



## Show Commands

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This chapter describes the Cisco NX-OS Hot Standby Router Protocol (HSRP) **show** commands.

# show hsrp

To display Hot Standby Router Protocol (HSRP) information for each HSRP group, use the **show hsrp** command.

```
show hsrp [interface {ethernet slot[/QSFP-module]/port | port-channel number | vlan vlan-id}]
           [group group-number] [active | init | listen | standby] [all] [brief] [detail] [ipv4]
```

Syntax Description	
<b>interface</b>	(Optional) Specifies the interface for which to display HSRP information.
<b>ethernet</b> <i>slot</i> [/ <i>QSFP-module</i> ]/ <i>port</i>	Specifies the Ethernet interface and the slot number and port number. The <i>slot</i> number is from 1 to 255. The <i>QSFP-module</i> number is from 1 to 4. The <i>port</i> number is from 1 to 128.  <b>Note</b> The <i>QSFP-module</i> number applies only to the QSFP+ Generic Expansion Module (GEM).
<b>port-channel</b> <i>number</i>	Specifies the EtherChannel interface and EtherChannel number. The range is from 1 to 4096.
<b>vlan</b> <i>vlan-id</i>	Specifies the VLAN interface. The range is from 1 to 4094.
<b>group</b> <i>group-number</i>	(Optional) Specifies the HSRP group number of the interface to display information about. The range is from 0 to 4095.
<b>active</b>	(Optional) Displays HSRP groups that are in an active state.
<b>init</b>	(Optional) Displays HSRP groups that are in an initialization state.
<b>listen</b>	(Optional) Displays HSRP groups that are in an listen state.
<b>standby</b>	(Optional) Displays HSRP groups that are in an standby state.
<b>all</b>	(Optional) Displays all HSRP groups.
<b>brief</b>	(Optional) Summarizes each virtual gateway or virtual forwarder with a single line of output.
<b>detail</b>	(Optional) Displays detailed information about HSRP groups.
<b>ipv4</b>	(Optional) Displays HSRP IPv4 groups.

**Command Default** None

**Command Modes** Any command mode

Command History	Release	Modification
	6.0(2)N1(2)	Support for the QSFP+ GEM was added.
	5.2(1)N1(1)	This command was introduced.

**Usage Guidelines** Use the **show hsrp** command to display information about HSRP groups. The **brief** keyword displays a single line of information about each virtual gateway or virtual forwarder.

If you have not configured authentication, the **show hsrp** command will display the following string:

```
Authentication text "cisco"
```

This is the default behavior of HSRP as defined in [RFC 2281](#):

If no authentication data is configured, the RECOMMENDED default value is 0x63 0x69 0x73 0x63 0x6F 0x00 0x00 0x00.

This command does not require a license.


**Note**

Make sure the LAN Base Services license is installed on the switch to enable Layer 3 interfaces.

**Examples**

This example shows how to display the default information about HSRP:

```
switch# show hsrp
Vlan1 - Group 1 (HSRP-V1) (IPv4)
  Local state is Active, priority 150 (Cfged 150), may preempt
  Forwarding threshold(for vPC), lower: 1 upper: 150
  Preemption Delay (Seconds) Reload:300
  Hellotime 3 sec, holdtime 10 sec
  Next hello sent in 0.793000 sec(s)
  Virtual IP address is 10.1.1.3 (Cfged)
  Active router is local
  Standby router is unknown
  Authentication text "cisco"
  Virtual mac address is 0000.0c07.ac01 (Default MAC)
  17 state changes, last state change 1w0d
  IP redundancy name is hsrp-Vlan1-1 (default)
...
```


**Note**

The authentication text string in the preceding example indicates that authentication has not been configured on the interface.

This example shows how to display a brief summary of HSRP information:

```
switch# show hsrp brief
          P indicates configured to preempt.
          |
Interface  Grp Prio P State   Active addr   Standby addr   Group addr
Vlan1      1   150 P Active local        unknown       10.1.1.3      (conf)
Vlan2      2   150 P Active local        unknown       10.1.2.3      (conf)
...
```

**Related Commands**

Command	Description
<b>feature hsrp</b>	Enables the HSRP feature.

# show hsrp delay

To display the Hot Standby Router Protocol (HSRP) group delay information, use the **show hsrp delay** command.

**show hsrp delay** [**interface** {**ethernet** *slot*[/*QSFP-module*]/*port* | **port-channel** *number*[*.sub\_if\_number*] | **vlan** *vlan\_id*}] [**group** *group-number*] [**all**] [**brief**]

Syntax Description	
<b>interface</b>	(Optional) Specifies the interface type and number for which to display HSRP information.
<b>ethernet</b> <i>slot</i> [/ <i>QSFP-module</i> ]/ <i>port</i>	(Optional) Specifies the Ethernet interface. The <i>slot</i> number is from 1 to 255. The <i>QSFP-module</i> number is from 1 to 4. The <i>port</i> number is from 1 to 128.
	<b>Note</b> The <i>QSFP-module</i> number applies only to the QSFP+ Generic Expansion Module (GEM).
<b>port-channel</b> <i>number</i>	(Optional) Specifies the EtherChannel interface. The EtherChannel number is from 1 to 4096.
<i>.sub_if-number</i>	(Optional) Subinterface number. The range is from 1 to 4093.
<b>vlan</b> <i>vlan-id</i>	(Optional) Specifies the VLAN interface. The range is from 1 to 4094.
<b>group</b> <i>group-number</i>	(Optional) Specifies the HSRP group number of the interface to display information about. The range is from 0 to 4095.
<b>all</b>	(Optional) Specifies all HSRP information.
<b>brief</b>	(Optional) Specifies brief HSRP information.

**Command Default** None

**Command Modes** Any command mode

Command History	Release	Modification
	6.0(2)N1(2)	Support for the QSFP+ GEM was added.
	5.2(1)N1(1)	This command was introduced.

**Usage Guidelines** This command does not require a license.



## Note

Make sure the LAN Base Services license is installed on the switch to enable Layer 3 interfaces.

**Examples** This example shows how to display HSRP delay information:

```
switch# show hsrp delay
```

```
-----
```

Interface	Minimum	Reload
Eth1/5	30	0

switch#

**Related Commands**

Command	Description
<b>delay minimum</b>	Configures the delay information for HSRP groups.
<b>feature hsrp</b>	Enables the HSRP feature.
<b>hsrp delay</b>	Configures the delay information for HSRP groups.

# show hsrp summary

To display Hot Standby Router Protocol (HSRP) summary information for each HSRP group, use the **show hsrp summary** command.

**show hsrp summary**

**Syntax Description** This command has no arguments or keywords.

**Command Default** None

**Command Modes** Any command mode

Command History	Release	Modification
	5.2(1)N1(1)	This command was introduced.

**Usage Guidelines** This command does not require a license.



**Note**

Make sure the LAN Base Services license is installed on the switch to enable Layer 3 interfaces.

**Examples** This example shows how to display a summary of HSRP information:

```
switch# show hsrp summary

HSRP Summary:

Extended-hold (NSF) disabled
Global HSRP-BFD disabled

Total Groups: 1
  Version::   V1-IPV4: 1       V2-IPV4: 0       V2-IPV6: 0
    State::   Active: 0       Standby: 0       Listen: 0
    State::   V6-Active: 0     V6-Standby: 0     V6-Listen: 0

Total HSRP Enabled interfaces: 1

Total Packets:
  Tx - Pass: 0       Fail: 0
  Rx - Good: 0

Packet for unknown groups: 0

Total MTS: Rx: 25

switch#
```

**Related Commands**

Command	Description
<b>feature hsrp</b>	Enables the HSRP feature.
<b>hsrp</b>	Configures HSRP groups.

■ show hsrp summary