



# Working with Configuration Files

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## Information About Configuration Files

Configuration files contain the Cisco NX-OS software commands used to configure the features on a Cisco NX-OS device. Commands are parsed (translated and executed) by the Cisco NX-OS software when the system is booted (from the startup-config file) or when you enter commands at the CLI in a configuration mode.

To change the startup configuration file, you can either save the running-configuration file to the startup configuration using the **copy running-config startup-config** command or copy a configuration file from a file server to the startup configuration.

## Types of Configuration Files

The Cisco NX-OS software has two types of configuration files, running configuration and startup configuration. The device uses the startup configuration (startup-config) during device startup to configure the software features. The running configuration (running-config) contains the current changes that you make to the startup-configuration file. The two configuration files can be different. You might want to change the device configuration for a short time period rather than permanently. In this case, you would change the running configuration by using commands in global configuration mode but not save the changes to the startup configuration.

To change the running configuration, use the **configure terminal** command to enter global configuration mode. As you use the Cisco NX-OS configuration modes, commands generally are executed immediately and are saved to the running configuration file either immediately after you enter them or when you exit a configuration mode.

To change the startup-configuration file, you can either save the running configuration file to the startup configuration or download a configuration file from a file server to the startup configuration.

#### Related Topics

[Saving the Running Configuration to the Startup Configuration](#), on page 3

[Downloading the Startup Configuration From a Remote Server](#), on page 5

## Guidelines and Limitations for Configuration Files

Configuration file guidelines and limitations are as follows:

- Beginning with NX-OS 7.0(3)I7(4), the **reload timer** command is supported to enable a reboot after a delay of 5 -60 seconds.

## Managing Configuration Files

This section describes how to manage configuration files.

### Copying Configuration Files to the Startup Configuration

You can directly copy configuration files, through FTP or SCP, to the startup configuration without reloading the device.

#### SUMMARY STEPS

1. **copy** *scheme://[user@]server/[url/]filename startup-config*

#### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>copy</b> <i>scheme://[user@]server/[url/]filename startup-config</i>  <b>Example:</b> <pre>switch(boot)# copy scp://user@123.40.56.78/wp/user/abc_cfg startup-config</pre>	<p>Copies the configuration file directly through SCP or FTP to the startup configuration. For the <i>scheme</i> argument, you can enter either <b>ftp</b> or <b>scp</b>. The <i>user@</i> argument is your username, the <i>server</i> argument is the address or name of the remote server, and the <i>url</i> argument is the path to the source file on the remote server.</p> <p>The <i>user@</i>, <i>server</i>, <i>url</i>, and <i>filename</i> arguments are case sensitive.</p> <p>This process does not require you to reload the device.</p>

### Configuring the Source Interface for Copying Configuration Files to or from a Remote Server

You can configure a source-interface while copying configuration files to or from a remote server. The source interface can be:

- Ethernet

- Loopback
- Management
- Port Channel
- VLAN

## SUMMARY STEPS

1. **copy** *scheme://server/[url/]filename* **source-interface** *type source/port*

## DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>copy</b> <i>scheme://server/[url/]filename</i> <b>source-interface</b> <i>type source/port</i>  <b>Example:</b> <code>copy sftp://user@12.345.678.9/wp/user/abc_config . source-interface ethernet 1/5</code>	Configures the source interface to be used while copying a configuration file to or from a remote server.  For the <i>scheme</i> argument, you can enter <b>tftp</b> , <b>ftp</b> , <b>scp</b> , <b>http</b> , or <b>sftp</b> . The <i>server</i> argument is the address or name of the remote server, and the <i>url</i> argument is the path to the source file on the remote server.  The <i>server</i> , <i>url</i> , and <i>filename</i> arguments are case sensitive.

# Saving the Running Configuration to the Startup Configuration

You can save the running configuration to the startup configuration to save your changes for the next time you that reload the device.

## SUMMARY STEPS

1. (Optional) **show running-config**
2. **copy running-config startup-config**

## DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	(Optional) <b>show running-config</b>  <b>Example:</b> <code>switch# show running-config</code>	Displays the running configuration.
<b>Step 2</b>	<b>copy running-config startup-config</b>  <b>Example:</b> <code>switch# copy running-config startup-config</code>	Copies the running configuration to the startup configuration.

## Copying a Configuration File to a Remote Server

You can copy a configuration file stored in the internal memory to a remote server as a backup or to use for configuring other Cisco NX-OS devices.

### SUMMARY STEPS

1. **copy running-config** *scheme://server/[url /]filename*
2. **copy startup-config** *scheme://server/[url /]filename*

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>copy running-config</b> <i>scheme://server/[url /]filename</i>  <b>Example:</b> <pre>switch# copy running-config tftp://10.10.1.1/sw1-run-config.bak</pre>	Copies the running-configuration file to a remote server.  For the <i>scheme</i> argument, you can enter <b>tftp:</b> , <b>ftp:</b> , <b>scp:</b> , <b>sftp:</b> , <b>http:</b> , or <b>https:</b> . The <i>server</i> argument is the address or name of the remote server, and the <i>url</i> argument is the path to the source file on the remote server.  The <i>server</i> , <i>url</i> , and <i>filename</i> arguments are case sensitive.
<b>Step 2</b>	<b>copy startup-config</b> <i>scheme://server/[url /]filename</i>  <b>Example:</b> <pre>switch# copy startup-config tftp://10.10.1.1/sw1-start-config.bak</pre>	Copies the startup-configuration file to a remote server.  For the <i>scheme</i> argument, you can enter <b>tftp:</b> , <b>ftp:</b> , <b>scp:</b> , <b>sftp:</b> , <b>http:</b> , or <b>https:</b> . The <i>server</i> argument is the address or name of the remote server, and the <i>url</i> argument is the path to the source file on the remote server.  The <i>server</i> , <i>url</i> , and <i>filename</i> arguments are case sensitive.

### Example

This example shows how to copy the configuration file to a remote server:

```
switch# copy running-config
tftp://10.10.1.1/sw1-run-config.bak
switch# copy startup-config
tftp://10.10.1.1/sw1-start-config.bak
```

## Downloading the Running Configuration From a Remote Server

You can configure your Cisco NX-OS device by using configuration files that you created on another Cisco NX-OS device and uploaded to a remote server. You then download the file from the remote server to your device using TFTP, FTP, Secure Copy (SCP), Secure Shell FTP (SFTP), HTTPS, or HTTP to the running configuration.

### Before you begin

Ensure that the configuration file that you want to download is in the correct directory on the remote server.

Ensure that the permissions on the file are set correctly. Permissions on the file should be set to world-read.

Ensure that your Cisco NX-OS device has a route to the remote server. The Cisco NX-OS device and the remote server must be in the same subnetwork if you do not have a router or a default gateway to route traffic between subnets.

Check connectivity to the remote server using the **ping** or **ping6** command.

## SUMMARY STEPS

1. **copy** *scheme://server/[url]/filename* **running-config**
2. (Optional) **show running-config**
3. (Optional) **copy running-config startup-config**
4. (Optional) **show startup-config**

## DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>copy</b> <i>scheme://server/[url]/filename</i> <b>running-config</b> <b>Example:</b> <pre>switch# copy tftp://10.10.1.1/my-config running-config</pre>	Downloads the running-configuration file from a remote server.  For the <i>scheme</i> argument, you can enter <b>tftp:</b> , <b>ftp:</b> , <b>scp:</b> , <b>sftp:</b> , <b>http:</b> , or <b>https:</b> . The <i>server</i> argument is the address or name of the remote server, and the <i>url</i> argument is the path to the source file on the remote server.  The <i>server</i> , <i>url</i> , and <i>filename</i> arguments are case sensitive.
<b>Step 2</b>	(Optional) <b>show running-config</b> <b>Example:</b> <pre>switch# show running-config</pre>	Displays the running configuration.
<b>Step 3</b>	(Optional) <b>copy running-config startup-config</b> <b>Example:</b> <pre>switch# copy running-config startup-config</pre>	Copies the running configuration to the startup configuration.
<b>Step 4</b>	(Optional) <b>show startup-config</b> <b>Example:</b> <pre>switch# show startup-config</pre>	Displays the startup configuration.

## Downloading the Startup Configuration From a Remote Server

You can configure your Cisco NX-OS device by using configuration files that you created on another Cisco NX-OS device and uploaded to a remote server. You then download the file from the remote server to your device using TFTP, FTP, Secure Copy (SCP), Secure Shell FTP (SFTP), HTTP, or HTTPS to the startup configuration.



### Caution

This procedure disrupts all traffic on the Cisco NX-OS device.

**Before you begin**

Log in to a session on the console port.

Ensure that the configuration file that you want to download is in the correct directory on the remote server.

Ensure that the permissions on the file are set correctly. Permissions on the file should be set to world-read.

Ensure that your Cisco NX-OS device has a route to the remote server. The Cisco NX-OS device and the remote server must be in the same subnetwork if you do not have a router or a default gateway to route traffic between subnets.

Check connectivity to the remote server using the **ping** or **ping6** command.

**SUMMARY STEPS**

1. **write erase**
2. **reload**
3. **copy *scheme://server/[url /]filename* running-config**
4. **copy running-config startup-config**
5. (Optional) **show startup-config**

**DETAILED STEPS**

	Command or Action	Purpose
<b>Step 1</b>	<b>write erase</b>  <b>Example:</b> <pre>switch# write erase</pre>	Erases the startup configuration file.
<b>Step 2</b>	<b>reload</b>  <b>Example:</b> <pre>switch# reload This command will reboot the system. (y/n)? [n] y ... Enter the password for "admin": &lt;password&gt; Confirm the password for "admin": &lt;password&gt; ... Would you like to enter the basic configuration dialog (yes/no): n switch#</pre>	Reloads the Cisco NX-OS device.  <b>Note</b> Do not use the setup utility to configure the device.
<b>Step 3</b>	<b>copy <i>scheme://server/[url /]filename</i> running-config</b>  <b>Example:</b> <pre>switch# copy tftp://10.10.1.1/my-config running-config</pre>	Downloads the running configuration file from a remote server.  For the <i>scheme</i> argument, you can enter <b>tftp:</b> , <b>ftp:</b> , <b>scp:</b> , <b>sftp:</b> , <b>http:</b> , or <b>https:</b> . The <i>server</i> argument is the address or name of the remote server, and the <i>url</i> argument is the path to the source file on the remote server.  The <i>server</i> , <i>url</i> , and <i>filename</i> arguments are case sensitive.
<b>Step 4</b>	<b>copy running-config startup-config</b>  <b>Example:</b>	Saves the running configuration file to the startup configuration file.

	Command or Action	Purpose
	<pre>switch# copy running-config startup-config</pre>	<p><b>Note</b> You can use the <b>copy {ftp:   scp:   sftp:   tftp:   http:   https:} source-url startup-config</b> command to copy a configuration file from a network server to the switch startup configuration. This command replaces the startup configuration file with the copied configuration file.</p> <p>Beginning with Cisco NX-OS Release 6.0(2)U2(1), the startup configuration file is stored as an ASCII text file and all commands in the configuration file are run during the next bootup to generate the binary configuration file. This is equivalent to booting with <b>write erase</b> and applying configuration commands individually on reload.</p> <p>Because all commands in the startup configuration file are run as configuration commands, this can delay the ASCII configuration file from taking effect.</p>
<b>Step 5</b>	<p>(Optional) <b>show startup-config</b></p> <p><b>Example:</b></p> <pre>switch# show startup-config</pre>	Displays the running configuration.

**Related Topics**[Copying Files](#)

## Copying Configuration Files to an External Flash Memory Device

You can copy configuration files to an external flash memory device as a backup for later use.

**Before you begin**

Insert the external Flash memory device into the active supervisor module.

**SUMMARY STEPS**

1. (Optional) **dir {slot0: | usb1: | usb2:}[directory/]**
2. **copy running-config {slot0: | usb1: | usb2:}[directory/]filename**
3. **copy startup-config {slot0: | usb1: | usb2:}[directory/]filename**

**DETAILED STEPS**

	Command or Action	Purpose
<b>Step 1</b>	<p>(Optional) <b>dir {slot0:   usb1:   usb2:}[directory/]</b></p> <p><b>Example:</b></p>	Displays the files on the external flash memory device.

	Command or Action	Purpose
	switch# dir slot0:	
<b>Step 2</b>	<b>copy running-config {slot0:   usb1:   usb2:}[directory/]filename</b>  <b>Example:</b> switch# copy running-config slot0:dsn-running-config.cfg	Copies the running configuration to an external flash memory device. The <i>filename</i> argument is case sensitive.
<b>Step 3</b>	<b>copy startup-config {slot0:   usb1:   usb2:}[directory/]filename</b>  <b>Example:</b> switch# copy startup-config slot0:dsn-startup-config.cfg	Copies the startup configuration to an external flash memory device. The <i>filename</i> argument is case sensitive.

**Related Topics**[Copying Files](#)

## Copying the Running Configuration from an External Flash Memory Device

You can configure your Cisco NX-OS device by copying configuration files created on another Cisco NX-OS device and saved to an external flash memory device.

**Before you begin**

Insert the external flash memory device into the active supervisor module.

**SUMMARY STEPS**

1. (Optional) **dir {slot0: | usb1: | usb2:}[directory/]**
2. **copy {slot0: | usb1: | usb2:}[directory/]filename running-config**
3. (Optional) **show running-config**
4. (Optional) **copy running-config startup-config**
5. (Optional) **show startup-config**

**DETAILED STEPS**

	Command or Action	Purpose
<b>Step 1</b>	(Optional) <b>dir {slot0:   usb1:   usb2:}[directory/]</b>  <b>Example:</b> switch# dir slot0:	Displays the files on the external flash memory device.
<b>Step 2</b>	<b>copy {slot0:   usb1:   usb2:}[directory/]filename running-config</b>  <b>Example:</b> switch# copy slot0:dsn-config.cfg running-config	Copies the running configuration from an external flash memory device. The <i>filename</i> argument is case sensitive.



	Command or Action	Purpose
<b>Step 3</b>	(Optional) <b>show running-config</b>  <b>Example:</b> switch# show running-config	Displays the running configuration.
<b>Step 4</b>	(Optional) <b>copy running-config startup-config</b>  <b>Example:</b> switch# copy running-config startup-config	Copies the running configuration to the startup configuration.
<b>Step 5</b>	(Optional) <b>show startup-config</b>  <b>Example:</b> switch# show startup-config	Displays the startup configuration.

**Related Topics**[Copying Files](#)

## Copying the Startup Configuration from an External Flash Memory Device

You can recover the startup configuration on your Cisco NX-OS device by downloading a new startup configuration file saved on an external flash memory device.

**Before you begin**

Insert the external flash memory device into the active supervisor module.

**SUMMARY STEPS**

1. (Optional) **dir {slot0: | usb1: | usb2:}[directory/]**
2. **copy {slot0: | usb1: | usb2:}[directory/]filename startup-config**
3. (Optional) **show startup-config**

**DETAILED STEPS**

	Command or Action	Purpose
<b>Step 1</b>	(Optional) <b>dir {slot0:   usb1:   usb2:}[directory/]</b>  <b>Example:</b> switch# dir slot0:	Displays the files on the external flash memory device.
<b>Step 2</b>	<b>copy {slot0:   usb1:   usb2:}[directory/]filename startup-config</b>  <b>Example:</b> switch# copy slot0:dsn-config.cfg startup-config	Copies the startup configuration from an external flash memory device. The <i>filename</i> argument is case sensitive.
<b>Step 3</b>	(Optional) <b>show startup-config</b>  <b>Example:</b> switch# show startup-config	Displays the startup configuration.

## Related Topics

[Copying Files](#)

## Copying Configuration Files to an Internal File System

You can copy configuration files to the internal memory as a backup for later use.

### SUMMARY STEPS

1. **copy running-config** [*filesystem:*][*directory/*] | [*directory/*]*filename*
2. **copy startup-config** [*filesystem:*][*directory/*] | [*directory/*]*filename*

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>copy running-config</b> [ <i>filesystem:</i> ][ <i>directory/</i> ]   [ <i>directory/</i> ] <i>filename</i>  <b>Example:</b> <pre>switch# copy running-config bootflash:sw1-run-config.bak</pre>	Copies the running-configuration file to internal memory.  The <i>filesystem</i> , <i>directory</i> , and <i>filename</i> arguments are case sensitive.
<b>Step 2</b>	<b>copy startup-config</b> [ <i>filesystem:</i> ][ <i>directory/</i> ]   [ <i>directory/</i> ] <i>filename</i>  <b>Example:</b> <pre>switch# copy startup-config bootflash:sw1-start-config.bak</pre>	Copies the startup-configuration file to internal memory.  The <i>filesystem</i> , <i>directory</i> , and <i>filename</i> arguments are case sensitive.

## Related Topics

[Copying Files](#)

## Rolling Back to a Previous Configuration

Problems, such as memory corruption, can occur that make it necessary for you to recover your configuration from a backed up version.

**Note**

Each time that you enter a **copy running-config startup-config** command, a binary file is created and the ASCII file is updated. A valid binary configuration file reduces the overall boot time significantly. A binary file cannot be uploaded, but its contents can be used to overwrite the existing startup configuration. The **write erase** command clears the binary file.

### SUMMARY STEPS

1. **write erase**
2. **reload**
3. **copy** *configuration\_file* **running-configuration**
4. **copy running-config startup-config**

## DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>write erase</b> <b>Example:</b> <pre>switch# write erase</pre>	Clears the current configuration of the switch.
<b>Step 2</b>	<b>reload</b> <b>Example:</b> <pre>switch# reload</pre>	Restarts the device. You will be prompted to provide a kickstart and system image file for the device to boot and run.  <b>Note</b> By default, the <b>reload</b> command reloads the device from a binary version of the startup configuration.  Beginning with Cisco NX-OS 6.2(2), you can use the <b>reload ascii</b> command to copy an ASCII version of the configuration to the start up configuration when reloading the device.
<b>Step 3</b>	<b>copy <i>configuration_file</i> running-configuration</b> <b>Example:</b> <pre>switch# copy bootflash:start-config.bak running-configuration</pre>	Copies a previously saved configuration file to the running configuration.  <b>Note</b> The <i>configuration_file</i> filename argument is case sensitive.
<b>Step 4</b>	<b>copy running-config startup-config</b> <b>Example:</b> <pre>switch# copy running-config startup-config</pre>	Copies the running configuration to the start-up configuration.

## Erasing a Configuration

You can erase the configuration on your device to return to the configuration defaults. "Configuration" refers to the startup configuration as seen in 'show startup'. No other internal application or process states are cleared.

You can erase the following configuration files saved in the persistent memory on the device:

- Startup
- Boot
- Debug

The **write erase** command erases the entire startup configuration, except for the following:

- Boot variable definitions
- The IPv4 configuration on the mgmt0 interface, including the following:
  - Address
  - Subnet mask

To remove the boot variable definitions and the IPv4 configuration on the mgmt0 interface, use the **write erase boot** command. To remove all application persistency files such as patch rpms, third party rpms, application configuration in /etc directory other than configuration, use 'install reset'.



**Note** When there are multiple IPv6 default routes present in the management VRF, the default route that is displayed first in the show ipv6 static-route command for the management VRF just before using 'copy r s' gets restored after the write erase and reload.



**Note** After you enter the **write erase** command, you must reload the ASCII configuration twice to apply the breakout configuration.



**Important** POAP is enabled by default, and it will prevent you from using the switch after you use the **write erase** and **reload** commands. To use the switch after erasing the configuration on the switch and reloading it, ensure that you have access to the console.

## SUMMARY STEPS

1. **write erase [boot | debug]**

## DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>write erase [boot   debug]</b> <b>Example:</b> <pre>switch# write erase Warning: This command will erase the startup-configuration. Do you wish to proceed anyway? (y/n) [n] y</pre>	<p>Erases configurations in persistent memory. The default action erases the startup configuration.</p> <p>The <b>boot</b> option erases the boot variable definitions and the IPv4 configuration on the mgmt0 interface.</p> <p>The <b>debug</b> option erases the debugging configuration.</p> <p><b>Note</b> When you configure multiple IPv6 addresses on mgmt0 interface, the IPv6 address that is displayed first before the usage of 'copy r s' in the show ipv6 interface &lt;intf&gt; command gets restored on write erase and reload.</p> <p><b>Note</b> The running configuration file is not affected by this command.</p>

## Clearing Inactive Configurations

You can clear inactive Quality of Service (QoS) and/or access control list (ACL) configurations.

**SUMMARY STEPS**

1. (Optional) **show running-config type inactive-if-config**
2. **clear inactive-config policy**
3. (Optional) **show inactive-if-config log**

**DETAILED STEPS**

	Command or Action	Purpose
<b>Step 1</b>	(Optional) <b>show running-config type inactive-if-config</b> <b>Example:</b> <pre># show running-config ipqos inactive-if-config</pre>	Displays any inactive ACL or QoS configurations. The values for the <i>type</i> argument are <b>aclmgr</b> and <b>ipqos</b> . <ul style="list-style-type: none"> <li>• <b>aclmgr</b>—Displays any inactive configurations for aclmgr.</li> <li>• <b>ipqos</b>—Displays any inactive configurations for qosmgr.</li> </ul>
<b>Step 2</b>	<b>clear inactive-config policy</b> <b>Example:</b> <pre># clear inactive-config qos clear qos inactive config Inactive if config for QoS manager is saved at/bootflash/qos_inactive_if_config.cfg for vdc default &amp; for other than default vdc: /bootflash/vdc_x/qos_inactive_if_config.cfg (where x is vdc number) you can see the log file @ show inactive-if-config log</pre>	Clears inactive configurations. The values for the <i>policy</i> argument are <b>qos</b> and <b>acl</b> . The following describes the values: <ul style="list-style-type: none"> <li>• <b>qos</b>—Clears inactive QoS configurations.</li> <li>• <b>acl</b>—Clears inactive ACL configurations.</li> <li>• <b>acl qos</b>—Clears inactive ACL configurations and inactive QoS configurations.</li> </ul>
<b>Step 3</b>	(Optional) <b>show inactive-if-config log</b> <b>Example:</b> <pre># show inactive-if-config log</pre>	Displays the commands that were used to clear the inactive configurations.

## Configuration Archive and Configuration Log

This section contains information on configuration archive and configuration log.

### Information About Configuration Archive

The configuration archive is intended to provide a mechanism to store, organize, and manage an archive of the configuration files to enhance the configuration rollback capability provided by the **configure replace** command. Before configuration archiving was introduced, you could save copies of the running configuration using the **copy running-config destination-url** command, storing the replacement file either locally or remotely. However, this method lacked any automated file management. The configuration replace and configuration rollback provides the capability to automatically save copies of the running configuration to the configuration archive. These archived files serve as checkpoint configuration references and can be used by the **configure replace** command to revert to the previous configuration states.

The **archive config** command allows you to save configurations in the configuration archive using a standard location and filename prefix that is automatically appended with an incremental version number (and optional timestamp) as each consecutive file is saved. This functionality provides a means for consistent identification of saved configuration files. You can specify how many versions of the running configuration are kept in the archive. After the maximum number of files are saved in the archive, the oldest file is automatically deleted when the next, most recent file is saved. The **show archive** command displays information for all configuration files saved in the configuration archive.

The configuration archive, wherein the configuration files are stored and are available for use with the **configure replace** command, can be located on the following file systems:

- If your platform has disk0--disk0:, disk1:, ftp:, pram:, rcpl:, slavedisk0:, slavedisk1:, or tftp:
- If your platform does not have disk0--bootflash:, tftp:, and ftp:

**Note**

The TFTP and FTP for this feature use VRF management.

## Configuring the Characteristics of the Configuration Archive

Before using the **archive config** command, the configuration archive must be configured. Complete the following steps to configure the characteristics of the configuration archive:

### SUMMARY STEPS

1. switch# **configure terminal**
2. switch(config)# **archive**
3. switch(config-archive)# **path url**
4. switch(config-archive)# **maximum number**
5. switch(config-archive)# **time-period minutes**
6. switch# **archive config**
7. switch# **show archive log config all**

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	switch# <b>configure terminal</b>  <b>Example:</b>  switch# <b>configure terminal</b>	Enters the global configuration mode.
<b>Step 2</b>	switch(config)# <b>archive</b>  <b>Example:</b>  switch(config)# <b>archive</b>	Enters the archive configuration mode.
<b>Step 3</b>	switch(config-archive)# <b>path url</b>  <b>Example:</b>	Specifies the location and the filename prefix for the files in the configuration archive.

	Command or Action	Purpose
	<pre>switch(config-archive)# path bootflash:myconfig</pre>	<ul style="list-style-type: none"> <li>Depending on your hardware platform, the name of your file system can be different than the one displayed in the example.</li> </ul> <p><b>Note</b> If a directory is specified in the path instead of the file, the directory name must be followed by a forward slash as follows: path flash:/<i>directory</i>/. The forward slash is not necessary after a filename; it is necessary only when specifying a directory.</p>
<b>Step 4</b>	<pre>switch(config-archive)# maximum number</pre> <p><b>Example:</b></p> <pre>switch(config-archive)# maximum 14</pre>	<p>(Optional) Sets the maximum number of archive files of the running configuration to be saved in the configuration archive.</p> <ul style="list-style-type: none"> <li>The <i>number</i> is the maximum number of the archive files of the running configuration that can be saved in the configuration archive. The range is 1 to 14. The default is 10.</li> </ul> <p><b>Note</b> Before using this command, you must configure the <b>path</b> to specify the location and filename prefix for the files in the configuration archive.</p>
<b>Step 5</b>	<pre>switch(config-archive)# time-period minutes</pre> <p><b>Example:</b></p> <pre>switch(config-archive)# time-period 10</pre>	<p>(Optional) Sets the time increment for automatically saving an archive file of the current running configuration in the configuration archive.</p> <ul style="list-style-type: none"> <li>The <i>minutes</i> argument specifies how often, in minutes, to automatically save an archive file of the current running configuration in the configuration archive.</li> </ul> <p><b>Note</b> Before using this command, you must configure the <b>path</b> command to specify the location and filename prefix for the files in the configuration archive.</p>
<b>Step 6</b>	<pre>switch# archive config</pre> <p><b>Example:</b></p> <pre>switch# archive config</pre>	<p>Saves the current running configuration file to the configuration archive.</p> <p><b>Note</b> You must configure the <b>path</b> before using the <b>archive config</b> command.</p>
<b>Step 7</b>	<pre>switch#show archive log config all</pre>	<p>Displays the configuration log entries for all the users.</p>

## Information About Configuration Log

The configuration change notification and logging tracks the changes that are made to the running configuration by maintaining a configuration log. This configuration log tracks the changes that are initiated only through

the CLI or HTTP. Only complete commands that result in the invocation of action routines are logged. The following types of entries are not logged:

- Commands that result in a syntax error message
- Partial commands that invoke the device help system

The configuration log tracks the changes that are initiated only through the CLI. For each configuration command that is executed, the following information is logged:

- A configuration change sequence number
- The line from which the command was executed
- The name of the user that executed the command
- The command that was executed

You can display the information from the configuration log by using the **show archive log config all** command

For each configuration command that is executed, the following information is logged:

- The command that was executed
- The configuration mode in which the command was executed
- The name of the user that executed the command
- The time at which the command was executed
- A configuration change sequence number
- Parser return codes for the command

You can display the information from the configuration log by using the **show archive log config** command, with the exception of the parser return codes, that are used for an internal purpose only.

## Displaying Configuration Log Entries

To display the configuration log entries, the configuration change logging provides the **show archive log config all** command.

### SUMMARY STEPS

1. switch# **show archive log config** *number* [*end-number*]
2. switch# **show archive log config user** *username*
3. switch# **show archive log config user** *username* **first-index** *start-number* [*last-index* *end-number*]

### DETAILED STEPS

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**Step 1** switch# **show archive log config** *number* [*end-number*]

Displays the configuration log entries for all users

**Example:**



```
switch# show archive log config all
```

NDEX	LINE	USER	LOGGED COMMAND
1	console0	user01	logging console 1
2	console0	user01	logging monitor 2
3	console0	user02	system default switchport shutdown
4	console0	user02	interface mgmt0
5	console0	user02	no shutdown

## Step 2 switch# show archive log config user username

Displays the configuration log entries for the specified username.

### Example:

The following example displays the configuration log entries for a specified username.

```
switch# show archive log config user user02
```

INDEX	LINE	USER	LOGGED COMMAND
3	console0	user02	system default switchport shutdown
4	console0	user02	interface mgmt0
5	console0	user02	no shutdown

## Step 3 switch# show archive log config user username first-index start-number [last-index end-number]

Displays the configuration log entries by the index numbers. If you specify a number for the optional last-index, all the log entries with the index numbers in the range from the value entered for the start-number through the end-number for the specified user are displayed.

### Example:

The following example displays the configuration log entry numbers 4 and 5 for a user with the username, user02. The range for the first-index and last-index is 1 to 2000000000.

```
switch# show archive log config user user02 first-index 4 last-index 5
Last Log cleared/wrapped time is : Wed Oct 19 00:53:08 2016
```

INDEX	LINE	USER	LOGGED COMMAND
4	console0	user02	interface mgmt0
5	console0	user02	no shutdown

# Verifying the Device Configuration

To verify the configuration, use one of the following commands:

Command	Purpose
<b>show running-config</b>	Displays the running configuration.
<b>show startup-config</b>	Displays the startup configuration.
<b>show time-stamp running-config last-changed</b>	Displays the timestamp when the running configuration was last changed.

For detailed information about the fields in the output from these commands, see the Cisco Nexus command reference for your device.

## Examples of Working with Configuration Files

This section includes examples of working with configuration files.

### Copying Configuration Files

This example shows how to copy a running configuration to the bootflash: file system:

### Backing Up Configuration Files

This example shows how to back up the startup configuration to the bootflash: file system (ASCII file):

```
switch# copy startup-config bootflash:my-config
```

This example shows how to back up the startup configuration to the TFTP server (ASCII file):

```
switch# copy startup-config tftp://172.16.10.100/my-config
```

This example shows how to back up the running configuration to the bootflash: file system (ASCII file):

```
switch# copy running-config bootflash:my-config
```

### Rolling Back to a Previous Configuration

To roll back your configuration to a snapshot copy of a previously saved configuration, you need to perform the following steps:

1. Clear the current running image with the **write erase** command.
2. Restart the device with the **reload** command.



---

**Note**

By default, the **reload** command reloads the device from a binary version of the startup configuration.

Beginning with Cisco NX-OS 6.2(2), you can use the **reload ascii** command to copy an ASCII version of the configuration to the start up configuration when reloading the device.

---

3. Copy the previously saved configuration file to the running configuration with the **copy configuration\_file running-configuration** command.
4. Copy the running configuration to the start-up configuration with the **copy running-config startup-config** command.

# Additional References for Configuration Files

This section includes additional information related to managing configuration files.

## Related Documents for Configuration Files

Related Topic	Document Title
Licensing	<i>Cisco NX-OS Licensing Guide</i>
Command reference	

