

Maximum MAC Addresses



- When Port Security is enabled the maximum number of MAC addresses allowed to send traffic into the interface is one by default
- This can be increased if multiple hosts share the port, for example an IP phone with a PC plugged into the back of it

```
SW1(config)# interface f0/2
```

```
SW1(config-if)# switchport port-security maximum 2
```

Maximum MAC Addresses



```
SW1#show port-security int f0/2
Port Security : Enabled
Port Status : Secure-up
Violation Mode : Shutdown
Aging Time : 0 mins
Aging Type : Absolute
SecureStatic Address Aging : Disabled
Maximum MAC Addresses : 2
Total MAC Addresses : 1
Configured MAC Addresses : 0
Sticky MAC Addresses : 0
Last Source Address:Vlan : 0000.0CA0.A359:1
Security Violation Count : 0
```

Manually Adding MAC Addresses



- You can statically configure allowed MAC addresses if you want to lock the port down to a particular host:

```
SW1(config)# interface f0/10
```

```
SW1(config-if)# switchport port-security
```

```
SW1(config-if)#switchport port-security mac-address  
1111.2222.3333
```

```
SW1(config-if)# switchport port-security maximum 1
```

MAC Address Learning



- Scenario: You have 1000 authorised hosts connected to the network. You want to lock the ports down to these particular hosts
- Manually adding the MAC addresses is not a scalable solution
- Sticky MAC addresses add the learned MAC address to the running configuration. Save to the startup config to make them permanent

```
SW1(config)# interface f0/2
```

```
SW1(config-if)# switchport port-security
```

```
SW1(config-if)# switchport port-security mac-address sticky
```

Verify Port Security Addresses



```
SW1#show port-security address
```

```
Secure Mac Address Table
```

```
-----
```

Vlan	Mac Address	Type	Ports	Remaining Age (mins)
----	-----	----	-----	-----
1	0000.0CA0.A359	DynamicConfigured	FastEthernet0/2	-
1	0002.164E.D116	DynamicConfigured	FastEthernet0/3	-
1	1111.2222.3333	SecureConfigured	FastEthernet0/10	-

```
-----
```

```
Total Addresses in System (excluding one mac per port) : 0
```

```
Max Addresses limit in System (excluding one mac per port) : 1024
```

View Summary Information



```
SW1#show port-security
```

Secure Port	MaxSecureAddr (Count)	CurrentAddr (Count)	SecurityViolation (Count)	Security Action
Fa0/2	2	1	0	Shutdown
Fa0/3	1	1	0	Shutdown
Fa0/10	1	1	0	Shutdown