Configuring Switchport Blocking

This chapter describes how to configure switchport blocking on the Cisco NX-OS device.

This chapter includes the following sections:

About Switchport Blocking

Occasionally, unknown multicast or unicast traffic is flooded to a switch port because a MAC address has timed out or has not been learned by the switch. Security issues could arise if unknown multicast and unicast traffic is forwarded to a switch port. You can enable switchport blocking to guarantee that no multicast or unicast traffic is flooded to the port.

Guidelines and Limitations for Switchport Blocking

Switchport blocking has the following configuration guidelines and limitations:

- Switchport blocking applies only to egress ports while traffic storm control applies only to ingress ports.
- Switchport blocking is supported on all switched ports (including PVLAN ports) and is applied to all VLANs on which the port is forwarding.
- Switchport blocking is not supported for FEX ports.
- When you block unknown multicast or unicast traffic for a port channel, it is blocked on all ports in the port-channel group.
- Switchport blocking does not offer levels of control. It prevents the flooding of all unknown egress multicast or unicast packets on the specified port.
- Switchport blocking drops control packets that originate from the CPU on Cisco Nexus 9500 Series switches. It does not drop packets on Cisco Nexus 9300 Series switches.

Default Settings for Switchport Blocking

This table lists the default settings for switchport blocking parameters.

Table 1: Default Switchport Blocking Parameters

Parameters	Default
Switchport blocking	Disabled

Configuring Switchport Blocking

By default, the switch floods packets with unknown destination MAC addresses to all ports. To prevent the forwarding of such traffic, you can configure a port to block unknown multicast or unicast packets.

Procedure

	Command or Action	Purpose

Step 1	**configure terminal**
	Example:
	`switch# configure terminal`
	`switch(config)#`
		Enters global configuration mode.

Step 2	**interface** {**ethernet** *slot*/*port* | **port-channel** *number*}
	Example:
	`switch# interface ethernet 1/1`
	`switch(config-if)#`
		Enters interface configuration mode.

Step 3	[**no**] **switchport block** {**multicast** | **unicast**} **Example:** `switch(config-if)# switchport block unicast`	Prevents the flooding of unknown multicast or unicast packets on the specified interface. Use the **no** form of this command to resume normal forwarding on the port.
Step 4	(Optional) **show interface** [**ethernet** *slot*/*port* | **port-channel** *number*] **switchport** **Example:** `switch(config-if)# show interface ethernet 1/1 switchport`	Displays the switchport blocking configuration.
Step 5	(Optional) **copy running-config startup-config** **Example:** `switch(config-if)# copy running-config startup-config`	Copies the running configuration to the startup configuration.

Verifying the Switchport Blocking Configuration

To display switchport blocking configuration information, perform one of the following tasks:

Command	Purpose
show interface switchport	Displays the switchport blocking configuration for all interfaces.
show interface {**ethernet** *slot*/*port* | **port-channel** *number*} **switchport**	Displays the switchport blocking configuration for the specified interface.
show running-config interface [**ethernet** *slot*/*port* | **port-channel** *number*]	Displays the switchport blocking configuration in the running configuration.

Configuration Example for Switchport Blocking

The following example shows how to block multicast and unicast flooding on Ethernet interface 1/2 and how to verify the configuration:

```
switch# configure terminal
switch(config)# interface ethernet 1/2
switch(config-if)# switchport block multicast
switch(config-if)# switchport block unicast
switch(config-if)# show running-config interface ethernet 1/2
!Command: show running-config interface Ethernet1/2
!Time: Wed Apr 15 16:25:48 2015

version 79.2(1)

interface Ethernet1/2
switchport
switchport block multicast
switchport block unicast
```