



Configuration Replace and Configuration Rollback

The Configuration Replace and Configuration Rollback feature provides the capability to replace the current running configuration with any saved Cisco IOS configuration file. This functionality can be used to revert to a previous configuration state, effectively rolling back any configuration changes that were made since that configuration file was saved.

- [Finding Feature Information, page 1](#)
- [Prerequisites for Configuration Replace and Configuration Rollback, page 2](#)
- [Restrictions for Configuration Replace and Configuration Rollback, page 2](#)
- [Information About Configuration Replace and Configuration Rollback, page 3](#)
- [How to Use Configuration Replace and Configuration Rollback, page 5](#)
- [Configuration Examples for Configuration Replace and Configuration Rollback, page 12](#)
- [Additional References, page 14](#)
- [Feature Information for Configuration Replace and Configuration Rollback, page 16](#)

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see [Bug Search Tool](#) and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Prerequisites for Configuration Replace and Configuration Rollback

The format of the configuration files used as input by the Configuration Replace and Configuration Rollback feature must comply with standard Cisco software configuration file indentation rules as follows:

- Start all commands on a new line with no indentation, unless the command is within a configuration submode.
- Indent commands within a first-level configuration submode one space.
- Indent commands within a second-level configuration submode two spaces.
- Indent commands within subsequent submodes accordingly.

These indentation rules describe how the software creates configuration files for such commands as **show running-config** or **copy running-config destination-url**. Any configuration file generated on a Cisco device complies with these rules.

Free memory larger than the combined size of the two configuration files (the current running configuration and the saved replacement configuration) is required.

Restrictions for Configuration Replace and Configuration Rollback

If the device does not have free memory larger than the combined size of the two configuration files (the current running configuration and the saved replacement configuration), the configuration replace operation is not performed.

Certain Cisco configuration commands such as those pertaining to physical components of a networking device (for example, physical interfaces) cannot be added or removed from the running configuration. For example, a configuration replace operation cannot remove the **interface ethernet 0** command line from the current running configuration if that interface is physically present on the device. Similarly, the **interface ethernet 1** command line cannot be added to the running configuration if no such interface is physically present on the device. A configuration replace operation that attempts to perform these types of changes results in error messages indicating that these specific command lines failed.

In very rare cases, certain Cisco configuration commands cannot be removed from the running configuration without reloading the device. A configuration replace operation that attempts to remove this type of command results in error messages indicating that these specific command lines failed.

Information About Configuration Replace and Configuration Rollback

Configuration Archive

The Cisco IOS configuration archive is intended to provide a mechanism to store, organize, and manage an archive of Cisco IOS configuration files to enhance the configuration rollback capability provided by the **configurereplace** command. Before this feature was introduced, you could save copies of the running configuration using the **copyrunning-configdestination-url** command, storing the replacement file either locally or remotely. However, this method lacked any automated file management. On the other hand, the Configuration Replace and Configuration Rollback feature provides the capability to automatically save copies of the running configuration to the Cisco IOS configuration archive. These archived files serve as checkpoint configuration references and can be used by the **configurereplace** command to revert to previous configuration states.

The **archiveconfig** command allows you to save Cisco IOS 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 Cisco IOS 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 **showarchive** command displays information for all configuration files saved in the Cisco IOS configuration archive.

The Cisco IOS configuration archive, in which the configuration files are stored and available for use with the **configurereplace** command, can be located on the following file systems:

- If your platform has disk0--disk0:, disk1:, ftp:, pram:, rcp:, slavedisk0:, slavedisk1:, or tftp:
- If your platform does not have disk0--ftp:, http:, pram:, rcp:, or tftp:

Configuration Replace

The **configurereplace** command provides the capability to replace the current running configuration with any saved Cisco IOS configuration file. This functionality can be used to revert to a previous configuration state, effectively rolling back any configuration changes that were made since the previous configuration state was saved.

When using the **configurereplace** command, you must specify a saved Cisco IOS configuration as the replacement configuration file for the current running configuration. The replacement file must be a complete configuration generated by a Cisco IOS device (for example, a configuration generated by the **copyrunning-configdestination-url** command), or, if generated externally, the replacement file must comply with the format of files generated by Cisco IOS devices. When the **configurereplace** command is entered, the current running configuration is compared with the specified replacement configuration and a set of diffs is generated. The algorithm used to compare the two files is the same as that employed by the **showarchiveconfigdifferences** command. The resulting diffs are then applied by the Cisco IOS parser to achieve the replacement configuration state. Only the diffs are applied, avoiding potential service disruption from reapplying configuration commands that already exist in the current running configuration. This algorithm effectively handles configuration changes to order-dependent commands (such as access lists) through a

multiple pass process. Under normal circumstances, no more than three passes are needed to complete a configuration replace operation, and a limit of five passes is performed to preclude any looping behavior.

The Cisco IOS **copysource-urlrunning-config** command is often used to copy a stored Cisco IOS configuration file to the running configuration. When using the **copysource-urlrunning-config** command as an alternative to the **configurereplacetarget-url** command, the following major differences should be noted:

- The **copysource-urlrunning-config** command is a merge operation and preserves all the commands from both the source file and the current running configuration. This command does not remove commands from the current running configuration that are not present in the source file. In contrast, the **configurereplacetarget-url** command removes commands from the current running configuration that are not present in the replacement file and adds commands to the current running configuration that need to be added.
- The **copysource-urlrunning-config** command applies every command in the source file, whether or not the command is already present in the current running configuration. This algorithm is inefficient and, in some cases, can result in service outages. In contrast, the **configurereplacetarget-url** command only applies the commands that need to be applied--no existing commands in the current running configuration are reapplied.
- A partial configuration file may be used as the source file for the **copysource-urlrunning-config** command, whereas a complete Cisco IOS configuration file must be used as the replacement file for the **configurereplacetarget-url** command.

In Cisco IOS Release 12.2(25)S and 12.3(14)T, a locking feature for the configuration replace operation was introduced. When the **configurereplace** command is used, the running configuration file is locked by default for the duration of the configuration replace operation. This locking mechanism prevents other users from changing the running configuration while the replacement operation is taking place, which might otherwise cause the replacement operation to terminate unsuccessfully. You can disable the locking of the running configuration by using the **no**lock keyword when issuing the **configurereplace** command.

The running configuration lock is automatically cleared at the end of the configuration replace operation. You can display any locks that may be currently applied to the running configuration using the **showconfigurationlock** command.

Configuration Rollback

The concept of rollback comes from the transactional processing model common to database operations. In a database transaction, you might make a set of changes to a given database table. You then must choose whether to commit the changes (apply the changes permanently) or to roll back the changes (discard the changes and revert to the previous state of the table). In this context, rollback means that a journal file containing a log of the changes is discarded, and no changes are applied. The result of the rollback operation is to revert to the previous state, before any changes were applied.

The **configurereplace** command allows you to revert to a previous configuration state, effectively rolling back changes that were made since the previous configuration state was saved. Instead of basing the rollback operation on a specific set of changes that were applied, the Cisco IOS configuration rollback capability uses the concept of reverting to a specific configuration state based on a saved Cisco IOS configuration file. This concept is similar to the database idea of saving a checkpoint (a saved version of the database) to preserve a specific state.

If the configuration rollback capability is desired, you must save the Cisco IOS running configuration before making any configuration changes. Then, after entering configuration changes, you can use that saved configuration file to roll back the changes (using the **configurereplace target-url** command). Furthermore,

since you can specify any saved Cisco IOS configuration file as the replacement configuration, you are not limited to a fixed number of rollbacks, as is the case in some rollback models based on a journal file.

Configuration Rollback Confirmed Change Operation

The Configuration Rollback Confirmed Change feature enables an added criterion of a confirmation to configuration changes. This functionality enables a rollback to occur if a confirmation of the requested changes is not received in a configured time frame. Command failures can also be configured to trigger a configuration rollback.

The following steps outline how this process is achieved:

- 1 A new option allows you to request confirmation (a confirmation time limit must be supplied) of the configuration changes.
- 2 You must enter the confirmation command. If no confirmation is entered within the requested time limit, the configuration reverts to its previous state.

Benefits of Configuration Replace and Configuration Rollback

- Allows you to revert to a previous configuration state, effectively rolling back configuration changes.
- Allows you to replace the current running configuration file with the startup configuration file without having to reload the router or manually undo CLI changes to the running configuration file, therefore reducing system downtime.
- Allows you to revert to any saved Cisco IOS configuration state.
- Simplifies configuration changes by allowing you to apply a complete configuration file to the router, where only the commands that need to be added or removed are affected.
- When using the **configure replace** command as an alternative to the **copy source-url running-config** command, increases efficiency and prevents risk of service outages by not reapplying existing commands in the current running configuration.

How to Use Configuration Replace and Configuration Rollback

Creating a Configuration Archive

No prerequisite configuration is needed to use the **configurereplace** command. Using the **configurereplace** command in conjunction with the Cisco IOS configuration archive and the **archiveconfig** command is optional but offers significant benefit for configuration rollback scenarios. Before using the **archiveconfig** command, the configuration archive must be configured. Perform this task to configure the characteristics of the configuration archive.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **archive**
4. **path** *url*
5. **maximum** *number*
6. **time-period** *minutes*
7. **end**
8. **archive config**

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable Example: Router> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> • Enter your password if prompted.
Step 2	configure terminal Example: Router# configure terminal	Enters global configuration mode.
Step 3	archive Example: Router(config)# archive	Enters archive configuration mode.
Step 4	path <i>url</i> Example: Router(config-archive)# path disk0:myconfig	Specifies the location and filename prefix for the files in the Cisco IOS configuration archive. <p>Note If a directory is specified in the path instead of file, the directory name must be followed by a forward slash as follows: path flash:/directory/. The forward slash is not necessary after a filename; it is only necessary when specifying a directory.</p>
Step 5	maximum <i>number</i> Example: Router(config-archive)# maximum 14	(Optional) Sets the maximum number of archive files of the running configuration to be saved in the Cisco IOS configuration archive. <ul style="list-style-type: none"> • The <i>number</i> argument is the maximum number of archive files of the running configuration to be saved in the Cisco IOS configuration archive. Valid values are from 1 to 14. The default is 10. <p>Note Before using this command, you must configure the path command to specify the location and filename prefix for the files in the Cisco IOS configuration archive.</p>

	Command or Action	Purpose
Step 6	time-period <i>minutes</i> Example: <pre>Router(config-archive)# time-period 10</pre>	(Optional) Sets the time increment for automatically saving an archive file of the current running configuration in the Cisco IOS configuration archive. <ul style="list-style-type: none"> The <i>minutes</i> argument specifies how often, in minutes, to automatically save an archive file of the current running configuration in the Cisco IOS configuration archive. Note Before using this command, you must configure the path command to specify the location and filename prefix for the files in the Cisco IOS configuration archive.
Step 7	end Example: <pre>Router(config-archive)# end</pre>	Exits to privileged EXEC mode.
Step 8	archive config Example: <pre>Router# archive config</pre>	Saves the current running configuration file to the configuration archive. Note The path command must be configured before using this command.

Performing a Configuration Replace or Configuration Rollback Operation

Perform this task to replace the current running configuration file with a saved Cisco IOS configuration file.



Note

You must create a configuration archive before performing this procedure. See [Creating a Configuration Archive](#) for detailed steps. The following procedure details how to return to that archived configuration in the event of a problem with the current running configuration.

SUMMARY STEPS

1. **enable**
2. **configure replace** *target-url* [**nolock**] [**list**] [**force**] [**ignorecase**] [**reverttrigger**{**error**}/**timer**{*minutes*}/**time**{*minutes*}]
3. **configure revert** {**now** |**timer**{*minutes*}/**idle**{*minutes*}}
4. **configure confirm**
5. **exit**

DETAILED STEPS

	Command or Action	Purpose
Step 1	<p>enable</p> <p>Example:</p> <pre>Router> enable</pre>	<p>Enables privileged EXEC mode.</p> <ul style="list-style-type: none"> • Enter your password if prompted.
Step 2	<p>configure replace <i>target-url</i> [nolock] [list] [force] [ignorecase] [reverttrigger[error]/timerminutes]timeminutes</p> <p>Example:</p> <pre>Router# configure replace disk0:myconfig-1 list time 30</pre>	<p>Replaces the current running configuration file with a saved Cisco IOS configuration file.</p> <ul style="list-style-type: none"> • The <i>target-url</i> argument is a URL (accessible by the Cisco IOS file system) of the saved Cisco IOS configuration file that is to replace the current running configuration, such as the configuration file created using the archiveconfig command. • The list keyword displays a list of the command lines applied by the Cisco IOS software parser during each pass of the configuration replace operation. The total number of passes performed is also displayed. • The force keyword replaces the current running configuration file with the specified saved Cisco IOS configuration file without prompting you for confirmation. • The timeminutes keyword and argument specify the time (in minutes) within which you must enter the configureconfirm command to confirm replacement of the current running configuration file. If the configureconfirm command is not entered within the specified time limit, the configuration replace operation is automatically reversed (in other words, the current running configuration file is restored to the configuration state that existed prior to entering the configurereplace command). • The nolock keyword disables the locking of the running configuration file that prevents other users from changing the running configuration during a configuration replace operation. • The reverttrigger keywords set the following triggers for reverting to the original configuration: <ul style="list-style-type: none"> • error--Reverts to the original configuration upon error. • timerminutes--Reverts to the original configuration if specified time elapses. • The ignorecase keyword allows the configuration to ignore the case of the confirmation command.

	Command or Action	Purpose
Step 3	<p>configure revert {now timer{minutes idleminutes}}</p> <p>Example:</p> <pre>Router# configure revert now</pre> <p>Example:</p>	<p>(Optional) To cancel the timed rollback and trigger the rollback immediately, or to reset parameters for the timed rollback, use the configure revert command in privileged EXEC mode.</p> <ul style="list-style-type: none"> • now --Triggers the rollback immediately. • timer --Resets the configuration revert timer. <ul style="list-style-type: none"> • Use the <i>minutes</i> argument with the timer keyword to specify a new revert time in minutes. • Use the idle keyword along with a time in minutes to set the maximum allowable time period of no activity before reverting to the saved configuration.
Step 4	<p>configure confirm</p> <p>Example:</p> <pre>Router# configure confirm</pre>	<p>(Optional) Confirms replacement of the current running configuration file with a saved Cisco IOS configuration file.</p> <p>Note Use this command only if the timeseconds keyword and argument of the configure replace command are specified.</p>
Step 5	<p>exit</p> <p>Example:</p> <pre>Router# exit</pre>	Exits to user EXEC mode.

Monitoring and Troubleshooting the Feature

Perform this task to monitor and troubleshoot the Configuration Replace and Configuration Rollback feature.

SUMMARY STEPS

1. **enable**
2. **show archive**
3. **debug archive versioning**
4. **debug archive config timestamp**
5. **exit**

DETAILED STEPS

-
- Step 1** **enable**
Use this command to enable privileged EXEC mode. Enter your password if prompted. For example:

Example:

```
Router> enable
Router#
```

Step 2 **show archive**

Use this command to display information about the files saved in the Cisco IOS configuration archive. For example:

Example:

```
Router# show archive
There are currently 1 archive configurations saved.
The next archive file will be named disk0:myconfig-2
Archive #  Name
0
1      disk0:myconfig-1 <- Most Recent
2
3
4
5
6
7
8
9
10
11
12
13
14
```

The following is sample output from the **showarchive** command after several archive files of the running configuration have been saved. In this example, the maximum number of archive files to be saved is set to three.

Example:

```
Router# show archive
There are currently 3 archive configurations saved.
The next archive file will be named disk0:myconfig-8
Archive #  Name
0
1      :Deleted
2      :Deleted
3      :Deleted
4      :Deleted
5      disk0:myconfig-5
6      disk0:myconfig-6
7      disk0:myconfig-7 <- Most Recent
8
9
10
11
12
13
14
```

Step 3 **debug archive versioning**

Use this command to enable debugging of the Cisco IOS configuration archive activities to help monitor and troubleshoot configuration replace and rollback. For example:

Example:

```
Router# debug archive versioning
Jan  9 06:46:28.419:backup_running_config
Jan  9 06:46:28.419:Current = 7
Jan  9 06:46:28.443:Writing backup file disk0:myconfig-7
Jan  9 06:46:29.547: backup worked
```

Step 4 **debug archive config timestamp**

Use this command to enable debugging of the processing time for each integral step of a configuration replace operation and the size of the configuration files being handled. For example:

Example:

```
Router# debug archive config timestamp
Router# configure replace disk0:myconfig force
Timing Debug Statistics for IOS Config Replace operation:
      Time to read file slot0:sample_2.cfg = 0 msec (0 sec)
      Number of lines read:55
      Size of file           :1054
Starting Pass 1
      Time to read file system:running-config = 0 msec (0 sec)
      Number of lines read:93
      Size of file           :2539
      Time taken for positive rollback pass = 320 msec (0 sec)
      Time taken for negative rollback pass = 0 msec (0 sec)
      Time taken for negative incremental diffs pass = 59 msec (0 sec)
      Time taken by PI to apply changes = 0 msec (0 sec)
      Time taken for Pass 1 = 380 msec (0 sec)
Starting Pass 2
      Time to read file system:running-config = 0 msec (0 sec)
      Number of lines read:55
      Size of file           :1054
      Time taken for positive rollback pass = 0 msec (0 sec)
      Time taken for negative rollback pass = 0 msec (0 sec)
      Time taken for Pass 2 = 0 msec (0 sec)
Total number of passes:1
Rollback Done
```

Step 5 **exit**

Use this command to exit to user EXEC mode. For example:

Example:

```
Router# exit
Router>
```

Configuration Examples for Configuration Replace and Configuration Rollback

Creating a Configuration Archive Example

The following example shows how to perform the initial configuration of the Cisco IOS configuration archive. In this example, disk0:myconfig is specified as the location and filename prefix for the files in the configuration archive and a value of 10 is set as the maximum number of archive files to be saved.

```
configure terminal
!
archive
 path disk0:myconfig
 maximum 10
end
```

Replacing the Current Running Configuration with a Saved Cisco IOS Configuration File Example

The following example shows how to replace the current running configuration with a saved Cisco IOS configuration file named disk0:myconfig. The **configure replace** command interactively prompts you to confirm the operation.

```
Device# configure replace disk0:myconfig
This will apply all necessary additions and deletions
to replace the current running configuration with the
contents of the specified configuration file, which is
assumed to be a complete configuration, not a partial
configuration. Enter Y if you are sure you want to proceed. ? [no]: Y
Total number of passes: 1
Rollback Done
```

In the following example, the **list** keyword is specified in order to display the command lines that were applied during the configuration replace operation:

```
Device# configure replace disk0:myconfig list
This will apply all necessary additions and deletions
to replace the current running configuration with the
contents of the specified configuration file, which is
assumed to be a complete configuration, not a partial
configuration. Enter Y if you are sure you want to proceed. ? [no]: Y
!Pass 1
!List of Commands:
no snmp-server community public ro
snmp-server community mystring ro

end
Total number of passes: 1
Rollback Done
```

Reverting to the Startup Configuration File Example

The following example shows how to revert to the Cisco IOS startup configuration file using the **configure replace** command. This example also shows the use of the optional **force** keyword to override the interactive user prompt.

```
Router# configure replace nvram:startup-config force
Total number of passes: 1
Rollback Done
```

Example: Performing a Configuration Replace Operation with the **configure confirm** Command

The following example shows the use of the **configure replace** command with the **time minutes** keyword and argument. You must enter the **configure confirm** command within the specified time limit to confirm replacement of the current running configuration file. If the **configure confirm** command is not entered within the specified time limit, the configuration replace operation is automatically reversed (in other words, the current running configuration file is restored to the configuration state that existed prior to entering the **configure replace** command).

```
Device# configure replace nvram:startup-config time 120
This will apply all necessary additions and deletions
to replace the current running configuration with the
contents of the specified configuration file, which is
assumed to be a complete configuration, not a partial
configuration. Enter Y if you are sure you want to proceed. ? [no]: Y
Total number of passes: 1
Rollback Done
Device# configure confirm
```

The following example shows the use of the **configure revert** command with the **timer** keyword. You must enter the **configure revert** command to cancel the timed rollback and trigger the rollback immediately, or to reset parameters for the timed rollback.

```
Device# configure revert timer 100
```

Performing a Configuration Rollback Operation Example

The following example shows how to make changes to the current running configuration and then roll back the changes. As part of the configuration rollback operation, you must save the current running configuration before making changes to the file. In this example, the **archiveconfig** command is used to save the current running configuration. The generated output of the **configure replace** command indicates that only one pass was performed to complete the rollback operation.



Note

Before using the **archiveconfig** command, you must configure the **path** command to specify the location and filename prefix for the files in the Cisco IOS configuration archive.

You first save the current running configuration in the configuration archive as follows:

```
archive config
```

You then enter configuration changes as shown in the following example:

```
configure terminal
!
user netops2 password rain
user netops3 password snow
exit
```

After having made changes to the running configuration file, assume you now want to roll back these changes and revert to the configuration that existed before the changes were made. The **showarchive** command is used to verify the version of the configuration to be used as a replacement file. The **configurereplace** command is then used to revert to the replacement configuration file as shown in the following example:

```
Router# show archive
There are currently 1 archive configurations saved.
The next archive file will be named disk0:myconfig-2
Archive # Name
0
1      disk0:myconfig-1 <- Most Recent
2
3
4
5
6
7
8
9
10
Router# configure replace disk0:myconfig-1
Total number of passes: 1
Rollback Done
```

Additional References

The following sections provide references related to the Configuration Replace and Configuration Rollback feature.

Related Documents

Related Topic	Document Title
Configuration Locking	<i>Exclusive Configuration Change Access and Access Session Locking</i>
Commands for managing configuration files	<i>Cisco IOS Configuration Fundamentals Command Reference</i>
Information about managing configuration files	<i>Managing Configuration Files</i>
Using the Contextual Configuration Diff Utility feature	<i>Contextual Configuration Diff Utility</i>

Standards

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

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

RFCs

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

Technical Assistance

Description	Link
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	http://www.cisco.com/cisco/web/support/index.html

Feature Information for Configuration Replace and Configuration Rollback

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Table 1: Feature Information for Configuration Replace and Configuration Rollback

Feature Name	Releases	Feature Information
Configuration Replace and Configuration Rollback	12.3(7)T 12.2(25)S 12.3(14)T 12.2(27)SBC 12.2(31)SB2 12.2(33)SRA 12.2(33)SXH 12.2(33)SB	

Feature Name	Releases	Feature Information
		<p>The Configuration Replace and Configuration Rollback feature provides the capability to replace the current running configuration with any saved Cisco IOS configuration file. This functionality can be used to revert to a previous configuration state, rolling back any configuration changes that were made since that configuration file was saved.</p> <p>In 12.3(7)T, this feature was introduced.</p> <p>In 12.2(25)S, support was added for a Cisco IOS 12.2S release. A locking mechanism for configuration replace (the Exclusive Configuration Change Access feature) was introduced.</p> <p>In 12.3(14)T, support for a locking mechanism for configuration replace (the Exclusive Configuration Change Access feature) was added for a Cisco IOS 12.3T release.</p> <p>In 12.2(27)SBC, support was added for a Cisco IOS 12.2SB release.</p> <p>In 12.2(33)SRA, support was added for a Cisco IOS 12.2SR release.</p> <p>In 12.2(31)SB2, this feature was implemented on the Cisco 10000 series.</p> <p>In 12.2(33)SXH, the Configuration Rollback feature was implemented in Release 12.2SX.</p> <p>In 12.2(33)SB, this feature was implemented on the Cisco 10000 series.</p> <p>The following sections provide feature information:</p> <p>The following commands were modified by this feature: archive config, configure confirm, configure replace, debug archive</p>

Feature Name	Releases	Feature Information
		config timestamp, debug archive versioning, maximum, path (archive configuration), show archive, show configuration lock, time-period.
Configuration Versioning	12.3(7)T 12.2(25)S 12.2(33)SRA	The Configuration Versioning feature allows you to maintain and manage backup copies of the Cisco IOS running configuration on or off the device. The Configuration Replace feature uses the Configuration Versioning feature to provide a rollback to a saved copy of the running configuration.
Exclusive Configuration Change Access	12.3(14)T 12.0(31)S 12.2(33)SRA 12.4(11)T 12.2(33)SXH 12.2(33)SB	The Exclusive Configuration Change Access feature (also called the Configuration Lock feature) allows you to have exclusive change access to the Cisco IOS running configuration, preventing multiple users from making concurrent configuration changes. The following command was modified by this feature and applies to the Configuration Replace and Configuration Rollback feature: show configuration lock. Refer to the separate module, Exclusive Configuration Change Access and Access Session Locking, for details

Feature Name	Releases	Feature Information
Configuration Rollback Confirmed Change	12.2(33)SRC 12.2(33)SB 12.4(20)T 12.2(33)SXI	<p>The Configuration Rollback Confirmed Change feature allows configuration changes to be performed with an optional requirement that they be confirmed.</p> <p>If this confirmation is not received, the configuration is returned to the state prior to the changes being applied.</p> <p>This mechanism provides a safeguard against inadvertent loss of connectivity between a network device and the user or management application due to configuration changes.</p> <p>In 12.2(33)SB, this feature was implemented on the Cisco 10000 series.</p> <p>The following sections provide information about this feature:</p> <p>The following commands were modified by this feature: configure confirm,configure replace,configure revert,configure terminal</p>