FS.COM

FiberstoreOS

IPv6 Security Command Line Reference

Table of Contents

1 DHCPv6 Snooping Commands

1.1 clear dhcpv6 snooping bindings

Use the clear dhcpv6 snooping bindings global configuration command on the switch to clear the dynamic DHCPv6 binding items.

Command Syntax

clear dhcpv6 snooping bindings learning (ipv6 *IP-ADDRESS* | **mac** *MAC-ADDRESS* | **vlan** *VLAN-ID*| **interface** *IFNAME* /)

ipv6 *IP-ADDRESS*	Clear the binding entry with the IPv6 address
mac *MAC-ADDRESS*	Clear the binding entry with the MAC address
vlan *VLAN-ID*	Clear the binding entry with the VLAN
interface *IFNAME*	Clear the binding entry with the Interface

Command Mode

Global Configuration

Default

No default is defined.

Usage

This command is used to clear dynamic DHCPv6 snooping binding item.

Examples

This example shows how to clear all DHCPv6 snooping binding items:

Switch# clear dhcpv6 snooping bindings learning

Related Commands

show dhcpv6 snooping binding

1.2 clear dhcpv6 snooping statistics

Use the clear dhcpv6 snooping statistics privileged EXEC command on the switch to clear the DHCPv6 snooping statistics counters.

Command Syntax

clear dhcpv6 snooping statistics

Command Mode

Privileged EXEC

Default

No default is defined.

Usage

This command is used to clear DHCPv6 snooping statistics.

Examples

This example shows how to clear the DHCPv6 snooping statistics counters:

Switch# clear dhcpv6 snooping statistics

Related Commands

show dhcpv6 snooping statistics

1.3 dhcpv6 snooping

Use the dhcpv6 snooping global configuration command on the switch to globally enable DHCPv6 snooping. Use the no form of this command to return to the default setting.

Command Syntax

dhcpv6 snooping

no dhcpv6 snooping

Command Mode

Global Configuration

Default

DHCPv6 snooping is disabled.

Usage

For any DHCPv6 snooping configuration to take effect, you must globally enable DHCPv6 snooping. DHCPv6 snooping is not active until you enable snooping on a VLAN by using the dhcpv6 snooping vlan global configuration command.

Examples

This example shows how to enable DHCPv6 snooping:

Switch(config)# dhcpv6 snooping

You can verify your settings by entering the show dhcpv6 snooping config privileged EXEC command.

Related Commands

dhcpv6 snooping vlan

show dhcpv6 snooping config

1.4 dhcpv6 snooping binding

Use the dhcpv6 snooping binding global configuration command on the switch to configure the DHCPv6 snooping binding database and to add binding entries to the database.

Command Syntax

dhcpv6 snooping binding mac *MAC-ADDRESS* **vlan** *VLAN-ID* **ipv6** *IP-ADDRESS* **interface** *IFNAME* **expiry** *SECONDS*

no dhcpv6 snooping bindings (**ipv6** *IP-ADDRESS* | **mac** *MAC-ADDRESS* | **vlan** *VLAN-ID* | **interface** *IFNAME* |)

mac *MAC-ADDRESS*	Specify a MAC address
vlan *VLAN-ID*	Specify a VLAN number. The range is 1 to 4094
ipv6 *IP-ADDRESS*	Specify an IPv6 address
interface *IFNAME*	Specify an interface on which to add or delete a binding entry
expiry *SECONDS*	Specify the interval (in seconds) after which the binding entry is no longer valid. The range is 0 to 86400

Command Mode

Global Configuration

Default

No default database is defined.

Usage

Use this command when you are testing or debugging the switch.

In the DHCPv6 snooping binding database, each database entry, also referred to a binding, has an IP address, an associated MAC address, the lease time, the interface to which the binding applies, and the VLAN to which the interface belongs.

Use the show dhcpv6 snooping binding privileged EXEC command to display the configured bindings.

Examples

This example shows how to generate a DHCPv6 binding with an expiration time of 1000 seconds on a port in VLAN 1:

Switch(config)# dhcpv6 snooping binding mac 0001.000c.01ef vlan 1 ipv6 2001:1::1 interface eth-0-1 expiry 1000

Related Commands

show dhcpv6 snooping binding

1.5 dhcpv6 snooping database

Use the dhcpv6 snooping database global configuration command on the switch to configure the DHCPv6 snooping binding database agent. Use the no form of this command to reset the write-delay value.

Command Syntax

dhcpv6 snooping database auto-save interval *SECONDS*

interval *SECONDS*	Specify the interval (in seconds) that how long to save the binding database. The range is 15 to 1200

Command Mode

Global Configuration

Default

Default interval is 600 seconds.

Usage

The DHCPv6 snooping database is save as flash:/dhcpv6snooping.

Examples

The following is sample output from the dhcpv6 snooping database command:

Switch(config)# dhcpv6 snooping database auto-save interval 120

Related Commands

dhcpv6 snooping

dhcpv6 snooping binding

1.6 dhcpv6 snooping trust

Use the dhcpv6 snooping trust interface configuration command on the switch to configure a port as trusted for DHCPv6 snooping purposes. Use the no form of this command to return to the default setting.

Command Syntax

dhcpv6 snooping trust

no dhcpv6 snooping trust

Command Mode

Interface configuration

Default

DHCPv6 snooping trust is disabled.

Usage

Configure as trusted ports those that are connected to a DHCPv6 server or to other switches or routers. Configure as entrusted ports those that are connected to DHCPv6 clients.

Examples

This example shows how to enable DHCPv6 snooping trust on a port:

Switch(config-if)# dhcpv6 snooping trust

Related Commands

show dhcpv6 snooping trusted-sources

1.7 dhcpv6 snooping vlan

Use the dhcpv6 snooping vlan global configuration command on the switch to enable DHCPv6 snooping on a VLAN. Use the no form of this command to return to the default setting.

Command Syntax

dhcpv6 snooping vlan *VLAN-RANGE*

no dhcpv6 snooping vlan *VLAN-RANGE*

VLAN-RANGE	Specify a VLAN ID or a range of VLANs on which to enable DHCP snooping. The range is 1 to 4094

Command Mode

Global Configuration

Default

DHCPv6 snooping is disabled on all VLANs.

Usage

You can enter a single VLAN ID identified by VLAN ID number, a series of VLAN IDs separated by commas, a range of VLAN IDs separated by hyphens, or a range of VLAN IDs separated by entering the starting and ending VLAN IDs separated by a space.

You must first globally enable DHCPv6 snooping before enabling DHCPv6 snooping on a VLAN.

Examples

This example shows how to enable DHCPv6 snooping on VLAN 10:

Switch(config)# dhcpv6 snooping vlan 10

Related Commands

show dhcpv6 snooping config

1.8 debug dhcpv6 snooping

Use this command to turn on the debug switches of dhcpv6 snooping module.

To restore the default, use the **no** form of this command

Command Syntax

debug dhcpv6 snooping (**events | error | dump | packet | all**)

no debug dhcpv6 snooping (**events | error | dump | packet | all**)

events	Snooping events
error	Error DHCPv6 message
packet	DHCPv6 message fields
dump	Dump message in hex format
all	Turn all debugging on

Command Mode

Privileged EXEC

Default

None

Usage

Use command “terminal monitor ” to make debug messages print on the VTY immediately.

Use command “show logging buffer” to check the debug messages in the logging buffer.

Examples

The following is sample to open dhcpv6 snooping debug switches:

Switch# debug dhcpv6 snooping all

Related Commands

terminal monitor

show logging buffer

1.9 show dhcpv6 snooping binding

Use the show dhcpv6 snooping binding privileged EXEC command to display the DHCPv6 snooping binding database and configuration information for all interfaces on a switch.

Command Syntax

show dhcpv6 snooping binding (（**all** | **manual** | **learning** ）(**ipv4** *IP-ADDRESS* | **mac** *MAC-ADDRESS* | **vlan** *VLAN-ID* | **interface** *IFNAME* |) **summary|)**

all	Display all entries
manual	Display static entries
learning	Display dynamic entries
mac *MAC-ADDRESS*	Specify MAC address
vlan *VLAN-ID*	Specify a VLAN number. The range is 1 to 4094
ipv4 *IP-ADDRESS*	Specify an IP address
interface *IFNAME*	Specify an interface on which to add or delete a binding entry
summary	Display summary information of DHCPv6 snooping bindings

Command Mode

Privileged EXEC

Default

None

Usage

If DHCPv6 snooping is enabled and an interface changes to the down state, the switch does not delete the statically configured bindings.

Examples

The following is sample output from the show dhcpv6 snooping binding command:

Switch# show dhcpv6 snooping binding all

```
DHCPv6 snooping binding table:
VLAN MAC Address    Interface  Lease(s)   IPv6 Address
============================================================
1    0001.0001.0001 eth-0-2    static     1:1::1:1
```

Switch# show dhcpv6 snooping binding summary

```
Total 1 DHCPv6 snooping binding entries
```

```
  0 learning entry, 1 configured entry
```

Related Commands

dhcpv6 snooping binding

1.10 show dhcpv6 snooping config

Use the show dhcpv6 snooping privileged EXEC command to display the DHCPv6 snooping configuration.

Command Syntax

show dhcpv6 snooping config

Command Mode

Privileged EXEC

Default

None

Usage

This command is used to display the configuration of DHCPv6 snooping.

Examples

The following is sample output from the show dhcpv6 snooping config command:

Switch# show dhcpv6 snooping config

```
dhcpv6 snooping service: enabled
dhcpv6 snooping switch: enabled
dhcpv6 snooping vlan 3
```

Related Commands

dhcpv6 snooping

dhcpv6 snooping vlan

1.11 show dhcpv6 snooping trusted-sources

Use the show dhcpv6 snooping trusted-sources privileged EXEC command to display the DHCPv6 snooping trusted interface.

Command Syntax

show dhcpv6 snooping trusted-sources

Command Mode

Privileged EXEC

Default

None

Usage

This command is used to display the trusted interface of DHCPv6 snooping.

Examples

The following is sample output from the show dhcpv6 snooping trusted-sources command:

Switch# show dhcpv6 snooping trusted-source

```
List of DHCPv6 snooping trusted interface(s):
=============================================================
eth-0-20
```

Related Commands

dhcpv6 snooping trust

1.12 show dhcpv6 snooping statistics

Use the show dhcpv6 snooping statistics privileged EXEC command to display DHCPv6 snooping statistics.

Command Syntax

show dhcpv6 snooping statistics

Command Mode

Privileged EXEC

Default

None

Usage

This command is used to display the statistics of DHCPv6 snooping.

Examples

The following is sample output from the show dhcpv6 snooping statistics command:

Switch# show dhcpv6 snooping statistics

```
DHCPv6 snooping statistics:
============================================================
DHCPv6 packets                          137

Packets forwarded                        137
Packets invalid                          0
Packets dropped                          0
```

Related Commands

clear dhcpv6 snooping statistics