



USB Disable for Cisco ISRs Feature Module

First Published: March 28, 2011
Part Number: OL-23833-01

This guide describes the *USB Disable* feature in the following major sections:

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Feature Introduction

The USB Disable feature provides Cisco IOS administrators with the ability to disable all USB ports on the router.

Default Setting

The Cisco IOS enables USB ports by default, which preserves existing USB functionality such as the following:

- Booting the Cisco IOS from a USB port
- Saving configuration files to a router for Cisco IOS reloads



Note

Using the USB Disable feature (to disable or re-enable the USB ports) requires a router reboot. When USB ports are disabled from within the Cisco IOS, USB functionality remains unavailable until re-enabled.



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CLI Commands

The USB Disable feature includes the Cisco IOS commands described in [Table 1](#).

Table 1 Cisco IOS Commands for the USB Disable Feature

CLI Command	Purpose
<code>hw-module usb disable</code>	Disabling all USB ports on the router. See How to Disable USB Ports, page 4 for details.
<code>no hw-module usb disable</code>	Re-enabling the USB ports requires the no version. See How to Re-enable USB Ports, page 6 for details.

See [Command Reference, page 7](#) for complete reference information.

Restrictions

Use of the USB Disable feature is restricted as follows:

- Only Cisco IOS administrators with enable-mode privileges have the ability to disable (and re-enable) the USB ports.
- The USB Disable feature is available only on the Cisco Integrated Services Routers (ISRs) listed in [Supported Platforms, page 2](#).
- You must reboot the router after entering the CLI command (to disable or re-enable the USB ports).



Note

USB ports are not meant to be disabled or re-enabled dynamically. When you disable or re-enable USB ports on a router, the change is implemented globally—affecting all USB ports. This feature, therefore, is intended for initial router configuration and deployment options and not for real-time operations.

Supported Platforms

The USB Disable feature is supported only on the following Cisco ISR Generation 2 (G2) platforms:

- Cisco 1941 ISR
- Cisco 2901 ISR
- Cisco 2911 ISR
- Cisco 2921 ISR
- Cisco 2951 ISR
- Cisco 3925 ISR
- Cisco 3925E ISR with Services Performance Engine (SPE) 250
- Cisco 3945 ISR
- Cisco 3945E ISR with SPE 250

Standards

No new or modified standards are supported by this feature, and support for existing standards has not been modified by this feature.

MIBs

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 the Cisco MIB Locator found at the following URL:

<http://www.cisco.com/go/mibs>

RFCs

No new or modified RFCs are supported by this feature, and support for existing RFCs has not been modified by this feature.

Technical Assistance

The Cisco Technical Support & Documentation website contains thousands of pages of searchable technical content, including links to products, technologies, solutions, technical tips, tools, and technical documentation. Registered Cisco.com users can log in from this page to access even more content.

<http://www.cisco.com/techsupport>


How to Disable USB Ports

To disable all USB ports on the router, use the **hw-module usb disable** command and start in privileged EXEC mode.

SUMMARY STEPS

1. **configure terminal**
2. **hw-module usb disable**
3. **exit**
4. **copy running-config startup-config**
5. **reload**

DETAILED STEPS

	Command or Action	Purpose
Step 1	<code>configure terminal</code>	Enters global configuration mode.
Step 2	<code>hw-module usb disable</code>	Disables USB ports on the router.
Step 3	<code>exit</code>	Exits Global Configuration mode.
Step 4	<code>copy running-config startup-config</code>	Saves the configuration to NVRAM.
Step 5	<code>reload</code>	Reloads Cisco IOS.
		 Caution Disabling the USB ports does not take effect until after you reload Cisco IOS on the router.

RESULTS

After you reload Cisco IOS, the USB ports are disabled, and the **show usb** command is no longer available in the CLI.



Note For routers configured with USB Type A flash (or smart card on a USB token):

The **dir**, **copy**, **erase**, **boot system**, and **format** commands no longer include keywords **usbflash[0-9]** or **usbtoken[0-9]**.

Verifying the USB Ports Are Disabled

To verify all USB ports on the router are disabled, use the **show running-config | include usb** command and start in privileged EXEC mode.

SUMMARY STEPS

1. **show running-config | include usb**
2. **show usb port**
3. **exit**

DETAILED STEPS

	Command or Action	Purpose
Step 1	show running-config include usb	Indicates status of the current configuration.
Step 2	Verify the output includes the following line: <code>hw-module usb disable</code>	Verifies that USB support is disabled.
Step 3	show usb port	Shows the current USB configuration.
Step 4	Verify the output includes the following lines: ^ <code>% Invalid input detected at '^' marker.</code>	Provides additional confirmation that USB support is disabled.


How to Re-enable USB Ports

You can re-enable all USB ports using the **no hw-module usb disable** command.

SUMMARY STEPS

1. **config terminal**
2. **no hw-module usb disable**
3. **exit**
4. **copy running-config startup-config**
5. **reload**

DETAILED STEPS

	Command or Action	Purpose
Step 1	<code>configure terminal</code>	Enters global configuration mode.
Step 2	<code>no hw-module usb disable</code>	Re-enables USB ports on the router.
Step 3	<code>exit</code>	Exits Global Configuration mode.
Step 4	<code>copy running-config startup-config</code>	Saves the configuration to NVRAM.
Step 5	<code>reload</code>	Reloads Cisco IOS.
		 Caution Re-enabling the USB ports does not take effect until after you reload Cisco IOS on the router.

RESULTS

After you reload Cisco IOS, the USB ports are re-enabled, and the **show usb** command becomes available in the CLI.



Note For routers configured with USB Type A flash (or smart card on a USB token):

The **dir**, **copy**, **erase**, **boot system**, and **format** commands include keywords **usbflash[0-9]** or **usbtoken[0-9]**.

Command Reference

This section documents the following new commands:

- **hw-module usb disable**
- **no hw-module usb disable**

All other commands used with this feature are documented in the Cisco IOS Release 15.1(4)T command reference publications.

hw-module usb disable

To disable the USB ports on the router, enter the **hw-module usb disable** command. To re-enable the USB ports, enter the **no hw-module usb disable** command.

hw-module usb disable

no hw-module usb disable

Command Modes

Global configuration

Command History

Release	Modification
Cisco IOS Software Release 15.1(4)M	This command was introduced.

Usage Guidelines

To disable or re-enable the USB ports on the router, you must enter the **copy running-config startup-config** command to save the changes and then reload Cisco IOS on the router.

To verify the USB ports are disabled after reloading Cisco IOS, you can enter the **show running-config | include usb** command or **show usb port** command to make sure all usbflash: directories are excluded from output.

After you have disabled the USB ports, the **show usb** command is not available in the CLI.

After you have disabled the USB ports, the **usbflash:**, **usbflash0:**, and **usbflash1:** keyword(s) are not available in the **dir**, **copy**, **erase**, **boot system**, and **format** commands.

The **hw-module usb disable** command is available on the following Cisco ISR Generation 2 (G2) platforms:

- Cisco 1941 ISR
- Cisco 2901 ISR
- Cisco 2911 ISR
- Cisco 2921 ISR
- Cisco 2951 ISR
- Cisco 3925 ISR
- Cisco 3925E ISR with Services Performance Engine (SPE) 250
- Cisco 3945 ISR
- Cisco 3945E ISR with SPE 250

Examples

The following example shows how to disable the USB ports and verify the configuration:

To disable all USB ports on the router:

```
router#configure terminal
router(config)#hw-module usb disable
```

Warning: this command requires a reload to take effect.


```
router(config)#exit
router#copy running-config startup-config
Building configuration...
[OK]
router#reload

Proceed with reload? [confirm]

System Bootstrap, Version xx.x(x), RELEASE SOFTWARE (xxx)
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PLD version 0x
GIO ASIC version 0x

...output truncated...
```

To verify the USB ports are disabled after reloading the Cisco IOS:

Example 1 Using the show running-config command

```
router>show running-config
Building configuration...

Current configuration:

!

version 15.x
...output truncated...
■ hw-module usb disable
...output truncated...
router>
```

Example 2 Using the show usb port command

```
router#show usb port
...output truncated...
^
■ % Invalid input detected at '^' marker.
...output truncated...
router>
```

Feature Information for Disabling USB Ports

Table 2 lists release history for this feature.

Not all commands may be available in your Cisco IOS software release. For release information about a specific command, see the command reference documentation.

**Note**

Table 2 lists only the Cisco IOS software release that introduced support for this feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support this feature.

Table 2 **Release History for USB Disable**

Release	Modifications
15.1(4)M	This feature was introduced.