



Upgrading Your CSS Software

Cisco Systems periodically releases new software versions for the CSS. To help you upgrade your CSS with a new software release, this appendix provides the following information:

- Before You Begin
- Upgrading your CSS
- Copying Custom Scripts

Before You Begin

Before you can upgrade your CSS, copy the new CSS software to your FTP server and configure an FTP server record for the FTP server on your CSS. To display the maximum number of installed versions allowed on your hard disk or flash disk, use the **show installed-software version-limit** command.

Copying the New CSS Software

ArrowPoint Distribution Images (ADIs) of the CSS software versions are on Cisco Connection Online (CCO), available at the Cisco Systems Web site (www.cisco.com). Use your customer login and password to access this page. From this location, you can access the page listing the versions of GZIP-compressed software. Click an image to download. Once the image is downloaded, place it on an FTP server which the CSS can access.

**Note**

You do not need to uncompress the GZIP-compressed software. When you copy it or the upgrade script copies it to the CSS, the CSS uncompresses it.

Configuring an FTP Server Record on the CSS

Before you can copy the ADI from the FTP server to the CSS, you must create an FTP record file on the CSS identifying it. The record contains the IP address, username, and password for the server. To configure an FTP server record:

1. Log into the CSS.
2. Access global configuration mode. For example:

```
# config
(config)#
```

3. Configure the default FTP server by using the **ftp-record** command. The syntax is:

```
ftp-record ftp_record ip_or_host username
[“password”|encrypted-password encrypted_pwd] {base_directory}
```

The variables are:

- *ftp_record* - Name for this FTP record file. Enter an unquoted text string with no spaces and a maximum length of 32 characters.
- *ip_or_host* - IP address or host name of the FTP server you want to access. Enter an IP address in dotted-decimal notation (for example, 192.168.11.1) or a mnemonic host name (for example, myhost.mydomain.com).
- *username* - Valid login username on the FTP server. Enter a case-sensitive unquoted text string with no spaces and a maximum length 32 characters.
- *password* - Password for the valid login username on the FTP server. Enter a case-sensitive quoted text string with no spaces and a maximum length of 16 characters.

- *encrypted_pwd* - Encrypted password for the valid login username on the FTP server. Enter a case-sensitive unquoted text string with no spaces and a maximum length of 16 characters after the **encrypted-password** option.
- *base_directory* - Optional base directory when using this record.

For example:

```
(config)# ftp-record DEFAULT_FTP 192.168.2.01 eng1
encrypted-password serve
```

You can now upgrade your CSS.

Upgrading your CSS

You can upgrade your CSS software by either:

- Using the Upgrade Script
- Manually Upgrading the CSS

Using the Upgrade Script

The upgrade script allows you to upgrade your CSS without having to enter any CLI commands. There are two ways to run the script:

- Automatically Running the Upgrade Script
- Interactively Using the Upgrade Script

Automatically Running the Upgrade Script

You can run the upgrade script to perform the software upgrade without having to enter any information. The script automatically:

- Checks to see how many installed software versions are installed on the CSS. On a hard disk-based system, if there are four installed versions (the maximum), the script deletes an older version. On a flash disk-based system (CSS 11150 or CSS 11800), if there are two installed versions (the maximum), the script deletes the older version.

**Note**

The script will not offer to delete a version that you have configured as the primary or secondary boot file. On a flash disk-based system, you may need to quit and then deselect the primary or secondary boot file before continuing with the upgrade.

- Archives the running-config to startup-config.
- Copies the new ADI to the CSS boot-image directory.
- Unpacks the new ADI.
- Sets the primary boot-file to the new ADI.
- Reboots the CSS.

To automatically upgrade your CSS software using the upgrade script:

1. Log into the CSS.

**Note**

If you created additional profiles on the CSS, archive them by using the **archive script** or **save_profile** command. After the upgrade is done, use the **restore filename script** command to restore the profile you archived.

2. Start the upgrade script and include the name of the ADI and its extension in quotes.
 - If you are using a GZIP-compressed ADI from the FTP server, include the **gz** file extension. For example:


```
# upgrade "ap0500002.gz"
```
 - If you are using an uncompressed version of the ADI from the FTP server, include the **adi** file extension. For example:


```
# upgrade "ap0500002.adi"
```

If you did not configure a default FTP record before starting the upgrade script, you are prompted to configure one. You can either:

- Allow the CSS to automatically configure a record to the server containing the ADI.
- At the prompts, manually configure the FTP record by entering the FTP server information where you copied the upgrade ADI.

When a default FTP record is configured, information similar to the following appears during the upgrade:

```
Current Version:ap0500002 (Build 2)

*** You must remove an installed version to upgrade. ***

Attempting to delete ap0410008

archive running-config startup-config

Attempting ftp of ap0500002.adi:
#      copy ftp DEFAULT_FTP ${new_version_adi} boot-image
Copying (-) 57,241,012
Completed successfully.
#(config-boot)#
unpack ${new_version_adi}
Unpacking(/) 99%
(config-boot)#
setting primary boot-file ap0500002

rebooting
```

The CSS automatically performs a flash upgrade, if necessary, and then boots the new image.

Interactively Using the Upgrade Script

The upgrade script allows you to enter information and make selections by responding to prompts as it runs. Before the script performs the upgrade, it prompts you to:

- Remove ADIs from the CSS if the script detects four installed versions on a hard disk-based system or two versions on a flash disk-based system (CSS 11150 or CSS 11800)
- Enter the version of the new ADI
- Set the primary boot-file to the new ADI
- Reboot the CSS with the ADI you are installing after the upgrade is done
- Archive the running-config to startup-config

To use the interactive version of the script:

1. Log into the CSS.



Note If you created additional profiles on the CSS, archive them by using the **archive script** or **save_profile** command. After the upgrade is done, use the **restore filename script** command to restore the profile you archived.

2. Start the upgrade script. For example:

```
# upgrade
```

If you did not configure a default FTP record before starting the upgrade script, you are prompted to configure one. You can either:

- Allow the CSS to automatically configure a record to the server containing the ADI.
- At the prompts, manually configure the FTP record by entering the FTP server information where you copied the upgrade ADI.

When a default FTP record is configured, the script displays the current version of the ADI.

```
Current Version: ap04100008 (Official)
```

A hard disk-based CSS can contain a maximum of four ADIs. A flash disk-based CSS (CSS 11150 or CSS 11800) can contain a maximum of two ADIs. If the script detects the maximum number of ADIs, a message informs you that you need to remove an ADI. Then the script prompts you to remove an older ADI. For example:

```
*** You must remove an installed version to upgrade.***
```

```
remove ap04100008 [y n q]?
```



Note

The script will not offer to delete a version that you have configured as the primary or secondary boot file. On a flash disk-based system, you may need to quit and then deselect the primary or secondary boot file before continuing with the upgrade.

- If necessary, remove the ADI.
 - Enter **y** to remove the displayed ADI version.
 - Enter **n** for the script to display another version to remove.
 - Enter **q** to exit from the script.

```
remove ap0410008 [y n q]?y
```

```
Attempting to delete ap0410008
```

- At the prompt, enter the file name and extension of the GZIP-compressed ADI version to install, and verify the information you entered. For example:

```
Please Enter Version to Install:ap0500002.gz
```

**Note**

If you are using an uncompressed version of the ADI from the FTP server, include the **adi** file extension (for example, *ap0500002.adi*).

```
Upgrade to Version ap0500002? [y n q] y
```

- Determine whether to set the ADI as the primary boot-file.
 - Enter **y** to set the ADI as the primary boot-file and change the CSS configuration.
 - Enter **n** to keep the same primary boot-file configuration.

```
Set primary boot-file to Version ap00410004? [y n q] y
```

- Determine whether to have the CSS reboot with the ADI you are installing.
 - Enter **y** to reboot the CSS with this ADI after the upgrade is done.
 - Enter **n** to not reboot the CSS with the ADI after the upgrade is done.

```
Reboot with Version ap0500002? [y n q] n
```

- Determine whether to have the CSS archive the running-config to the startup-config.
 - Enter **y** to archive the running-config to the startup-config.
 - Enter **n** to keep the same startup-config.

```
Archive running-config to startup-config? [y n q] y
```

```
archive running-config startup-config
```

The script copies the ADI from the FTP server, unpacks and installs it, and sets it as the primary boot-file.

```
Attempting ftp of ap0500002.gz:

#    copy ftp DEFAULT_FTP ${new_version_adi} boot-image

Copying (-) 57,241,012

Completed successfully.
#
(config-boot)# unpack ${new_version_adi}

unpacking(/) 99%

(config-boot)#

setting primary boot-file ap0500002
```

If you decided to reboot the CSS with the installed ADI in Step 6, the CSS reboots automatically. If you made the ADI the primary boot-file and archived the running-config to the startup-config, the CSS automatically performs a flash upgrade, if necessary, and then boots the new image.

To manually reboot the system, enter the following commands:

```
(config)# boot
(config-boot)# reboot
```

Manually Upgrading the CSS

You can manually enter CLI commands to upgrade the CSS.



Note

Make sure that you configure a default FTP server, as described in the “Before You Begin” section earlier in this appendix.

To manually upgrade the software version on your CSS:

1. Log onto the CSS.
2. If necessary, remove an older version of the ADI from the CSS. A hard disk-based CSS can contain a maximum of four ADIs. A flash disk-based CSS (CSS 11150 or CSS 11800) can contain a maximum of two ADIs.

**Caution**

Do not remove the ADI currently running on the CSS. Use the **version** command to see the currently running software version.

To remove an ADI:

- a. List the ADIs on the CSS. For example:

```
(config)# show installed-software
ap0401003
ap0410008
ap0500002
```

- b. Access boot mode:

```
(config)# boot
(config-boot)#
```

- c. Use the **remove** command to remove the ADI. For example:

```
(config-boot)# remove ap0410008
```

3. Archive your running-config to startup-config. For example:

```
# config
(config)# archive running-config startup-config
```

You can also use the **save_config** alias to archive your startup-config. To view all available aliases, use the **show aliases** command.

**Caution**

If you created additional profiles on the CSS, archive them by using the **archive script** or **save_profile** command. After the upgrade is done, use the **restore filename script** command to restore the profile you archived.

4. Copy the new ADI onto the CSS as the boot-image.

```
(config-boot)# exit
```

```
(config)# copy ftp DEFAULT_FTP ap0500002.gz boot-image
```

DEFAULT_FTP is the FTP record file defined in “Configuring an FTP Server Record on the CSS”.

When you copy a GZIP-compressed ADI onto the CSS, the CSS automatically uncompresses it.



Note If you are copying an uncompressed version of the ADI from the FTP server, include the **adi** file extension (for example, ap0500002.adi).

5. Unpack the ADI.

```
(config)# boot
(config-boot)# unpack ap0500002.adi
```

6. Set the new ADI as the primary boot-file and install it.

```
(config-boot)# primary boot-file ap0500002
```

7. Reboot the system.

```
(config)# boot
(config-boot)# reboot
```

The CSS automatically performs a flash upgrade, if necessary, and then boots the new image.

Copying Custom Scripts

When you upgrade the WebNS software in your CSS, the upgrade process creates a new */<current running version>/script* directory. You must copy your custom scripts (including custom script keepalives) to the new */<current running version>/script* directory so that the CSS can find them.

Use the following procedure to ensure that your custom script keepalives operate properly after upgrading the CSS software.

1. Upgrade the WebNS software in your CSS.
2. Copy the scripts from the old */<current running version>/script* directory to the new */<current running version>/script* directory.
3. Reboot the CSS.