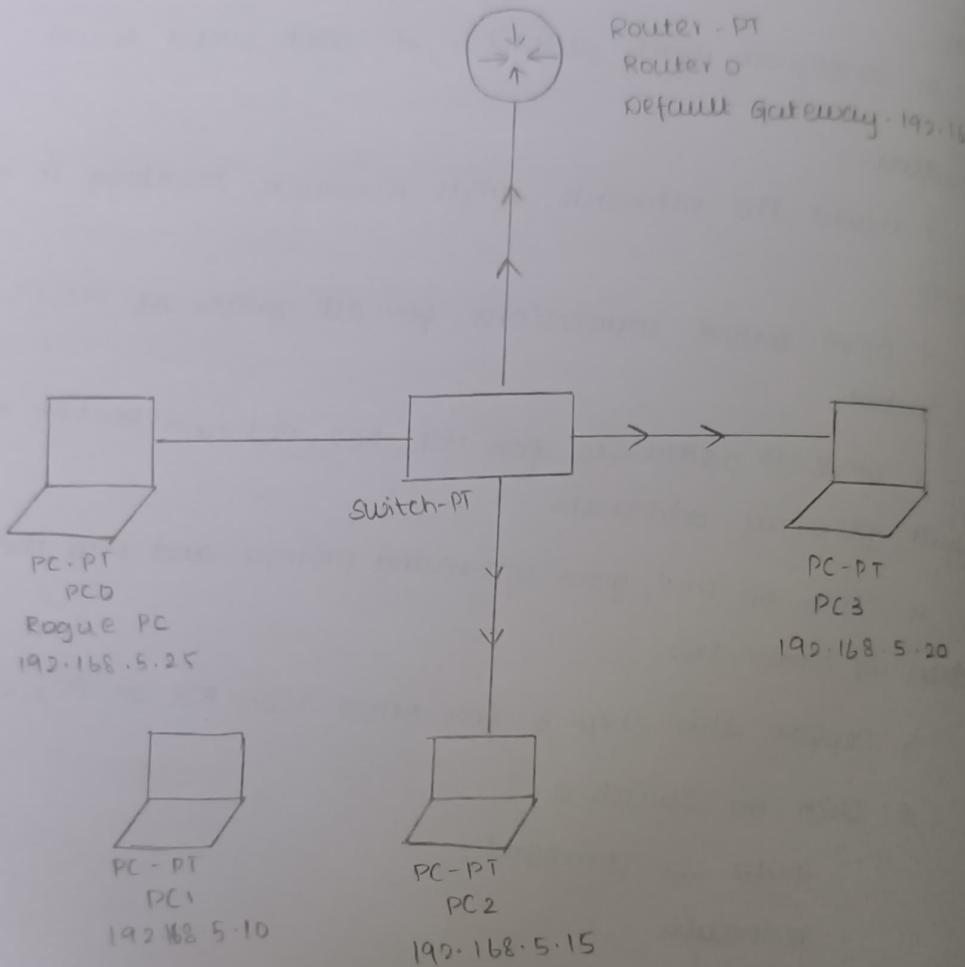
6. Click on Switch 0:

Goto CLI command
#enable
#config
#int fast 1/
#switchport mode access
#switchport port-security mac-address sticky
#switchport port-security maximum?
#switchport port-security maximum 1
##switchport port-security violation?

7. Now, from the 3 port-security violation we will first process for "shutdown mode"

#switchport port-security violation shutdown
##exit

Now, for the next interface connection access the shutdown mode



```

# int fa1/
# switchport mode access
# switchport port-security
# switchport port-security maximum 1
# switchport port-security violation shutdown
# switchport
# exit

```

8. Do the same for the next interface connection

9. Then,

```

# show port-security
# show port-security int fa0/
# show port-security int fa1/
# show port-security int fa2/
# show port-security-address-table

```

10. Now, ping all PCs

11. Now, give IP address for Rogue PC0

12. Now, again ping all PC₁, PC₂ and PC₃.

13. Now, remove the wired connection from PC₁ and give connection to Rogue PC0.

14. Do this repeatedly for all PCs.

Restrict Mode:

1. Click on switch0

```

# enable
# configure terminal
# int fa1/
# switchport mode access
# switchport port-security violation restrict
# exit
# show port-security
# show port-security int fa1/

```

2. Now, cut the wired connection from PC₂ and give connection to PC0.

3. Give the ping command 192.168.5.10 and 192.168.5.20. Close it.

4. click switch0

show port-security

show port-security int fa1/1

5. Now cut the connection wire from PC0 and connect it to PC1

6. click ping command from PC2 to PC1 and PC3

show running-config

Protect Mode

1. click on switch0

enable

conf 1

int fa2/1

switchport mode access

switchport port-security

switchport port-security violation protect

exit

end

show port-security

show port-security fa2/1

2. check ping command PC1 to PC2 and PC3. Check ping command PC3 to PC2 and PC1

3. Now, cut the wired connection from PC3 and give connection PC0

4. Give the ping command 192.168.5.10 and 198.168.5.20
close it

5. click on switch0

show port-security

show port-security int fa1/1

show mac address-table

show ip int br

Ping -t 192.168.5.10

ctrl c

Output

Post-security summary

Secure port	Nonsecure Add (count)	UnifAdd (count)	Security Violation (count)	Security action
Fa0/1	1	1	0	shutdown
Fa1/1	1	1	0	Restrict
Fa2/1	1	1	0	Restrict

Mac Address Table

Vlan	Mac-Address	Type	Ports
1	0001.9677.e9ec	static	Fa2/1
1	0000.9759.bb38	static	Fa1/1
1	0000.9761.e2be	dynamic	Fa3/1
1	0000.bcd8.163d	static	Fa0/1

Result:

Thus, the port security configuration is successfully executed and the output is verified.