



Adding the Cisco ATA to the Cisco CallManager

Once you have configured the Cisco ATA, converted the configuration file into a binary file and stored the file on the Cisco CallManager TFTP server, you must register the Cisco ATA with Cisco CallManager.

This section contains important information about which device type to use when you register the Cisco ATA as well as how to choose which registration method is best based on your Cisco CallManager environment. This section also includes information about Cisco ATA behavior with Survivable Remote Site Telephony (SRST):

- [Device Type Information, page 4-2](#)—This section describes how to choose and configure the correct device type for your Cisco ATA.
- [Adding Cisco ATAs Manually, page 4-2](#)—You can use this method if you have a limited number of Cisco ATAs to add to the Cisco CallManager.
- [Using the Cisco Bulk Administration Tool \(BAT\), page 4-3](#)—This is the most common method if you need to add many Cisco ATAs to the Cisco CallManager.
- [Using Auto-Registration, page 4-4](#)—This method is disabled by default. If this method is enabled, all devices connected to a specific Cisco CallManager are auto-registered. This process cannot be limited to only the Cisco ATAs that are connected to a specific Cisco CallManager.
- [Survivable Remote Site Telephony, page 4-5](#)—The Cisco ATA utilizes SRST without any required configuration on the Cisco ATA.
- [Using the Cisco IP Telephony Network Locale Option, page 4-5](#)—The Cisco ATA supports the Cisco IP Telephony Locale Installer, which is available with Cisco CallManager release 3.3(3).
- [Using the Gratuitous ARP Feature, page 4-6](#)—The Cisco ATA supports this feature, which allows the Cisco ATA to ignore ARP responses that are not the result of prior Cisco ATA requests.



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.

Device Type Information

If you are running Cisco CallManager version 3.2 or later, make sure you do the following:

- Register the Cisco ATA as the **Cisco ATA 186** device type during Cisco CallManager configuration.
- Configure Bit 27 of the ConnectMode parameter with the value **0**, which is the default value. For more information about the ConnectMode parameter, see the “[ConnectMode](#)” section on page 5-21.

If you are running Cisco CallManager version 3.0 or 3.1, make sure you do the following:

- Register the Cisco ATA as the **Cisco 7960** device type during Cisco CallManager configuration.
- Configure Bit 27 of the ConnectMode parameter with the value **1**. For more information about the ConnectMode parameter, see the “[ConnectMode](#)” section on page 5-21

Adding Cisco ATAs Manually

Use the following procedure to add Cisco ATAs manually using the Cisco CallManager Administration application.



Tip

To get help using the Cisco CallManager application, access context-sensitive help by choosing **Help > For this page** from the main menu bar.

Procedure

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- Step 1** Log in to the Cisco CallManager Administration application.
From the menu bar, select **System > Cisco CallManager**. The Cisco CallManager Configuration screen appears.
- Step 2** In the Cisco CallManager Configuration screen, perform the following steps:
- From the list of Cisco CallManagers click the IP address or name of the Cisco CallManager to configure.
 - Enter identical Starting Directory Number and Ending Directory Number values in the fields provided.
 - Make sure that the setting called **Auto-registration Disabled on this Cisco CallManager** is checked.
 - Click the **Update** button.
- Step 3** From the Cisco CallManager Administration menu bar, select **Device > Phone** to display the Find and List Phones screen.
- Step 4** Click the **Add a New Phone** link to display the Add a New Phone screen.
- Step 5** From the Phone Type drop-down list, make your selection as follows:
- If you are using Cisco CallManager version 3.0 or 3.1, select **Cisco 7960**.
 - If you are using Cisco CallManager version 3.2, select **Cisco ATA 186**.
- Step 6** Click **Next**. The Phone Configuration screen appears.

- Step 7** In the Phone Configuration screen, you must enter information in the following fields:
- MAC Address —Enter the MAC address of the Cisco ATA.
 - Device Pool—Select either the **Default** value or a configured device pool from the drop-down list.
 - Phone Button Template—From the drop-down list, select **Standard 7960** if you are using Cisco CallManager version 3.0 or 3.1; select **Standard ATA 186** if you are using Cisco CallManager version 3.2
- Step 8** Click the **Insert** button (called the **Update** button in Cisco CallManager version 3.2).
The Cisco CallManager Administration application should inform you that the device has been added to the database. You are also asked if you want to assign a directory number for the **Phone 1** port at this time.
Click **OK**.
- Step 9** In the Directory Number field, assign a directory number to the Cisco ATA.
- Step 10** From the Partition drop-down list, you can select a partition for the Cisco ATA or you can keep the default value of **None**.
- Step 11** Click the **Insert** button (called the **Update** button in Cisco CallManager version 3.2).
A popup window asks you if you want to return to the current-device page. Click **OK**.
- Step 12** To add a second FXS port to Cisco CallManager, go back to Step 3 and proceed from there.
You need to fabricate a MAC address for the **Phone 2** port by dropping the two left-most digits from the Cisco ATA MAC address and add the digits **01** to the right-most portion of the MAC address.

Example

If the MAC address of the Cisco ATA is *00070EA26032*, then the fabricated MAC address for the **Phone 2** port would be *070EA2603201*.



Note By default, both Cisco ATA FXS ports are enabled for Cisco CallManager registration. If you do not want to add the **Phone 2** FXS port to Cisco CallManager, you must change the Cisco ATA *EPID1* or *SID1* parameter value to 0 to disable the **Phone 2** port. (To disable the **Phone 1** port, you must change the *EPID0* or *SID0* parameter value to 0.)

Using the Cisco Bulk Administration Tool (BAT)

The Cisco Bulk Administration Tool (BAT) is a plug-in application for Cisco CallManager that enables system administrators to perform batch operations, including registration, on large numbers of Cisco IP Phones and Cisco ATAs.

Refer to the *Bulk Administration Tool Guide for Cisco CallManager* for instructions on using BAT to add Cisco ATAs to the Cisco CallManager.

You will need to know the following information when you use the BAT tool:

- When you use the Phone Type drop-down list, make your device-type selections as follows:
 - If you are using Cisco CallManager version 3.0 or 3.1, select **Cisco 7960**.
 - If you are using Cisco CallManager version 3.2, select **Cisco ATA 186**.
- When you use the Phone Configuration screen, you must enter information in the following fields:
 - MAC Address—Enter the MAC address of the Cisco ATA. The MAC address is labeled at the bottom of the Cisco ATA. (You can also use the `atapname.exe` tool to determine the MAC address of the Cisco ATA. For information on how to use this tool, see the “[Using atapname.exe Tool to Obtain MAC Address](#)” section on page 3-13.)
 - Device Pool—Select either the **Default** value or a configured device pool from the drop-down list.
 - Phone Button Template—From the drop-down list, select **Standard 7960** if you are using Cisco CallManager version 3.0 or 3.1; select **Standard ATA 186** if you are using Cisco CallManager version 3.2
- If you want to add a second Cisco ATA FXS port to Cisco CallManager, you need to fabricate a MAC address for the **Phone 2** port by dropping the two left-most digits from the Cisco ATA MAC address and add the digits **01** to the right-most portion of the MAC address.

Example

If the MAC address of the Cisco ATA is `00070EA26032`, then the fabricated MAC address for the **Phone 2** port would be `070EA2603201`.



Note By default, both Cisco ATA FXS ports are enabled for Cisco CallManager registration. If you do not want to add the **Phone 2** FXS port to Cisco CallManager, you must change the Cisco ATA `EPID1orSID1` parameter value to 0 to disable the **Phone 2** port. (To disable the **Phone 1** port, you must change the `EPID0orSID0` parameter value to 0.)

Using Auto-Registration

Use auto-registration if you want Cisco CallManager to assign directory numbers automatically to new Cisco ATAs as they connect to the IP telephony network. Once a Cisco ATA has auto-registered, you can move the Cisco ATA to a new location and assign it to a different device pool without affecting its directory number.

To perform auto registration, see the applicable release version of the *Cisco CallManager Administration Guide* at the following location:

http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_administration_guide_books_list.html

Survivable Remote Site Telephony

During normal Cisco ATA operation, keepalive packets are exchanged between Cisco CallManagers and Cisco ATAs. When the WAN link fails, the Cisco ATA detects that it can no longer exchange keepalive packets with the Cisco CallManager, so the Cisco ATA registers with the Survivable Remote Site Telephony (SRST) router.

The Cisco ATA is configured to query the SRST router as a backup call-processing source when the central Cisco CallManager does not acknowledge keepalive packets. The SRST router performs call setup and processing.

When the WAN link is restored, the Cisco ATA switches back to the central Cisco CallManager, and the SRST router purges its call processing database and reverts to SRST-standby mode. Cisco ATAs that are in use are not interrupted by the WAN link recovery and switch back to the central Cisco CallManager after the call is terminated.

**Note**

SRST is configured on an SRST-enabled router and on the Cisco CallManager. The Cisco ATA does not need to be configured to utilize SRST.

Using the Cisco IP Telephony Network Locale Option

This release supports the Cisco IP Telephony Network Locale option for configuration of Cisco ATA call-progress tones. The Cisco ATA must be using Cisco CallManager 3.3(3) or later with the Cisco IP Telephony Locale Installer. The Cisco IP Telephony Locale Installer adds the Cisco ATA network locale option to the Cisco CallManager device configuration page.

This section contains the following topics about how to configure tone parameters for the Cisco ATA:

- [Cisco ATA Configuration Parameter, page 4-5](#)
- [Cisco IP Telephony Locale Installer Installation and Configuration, page 4-6](#)

Cisco ATA Configuration Parameter

The setting of configuration parameter ConnectMode (bit 0) determines whether the Cisco ATA uses tone parameters supplied by the Cisco CallManager or tone parameters supplied by Cisco ATA configuration. Configure ConnectMode, bit 0, as follows:

- The default setting of **0** for ConnectMode bit 0 indicates that the Cisco ATA will use the Cisco CallManager tones supplied by the network locale feature if Cisco CallManager 3.3(3) is running and contains the Cisco IP Telephony Locale Installer.
- Set ConnectMode bit 0 to **1** if you want the Cisco ATA-configured tone parameters to override the Cisco CallManager tone parameters. You would use this setting if the desired locale is not supported by the network locale feature.

For more information, see the “[ConnectMode](#)” section on page 5-21.

Cisco IP Telephony Locale Installer Installation and Configuration

For installation and configuration instructions, see the *Using the Cisco IP Telephony Locale Installer with Cisco CallManager 3.3(3)* manual.

The Cisco ATA supports the Cisco IP Telephony Locale Installer, available with Cisco CallManager release 3.3(3). Network locale files provide country-specific phone tones and gateway tones, if available. For installation and Cisco ATA configuration instructions, see the *Using the Cisco IP Telephony Locale Installer with Cisco CallManager 3.3(3)* manual.

Using the Gratuitous ARP Feature

The Cisco ATA updates an Ethernet-to-IP address mapping when it accepts an ARP response. By default, the Cisco ATA uses the Gratuitous ARP (GARP) feature, which means that the Cisco ATA accepts an ARP response only after it sends an ARP request. The Cisco ATA ignores ARP responses that are not the result of prior requests.

However, you can disable GARP, which would allow the Cisco ATA to accept all ARP responses.

To go to the GARP field, first bring up the Cisco CallManager Administration Web page. Select **Phone** from the Device menu to go to the Find and List Phones screen. Next, search for your Cisco ATA, then click on its name. You are now taken to the Phone Configuration screen, which contains the the Gratuitous ARP field in the **Product Specific Configuration** category.