



# I Commands

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This chapter describes the basic Cisco NX-OS system commands that begin with I.

# install all

To install the kickstart and system images on a Cisco Nexus 5000 Series switch, use the **install all** command.

```
install all [kickstart kickstart-url] [system system-url]
```

Syntax Description	Parameter	Description
	<b>kickstart</b>	(Optional) Specifies the kickstart image file.
	<i>kickstart-url</i>	Full address of the kickstart image file. The name is case sensitive.
	<b>system</b>	(Optional) Specifies the system image file.
	<i>system-url</i>	Full address of the system image file. The name is case sensitive.

**Command Default** If you do not enter any parameters, the boot variable values are used.

**Command Modes** EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.
	5.0(3)N1(1)	Support for Layer 3 interfaces was added.

**Usage Guidelines** The format of the kickstart and system URLs varies according to the file system, directory, and file location.

The following tables list URL prefix keywords by the file system type. If you do not specify a URL prefix keyword, the switch looks for a file in the current directory.

[Table 1](#) lists URL prefix keywords for local writable storage file systems. [Table 2](#) lists the URL prefix keywords for remote file systems. For remote file systems, if it is not otherwise specified, the path is the default for the user on the remote server.

**Table 1 URL Prefix Keywords for Local Writable Storage File Systems**

Keyword	Source or Destination
<b>bootflash:</b> <i>[//server/]</i>	Source URL for boot flash memory. The <i>server</i> argument value is <b>module-1</b> , <b>sup-1</b> , <b>sup-active</b> , or <b>sup-local</b> .
<b>modflash:</b> <i>[//server/]</i>	Source URL of an external flash file system. The <i>server</i> argument value is <b>module-1</b> , <b>sup-1</b> , <b>sup-active</b> , or <b>sup-local</b> .
<b>volatile:</b> <i>[//server/]</i>	Source URL of the default internal file system. Any files or directories stored in this file system are erased when the switch reboots. The <i>server</i> argument value is <b>module-1</b> , <b>sup-1</b> , <b>sup-active</b> , or <b>sup-local</b> .

**Table 2 URL Prefix Keywords for Remote File Systems**

Keyword	Source or Destination
<b>ftp:</b>	Source URL for a FTP network server. The syntax for this alias is as follows: <b>ftp://server[/path]/filename</b>
<b>scp:</b>	Source URL for a network server that supports Secure Shell (SSH) and uses the secure copy protocol (scp). The syntax is as follows: <b>scp://[username@]server[/path]/filename</b>
<b>sftp:</b>	Source URL for an SSH FTP (SFTP) network server. The syntax is as follows: <b>sftp://[username@]server[/path]/filename</b>
<b>tftp:</b>	Source URL for a TFTP network server. The syntax is as follows: <b>tftp://server[:port][[/path]/filename</b>

If you do not enter the information about the server or username when downloading and installing the image files from a remote server, you are prompted for the information.

This command sets the kickstart and system boot variables and copies the image files to the redundant supervisor module.

The **install all** command upgrades the switch software and also upgrades the Fabric Extender software of all attached chassis. The Fabric Extender remains online passing traffic while the software is copied. Once the software images have successfully been installed, the parent switch and the Fabric Extender chassis are rebooted automatically to maintain the software version compatibility between the parent switch and the Fabric Extender.

You can use the **install all** command to downgrade the Cisco NX-OS software on the switch. To determine if the downgrade software is compatible with the current configuration on the switch, use the **show incompatibility system** command and resolve any configuration incompatibilities.

In Cisco NX-OS Release 5.0(3)N1(1), a software upgrade on the Cisco Nexus 5548 switch and the Cisco Nexus 5596 switch that has the Layer 3 features enabled is disruptive. You must reload the switch and the Cisco Nexus 2000 Series Fabric Extender.

**Examples**

This example shows how to install the Cisco NX-OS software from the bootflash: directory:

```
switch# install all kickstart bootflash:nx-os_kick.bin system bootflash:nx-os_sys.bin
```

This example shows how to install the Cisco NX-OS software using the values configured in the kickstart and system boot variables:

```
switch# configure terminal
switch(config)# boot kickstart bootflash:nx-os_kick.bin
switch(config)# boot system bootflash:nx-os_sys.bin
switch(config)# exit
switch# copy running-config startup-config
switch# install all
```

This example shows how to install the Cisco NX-OS software from an SCP server:

```
switch# install all kickstart scp://adminuser@192.168.1.1/nx-os_kick.bin system
bootflash:scp://adminuser@192.168.1.1/nx-os_sys.bin
```

Related Commands	Command	Description
	<b>reload</b>	Reloads the device with new Cisco NX-OS software.
	<b>show incompatibility system</b>	Displays configuration incompatibilities between Cisco NX-OS system software images.
	<b>show install all</b>	Displays information related to the install operation.
	<b>show version</b>	Displays information about the software version.

# install license

To install a license, use the **install license** command.

**install license** [*filesystem:*] [*//server/*] [*directory*] *src-filename* [*target-filename*]

Syntax Description	
<i>filesystem:</i>	(Optional) Name of the file system. Valid values are <b>bootflash</b> or <b>volatile</b> .
<i>//server/</i>	(Optional) Name of the server. Valid values are <i>//</i> , <b>//module-1/</b> , <b>//sup-1/</b> , <b>//sup-active/</b> , or <b>//sup-local/</b> . The double slash ( <i>//</i> ) is required.
<i>directory</i>	(Optional) Name of a directory. The directory name is case sensitive.
<i>src-filename</i>	Name of the source license file.
<i>target-filename</i>	(Optional) Name of the target license file.



**Note**

There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (*:*) and slashes (*/*).

**Command Default** All licenses for the Cisco Nexus 5000 Series switches are factory installed. Manual installation is not required.

**Command Modes** EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

**Usage Guidelines** If a target filename is provided after the source location, the license file is installed with that name. Otherwise, the filename in the source URL is used. This command also verifies the license file before installing it.

**Examples** This example shows how to install a file named license-file that resides in the bootflash: directory:

```
switch# install license bootflash:license-file
```

Related Commands	Command	Description
	<b>show license</b>	Displays license information.
	<b>show license host-id</b>	Displays the serial number of the chassis to use for licensing.
	<b>show license usage</b>	Displays license usage information.

