



# Enhancement to the show standby Command

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The output of the **show standby** command has been revised, making the output clearer and easier to use. No other changes to the Cisco IOS software were made.

## Feature History for Enhancement to the show standby Command

Release	Modification
12.2(8)T	This feature was introduced.
12.2(25)S	This feature was integrated into Cisco IOS Release 12.2(25)S.

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## Additional References

The following sections provide references related to the Enhancement to the **show standby** Command feature.

## Related Documents

Related Topic	Document Title
IP addressing and services	<ul style="list-style-type: none"><li>• <i>Cisco IOS IP Command Reference, Volume 1 of 3: Addressing and Services, Release 12.2</i></li></ul>



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## MIBs

MIBs	MIBs Link
No new or modified MIBs are supported by this feature and support for existing MIBs has not been modified by this feature.	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a>

## Technical Assistance

Description	Link
Technical Assistance Center (TAC) home page, containing 30,000 pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.	<a href="http://www.cisco.com/public/support/tac/home.shtml">http://www.cisco.com/public/support/tac/home.shtml</a>

## Command Reference

This section documents the modified **show standby** command.

- [show standby](#)

# show standby

To display Hot Standby Router Protocol (HSRP) information, use the **show standby** command in privileged EXEC mode.

```
show standby [type number [group-number]] [active | init | listen | standby] [brief]
```

## Syntax Description

<i>type number</i>	(Optional) Interface type and number for which output is displayed.
<i>group-number</i>	(Optional) Group number on the interface for which output is displayed.
<b>active</b>	(Optional) Displays HSRP groups in the active state.
<b>init</b>	(Optional) Displays HSRP groups in the initial state.
<b>listen</b>	(Optional) Displays HSRP groups in the listen or learn state.
<b>standby</b>	(Optional) Displays HSRP groups in the standby or speak state.
<b>brief</b>	(Optional) Summarizes each standby group as a single line of output.

## Command Modes

Privileged EXEC

## Command History

Release	Modification
10.0	This command was introduced.
12.1(3)T	The following keywords were added: <ul style="list-style-type: none"> <li>• <b>active</b></li> <li>• <b>init</b></li> <li>• <b>listen</b></li> <li>• <b>standby</b></li> </ul>
12.2(8)T	The output for the command was made clearer and easier to understand.
12.2(25)S	This command was integrated into Cisco IOS Release 12.2(25)S.

**Examples**

The following is sample output from the **show standby** command:

```
Router# show standby

Ethernet0/1 - Group 1
  State is Active
    2 state changes, last state change 00:30:59
  Virtual IP address is 10.1.0.20
    Secondary virtual IP address 10.1.0.21
  Active virtual MAC address is 0004.4d82.7981
    Local virtual MAC address is 0004.4d82.7981 (bia)
  Hello time 4 sec, hold time 12 sec
    Next hello sent in 1.412 secs
  Preemption enabled, min delay 50 sec, sync delay 40 sec
  Active router is local
  Standby router is 10.1.0.6, priority 75 (expires in 9.184 sec)
  Priority 95 (configured 120)
    Tracking 2 objects, 0 up
      Down Interface Ethernet0/2, pri 15
      Down Interface Ethernet0/3
  IP redundancy name is "HSRP1", advertisement interval is 34 sec
```

The following is sample output from the **show standby** command with an interface and the **init** and **brief** keywords specified:

```
Router# show standby ethernet0/1 1 init brief

Interface   Grp Prio P State   Active addr   Standby addr   Group addr
Et0         0   120  Init   10.0.0.1     unknown       10.0.0.12
```

[Table 1](#) describes the significant fields shown in the displays.

**Table 1** *show standby Field Descriptions*

Field	Description
Ethernet - Group	Interface type and number and Hot Standby group number for the interface.
State is	State of the local router; can be one of the following: <ul style="list-style-type: none"> <li>Active—Indicates the current Hot Standby router.</li> <li>Standby—Indicates the router next in line to be the Hot Standby router.</li> <li>Speak—Router is sending packets to claim the active or standby role.</li> <li>Listen—Router is not in the active nor standby state, but if no messages are received from the active or standby router, it will start to speak.</li> <li>Init or Disabled—Router is not yet ready or able to participate in HSRP, possibly because the associated interface is not up. HSRP groups configured on other routers on the network that are learned via snooping are displayed as being in the Init state. Locally configured groups with an interface that is down or groups without a specified interface IP address appear in the Init state. For these cases, the Active addr and Standby addr fields will show “unknown.” The state is listed as disabled in the fields when the <b>standby ip</b> command has not been specified.</li> </ul>
Virtual IP address is, Secondary virtual IP address	All secondary virtual IP addresses are listed on separate lines. If one of the virtual IP addresses is a duplicate of an address configured for another device, it will be marked as “duplicate.” A duplicate address indicates that the router has failed to defend its ARP (Address Resolution Protocol) cache entry.

**Table 1** *show standby Field Descriptions (continued)*

Field	Description
Active virtual MAC address	Virtual MAC address being used by the current active router.
Local virtual MAC address	Virtual MAC address that would be used if this router became the active router. The origin of this address (displayed in parentheses) can be “default,” “bia” (burned-in address), or “confgd” (configured).
Hello time, hold time	The hello time is the time between hello packets (in seconds) based on the <b>standby timers</b> command. The hold time is the time (in seconds) before other routers declare the active or standby router to be down, based on the <b>standby timers</b> command. All routers in an HSRP group use the hello-time and hold-time values of the current active router. If the locally configured values are different, the variance appears in parentheses after the hello-time and hold-time values.
Next hello sent in	Time at which the Cisco IOS software will send the next hello packet (in hours:minutes:seconds).
Preemption enabled	Indicates whether preemption is enabled. If enabled, the minimum delay is the time for which a higher-priority nonactive router will wait before preempting the lower-priority active router. The sync delay is the maximum time for which a group will wait to synchronize with the IP redundancy clients.
Active router is	Value can be “local,” “unknown,” or an IP address. Address (and the expiration date of the address) of the current active Hot Standby router.
Standby router is	Value can be “local,” “unknown,” or an IP address. Address (and the expiration date of the address) of the “standby” router (the router that is next in line to be the Hot Standby router).
expires in	Time (in hours:minutes:seconds) in which the standby router will no longer be the standby router if the local router receives no hello packets from it.
Tracking	List of interfaces that are being tracked and their corresponding states. Based on the <b>standby track</b> command.
IP redundancy name	Name of the IP redundancy and advertisement interval, in seconds.

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>standby authentication</b>	Configures an authentication string for the HSRP.
<b>standby ip</b>	Activates the HSRP.
<b>standby mac-address</b>	Specifies the virtual MAC address for the virtual router.
<b>standby mac-refresh</b>	Refreshes the MAC cache on the switch by periodically sending packets from the virtual MAC address.
<b>standby preempt</b>	Configures HSRP preemption and preemption delay.
<b>standby priority</b>	Configures Hot Standby priority of potential standby routers.
<b>standby timers</b>	Configures the time between hello messages and the time before other routers declare the active Hot Standby or standby router to be down.
<b>standby track</b>	Configures an interface so that the Hot Standby priority changes based on the availability of other interfaces.
<b>standby use-bia</b>	Configures HSRP to use the BIA of the interface as its virtual MAC address, instead of the preassigned MAC address (on Ethernet and FDDI) or the functional address (on Token Ring).

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