



Upgrading the Cisco ATA Signaling Image

This section describes two methods for upgrading the Cisco ATA software for the SIP protocol:

- [Upgrading the Signaling Image from a TFTP Server, page 8-1](#)—This is the Cisco-recommended method for the SIP protocol. This method is the most efficient method and requires only a one-time configuration change.
- [Upgrading the Signaling Image Manually, page 8-2](#)—This method can be used if you must manually upgrade the image of one Cisco ATA. However, this method is not the recommended upgrade method because it is not as simple as the TFTP method.

This section also describes procedures for verifying a successful image upgrade:

- [Confirming a Successful Signaling Image Upgrade, page 8-5](#)—Procedures for using your Web browser or the voice configuration menu are included.



Caution

Do not unplug the Cisco ATA while the function button is blinking. Doing so can cause permanent damage to the device. The function button blinks during an upgrade.



Note

The term *Cisco ATA* is used throughout this manual to refer to both the Cisco ATA 186 and the Cisco ATA 188, unless differences between the Cisco ATA 186 and Cisco ATA 188 are explicitly stated.

Upgrading the Signaling Image from a TFTP Server

You can configure the Cisco ATA to automatically download the latest signaling image from the TFTP server. You do this configuring the parameter *upgradecode* in your Cisco ATA configuration file. (You also would use this procedure if you wanted to perform a cross-protocol signaling image upgrade.) For more information about setting up the configuration file, see the [“Creating Unique and Common Cisco ATA Configuration Files” section on page 3-8](#).

Syntax of upgradecode Parameter

```
upgradecode:3,0x301,0x0400,0x0200,tftp_server_ip,69,image_id,image_file_name
```

Definitions

- The hexadecimal values that precede the *tftp_server_ip* variable must always be the values shown in the syntax.
- *tftp_server_ip* is the TFTP server that contains the latest signaling image file.

- `image_id` is a unique 32-bit integer that differs with each upgrade. You can determine this 32-bit integer value by using the build date on the image file name and prepending it with "0x". For example, if the `image_file_name` is `ata186-v2-14-020514a.kxz`, then the build date is `020508a`, and the `image_id` is `0x020508a`.
- `image_file_name` is the firmware upgrade-image file name. The `image_file_name` format is:
`ata186-v{M}-{N}-{yyymmdd}{a-f}{ext}`
 - `M` is the major version number
 - `N` is the minor version number (always two digits)
 - `yyymmdd` is a two-digit year, two-digit month, and two-digit day
 - `a-f` is the build letter (- `yyymmdd` and `a-f` together form the build date of the image)
 - `ext` must be ".kxz" for upgrading from version 2.11 and below, and can be ".zup" for upgrading from version 2.12 and up for the Cisco ATA186, but it *must* be ".zup" for upgrading the Cisco ATA188.

Process

Whenever the Cisco ATA administrator stores a new signaling image (denoted by a change to the `image_id`), the Cisco ATA upgrades its firmware with the new `image_file`. To contact the TFTP server, the Cisco ATA uses the TFTP server IP address that is contained within the value of the `upgradecode` parameter.

Example

The `upgradecode` parameter value could be:

```
upgradecode:3,0x301,0x0400,0x0200,192.168.2.170,69,0x020723a,ata186-v2-15-020723a.zup
```

This instructs the Cisco ATA to upgrade its firmware to `ata186-v2-15-020723a.zup` by downloading the `ata186-v2-15-020723a.zup` file from the TFTP server IP address of `192.168.2.170`. This download occurs after the Cisco ATA downloads its configuration file that contains the directive from the `upgradecode` parameter. Also, the upgrade occurs only if the internally cached `image_id` in Cisco ATA is different from the value `0x020723a`.

Upgrading the Signaling Image Manually

This section describes how to manually upgrade the Cisco ATA with the most recent signaling image. The executable file that you need is called `ata186us.exe`, and is bundled in the Cisco ATA release-software zip file.


This section contains the following topics:

- [Preliminary Steps, page 8-3](#)
- [Running the Executable File, page 8-3](#)

Preliminary Steps

Before you run the executable file, be sure to complete the following procedure:

Procedure

-
- Step 1** If you are a registered CCO user, go to the following URL:
<http://www.cisco.com/cgi-bin/tablebuild.pl/ata186>
- Step 2** Locate the zip file that contains the software for the applicable release and signaling image you are using. The contents of each file are described next to the file name. Extract the signaling image file (this file has an extension of .zup—For example, ata186-v2-15-020723a.zup) and store it on the PC that has connectivity with the Cisco ATA.
- Step 3** Set the Cisco ATA parameter UseTftp to 0.
-  **Note** Remember to set this parameter back to 1 before you use the TFTP upgrade method at a later time.
-
- Step 4** Follow the instructions in the [“Running the Executable File” section on page 8-3](#).
-

Running the Executable File

This section includes the procedure for running the executable file and using the voice configuration menu to complete the upgrade process. First check to make sure the upgrade requirements are met and determine the syntax to use when running the program.

This section contains the following topics:

- [“Upgrade Requirements” section on page 8-3](#)
- [“Syntax” section on page 8-3](#)
- [“Upgrade Procedure” section on page 8-4](#)

Upgrade Requirements

The following list contains the requirements for using the ata186us.exe file and the voice configuration menu to upgrade the Cisco ATA to the latest signaling image:

- A network connection between the PC from which you will invoke the executable file and the Cisco ATA
- A PC running Microsoft Windows 9X/ME/NT/2000

Syntax

```
ata186us [-any] {-h[host_ip]} {-p[port]} {-quiet} [-d1 -d2 -d3] <image file>
```

Definitions

- `-any`—Allow upgrade regardless of software and build versions (recommended).
- `-h[host_ip]`—Set the upgrade server to a specific IP address in cases where there may be more than one IP address for the host. The default behavior is that the program will use the first IP address it obtains when it runs the `gethostbyname` command.
- `-p[port]`—Set the server port to a specific port number (the default port number is 8000; use a different port number only if you are setting up an upgrade server other than the default).
- `-quiet`—Quiet mode; send all output to log file named as `[port].log` (useful when running the upgrade server as a daemon).
- `-d1`, `-d2`, `-d3`—Choose a verbosity level for debugging, with `-d3` being the most verbose.
- `image file`—This is the name of the signaling image file to which the Cisco ATA will upgrade.

Example

To upgrade the Cisco ATA to the signaling image `ata186-v2-15-020723a.zup`, you can use the following syntax:

```
ata186us -any -d1 ata186-v2-15-020723a.zup
```

Upgrade Procedure

To perform the upgrade, follow these steps:

Procedure

-
- Step 1** Run the executable file (see the [“Syntax” section on page 8-3](#)) from the Microsoft Windows DOS or command prompt. You will receive instructions on how to upgrade.
- Step 2** On the Cisco ATA, press the function button to invoke the voice configuration menu.
- Step 3** Using the telephone keypad, enter the following:

```
100# ip_address_of_PC * port #
```

This is the IP address of the PC and the port number at the DOS prompt where you invoked the `ata186us.exe` file.

For example, if the IP address is 192.168.1.10, and the port number is 8000 (the default), then enter:

```
100#192*168*1*10*8000#
```

When the upgrade is complete, the "Upgrade Successful" prompt will sound.

**Note**

When upgrading many Cisco ATAs manually, you can save the software-upgrade dial-pad sequence in your telephone's speed-dial, and use this sequence repeatedly.

Confirming a Successful Signaling Image Upgrade

You can verify that you have successfully upgraded the Cisco ATA signaling image by using one of the following methods:

- [Using a Web Browser, page 8-5](#)
- [Using the Voice Configuration Menu, page 8-5](#)

Using a Web Browser

To use your web browser to verify a successful image upgrade, perform the following steps:

Procedure

- Step 1** Open your web browser.
- Step 2** Enter the IP address of your Cisco ATA Web configuration page:
`http://<IP address>/dev`
- Step 3** Refresh the page to clear the cache.

The image version number and its build date should appear at the bottom-left corner of the Cisco ATA Web configuration page.

Using the Voice Configuration Menu

To use the voice configuration menu to verify a successful image upgrade, perform the following steps:

Procedure

- Step 1** Pick up the telephone handset attached to the **Phone1** port of the Cisco ATA.
- Step 2** Press the function button on the Cisco ATA.
- Step 3** Press **123#** on the telephone keypad to play out the image version number.
- Step 4** Press **123123#** on the telephone keypad to play out the image build date.
-

■ Confirming a Successful Signaling Image Upgrade