



Deploying and Updating Cisco IP Communicator

This chapter includes the following topics to help you deploy and update Cisco IP Communicator software components:

- [Installing Headsets and Other Audio Devices, page 3-1](#)
- [Deploying the Application, page 3-2](#)
- [Updating the Application, page 3-7](#)



Note

Before completing tasks covered in this chapter, be sure to read [Chapter 2, “Preparing to Deploy Cisco IP Communicator.”](#) This chapter includes an overview of tasks that you might need to perform before deployment.

Installing Headsets and Other Audio Devices

Before the user installs Cisco IP Communicator on the client PC, you or the user should install and configure any audio devices that require drivers, such as sound cards, USB handsets, or USB headsets.

If users are installing audio devices and Cisco IP Communicator themselves, you should recommend that they complete any guided installations (such as the Found New Hardware Wizard or manufacturer instructions) after plugging in audio devices and before installing Cisco IP Communicator.

Users must *select* and *tune* audio devices before using those devices with Cisco IP Communicator. The ideal time to do this task is at first launch after installation. Cisco IP Communicator launches the Audio Tuning Wizard at initial startup; users must complete the wizard before Cisco IP Communicator will launch. If the user installs a new device after start up, Cisco IP Communicator will not recognize the device until the user relaunches the application.

Related Topics

- [Deploying the Application, page 3-2](#)
- [Updating the Application, page 3-7](#)
- [Selecting and Tuning Audio Devices, page 4-6](#)

Deploying the Application

You can deploy Cisco IP Communicator using either of the following installer packages:

- `CiscoIPCommunicatorSetup.exe`—This executable contains the required Windows Installer engines and default verbose logging for typical deployments.
- `CiscoIPCommunicatorSetup.msi`—This Microsoft Windows Installer package (MSI package) allows you to provide deployment customization using command line options. Logging is not automatically set when you use the MSI package.



Note

If users in your system have more than one network interface on their PCs or use laptops with docking stations, be sure to read the [“Selecting a Device Name” section on page 4-9](#).

See these sections for details:

- [Deployment Methods, page 3-3](#)
- [Customizing Deployment with Command Line Options, page 3-5](#)

Deployment Methods

Using either the executable or MSI package, you have three options for performing installation:

- You can place the installer on a shared location where you or a user can run it. (To use this method, users must have administrative privileges on their PCs.)
- You can perform installation for an entire enterprise by using a software distribution technology. (This method will temporarily elevate user privileges for installation purposes, if necessary.)
- You can perform installation operations directly on an individual's computer.



Note

If users in your company do *not* have administrator rights on their computers, Cisco recommends that you use a software deployment tool for initial deployment. Alternately, you (the administrator) can install Cisco IP Communicator manually on each client PC.

This sections contains these topics:

- [Deploying to a Shared Location, page 3-3](#)
- [Using a Software Deployment Tool, page 3-4](#)
- [Using the Installer on the Client PC, page 3-5](#)

Deploying to a Shared Location

You can deploy the executable or MSI package to a shared location, such as a web server, where users can access it to perform installation. Alternately, you can use the following command line option with the MSI package to create a server image of Cisco IP Communicator at a specified network location:

```
msiexec.exe /a CiscoIPCommunicatorSetup.msi
```

See the “[Customizing Deployment with Command Line Options](#)” section on [page 3-5](#) for more information about using command lines.

Related Topics

- [Using a Software Deployment Tool, page 3-4](#)
- [Using the Installer on the Client PC, page 3-5](#)
- [Updating the Application, page 3-7](#)

Using a Software Deployment Tool

You can use a software deployment tool to distribute Cisco IP Communicator to client PCs. In fact, you must use this deployment method if users do not have administrative privileges on their computers (and if you want to avoid installing the application manually on each client PC). A software deployment tool can temporarily elevate user privileges on the client PC for installation purposes.

Software deployment tools include group policy-based tools such as Active Directory, or more advanced tools, such as the System Management Server (SMS) software from Microsoft.

Using a software distribution tool that can pass a command line to a system allows you to take advantage of the Windows Installer package and customize values such as the device name and TFTP server address(es) at the time of deployment. Using command line options to specify these values at deployment means that users do not have to configure these settings after installation. This greatly simplifies the post-installation process for users. See the [“Customizing Deployment with Command Line Options”](#) section on page 3-5 for information about using command lines.



Note

Cisco IP Communicator does not support the “advertising” or “publishing” deployment whereby a user installs the application by opening an icon that the administrator has placed on the user’s desktop.

Related Topics

- [Deploying to a Shared Location, page 3-3](#)
- [Using the Installer on the Client PC, page 3-5](#)
- [Updating the Application, page 3-7](#)

Using the Installer on the Client PC

You can deploy either the executable or the MSI package directly to the client PC and perform installation by running the installer and following the installation wizard. If necessary, use an administrator account to do this task.

If you use the MSI package, you can use command line options on the client PC to customize the installation. See the [“Customizing Deployment with Command Line Options”](#) section on page 3-5 for information.

Related Topics

- [Using a Software Deployment Tool, page 3-4](#)
- [Using a Software Deployment Tool, page 3-4](#)
- [Updating the Application, page 3-7](#)

Customizing Deployment with Command Line Options

The Microsoft Windows Installer package (MSI package) provides numerous command line options and properties that allow you to customize the installation and management of an application.

For Cisco IP Communicator, you can use command line options to specify the device name of the appropriate network interface, the TFTP server address(es), and other variables. Doing so reduces the number of configuration tasks that users will otherwise need to perform during and after installation.

Specifying the network interface in particular is helpful if users have PCs with multiple network interfaces and/or a removable network interface (such as a laptop with a docking station). If users in your company use multiple computer models with a combination of network interfaces, you can configure a software distribution tool to detect the target computer model and then execute the corresponding command line option with the appropriate device name variable specified.

[Table 3-1](#) provides examples of command line options that you can use when deploying Cisco IP Communicator with the MSI package. (Values given for variables are examples only.)

Table 3-1 Using command line options with the MSI package

If you want to....	Use this command line
Prevent users from interacting with the installation process, but allow them to view its progress	<code>msiexec.exe /i C:\CiscoIPCommunicatorSetup.msi /qb</code>
Specify an installation directory location	<code>msiexec /i \\server\share\CiscoIPCommunicatorSetup.msi /qb INSTALLDIR="D:\Newlocation"</code>
Specify the network interface of the target PC's network interface	<code>msiexec /i CiscoIPCommunicatorSetup.msi /qb DEVICENAME="Network Adapter Device Name"</code>
Specify one TFTP server address	<code>msiexec /i CiscoIPCommunicatorSetup.msi /qb TFTP1="IP Address 1"</code>
Specify multiple TFTP server addresses	<code>msiexec /i CiscoIPCommunicatorSetup.msi /qb TFTP1="IP Address 1" TFTP2="IP Address 2"</code>
Combine the device name and TFTP server address(es) in one command line	<code>msiexec /i CiscoIPCommunicatorSetup.msi /qb DEVICENAME="Network Adapter Device Name" TFTP1="IP Address 1" TFTP2="IP Address 2"</code>

**Note**

- The device name string that you enter must be the exact device name that appears on Cisco IP Communicator (**right-click > Preferences > Network**).
- The option to specify device name and TFTP variables applies to new installations only, not upgrades.
- If you want Cisco IP Communicator to display a dialog box that users must manually dismiss before the installer reboots the machine, add a "+" character after "qb" in the command line options in [Table 3-1](#).

Related Topics

- [Deploying the Application, page 3-2](#)
- [Updating the Application, page 3-7](#)
- [Specifying a TFTP Server, page 4-8](#)
- [Selecting a Device Name, page 4-9](#)

Updating the Application

You can download the latest available software from the Cisco IP Communicator Software web site:

<http://www.cisco.com/cgi-bin/tablebuild.pl/ip-comm>

After you obtain updated software, you can update Cisco IP Communicator in one of the following ways, depending on whether or not users are granted administrator privileges on the client PCs:

- If users have administrative privileges on client PCs, you can use the AutoUpdate tool in conjunction with the Verify Software Versions feature to detect and obtain software updates. See the “Using AutoUpdate” section on page 3-8 for details.
- If users do *not* have administrative privileges on the client PCs, use a software deployment tool to handle updates. A software deployment tool can temporarily elevate privileges for installation purposes. (In this case, you probably used a software deployment tool to initially deploy the application, as well.) See the [Pushing Updates Using a Software Deployment Tool](#), page 3-10 for details.



Note

Cisco CallManager Administration refers to components of the Cisco IP Communicator application that can be updated as “firmware” instead of “software,” and uses the descriptor “phone load” instead of “software load.”

This section contains these topics:

- [Using AutoUpdate](#), page 3-8
- [Pushing Updates Using a Software Deployment Tool](#), page 3-10

Using AutoUpdate

AutoUpdate is part of the Cisco IP Communicator software that helps you automatically update Cisco IP Communicator. Every time Cisco IP Communicator registers with a Cisco CallManager, AutoUpdate compares Cisco IP Communicator's current software load with the version in the configuration file. AutoUpdate downloads and installs new software components from the TFTP server when it detects that they are available.

In addition, AutoUpdate can use HTTP to download from the server if you have enabled HTTP access to your TFTP server. To do this, run the Cisco IP Communicator Administration Tool and click the Enable HTTP check box. Enabling HTTP will improve the performance of AutoUpdate for remote users. (Downloading software updates over a dialup or broadband connection using TFTP can take more than 15 minutes). In order to enable HTTP access, run the Administration Tool. See the [“Running the Cisco IP Communicator Administration Tool” section on page 2-14](#).

Before using AutoUpdate, you should obtain an updated software load. Then run the phone load installer to install the updated software files on the TFTP server.

**Note**

Users must have administrative privileges on their PCs in order for AutoUpdate to work. If they do not have these privileges, use a software deployment tool instead. See the [“Pushing Updates Using a Software Deployment Tool” section on page 3-10](#).

See these topics for more information about configuring AutoUpdate and specifying software loads:

- [Configuring Software Version Verification, page 3-8](#)
- [Specifying a Default Software Load for All Cisco IP Communicator Devices, page 3-9](#)
- [Specifying a Non-Default Software Load for a Specific Device, page 3-10](#)

Configuring Software Version Verification

AutoUpdate can inspect all of the files necessary to run Cisco IP Communicator and verify that they are complete and unmodified since the Cisco IP Communicator application was installed or last updated.

To control how often AutoUpdate goes through this process, you can modify the Verify Software Versions setting in the Product Specific Configuration panel of the Phone Configuration page in Cisco CallManager Administration.

This setting can be configured to run AutoUpdate either:

- On Upgrade—AutoUpdate verifies existing software components only when the configuration file lists a new software version (default setting)
- At Startup—AutoUpdate verifies existing software components each time Cisco IP Communicator is started, whether or not the software version in the configuration file has changed.

If this option is set to On Upgrade (the default), Cisco IP Communicator will launch quickly but will not be able to automatically heal itself if any of its files are deleted or modified by the user. If this option is set to At Startup, Cisco IP Communicator will launch more slowly, but will detect and repair most such modifications or corruption.

Related Topics

- [Specifying a Default Software Load for All Cisco IP Communicator Devices, page 3-9](#)
- [Specifying a Non-Default Software Load for a Specific Device, page 3-10](#)

Specifying a Default Software Load for All Cisco IP Communicator Devices

You can apply a default load to all Cisco IP Communicator devices by specifying a software load in the Device Defaults Configuration page of Cisco CallManager Administration. This occurs automatically if you use the phone load package to put software files on the TFTP server. Therefore, if you want to specify a different load other than the one that the phone load package specified to serve as the default for all devices, you must enter this software load manually in the Device Defaults Configuration page in Cisco CallManager Administration.



Note

Cisco CallManager Administration refers to components of the Cisco IP Communicator application that can be updated as “firmware” instead of “software,” and uses the descriptor “phone load” instead of “software load.”

Related Topics

- [Configuring Software Version Verification, page 3-8](#)
- [Specifying a Non-Default Software Load for a Specific Device, page 3-10](#)

Specifying a Non-Default Software Load for a Specific Device

You can apply a non-default load to a specific Cisco IP Communicator device by specifying a software load in the Device Defaults Configuration page of Cisco CallManager Administration.

If you want AutoUpdate to apply a specific software load to a specific Cisco IP Communicator device, specify that load in the Phone Configuration page in Cisco CallManager Administration. It will override whatever value is in the Device Defaults Configuration page.

**Note**

Cisco CallManager Administration refers to components of the Cisco IP Communicator application that can be updated as “firmware” instead of “software,” and uses the descriptor “phone load” instead of “software load.”

Related Topics

- [Configuring Software Version Verification, page 3-8](#)
- [Specifying a Default Software Load for All Cisco IP Communicator Devices, page 3-9](#)

Pushing Updates Using a Software Deployment Tool

You can use a software deployment tool to push software updates. You must use this method if Cisco IP Communicator users do not have administrator privileges on their client PCs (and if you do not want to administer updates locally on each user’s machine).

To push updates using a software deployment tool, perform the following tasks in Cisco CallManager Administration:

- In the Phone Configuration page, verify that the Phone Load Name field is blank
- In the Device Defaults Configuration page, delete the value for Cisco IP Communicator

**Note**

You should not use the phone load package to download software files to the TFTP server. Using the software installer will automatically populate the software load field in the Device Defaults Configuration page.

Related Topics

- [Deployment Methods, page 3-3](#)
- [Customizing Deployment with Command Line Options, page 3-5](#)
- [Using AutoUpdate, page 3-8](#)

■ Updating the Application