



CHAPTER 3

Deploying and Updating Cisco IP Communicator

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

Some tasks in this chapter required configuration in Cisco Unified Communications Manager, formerly known as Cisco Unified CallManager.

- [Installation and Configuration of Headsets and Other Audio Devices, page 3-1](#)
- [Use of Third-Party Headsets and Handsets with Cisco IP Communicator, page 3-2](#)
- [How to Deploy the Application, page 3-2](#)
- [About Updating the Application, page 3-6](#)

Installation and Configuration of 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, universal serial bus (USB) handsets, or USB headsets. For details about supported audio devices, see the release notes at this URL:

http://www.cisco.com/en/US/products/sw/voicesw/ps5475/prod_release_notes_list.html

If users are installing audio devices and Cisco IP Communicator, 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.

At first launch after installation, users must *select* and *tune* audio devices before using those devices with Cisco IP Communicator. At initial start up, the Audio Tuning Wizard automatically launches, and users must complete the wizard before Cisco IP Communicator launches.

Related Topics

- [Use of Third-Party Headsets and Handsets with Cisco IP Communicator, page 3-2](#)
- [About Selecting and Tuning Audio Devices, page 4-5](#)

Use of Third-Party Headsets and Handsets with Cisco IP Communicator

While Cisco does perform basic testing of third-party headsets and handsets for use with Cisco IP Communicator, it is ultimately the customer's responsibility to test this equipment in their own environment to determine suitable performance. Due to the many inherent environmental and hardware inconsistencies in the locations where Cisco IP Communicator is deployed, there is not a single “best” solution that is optimal for all environments.

Before customers begin deploying any headsets or handsets (especially deployment in quantity) in their production network, Cisco recommends thorough testing at the customer site to check for voice quality issues, especially hum and echo.

The primary reason that support of a headset or handset would be inappropriate for an installation is the potential for an audible hum. This hum can either be heard by the remote party or by both the remote party and the Cisco IP Communicator user. Causes for this humming sound range from electrical lights near the PC to the PC power source itself. In some cases, a hum heard on a headset that is plugged directly into the PC USB port might be reduced or eliminated by using a powered USB hub.

In some instances, the mechanics or electronics of various headsets can cause remote parties to hear an echo of their own voice when they speak to Cisco IP Communicator users. The Cisco IP Communicator user are not aware of this echo.

Finally, some analog headsets do not match the electrical characteristics for which some sound cards are designed. The microphones on such headsets are frequently too sensitive, even when the input levels in Cisco IP Communicator are reduced to their lowest values; the users of such headsets sound distorted to remote parties.

It is important to ask Cisco IP Communicator users whether a particular headset sounds good to them. Remote parties should be queried as to the reception from Cisco IP Communicator when using a particular headset.

Related Topics

- [About Selecting and Tuning Audio Devices, page 4-5](#)

How to Deploy the Application

- [Installer Package Names, page 3-3](#)
- [Deployment Methods, page 3-3](#)
- [Command-Line Options for the MSI Package, page 3-4](#)

Installer Package Names

You can deploy Cisco IP Communicator by using either of the installer packages listed in [Table 3-1](#).

Table 3-1 *Installer Packages for Cisco IP Communicator*

Filename	Description
CiscoIPCommunicatorSetupK9.exe	This executable contains the required Windows Installer engines and default verbose logging for typical deployments.
CiscoIPCommunicatorSetupK9.msi	This Microsoft Windows Installer package (MSI package) provides deployment customization through 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, see the [“About Selecting a Device Name”](#) section on page 4-7.

Related Topics

- [Deployment Methods, page 3-3](#)
- [Command-Line Options for the MSI Package, page 3-4](#)

Deployment Methods

By using either the executable or MSI package, you have the options listed in [Table 3-2](#) for performing the installation.



Note

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

Table 3-2 *Deployment Methods*

Method	Description
Shared location	Place the installer (executable or MSI) on a shared location, such as a web server, where you or a user can run it. To use this method, users must have administrative privileges on their PCs. Alternately, you can use a command line with the MSI package to create a server image of Cisco IP Communicator at a specified network location.

Table 3-2 Deployment Methods (continued)

Method	Description
Software deployment tool	<p>Perform the installation for an entire enterprise by using a software distribution technology. This method can temporarily elevate user privileges on the client PC for installation purposes.</p> <p>You can use a software deployment tool to distribute Cisco IP Communicator to client PCs. You must use this deployment method if users do not have administrative privileges on their computers (and if you want to avoid manually installing the application on each client PC).</p> <p>Software deployment tools include group policy-based tools such as Active Directory, or more advanced tools, such as the SMS¹ software.</p> <p>By using a software deployment tool that can pass a command line to a system, you can take advantage of the Windows Installer package and customize values, such as the device name and TFTP server addresses, during deployment. Specifying these values at deployment means that users do not have to configure these settings after installation and greatly simplifies the post-installation process for users.</p> <p>Note Cisco IP Communicator does not support the “advertising” or “publishing” deployment in which users install the application by opening an icon that the administrator places on the their desktop.</p>
Installer on the client PC	<p>You can deploy either the executable or the MSI package directly to the client PC and perform the installation by running the installer and following the installation wizard. If necessary, use an administrator account to do this task.</p> <p>If you use the MSI package, you can use a command line on the client PC to customize the installation.</p>
Languages other than English (when localized versions are available)	<p>If you are using the .exe file, the installation prompts you to choose the language (if a language other than English is available) for which you want to install Cisco IP Communicator.</p> <p>Alternatively, you can customize the deployment to specify a language locale by using a command line.</p>

1. SMS = Microsoft System Management Server

Related Topics

- [Command-Line Options for the MSI Package, page 3-4](#)
- [About Updating the Application, page 3-6](#)

Command-Line Options for the MSI Package

Table 3-3 provides examples of command-line options that are specific to the deployment of Cisco IP Communicator with the MSI package. (Values given for variables are examples only.)

For a complete list of command-line options that can be used and examples of their usage, see this URL:

<http://msdn2.microsoft.com/en-us/library/aa367988.aspx>

These command-line options customize the installation and management of the application. For example, by using command-line options to specify the device name, the TFTP server addresses, and other variables, you reduce the number of configuration tasks that users will otherwise need to perform during and after installation.

Table 3-3 Using Command-Line Options with the MSI Package

If you want to....	Use this command line
For SIP-only deployments, allow devices to auto-register.	<pre>msiexec /i CiscoIPCommunicatorSetupK9.msi /qb SIP=1</pre>
Install a language locale by associating the locale .mst file to the TRANSFORMS parameter.	For example, to install the French locale: <pre>msiexec /i CiscoIPCommunicatorSetupK9.msi /qb+ TRANSFORMS="French.mst"</pre>
Specify the device name by using the network interface of the target PC.	<pre>msiexec /i CiscoIPCommunicatorSetupK9.msi /qb DEVICENAME="Network Adapter Device Name"</pre> <p>If users have PCs with multiple network interfaces and/or a removable network interface (such as a laptop with a docking station), it is helpful if you specify the network interface.</p> <p>If users in your company use multiple computer models with a combination of network interfaces, 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.</p>
Specify the device name by using a free-form device name. Note For use only with Cisco Unified Communications Manager Release 5.0(1) and later	<pre>msiexec /i CiscoIPCommunicatorSetupK9.msi /qb FREEFORMDEVICENAME="freeformdevice"</pre> <p>This option allows you to specify a unique device name that is not based on MAC addresses. This option is helpful in companies where PCs are refreshed often. When a PC is refreshed, you can install Cisco IP Communicator on the new PC by using the same device name that was used on the old PC, eliminating further administration. The free-form device name must be less than 15 characters, including alphanumeric characters, dot, dash, and underscores (but no spaces).</p>
Specify one TFTP server address.	<pre>msiexec /i CiscoIPCommunicatorSetupK9.msi /qb TFTP1="IP Address 1"</pre>
Specify multiple TFTP server addresses.	<pre>msiexec /i CiscoIPCommunicatorSetupK9.msi /qb TFTP1="IP Address 1" TFTP2="IP Address 2"</pre>
Combine the device name by using a network interface and TFTP server addresses in one command.	<pre>msiexec /i CiscoIPCommunicatorSetupK9.msi /qb DEVICENAME="Network Adapter Device Name" TFTP1="IP Address 1" TFTP2="IP Address 2"</pre>
Combine the device name by using a free-form device name and TFTP server addresses in one command. Note A free-form device name can be used only with Cisco Unified Communications Manager Release 5.0(1) and later.	<pre>msiexec /i CiscoIPCommunicatorSetupK9.msi /qb FREEFORMDEVICENAME="freeformdevice" TFTP1="IP Address 1" TFTP2="IP Address 2"</pre>

**Note**

- If you want Cisco IP Communicator to display a dialog box that users must manually dismiss before the installer reboots the PC, add a “+” character after “qb” to the commands in [Table 3-3](#).
- The options to specify the device name and TFTP addresses apply to new installations only, not upgrades.
- For the DEVICENAME option, the device name string that you enter must be the exact device name of one of the network adapters that appears in the Network Adapter drop-down list in Cisco IP Communicator (**right-click** > **Preferences** > **Network** tab).
- If you use the DEVICENAME option, it hides the free-form device name option from the user in Cisco IP Communicator (**right-click** > **Preferences** > **Network** tab).
- If you use the FREEFORMDEVICENAME option, it hides the network adapter selection in Cisco IP Communicator (**right-click** > **Preferences** > **Network** tab).
- If you do not use either the DEVICENAME option or the FREEFORMDEVICENAME option, the user can use either the network interface card or a free-form string to generate the device name in Cisco IP Communicator (**right-click** > **Preferences** > **Network** tab).

Related Topics

- [About Updating the Application, page 3-6](#)
- [About Specifying a TFTP Server, page 4-6](#)
- [About Selecting a Device Name, page 4-7](#)

About Updating the Application

- [Software Download Site, page 3-6](#)
- [Pushing Updates by Using a Software Deployment Tool, page 3-6](#)

Software Download Site

You can download the latest available software from this URL:

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

Pushing Updates by Using a Software Deployment Tool

If users do *not* have administrative privileges on the client PCs or if you do not want to administer updates locally on each client PC, 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.)

**Note**

Cisco Unified Communications Manager 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*.

Procedure

- Step 1** In Phone Configuration window, verify that the Phone Load Name field is blank.
- Step 2** In the Device Defaults Configuration window, delete the load information value for Cisco IP Communicator.

**Tip**

Do not use the phone load package to download software files to the TFTP server. The software installer automatically populates the software load field in the Device Defaults Configuration window.

Related Topics

- [Deployment Methods, page 3-3](#)
- [Command-Line Options for the MSI Package, page 3-4](#)

