

Configuring Secure Port Filtering

This chapter describes how to configure secure port filtering on the Catalyst 5000, 4000, 2948G, 2926G, and 2926 series switches.

Note For complete syntax and usage information for the commands used in this chapter, refer to the *Command Reference* for your switch.

This chapter consists of these sections:

- Understanding How Secure Port Filtering Works on page 28-1
- Secure Port Filtering Configuration Guidelines on page 28-1
- Configuring Secure Port Filtering on page 28-2

Understanding How Secure Port Filtering Works

You can use secure port filtering to block input to an Ethernet or Fast Ethernet port when the Media Access Control (MAC) address of the station attempting to access the port is different from the MAC address specified for that port.

When a secure port receives a packet, the source MAC address of the packet is compared to the secure source address configured for the port. If the MAC address of the device attached to the port differs from the secure address, the port is disabled, the Link LED for that port turns orange, and a link-down trap is sent to the Simple Network Management Protocol (SNMP) manager.

You can specify the secure MAC address for the port manually or you can have the port dynamically learn the MAC address of the connected device. Once the address is specified or learned, it is stored in nonvolatile RAM (NVRAM) and maintained even after a reset.

Secure Port Filtering Configuration Guidelines

These guidelines apply when configuring secure port filtering:

- You cannot configure secure port filtering on a trunk port.
- Secure port filtering is not supported on the three-port Gigabit Ethernet module (WS-X5403).

Configuring Secure Port Filtering

These sections describe how to configure secure port filtering:

- Enabling Secure Port Filtering on page 28-2
- Disabling Secure Port Filtering on page 28-3

Enabling Secure Port Filtering

To enable secure port filtering, perform this task in privileged mode:

Task	Command
Step 1 Enable port security on the desired ports. If desired, specify the secure MAC address.	set port security <i>mod_num/port_num</i> enable [<i>mac_addr</i>]
Step 2 Verify the configuration.	show port [<i>mod_num[/port_num]</i>]

This example shows how to enable secure port filtering on a port using the learned MAC address on a port and verify the configuration:

```

Console> (enable) set port security 2/1 enable
Port 2/1 port security enabled with the learned mac address.
Trunking disabled for Port 2/1 due to Security Mode
Console> (enable) show port 2/1
Port  Name                Status      Vlan      Level Duplex Speed Type
-----
2/1                connected  522      normal  half  100 100BaseTX

Port  Security Secure-Src-Addr  Last-Src-Addr  Shutdown Trap      IfIndex
-----
2/1  enabled  00-90-2b-03-34-08  00-90-2b-03-34-08  No      disabled 1081

Port  Broadcast-Limit Broadcast-Drop
-----
2/1                -              0

Port  Align-Err  FCS-Err  Xmit-Err  Rcv-Err  UnderSize
-----
2/1                0        0        0        0        0

Port  Single-Col Multi-Coll Late-Coll  Excess-Col Carri-Sen Runts      Giants
-----
2/1                0        0        0        0        0        0        0

Last-Time-Cleared
-----
Fri Jul 10 1998, 17:53:38
Console> (enable)
    
```

This example shows how to enable secure port filtering on a port and manually specify the secure MAC address:

```

Console> (enable) set port security 2/1 enable 00-90-2b-03-34-08
Port 2/1 port security enabled with 00-90-2b-03-34-08 as the secure mac address
Trunking disabled for Port 2/1 due to Security Mode
Console> (enable)
    
```

Disabling Secure Port Filtering

To disable secure port filtering, perform this task in privileged mode:

Task	Command
Step 1 Disable port security on the desired ports.	set port security <i>mod_num/port_num</i> disable
Step 2 Verify the configuration.	show port [<i>mod_num</i>[/<i>port_num</i>]]

This example shows how to disable secure port filtering on a port:

```
Console> (enable) set port security 2/1 disable  
Port 2/1 port security disabled.  
Console> (enable)
```

