Cisco IP SoftPhone User Guide

Version 1.3

CONTENTS

Preface

This preface describes the purpose, audience, organization, and conventions of this guide, and provides information on how to obtain related documentation.

The preface covers these topics:

Purpose

The *Cisco IP SoftPhone User Guide* provides instructions for installing, configuring, and using the Cisco IP SoftPhone. It will help you to:

- Understand the Cisco IP SoftPhone components and features
- Install and configure the Cisco IP SoftPhone on your Windows PC
- Use the Cisco IP SoftPhone to place, receive and control calls over an IP network

Audience

The *Cisco IP SoftPhone User Guide* is written for computer users who will use their desktop PC to make and receive phone calls, use desktop collaboration, and/or control a Cisco IP Phone.

Organization

This guide is organized as follows:

Chapter	Description
Chapter 1	"Cisco IP SoftPhone Overview"
	Describes the features, components, and system requirements for Cisco IP SoftPhone
Chapter 2	"How to Install and Start Cisco IP SoftPhone"
	Describes how to install and start Cisco IP SoftPhone
Chapter 3	"How to Use Cisco IP SoftPhone"
	Describes how to use Cisco IP SoftPhone to place, receive, and control calls from your desktop PC
Chapter 4	"How to Use Virtual Conference Room"
	Describes how to use the desktop collaboration features of Cisco IP SoftPhone
Appendix A	"How to Troubleshoot"
	Describes troubleshooting procedures for common problems you may encounter when you use Cisco IP SoftPhone.

Related Documentation

Refer to the following documents for further information about
Cisco IP SoftPhone and the Cisco CallManager. These documents can also be
found online at www.cisco.com/univercd/cc/td/doc/product/voice/.

- *Cisco IP SoftPhone Administration Guide*
- *Cisco IP SoftPhone Quick Start Guide*
- *Cisco IP SoftPhone Release Notes*
- *Cisco CallManager System Guide*

System Requirements

You can install Cisco IP SoftPhone on the following English, French, German
and Japanese versions of Microsoft Windows:

- Windows 95
- Windows 98 SE
- Windows ME
- Windows NT 4.0 with Service Pack 4 or later
- Windows 2000
- Windows XP

Conventions

This document uses the following conventions:

Convention	Description
boldface font	Commands and keywords are in **boldface**.
italic font	Arguments for which you supply values are in *italics*.
[ ]	Elements in square brackets are optional.
{ x | y | z }	Alternative keywords are grouped in braces and separated by vertical bars.
[x | y | z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
screen font	Terminal sessions and information the system displays are in screen font.
boldface screen font	Information you must enter is in **boldface screen** font.
italic screen font	Arguments for which you supply values are in *italic screen* font.
⟶	This pointer highlights an important line of text in an example.
^	The symbol ^ represents the key labeled Control—for example, the key combination ^D in a screen display means hold down the Control key while you press the D key.
< >	Nonprinting characters, such as passwords are in angle brackets.

Notes use the following conventions:

Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.

Timesavers use the following conventions:

Timesaver Means *the described action saves time*. You can save time by performing the action described in the paragraph.

Tips use the following conventions:

Tip Means *the following are useful tips.*

Cautions use the following conventions:

Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Warnings use the following conventions:

Warning **This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, you must be aware of the hazards involved with electrical circuitry and familiar with standard practices for preventing accidents. To see translated versions of the warning, refer to Appendix n, "Translated Safety Warnings."**

Cisco Connection Online

Cisco Connection Online (CCO) is Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional information and services.

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco's customers and business partners. CCO services include product information, product documentation, software updates, release notes, technical tips, the Bug Navigator, configuration notes, brochures, descriptions of service offerings, and download access to public and authorized files.

CCO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously: a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CCO supports Zmodem, Kermit, Xmodem, FTP, and Internet e-mail, and it is excellent for quick access to information over lower bandwidths. The WWW version of CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- WWW: http://www.cisco.com
- WWW: http://www-europe.cisco.com
- WWW: http://www-china.cisco.com
- Telnet: cco.cisco.com
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and connection rates up to 28.8 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

Note If you are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or tac@cisco.com. To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more current than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or as an annual subscription. You can also access Cisco documentation on the World Wide Web at http://www.cisco.com, http://www-china.cisco.com, or http://www-europe.cisco.com.

If you are reading Cisco product documentation on the World Wide Web, you can submit comments electronically. Click **Feedback** in the toolbar and select **Documentation**. After you complete the form, click **Submit** to send it to Cisco. We appreciate your comments.

Cisco IP SoftPhone Overview

Cisco IP SoftPhone is a desktop application that turns your computer into a full-feature telephone with the added advantages of call tracking, desktop collaboration, and one-click dialing from online directories. You can also use Cisco IP SoftPhone in tandem with a Cisco IP Phone to place, receive and control calls from your desktop PC. All features are functional in both modes of operation. Cisco IP SoftPhone can also be used to control phones on supported analog lines.

These sections introduce you to the features, components, and system requirements for Cisco IP SoftPhone:

Figure 1-1 shows the main components of the Cisco IP SoftPhone.

Figure 1-1   Cisco IP SoftPhone
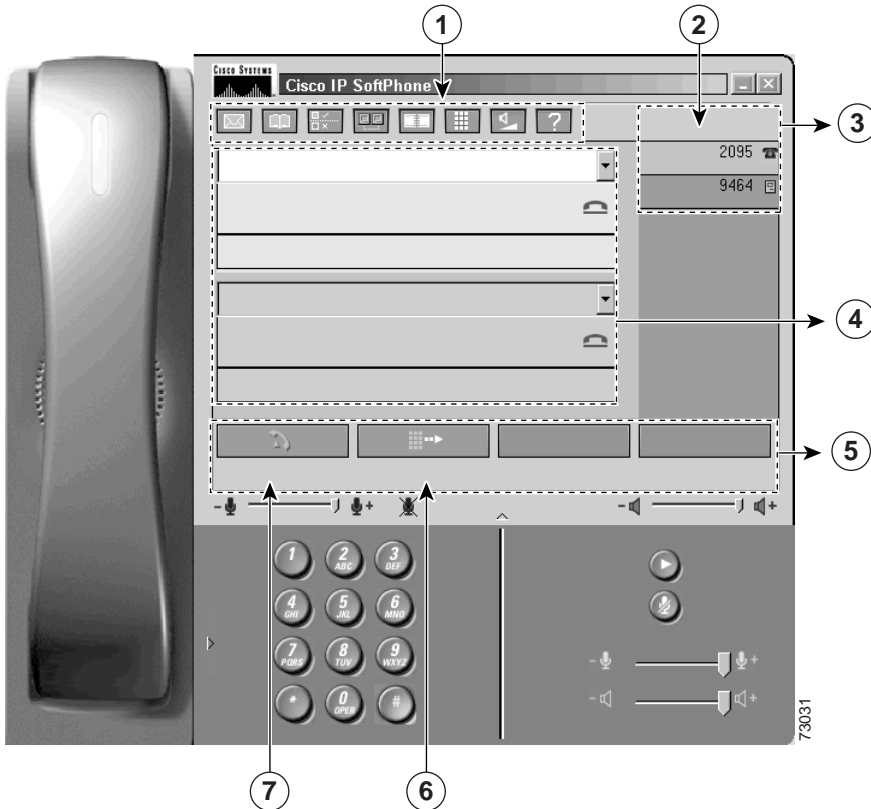
1	Icon bar	2	Line(s) display	3	Line buttons	4	Call blocks
5	Context-sensitive button bar	6	OffHook soft key	7	Redial soft key		

Cisco IP SoftPhone as a Stand-alone Phone

You can use Cisco IP SoftPhone as a stand-alone phone to place and receive all calls through your computer rather than your Cisco IP Phone. In this mode, the media stream is terminated by your computer. This means that your computer "rings" when you have an incoming call and you must use a computer headset or computer handset to speak and listen during a call. The volume controls on the Cisco IP SoftPhone user interface control the microphone and speaker volume.

When you use Cisco IP SoftPhone as a stand-alone phone, you can take your phone extension with you and receive calls wherever you are connected to the corporate network. For example, when you are on a business trip, you can use Cisco IP SoftPhone to place and receive calls and check voice mail while online.

To use Cisco IP SoftPhone as a stand-alone phone, your PC must have a full-duplex sound card or device with the proper drivers installed, and a computer headset or computer handset. Use of the PC's speakers is not recommended as it may introduce echo.

Related Topics

- Cisco IP SoftPhone to Control a Cisco IP Phone, page 1-4
- Select Your Cisco IP SoftPhone Line, page 3-3

Cisco IP SoftPhone to Control a Cisco IP Phone

You can use Cisco IP SoftPhone in tandem with a Cisco IP Phone to give you the flexibility to control calls from your computer or from your Cisco IP Phone. Both devices reflect the same current call state.

For example, you can pick up the Cisco IP Phone handset to accept an incoming call and use the Cisco IP SoftPhone application to place the call on hold. Both the Cisco IP Phone and the Cisco IP SoftPhone reflect the fact that the call is on hold.

In this mode, the Cisco IP Phone terminates the media stream. This means that the Cisco IP Phone rings when you have an incoming call and you need to use the telephone handset to speak and listen during a call. The volume controls on the Cisco IP Phone control the microphone and speaker volume, rather than the volume controls provided with Cisco IP SoftPhone.

Related Topics

- Cisco IP SoftPhone as a Stand-alone Phone, page 1-3
- Select Your Cisco IP SoftPhone Line, page 3-3

Cisco IP SoftPhone in Languages Other Than English

You have the flexibility to use Cisco IP SoftPhone in various languages, such as English, French, German, Japanese, Chinese, and Korean.

During installation, you can select the language in which you would like to run Cisco IP SoftPhone. As a result, text in the Cisco IP SoftPhone graphical user interface and dialog boxes appears in the language of your choice. When you run Cisco IP SoftPhone, you can switch to another language at any time.

Related Topic

- How to Configure Advanced Settings, page 3-54

Online Dialing and Directories

Cisco IP SoftPhone enables you to place phone calls using directory servers, web pages, and your computer keyboard. It integrates with the directory service used by the Cisco CallManager, allowing you to place calls by dragging a name from the corporate directory to the dialing window. To setup a conference call, simply drag names from the directory into the dialing window.

To add names to your personal directory, drag an active call into the directory. Cisco IP SoftPhone automatically adds the caller ID to your directory.

Related Topics

- Alphanumeric Translation, page 1-5
- How to Use the Dialing Directories, page 3-31
- Dial from the Online Directories, page 3-17

Alphanumeric Translation

Cisco IP SoftPhone translates alphanumeric dialing strings into keypad digits. For example, if you enter 1-800-GOCISCO, Cisco IP SoftPhone correctly translates the dial string to 1-800-462-4726. The values for 'Q' and 'Z' are translated to '7' and '9' respectively.

Tracking Calls

Whenever you place or receive a call, Cisco IP SoftPhone displays the caller address, caller name, and phone number for the duration of the call. Cisco IP SoftPhone also logs this information to a call log. The call log keeps track of which line placed or received the call, the duration of the call, the type of call and how the call ended.

You can view the call log at any time to see an up-to-date history of your calls. You can place a call to any call log entry (with a phone number) or clear all entries in the call log.

Related Topic

Audio Conference

To initiate a conference call with Cisco IP SoftPhone, you simply click the conference button and drag a directory entry onto the active call block. Cisco IP SoftPhone provides full audio conferencing capabilities, with up to six participants in a conference call. It supports full-duplex audio so people can speak simultaneously.

Once you establish a conference call, you may add participants at any time. As participants are invited to join the conference, the Roster updates to show the current list of participants.

Related Topics

Desktop Collaboration with Virtual Conference Room

Cisco IP SoftPhone includes a desktop collaboration utility called Virtual Conference Room. You can use Virtual Conference Room to create online meetings where all parties can be heard and any party can share a document, application, or whiteboard, with other participants. Only one computer must have the program, and any participant can be given control of the document. Additionally, you can integrate with Microsoft NetMeeting for video and other modes of collaboration.

These sections describe the Virtual Conference Room desktop collaboration features of Cisco IP SoftPhone:

Related Topics

Whiteboarding

The Virtual Conference Room whiteboard application allows everyone in a call or audio conference to draw and type simultaneously on a shared screen. When you press the whiteboard button, a whiteboard appears on the PC screen for each conference call participant. The whiteboard application includes tools you can use to add and delete whiteboard pages, draw shapes, type text, and emphasize an item with a highlighter or remote pointer.

You can also use the whiteboard application to copy and paste items between the whiteboard and other programs. Then, you can use the whiteboard's tools to further illustrate the objects. Other meeting participants can see your work without having access to your desktop.

Related Topics

Application and Document Sharing

The Virtual Conference Room application and document sharing feature allows meeting participants to view and work on files simultaneously. For example, you may want several people to work on the same Microsoft Word document. You can open the document on your computer, share it, and then everyone can provide their comments directly in the document. Only the person who opened the file must have the program, in this case, Microsoft Word, on their computer. Other participants do not need to have access to the program; they can work on the document without it. All meeting participants can share programs during a meeting. The shared programs of each participant appear in separate shared program windows on the other participants' desktops.

Related Topics

Chat

Cisco IP SoftPhone integrates with the Microsoft NetMeeting chat application. This allows you to send a text message to all or selected participants in an audio or video call. Chat is useful in a group meeting because everyone can "talk" to each other simultaneously. In an audio or video connection, only two people can talk at a time.

Related Topic

- How to Send a Chat Message, page 4-11

Video Collaboration

Cisco IP SoftPhone integrates with Microsoft NetMeeting so you can conduct video meetings. Even if you are unable to transmit video, you can still receive video calls in the NetMeeting video window.

If you choose to use video or prefer the NetMeeting interface, you must disable Virtual Conference Room. See "How to Prepare for a Video Collaboration Session" section on page 4-12 for instructions on how to disable Virtual Conference Room. After you disable Virtual Conference Room, Cisco IP SoftPhone uses the NetMeeting user interface to place calls.

See the Microsoft NetMeeting online help and documentation for details on how to use the video collaboration features of NetMeeting.

Related Topic

- How to Prepare for a Video Collaboration Session, page 4-12

Voice Mail Integration

Cisco IP SoftPhone integrates with your voice mail system. It can transfer calls or place calls directly into a voice mailbox. When you have a voice mail message, the messages icon in the Cisco IP SoftPhone icon bar turns red until you check your messages. To dial your voice mailbox, simply click on the voice mail message icon.

Related Topics

- How to Use Voice Mail, page 3-23
- Send an Incoming Call to Voice Mail, page 3-20

Support for Cisco Emergency Responder

Cisco IP SoftPhone 1.2 includes support for the Cisco Emergency Responder service. Cisco Emergency Responder (CER) provides 911 dispatchers with your caller information such as phone number and location. You can operate Cisco IP SoftPhone with CER if you have Cisco CallManager 3.2 or Cisco CallManager 3.1 and your system administrator has configured Cisco CallManager for CER. To find out whether you have the CER service, contact your system administrator.

Network Components

Cisco IP SoftPhone uses the services of the Cisco CallManager to route calls through an IP telephony network. The Cisco CallManager is an open and industry-standard call processing system which integrates traditional PBX functionality with a corporate IP network. Cisco CallManager manages the components of the IP telephony system, the phones, access gateways, and the resources necessary for such features as call conferencing and route planning.

Your system administrator must configure a line for you and assign user permissions on the Cisco CallManager system before you can send and receive calls with the Cisco IP SoftPhone.

Figure 1-2 shows a diagram of the network components required for
Cisco IP SoftPhone.

Figure 1-2   Cisco IP SoftPhone and the Cisco IP Telephony Network
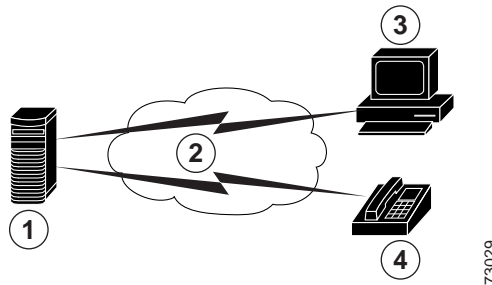
1	Cisco CallManager server	2	IP network
3	PC running Cisco IP SoftPhone	4	Cisco IP Phone

System Requirements

Table 1-1 lists the system and network requirements necessary to install and use
Cisco IP SoftPhone on your PC.

Table 1-1   Hardware and Software Requirements for Cisco IP SoftPhone

Item	Requirement	Notes
Operating system	Microsoft Windows 95, Windows 98 SE (Second Edition), Windows NT 4.0 with Service Pack 4 or later, Windows 2000 or Windows XP.	Cisco IP SoftPhone supports multiple languages.
Free disk space	40 MB	
Temporary disk space	60 MB	20 MB is used only for installation (TEMP directory).

Table 1-1   *Hardware and Software Requirements for Cisco IP SoftPhone (continued)*

Item	Requirement	Notes
Processor	Pentium II 266 MHZ	A Pentium 166 MHZ MMX is sufficient if you use Cisco IP SoftPhone only in phone control mode.
Memory	64 to 128 MB RAM	Depends on which features are active.
Internet browser	Microsoft Internet Explorer 4.01 or later, or Netscape Navigator 4.06 or later with Internet Explorer 4.01 or later also installed.	You do not need an internet browser to use Cisco IP SoftPhone; however, Cisco IP SoftPhone requires the Java Virtual Machine (JVM). Microsoft Internet Explorer includes JVM. You must have an internet browser to install Cisco IP SoftPhone from the web.
Sound card	Microsoft Windows-compatible full-duplex sound card	If you have a Universal Serial Bus (USB) microphone/headset, you do not need an additional sound card.
Computer headset or handset	Any PC-compatible headset or handset (microphone and headphone)	Required if you plan to use Cisco IP SoftPhone as a stand-alone application. A headset or handset is not required if you use Cisco IP SoftPhone to control a Cisco IP Phone. Cisco IP SoftPhone is compatible with Plantronics headsets. See the following URL for details on how to obtain a Plantronics headset: http://cisco.getheadsets.com
Microsoft NetMeeting client application	Version 3.01	Required if you plan to use desktop collaboration. The Cisco IP SoftPhone installation includes NetMeeting 3.01.

Standards Support

Cisco IP SoftPhone supports the following networking and telephony standards:

- Telephony Application Programming Interface (TAPI) compliant
- T.120 via networking integration
- H.323
- G.711, G.723.1 and G.729A coder/decoder (codec) support

Standards Support

How to Install and Start Cisco IP SoftPhone

You can install the Cisco IP SoftPhone from a web page within your company's intranet. If you do not have Internet access or are otherwise unable to install from the web page, you can download a self-extracting executable and run the installation locally. Alternatively, you can install Cisco IP SoftPhone from a CD-ROM.

The installation is quick and easy and requires little configuration. Your system administrator can pre-set the configuration information in administrator customization files so you can install and use Cisco IP SoftPhone right away.

The following sections help you to prepare for, install, start and exit Cisco IP SoftPhone:

How to Install Cisco IP SoftPhone

Use one of the following procedures to install the Cisco IP SoftPhone. Choose the procedure based on how your system administrator has set up Cisco IP SoftPhone on your network.

Install from a Web Page

Use this procedure to install Cisco IP SoftPhone from an intranet web page.

Note   You can only use this procedure if you Cisco IP SoftPhone administrator has created a "one-click install" option on your web server.

Before You Begin

- Install Microsoft Internet Explorer 4.01 or later.
- You can download this browser from the Microsoft web site at http://www.microsoft.com/windows/ie/
- Obtain the following information from your network or system administrator:
    - The URL for the Cisco IP SoftPhone installation files
    - The username and password configured for you on the Cisco CallManager

Procedure

Step 1   Open a web browser and go to the URL where the Cisco IP SoftPhone installation files reside.

Step 2   For use with Netscape Communicator, click **Grant** in the Java Security window.

Step 3   Choose the language in which you want to view Cisco IP SoftPhone.

Step 4   Click the **Install Now** button.

Step 5   Read the software authenticity verification and click **Next** to begin the installation.

Step 6   If this is your first installation of Cisco IP SoftPhone:

    a.   Click **Next** in the Welcome screen to begin the installation.

    b.   Read the software license agreement and then click **Yes** to accept the terms of the agreement.

    c.   Choose a destination to install Cisco IP SoftPhone and then click **Next**.

    If are upgrading to a newer version of Cisco IP SoftPhone, choose **Upgrade to a Newer Version** and click **Next** in the Welcome screen.

Step 7   In the Local TSP Configuration screen, enter your username and password and then click **Next**.

> **Note**   The username and password you configure for Cisco IP SoftPhone must exactly match your Cisco CallManager username and password.

Step 8   If this is your first installation of Cisco IP SoftPhone, select a Program Folder for the icons.

By default, the Installer adds icons to a folder called Cisco IP SoftPhone.

Step 9   Click **Next** and follow the instructions on the screen.

Step 10   In the Install Wizard Complete dialog window, choose whether you want to restart your computer now or later, and click **Finish** to complete the installation.

You must restart your computer before you can use Cisco IP SoftPhone.

Install from a Self-extracting Executable

Use this procedure to install Cisco IP SoftPhone from a self-extracting executable. This installation procedure allows you to download Cisco IP SoftPhone to your local drive and install the program at a later time.

Before You Begin

- Install Microsoft Internet Explorer 4.01 or later.

- You can download this browser from the Microsoft web site at http://www.microsoft.com/windows/ie/

- Obtain the following information from your network or system administrator:

  - The URL for the Cisco IP SoftPhone installation files

  - The username and password configured for you on the Cisco CallManager

Procedure

Step 1 Open a web browser and go to the URL where the Cisco IP SoftPhone installation files reside.

Step 2 For use with Netscape Communicator, click **Grant** in the Java Security window.

Step 3 Click the language in which you wish to install Cisco IP SoftPhone.

Step 4 Click **download the Cisco IP SoftPhone installation**.

The Cisco IP SoftPhone download instructions window appears with the URL where the Cisco IP SoftPhone customization files reside.

Step 5 Make a note of the URL which you must provide in Step 13.

Step 6 Click **Cisco IP SoftPhone** to download the self-extracting executable.

Step 7 In the File download window, choose either to **Run this program from its current location** or **Save this program to disk** and then click **OK**.

If you select **Run this program from its current location**, skip to Step 10.

Step 8 Choose a destination to which you want to download the installation files and click **Save**.

Step 9 In the Download complete window, choose one of the following procedures:

- Click **Open** to launch **CiscoIPSoftPhoneSetup.exe** and begin the installation.
- Click **Open Folder** and launch **CiscoIPSoftPhoneSetup.exe** from the folder.
- Click **Close** to launch **CiscoIPSoftPhoneSetup.exe** at a later time.

Step 10 The Setup Language dialog box appears.

Choose the language in which you would like the installation screens to appear and click **OK**.

Step 11 Choose the destination to which you want to download the installation files and click **Save**.

Step 12 If this is your first installation of Cisco IP SoftPhone:

   a. Click **Next** in the Welcome screen to begin the installation.

   b. Read the software license agreement and then click **Yes** to accept the terms of the agreement.

   c. Choose a destination to which you want to install Cisco IP SoftPhone and then click **Next**.

If this is an upgrade to a new version of Cisco IP SoftPhone, choose **Upgrade to a Newer Version** and click **Next** in the Welcome screen.

Step 13 In the Setup window, specify the URL where the customization files reside.

⚠

Caution If you do not specify the correct URL, you will not receive customization files such as Microsoft NetMeeting 3.01, Cisco TSP and Cisco IP SoftPhone settings. You need these files to run Cisco IP SoftPhone.

Step 14 In the Local TSP Configuration screen, enter your username and password.

✎

Note The username and password you configure for Cisco IP SoftPhone must exactly match your Cisco CallManager username and password.

Step 15 Click **Next.**

Step 16   If this is your first installation of Cisco IP SoftPhone, select a Program Folder to which you want the Installer to add icons.

By default, the Installer adds icons to a folder called Cisco IP SoftPhone.

Step 17   Follow the instructions on the screen.

Step 18   In the Install Wizard Complete dialog window, choose whether you want to restart your computer now or later, and click **Finish** to complete the installation.

You must restart your computer before you can use Cisco IP SoftPhone.

Install From a CD-ROM

Use this procedure to install Cisco IP SoftPhone from a CD-ROM.

Before You Begin

- Install Microsoft Internet Explorer 4.01 or later.

   You can download this browser from the Microsoft web site at
   http://www.microsoft.com/windows/ie/

- Obtain the following information from your network or system administrator:

   - The username and password configured for you on the Cisco CallManager

   - The location of the customization files (if any) for the Cisco IP SoftPhone installation

   - Which version of Cisco CallManager your Cisco IP SoftPhone is configured with, for example, Cisco CallManager 3.2.

For Cisco CallManager 3.1 and later, also obtain the following information from your network or system administrator:

- The primary and backup CTI Manager IP addresses of the Cisco CallManager server you use

- Whether the Cisco Emergency Responder service is configured on the Cisco CallManager

- If Cisco Emergency Responder is configured, the primary and backup server URLs for Cisco IP SoftPhone

Note   For more information about the Cisco Emergency Responder service, refer to the "Support for Cisco Emergency Responder" section on page 1-10.

For Cisco CallManager 3.0, also obtain the following information from your network or system administrator:

- The IP address of the Cisco CallManager server you use.

Procedure

Step 1   Insert the installation CD-ROM and run **Launch.exe** to start the Cisco IP SoftPhone installation.

Step 2   In the Demonstration Language window, select the language in which you want to view the installation windows and click **OK**.

Step 3   Click **Install Products.**

Step 4   Click the **Cisco IP SoftPhone** button.

The Setup Language dialog box appears.

Step 5   Choose the language in which you want to install Cisco IP SoftPhone from the drop-down menu and click **OK**.

The InstallShield wizard launches and prepares for the installation.

Step 6   Click **Next** in the welcome screen to begin the installation.

Step 7   Read the software license agreement and then click **Yes** to accept the terms of the agreement.

Step 8   Choose a destination to which you want to install Cisco IP SoftPhone and then click **Next**.

By default, the installation program installs Cisco IP SoftPhone in the following directory:

C:\...\Cisco Systems\Cisco IP SoftPhone

Step 9   To use customization files:

- Enter the URL where the customization files reside and click **Next**.

If you do not plan to use customization files:

- Leave the URL field blank and click **Back**.

    A question box asks whether you want to download and import the customization files.

- Click **No**.

Step 10   If Cisco Emergency Responder is configured on the Cisco CallManager:

- Click **Yes** in the question box:

    ```
    Do you wish to configure the SoftPhone for Emergency Responder
    Support?
    ```

- Enter the URLs for the primary and backup Cisco Emergency Responder servers and click **Next**.

If Cisco Emergency Responder is not configured on the Cisco CallManager:

- Click **No**.

Step 11   In the Cisco IP SoftPhone Setup screen, choose your Cisco CallManager version and click **Next**.

Step 12 Use one of the following procedures to configure the Local TSP:

For Cisco CallManager 3.1 and later:

a. Enter your username and password in the Local TSP Configuration screen.

> **Note** The username and password you configure for Cisco IP SoftPhone must exactly match your Cisco CallManager username and password.

b. If you do not plan to use customization files, enter the primary and backup CTI Manager IP addresses for the Cisco CallManager.

For Cisco CallManager 3.0:

a. Enter your username and password in the Local TSP Configuration screen.

> **Note** The username and password you configure for Cisco IP SoftPhone must exactly match your Cisco CallManager username and password.

b. If you are do not plan to use customization files, enter the IP address for the Cisco CallManager.

Step 13 Click **Next**.

Step 14 Select a Program folder to which you want the Installer to add icons.

By default, the Installer adds icons to a folder called Cisco IP SoftPhone.

Step 15 Follow the instructions on the screen.

Step 16 In the Install Wizard Complete dialog window, choose whether you want to restart your computer now or later, and click **Finish** to complete the installation.

You must restart your computer before you can use Cisco IP SoftPhone.

How to Start Cisco IP SoftPhone

Perform the following steps to start your Cisco IP SoftPhone.

⚠️
Caution   If you are using VPN software, be sure to launch it and verify that it is working before you start Cisco IP SoftPhone.

Procedure

Step 1   From the Windows Start menu, choose **Programs > Cisco IP SoftPhone > Cisco IP SoftPhone**.

The first time you start Cisco IP SoftPhone, the Microsoft NetMeeting configuration program may display a window followed by the Cisco IP SoftPhone Line Selection window. On subsequent sessions, the main dialing window opens.

Step 2   In the Microsoft NetMeeting configuration window, follow the instructions on the screen to tune audio parameters and specify user information for your system.

✎
Note   You do not see this window if you have previously configured Microsoft NetMeeting.

⚠️
Caution   The collaboration features of Cisco IP SoftPhone will not work unless you configure settings for Microsoft NetMeeting.

Step 3   In the select lines window, click on the line(s) you want to control and click **OK**.

✎
Note   If there are no lines displayed in the line selection window, refer to the "How to Select Lines to Control" section on page 3-2.

Related Topics

- How to Exit Cisco IP SoftPhone, page 2-11
- How to Select Lines to Control, page 3-2
- Select Your Cisco IP SoftPhone Line, page 3-3
- When I Start Cisco IP SoftPhone, Why Don't I See Any Lines to Control?, page A-2

How to Exit Cisco IP SoftPhone

To exit Cisco IP SoftPhone, use one of the following procedures:

- Click your right mouse button and select **Exit** from the floating menu.
- Click the **x** in the upper right corner of the main dialing window.
- Press the ALT-F4 on your keyboard.

How to Exit Cisco IP SoftPhone

How to Use Cisco IP SoftPhone

The following sections describe how to use the Cisco IP SoftPhone application to place, receive, and control calls from your PC:

How to Select Lines to Control

The first time you launch Cisco IP Phone, a dialog box appears for you to select the line(s) your system administrator has assigned to you on the Cisco CallManager. Or, you can use this procedure to select the line(s).

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Click the **Advanced** tab in the Settings dialog window.

Step 3   Click **Select Lines...** on the **Advanced** tab.

Step 4   Select the line(s) you want to control in the line selection dialog window.

Each line that you select must have a unique phone number. You cannot control multiple lines that share the same phone number.

> **Note**   If there are no lines displayed in the line selection window, see "When I Start Cisco IP SoftPhone, Why Don't I See Any Lines to Control?" section on page A-2.

Step 5   Close the Settings dialog window.

When the lines connect, the main dialing window displays.

Related Topics

- Cisco IP SoftPhone as a Stand-alone Phone, page 1-3
- Cisco IP SoftPhone to Control a Cisco IP Phone, page 1-4
- Select Your Cisco IP SoftPhone Line, page 3-3
- Use Line Buttons, page 3-11
- Frequently Asked Questions (FAQs), page A-1

Select Your Cisco IP SoftPhone Line

If you have multiple lines configured for you on the Cisco CallManager, you may see two types of entries in the Select Lines window:

- An entry with the Media Access Control (MAC address and extension assigned to your Cisco IP Phone, for example,

  ```
  Cisco Line: [SEP003049C2B80F][52222]
  ```

- An entry with the device name and extension assigned to your Cisco IP Phone or Cisco IP SoftPhone, for example,

  ```
  Cisco Line: [CTIPJSmith][52222]
  ```

Use Table 3-1 to determine which line to select for your use with Cisco IP Phone.

Table 3-1   How to Select Your Phone Line for Cisco IP SoftPhone

Cisco IP Phone Line	Example	When to Select
Media Access Control (MAC) address and extension assigned to your Cisco IP Phone	Cisco Line: [SEP003049C2B80F][52222]	Select this line to use Cisco IP SoftPhone to control your Cisco IP Phone.
Device name and extension assigned to your Cisco IP Phone	Cisco Line: [CTIPJSmith][52222]	Select this line to use Cisco IP SoftPhone as a stand-alone phone.

Note If you have multiple lines with the same extension configured for you on the Cisco CallManager, you can control only one of those lines at a time with Cisco IP SoftPhone.

Note Cisco IP SoftPhone can also be used to control phones on supported analog lines. If you are using an analog line, your line displays like the MAC address.

Related Topics

How to Use the Main Dialing Window

The main dialing window, shown in Figure 3-1, contains call blocks, icons, and buttons you can use to answer, place, and control calls.

Table 3-2 defines components of the main dialing window. These sections describe how to use the controls in the main dialing window:

Figure 3-1   Main Dialing Window
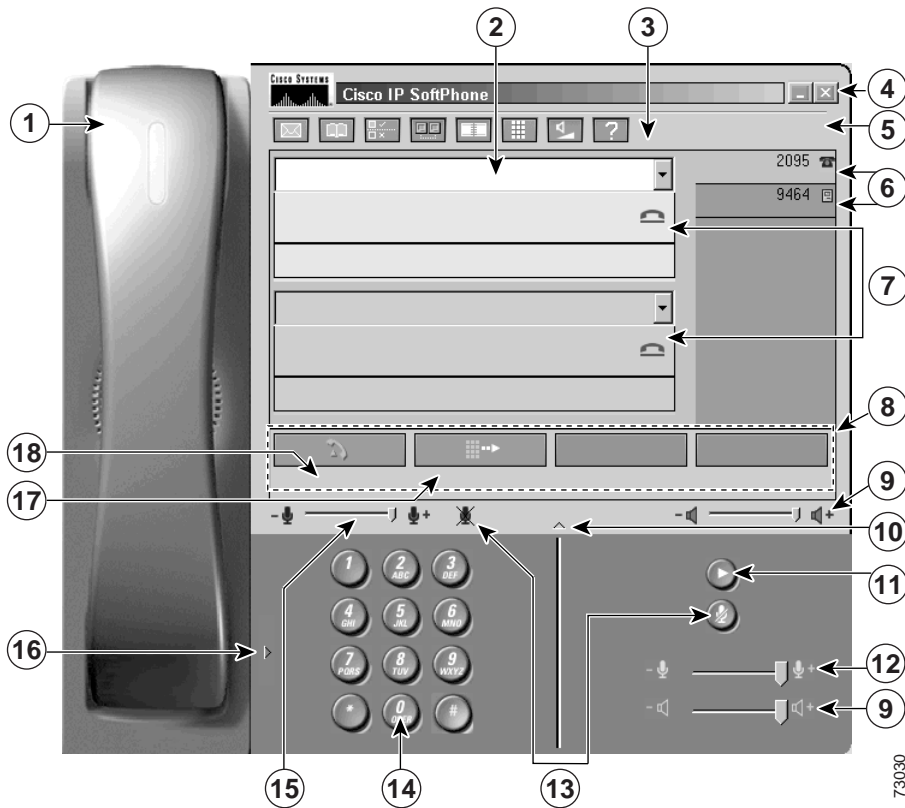
Table 3-2   Components of the Main Dialing Window

	Component	Description
1	Handset	Click the handset to go off-hook, depending on the current call state.
2	Dialing box	This is where you enter phone numbers when you place a call.
		See "How to Place a Call" section on page 3-15 for details on how to use the dialing box.
3	Icon bar	Click these icons to access your voice mailbox, dialing directories, configuration settings, call log, Virtual Conference Room, keypad, volume controls, and online help.
		See "Use the Icon Bar" section on page 3-8 for more details.

Table 3-2   Components of the Main Dialing Window (continued)

	Component	Description
4	Exit button	Click this button to close the main dialing window and exit Cisco IP SoftPhone. See "How to Exit Cisco IP SoftPhone" section on page 2-11 for more details.
5	Line(s)	Display(s) on your Cisco IP SoftPhone above your line buttons.
6	Line buttons	Click these buttons to select a line when you place a call. The line buttons display the phone numbers you currently control with Cisco IP SoftPhone. See "Use Line Buttons" section on page 3-11 for details on how to use the line buttons.
7	Call block	Displays the call destination, length of call (in hh:mm:ss format) and call status for all calls. See "How to Use the Call Log" section on page 3-36 for more details.
8	Context-sensitive button bar	Click these buttons to access call control functions that are relevant to the current call state. See "Use the Context-Sensitive Button Bar" section on page 3-9 for more details.
9	Speaker volume control	Drag the slider on this volume control to increase or decrease the volume of your speakerphone. See "Adjust the Speaker Volume" section on page 3-13 for more details.
10	Dialing pad button	Click this button to hide or display the online dialing pad. See "How to Place a Call" section on page 3-15 for more details.
11	Play messages button	Click this icon to plays voice mail for the currently selected line.
12	Microphone volume control	Drag the slider on this volume control to increase or decrease the volume of your headset microphone. See "Adjust the Microphone Volume" section on page 3-14 for more details.
13	Microphone mute button or icon	Click this button to mute the microphone. The person on the line cannot hear what you say. See "Adjust the Microphone Volume" section on page 3-14 for more details.

Table 3-2   Components of the Main Dialing Window (continued)

	Component	Description
14	Online dialing pad	Click the buttons in the online dialing pad to dial telephone numbers. See "Dial from the Online Keypad" section on page 3-17 for more details.
15	Microphone volume control	Drag the slider on this volume control to increase or decrease the volume of your headset microphone. See "Adjust the Microphone Volume" section on page 3-14 for more details.
16	Handset button	Click this button to hide or display the handset image. See "Use the Icon Bar" section on page 3-8 for more details.
17	OffHook soft key	Part of the Context-sensitive button bar. See "Use the Context-Sensitive Button Bar" section on page 3-9 for more details.
18	Redial soft key	Part of the Context-sensitive button bar. See "Use the Context-Sensitive Button Bar" section on page 3-9 for more details.

Use the Icon Bar

Table 3-3 describes the icons in the Cisco IP SoftPhone icon bar.

Table 3-3   Cisco IP SoftPhone Icons

Icon	Description
Voice Messages	Turns red when you have a voice mail message. Also provides access to your voice mailbox. See "How to Use Voice Mail" section on page 3-23 for more details.
Dialing Directories	Displays the dialing directories available for use with Cisco IP SoftPhone. See "How to Use the Dialing Directories" section on page 3-31 for more details.
Settings	Displays the Settings dialog window to select lines, edit the dialing directories, change audio configurations and change collaboration settings. For more details, see: • "How to Set Call Control Options" section on page 3-37; • "How to Configure Directory Settings" section on page 3-38 • '"How to Configure Dialing Rules" section on page 3-41; • "How to Configure Audio Settings" section on page 3-43 • "How to Configure Advanced Settings" section on page 3-54
Collaboration	Invokes a desktop collaboration session to use Virtual Conference Room. See Chapter 4, "How to Use Virtual Conference Room" for more details.
Call Log	Displays the Call Log with a history of the calls you placed or received. You can place a call to an entry in the Call Log. You can also delete all entries in the Call Log. See "How to Use the Call Log" section on page 3-36 for more details.

Table 3-3   Cisco IP SoftPhone Icons (continued)

Icon	Description
Keypad	Displays or hides the online keypad to dial phone numbers. See "Dial from the Online Keypad" section on page 3-17 for more details.
Volume Settings	Displays controls to adjust the speaker, microphone, ring, and wave file volume. See the "Adjust Volume Controls" section on page 3-12 for more details
Help	Displays the online help system for Cisco IP SoftPhone.

Use the Context-Sensitive Button Bar

The context-sensitive button bar and button names change, depending on the current call state.

Table 3-4 describes the buttons in the context-sensitive button bar.

Table 3-4   Context-Sensitive Button Bar

Button	Button Name	Call State	Description
	Off Hook or Answer	Idle or incoming call	Click this button to start or answer a call. It performs the same function as when you lift the receiver on a telephone.
	End Call	In a call	Click this button to end or "hang up" a call.
	Dial	Idle	Click this button to dial the number entered in the dialing box.

Table 3-4   Context-Sensitive Button Bar (continued)

Button	Button Name	Call State	Description
	Redial	Idle/off-hook	Click this button to redial the most recently dialed number.
	Clear	Idle	Click this button to clear the entry in the dialing box.
	Hold or Resume	In a call or call hold	Click this button to place a call on hold or take a call off hold.
	Transfer or Send Call	In a call or call transfer	Click this button to begin a call transfer or to complete the transfer.
	Consult or Invite	Call transfer or Conference Call	When you transfer a call, click this button to place a consultation call to the intended recipient. When in a conference call, click this button to add a party to the call.
	Cancel	Outgoing call	Click this button to cancel an outgoing call, call transfer or conference call before it connects.
	Conference	In a call	Click this button to initiate a conference call.
	Join	Conference call	Click this button to add a party to a conference call.
	Redirect	Incoming call	Click this button to redirect an incoming call to another number without interacting with the caller.

Table 3-4   Context-Sensitive Button Bar (continued)

Button	Button Name	Call State	Description
	Voice mail	Incoming call	Click this button to automatically send an incoming call to voice mail without any interaction with the caller.
	Ignore	Incoming call	Click this button to ignore an incoming call. The call automatically disconnects without any interaction with the caller.

Use Line Buttons

The line buttons in the main dialing window display the phone numbers of the lines you currently control with Cisco IP SoftPhone. When a Cisco IP Phone device terminates lines, a phone icon displays; when your computer (for example, stand-alone phone mode) terminates lines, a PC icon displays. If you have multiple phone lines assigned to you, press a line button to select the line you want to use for outgoing calls.

If the call arrives on a line other than the selected line, the focus automatically changes to the incoming call. To accept the call, click the **Answer** button. To accept the call on a Cisco IP Phone, lift the handset and press the appropriate line button.

Change the Display

When you first start the Cisco IP SoftPhone, the main dialing window appears in the full-view mode. The full-view mode includes a handset image and dialing pad to provide the familiar look and feel of a telephone. However, you do not need to use the handset and keypad to place and receive calls with Cisco IP SoftPhone. Once you are familiar with the Cisco IP SoftPhone interface, you can hide these features so the main dialing window takes up less space on your desktop.

To hide the handset and/or keypad, click the handset button and/or dialing pad button. The main dialing window then appears.
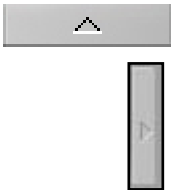
Adjust Volume Controls

The speaker and microphone controls in the main dialing window adjust the volume of the currently active voice receiver: the computer headset, computer handset, or the computer speaker. You can also use the volume settings icon in the icon bar to adjust these settings, as well as to adjust the ring and .wav file volume.

Note   The volume controls adjust the volume only if you use Cisco IP SoftPhone as a stand-alone phone. If you use Cisco IP SoftPhone to control an IP phone, use the ringer, speakerphone and handset volume controls on the Cisco IP Phone base to adjust the volume.

Related Topics

- Cisco IP SoftPhone as a Stand-alone Phone, page 1-3
- Cisco IP SoftPhone to Control a Cisco IP Phone, page 1-4
- Adjust the Speaker Volume, page 3-13
- Adjust the Microphone Volume, page 3-14

Adjust the Speaker Volume

If you are in full-view mode, use your mouse to drag the speaker volume controls to set the desired volume.

If you are not in full-view mode, click the volume control icon in the icon bar to access the volume controls. See Table 3-5 for a description of the volume controls. Use your mouse to drag the volume bars up and down to set the desired volume.

To mute the speaker, click the Mute checkbox beneath the speaker volume control.

Table 3-5   Volume Controls

Volume Control	Description
Speaker Volume	Adjusts the volume of the computer speaker. Enable the checkbox below this column to mute the computer speaker.
Microphone Volume	Adjusts the input sensitivity (volume) of the computer microphone. Enable the checkbox below this column to mute the computer microphone.
Ring Volume	Adjusts the ring volume of the ringer (from an incoming call). Enable the checkbox below this column to mute the ringer.
Wave File Volume	Adjusts the volume of .wav files played through Cisco IP SoftPhone.

Adjust the Microphone Volume

Use your mouse to drag the microphone volume controls to set the desired input sensitivity (volume) of the computer microphone or headset microphone. To mute the microphone, click the **Mute** button or icon. To locate the **Mute** button or icon, see Table 3-6. The button and icon turn red to indicate that the microphone is muted. To turn muting off, click the button or icon again.

Table 3-6   Mute Button and Icon

Button	Location
	In full-view mode, this **Mute** button is located below the **Play messages** button.
	This **Mute** icon is located to the left of the **Dialing pad** button.

To adjust the microphone volume, use the **volume settings** icon. Click the **volume settings** icon in the icon bar to access the volume controls. Use your mouse to drag the microphone volume bar up and down to set the desired volume. To mute the microphone, click the Mute checkbox beneath the microphone volume control.

How to Place a Call

Procedure

Step 1   In the main dialing window, click the line button for the line you want to use.

The call block for that line displays.

Step 2   Dial the number you want to call in one of the following ways:

- Use your keyboard to type the number in the dialing box and press **Enter**.

- Enter the e-mail address or name (partial or full) for the person you want to call and press CTRL-K.

  - To use this feature, you must have a directory entry for the recipient that includes their e-mail address and phone number or you must have an Cisco CallManager (LDAP) directory configured.

- Use your mouse to click the keys on the online keypad and click **Dial**.

  See the "Dial from the Online Keypad" section on page 3-17 for more details.

- Drag the number from your Internet browser into the dialing box.

- Open a Cisco IP SoftPhone directory, click your mouse on the name of the person you want to dial and click **Dial**.

  See the "Dial from the Online Directories" section on page 3-17 for more information.

- Click on the arrow next to the dialing box, select the number from the list of recently dialed numbers, and click **Dial**.

  See the "Dial the Last Number Dialed" section on page 3-18 for more details.

- Drag the number from the Cisco IP SoftPhone dialing directory to the dialing box.

- Copy the number from any Windows program, paste it into the dialing box, and click **Dial**.
- Drag a v-card file from your desktop into the dialing box.

When the call connects, the context-sensitive button bar displays buttons that enable you to perform additional call functions. See Figure 3-2.

Figure 3-2   Call Options
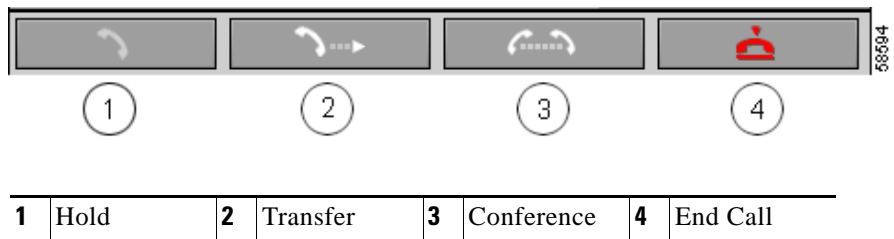
1	Hold	2	Transfer	3	Conference	4	End Call

Related Topics

Dial from the Online Keypad

To provide the familiar look and function of a telephone keypad,
Cisco IP SoftPhone includes an online keypad for you to dial calls. Simply click
your mouse on the numbers you want to dial and then click the **Dial** button. Use
of the online keypad is optional.

Procedure

Step 1   In the main dialing window, click the line button for the line you want to use.

Step 2   Click the **Off Hook** button or click on the handset image.

Step 3   If the online keypad is not open, click the keypad icon in the icon bar.

Step 4   Click on the telephone number digits in the keypad.

The call automatically connects once you enter the digits.

Dial from the Online Directories

With Cisco IP SoftPhone, you can focus on names rather than numbers and place
calls through your public and personal online directories.

Procedure

Step 1   Click the **Directories** icon.

The Directories window opens.

Step 2   Select the desired directory from the drop-down list box.

The directory list displays the name, phone number, and e-mail address for each
person in the directory.

Tip   To narrow the list of names displayed in the directory, enter the first few
characters of the person's last name in the find box and then click **Find**. Or, to
search on the person's name, type the name in the find box and click **Find**.

Step 3   To place a call from the directory, you can do one of the following:

- Click on the name of the person you want to call and click **Dial.**

- Drag the name of the person you want to call from the directory to the dialing box.

Related Topic

- How to Use the Dialing Directories, page 3-31

Dial the Last Number Dialed

Click the **Redial** button to automatically redial the last number dialed. Or, to redial a recent called number, choose it from the destination drop-down list box and click the **Dial** button. Cisco IP SoftPhone keeps a list of the last 15 dialed numbers.

How to End a Call

Click the **End Call** button to disconnect a call.

If you use Cisco IP SoftPhone with a Cisco IP Phone, put the phone on-hook to end a call.

How to Answer a Call

Click the **Answer** button to answer an incoming call.

When you have an incoming call, the context-sensitive button bar displays buttons that enable you to answer, redirect, send the call to voice mail, or ignore the call. See Figure 3-3. You can also configure Cisco IP SoftPhone to automatically answer the phone. See the "Answer a Call Automatically" section on page 3-21 for more details.

If you receive an incoming call while you are already in a call, click the **Answer** button to place the current call on hold and answer the incoming call. Otherwise, use any of the other calling options that are presented to you on the context-sensitive button bar to handle the incoming call.

Additionally, if you use Cisco IP SoftPhone to control a Cisco IP Phone, to answer an incoming call, simply pick up the handset or use any answering method supported by the physical phone.

Figure 3-3   Call Answer Options

1	Answer	2	Redirect	3	Voice mail	4	Ignore
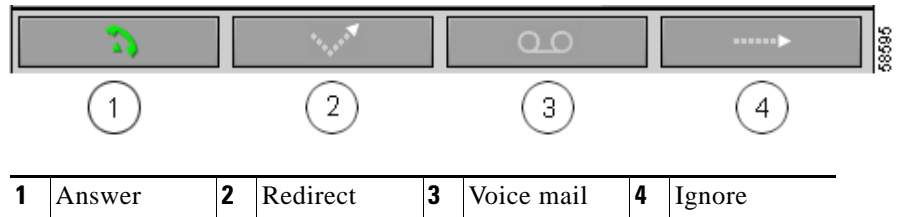
Related Topics

- Redirect an Incoming Call, page 3-20
- Send an Incoming Call to Voice Mail, page 3-20
- Ignore an Incoming Call, page 3-20
- Answer a Call Automatically, page 3-21

Redirect an Incoming Call

Click the **Redirect** button to send an incoming call to another number without any interaction with the caller. The cursor moves to the dialing box where you can type the number to which you want to Redirect the call. Press the **Send Call** button on the Cisco IP SoftPhone, or **Enter** on your computer keyboard after you type the number.

Another way to Redirect an incoming call is to drag the number to which you want to Redirect the call from the directory to the dialing box.

Send an Incoming Call to Voice Mail

Click the **Voice mail** button in the context-sensitive button bar to automatically send an incoming call to voice mail without interaction with the caller. If you have not configured a voice mail destination through the Settings menu for Cisco IP SoftPhone, you are prompted to enter the voice mail box destination.

Related Topic

- How to Use Voice Mail, page 3-23

Ignore an Incoming Call

Click the **Ignore** button in the context-sensitive button bar to automatically send an incoming call to voice mail without any interaction with the caller.

Answer a Call Automatically

Use this procedure to configure Cisco IP SoftPhone to automatically answer incoming calls and play a .wav file to the caller.

Procedure

Step 1 Click the **Settings** toolbar icon.

This opens the Settings dialog window.

Step 2 On the Call Control tab, enable the checkbox next to "Answer Calls Automatically," and enter the number of rings you want the caller to hear before the call is answered.

By default, the number of rings is set to one.

Step 3 Enable the checkbox next to "Enable Automatic Greeting."

Step 4 In the Greeting File... selection box, enter the pathname for the .wav file you want to play as your greeting.

Tip Use the Windows Sound Recorder to record a .wav file or to verify if a .wav file is the proper format. See the online help for the Sound Recorder program for details.

Step 5 Click **OK** to save your settings and close the Settings dialog window.

Related Topic

How to Place a Call on Hold

To place an active call on hold, click the **Hold** button in the context-sensitive button bar, or if you control a Cisco IP Phone, the **Hold** button on the phone base.

While the call is on hold, caller information, and the time on hold are displayed in the call block.

To retrieve a call on hold, press the **Resume** button in the context-sensitive button bar, or the **Resume** key on the Cisco IP Phone.

To place an active call on hold so you can receive an incoming call, click the **Answer** button.

How to Transfer a Call

Call transfer allows you to send an existing call to an internal or external extension.

These sections describe two ways you can transfer a call with Cisco IP SoftPhone:

- Perform a Consult Transfer, page 3-22
- Perform a Direct Transfer, page 3-23

Perform a Consult Transfer

In a consult transfer, also called an attended transfer, you place a consultation call to the intended recipient before you transfer the call.

Procedure

Step 1 During an active call, click the **Transfer** button in the context-sensitive button bar or if you control a Cisco IP Phone, the **Transfer** key on the phone base.

Step 2 In the dialing box, enter the new destination.

Step 3   Press **Consult** and announce the call to the new destination.

Step 4   Press **Send Call**.

When the transfer is complete, both the original and the consultation call are removed from your screen.

Perform a Direct Transfer

In a direct transfer, also called an unattended transfer, you immediately transfer the original call to the destination without a consultation call.

Procedure

Step 1   During an active call, click the **Transfer** button in the context-sensitive button bar, or if you control a Cisco IP Phone, the **Transfer** key on the phone base.

This opens a transfer dialing box.

Step 2   In the transfer dialing box, enter the new destination

Step 3   Press **Enter** on the keyboard or click **Send Call** to complete the transfer.

When the transfer is complete, both the original and the consultation call are removed from your screen.

How to Use Voice Mail

These sections help you use the voice mail features of Cisco IP SoftPhone:

Configure Your Voice Mailbox

Before you can access your voice mail with Cisco IP SoftPhone, you must configure the number for your voice mailbox.

Procedure

Step 1   Click the **Settings** toolbar icon.

This opens the Call Control tab.

Step 2   Enter the number for your voice mailbox in the Voicemail Destination box.

Step 3   Click **OK**.

Related Topics

Check Voice Mail

When you have a voice mail message, the messages icon in the icon bar turns red until you check your messages as described in the following procedure:

Prerequisite

- Configure the number to access your voice mailbox. See the "Configure Your Voice Mailbox" section on page 3-24.

Procedure

Step 1   Click the **voice mail message** icon.

A pop-up dialog box appears with the lines that have voice mail.

Step 2   Select the line for which you want to check voice mail.

Cisco IP SoftPhone automatically dials your voice mailbox.

Step 3   Follow the voice prompts to access your voice mail.

Tip   To quickly check voice mail for a selected line, click the **Play Messages** button in the main dialing window.

Related Topics

- Voice Mail Integration, page 1-10
- Configure Your Voice Mailbox, page 3-24

Forward All Calls to Voice Mail

Use this procedure to automatically forward all calls to voice mail.

Prerequisite

- Configure the number to access your voice mailbox. See "Configure Your Voice Mailbox" section on page 3-24

Procedure

Step 1 Click the **Settings** toolbar icon.

This opens the Call Control tab.

Step 2 Enable Forward All Incoming Calls to Voice mail checkbox.

Step 3 Click **OK**.

To remove call forward:

Step 1 Uncheck the Forward all incoming calls to Voice Mail checkbox on the Call Control tab.

Step 2 Click **OK**.

Related Topics

- Voice Mail Integration, page 1-10
- Configure Your Voice Mailbox, page 3-24
- Check Voice Mail, page 3-25

How to Start an Audio Conference

To set up audio conference calls with Cisco IP SoftPhone, use the **Conference** button in the context-sensitive button bar, or drag a directory entry onto the call block of an active call. The name of each user who has agreed to join the conference appears in the Cisco IP SoftPhone roster display.

Procedure

Step 1   Place a call to the first conference call destination.

Step 2   Once you have established a connection, click the **Conference** button in the context-sensitive button bar

Step 3   In the dialing box, enter the second conference call destination.

Tip   You can drag conference call destinations from your personal and public dialing directories into the dialing box.

Step 4   Click **Invite** or press **Enter**.

Step 5   Click **Join** to set up a three-way conference between yourself, the first destination, and the second destination

Repeat steps 3 through 5 to add additional participants to the conference. A maximum of six may participate in an audio conference.

Related Topics

- Audio Conference, page 1-6
- Desktop Collaboration with Virtual Conference Room, page 1-7
- Add Participants to a Conference, page 3-28
- Leave a Conference, page 3-28
- How to Use the Roster, page 4-3

Add Participants to a Conference

You may add participants to an audio conference call at any time, even while a collaboration session is in progress. The new participant joins both the audio and data portions of the conference. The most current data from the collaboration session is displayed on the new participant's PC. A maximum of six participants are allowed in any given conference.

Procedure

Step 1   Start an audio conference.

See "How to Start an Audio Conference" section on page 3-27

Step 2   Enter the destination you want to add to the conference call in the dialing box.

Tip   You can drag conference call destinations from your personal and public dialing directories into the dialing box.

Step 3   Click **Invite** or press **Enter**.

Step 4   Click **Join** to add this person to the conference.

When the audio conference call is active, the caller ID for each participant is displayed in the main dialing window. A maximum of six participants are allowed in any given conference.

Related Topic

- Leave a Conference, page 3-28

Leave a Conference

To leave an audio conference at any time, click the **End Call** button in the context-sensitive button bar. When you exit from an audio conference, Cisco IP SoftPhone removes your name from the roster.

How to Play .wav Files with Cisco IP SoftPhone

When you use the Cisco IP SoftPhone as a stand-alone IP phone, you can play pre-recorded audio files (.wav) files to callers in the form of a customized greeting or during a call. You can also use the Microsoft Windows Sound Recorder application to create files.

These sections help you play .wav files with Cisco IP SoftPhone:

- Use Auto-Greet Mode, page 3-29
- Play a .wav File to a Caller, page 3-30
- Stop a .wav File During a Call, page 3-30

Use Auto-Greet Mode

You can configure Cisco IP SoftPhone to automatically play a predetermined .wav file to the caller.

Step 1   Click the **Settings** toolbar icon.

This opens the Call Control tab.

Step 2   Enable the Enable Automatic Greeting checkbox.

Step 3   In the Greeting File... selection box, enter the pathname for the .wav file you want to play as your greeting, or click **Browse...** to find and select the file.

Step 4   Click **OK**.

Related Topic

- Answer a Call Automatically, page 3-21

Play a .wav File to a Caller

If you use Cisco IP SoftPhone as a stand-alone application, you can play a .wav file to the caller at any time during the course of the call. The .wav file also plays simultaneously on your PC. Only one file may play at a time.

Procedure

Step 1   Right-click your mouse in the main dialing window.

Step 2   Choose **Play File...** from the floating menu.

Step 3   In the filename box, enter the path and name of the .wav file you want to play.

Step 4   Click **Open**.

The .wav file is played to the caller.

Related Topics

Stop a .wav File During a Call

To stop a .wav file while it plays to a caller, click **Stop Playing Wave File** from the Cisco IP SoftPhone floating menu.

How to Use the Dialing Directories

Cisco IP SoftPhone integrates with the directory service on Cisco CallManager. System administrators set the name of this directory when they configure your network for Cisco IP SoftPhone.

Additionally, the Cisco IP SoftPhone provides a personal directory for you to store directory entries that are not available in the corporate or public directories. Cisco IP SoftPhone always searches your personal directory first before it looks up an entry in the public directories. It also integrates with other private directories like those implemented by the various email clients.

These sections help you configure and use the dialing directories:

- Dial from the Online Directories, page 3-17
- Add a Directory Entry, page 3-32
- Delete a Directory Entry, page 3-34
- Edit a Directory Entry, page 3-35
- Search for a Directory Entry, page 3-35

Add a Directory Entry

To add entries to your personal directory, drag an active call into the directory or add the address through the Add/Edit Directory Entry dialog window.

Tip   To collaborate with others, you must add an entry for yourself to your personal directory. Be sure to specify the host name or IP address of your computer in the "Associated PC" field.

Procedure

Step 1   Click the **Directories** toolbar icon.

Step 2   Click the **Add Directory Entry** button to open the Add/Edit Directory Entry dialog window.

Step 3   Enter address information in the entry boxes in one of the following ways:

- Use your keyboard to type the address information.

  Table 3-7 illustrates the entries in the Add/Edit Directory Entry dialog window.

- Drag a v-card file from your web browser into the Add/Edit Directories dialog window. Cisco IP SoftPhone displays the prompt:

  `Do you want to add this destination to the address book?`

- Drag an entry from your Public directory to your Personal directory.

Step 4   When you finish, click **OK**.

The name, number, and e-mail address that you entered now appears in the Directories dialog window. To dial that person, simply select the directory entry and click **Dial**.

Table 3-7   How to Add/Edit an Address Book Entry

Field	Example
First name:	David
Middle name:	T
Last name:	Johnson
Phone:	408-555-2323
Fax:	
Pager:	
Mobile:	
EMail:	davidt
Associated PC:	172.30.277.277 **Note** This is the IP address or host name of the person's PC. You must specify this information to collaborate with this person.

Related Topics

- Dial from the Online Directories, page 3-17
- How to Use the Dialing Directories, page 3-31
- Delete a Directory Entry, page 3-34
- Edit a Directory Entry, page 3-35

Delete a Directory Entry

Use this procedure to delete names from your personal directory.

Note   You cannot delete names from a public directory.

Procedure

Step 1   Click the **Directories** toolbar icon.

Step 2   Select the Personal Directory name from the drop-down list box.

Step 3   Select the entry you want to delete.

Step 4   Click the **Remove Directory Entry** button.

A confirmation dialog window displays:

```
Are you sure you want to delete this person from the directory?
```

Step 5   Click **Yes** to confirm the deletion.

The application removes the entry from the Directories dialog window.

Related Topics

- Dial from the Online Directories, page 3-17
- How to Use the Dialing Directories, page 3-31
- Add a Directory Entry, page 3-32
- Edit a Directory Entry, page 3-35

Edit a Directory Entry

Use this procedure to edit directory entries in your personal directory.

Procedure

Step 1 Click the **Directories** toolbar icon.

Step 2 Select the Personal directory name from the drop-down list box.

Step 3 Double-click on the directory entry you want to edit, or select it with your mouse and then click the **Edit Directory Entry** button.

This opens the Add/Edit Directory Entry dialog window.

Step 4 Make the desired changes to the address information.

Step 5 Click **OK** to enable your changes.

Related Topics

- Add a Directory Entry, page 3-32
- Delete a Directory Entry, page 3-34
- How to Use the Dialing Directories, page 3-31
- Dial from the Online Directories, page 3-17

Search for a Directory Entry

You can use the filter box to narrow the list of names displayed in the directory. Type the first few characters of the name of the person you want to call, and click the **Find** button.

How to Use the Call Log

Use Call Log to perform the following tasks:

- View a history of the calls you have placed, missed or answered.

- Place a call to any Call Log entry (with a phone number).

- Clear entries in the Call Log.

Procedure

Step 1   Click the **Call Log** icon.

The Call Log displays a history of the calls that you have placed, missed or answered. The logs lists your 100 most recent entries, in the order of most recent calls first. Table 3-8 shows the information stored in Call Log.

Step 2   From the Call Log display, you can perform these tasks:

- To place a call to someone in the Call Log in one of two ways, simply select the entry and click **Dial** or select the entry and drag and drop it to the SoftPhone interface.

- To delete all entries in the Call Log, click **Clear All**.

Table 3-8   Call Log Data

Field	Description
Other Party Name	The name of the connected party
Other Party Number	The phone number of the connected party
Start Time	Date and time the call connected
Direction	Whether the call was a placed call, a missed call or an answered call
End Time	Time the call ended
Line	Directory Number of the line that handled the call

How to Set Call Control Options

Use the **Call Control** tab to specify how you want Cisco IP SoftPhone to answer calls.

Procedure

Step 1   Click the **Settings** toolbar icon.

This opens the Call Control tab.

Step 2   Select the appropriate call control settings as described in Table 3-9.

Step 3   Click **OK**.

Table 3-9   Call Control Settings

Setting	Description
Voicemail Destination	The number for your voice mail system.
Call Answer Options	Specify whether you want to answer calls yourself, forward all calls to your voice mailbox, or have Cisco IP SoftPhone automatically answer your calls after a specified number of rings.
Ring file	Specifies the wave file to be played as the ringer for incoming calls.
Enable automatic greeting	Specifies the wave file to be played as the greeting for incoming calls.

How to Configure Directory Settings

Use the **Directories** tab in the Settings dialog window to specify the location of
the Cisco CallManager (LDAP) directories you want Cisco IP SoftPhone to use
when doing name completion lookups.

These procedures help you configure directory settings:

Add a Directory

Procedure

Step 1 Click the **Settings** toolbar icon.

Step 2 Select the **Directories** tab.

Step 3 Select **Add...**

The Directory Service dialog window opens.

Step 4 Configure directory settings as described in Table 3-10.

If you need help, see your system administrator.

Table 3-10   Configuring Directory Settings

Setting	Description
Display Name	Enter a name for the Cisco CallManager (LDAP) directory. For example, **SoftPhone-CM**
Server Name	Enter the name for the Cisco CallManager (LDAP) server. For example, **ldap.company.com**
Port Number	Enter the port number used by the directory. For example, **8404**

Table 3-10   Configuring Directory Settings (continued)

Setting	Description
Account name	If the "This server requires me to login" option is enabled, you must enter your user name for this account. For example, **john.**
Password	If the "This server requires me to login" option is enabled, you must enter the account password. If you have questions about the account name and password, see your system administrator.
Search Base	Enter the base—or root—of the directory service in which to search for names. For example, **ou=users, o=company.com**

Step 5   Click **OK**.

The **Directories** tab will redisplay showing the directory name you just added.

Related Topics

- How to Configure Directory Settings, page 3-38

- Remove a Directory, page 3-40

- Edit a Directory, page 3-40

Remove a Directory

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Select the **Directories** tab.

Step 3   Click on the directory you want to remove.

Step 4   Click **Remove**.

The directory is removed from the list of directories.

⚠

Caution   You are not prompted before the directory is removed from the list.

Related Topics

- How to Configure Directory Settings, page 3-38
- Add a Directory, page 3-38
- Edit a Directory, page 3-40

Edit a Directory

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Select the **Directories** tab.

Step 3   Double-click on the directory you want to edit or select the directory and click the **Edit** button.

Step 4   Make the desired changes to the information in the directory service dialog window.

Step 5   Click **OK** to make these changes take effect. Otherwise, click **Cancel**.

Related Topics

How to Configure Dialing Rules

⚠

Caution   Dialing rules should only be set by the system administrator.

✎

Note   If there are no dialing rules, users must type phone numbers in the dialing box exactly as they need to be dialed out. The dialing rules also affect any numbers obtained from Cisco CallManager (LDAP) directories using Ctrl-K.

System administrators use the **Dialing Rules** tab in the Settings dialog window to set up dialing rules for Cisco IP SoftPhone. Dialing rules tell Cisco IP SoftPhone how to prefix the phone numbers so the Cisco CallManager can properly route them. The dialing rules apply only when you use Cisco IP SoftPhone to initiate a call; they do not apply to numbers dialed on the Cisco IP Phone.

Dialing rules are maintained in the dialing rule list in the order you created them. Dialing rules are searched from the top of the dialing rules list to the bottom of the list. When the search finds a match, that dialing rule is used.

🔍

Tip   Create the dialing rules in the order in which you want them to be used.Create specific rules first and create general rules later. In the examples shown in Table 3-12, internal phone calls are the most commonly used. Therefore, it becomes rule1.

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Select the **Dialing Rules** tab.

Step 3   Click **Add...**

The Dialing Rule dialog window opens.

Step 4   Configure a dialing rule as described in Table 3-11.

Step 5   Review the dialing rule description displayed in the text box to ensure the settings are as you intended.

Step 6   Click **OK**.

Step 7   Repeat Steps 3 through 6 to set additional dialing rules as necessary.

Table 3-11   Setting Dialing Rules

Setting	Description
Rule Name	Enter a name for the rule.
	For example, **Rule 1**
Starting Digits	Enter the starting digits to which the rule applies.
	For example, **525**
Total number of digits	Enter the number of digits to which the rule applies.
	For example, **7**
Number of digits to remove from front	Enter the number of digits this rule will remove from the beginning of all phone numbers you dial.
	For example, **2**
Add prefix	Enter a prefix this rule will add to the beginning of all phone numbers you dial.
	For example, **7**

Examples

Table 3-12 shows the dialing rule settings for the following three scenarios:

1. to place long-distance calls outside your company without first dialing 9 and 1

2. to place calls inside your company by dialing only the last five digits of the telephone number

3. to place local calls outside of your company without first dialing 9

Table 3-12   Sample Dialing Rule Settings

Dialing Rules Field	For Internal Calls	For Outside Local Calls	For Outside Long-Distance Calls
Rule Name	Rule1	Rule2	Rule3
Starting Digits	525	<Leave empty>	<Leave empty>
Total number of digits	7	7	10
Number of digits to remove from front	2	0	0
Add Prefix	<Leave empty>	9	91

How to Configure Audio Settings

The Audio setting allows you to change settings that control the audio reception and transmission for Cisco IP SoftPhone.

Use the Audio settings to:

- Adjust Your Volume Settings, page 3-44
- Configure Your Voice Settings, page 3-45
- Configure Advanced Voice Settings, page 3-47
- Choose Your Ringer Settings, page 3-50
- Set Network Audio Settings, page 3-51

Adjust Your Volume Settings

You can adjust your volume settings from the Audio tab. This is similar to the way you adjust them from the main dialing window (see the "Adjust Volume Controls" section on page 3-12.)

Note   The volume controls adjust the volume only if you use Cisco IP SoftPhone as a stand-alone phone. If you use Cisco IP SoftPhone to control an IP phone, use the ringer, speakerphone and handset volume controls on the Cisco IP Phone base to adjust the volume.

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Select the **Audio** tab.

Step 3   Click **Volume Settings**.

Volume controls display as shown in Table 3-13.

Step 4   Use your mouse to drag the volume bars up and down to set the desired volume.

Step 5   To mute the speaker, microphone or ringer, click the Mute checkbox beneath the speaker volume control.

Table 3-13   Volume Settings

Volume Control	Description
Speaker Volume	Adjusts the volume of the computer speaker. Enable the checkbox below this column to mute the computer speaker.
Microphone Volume	Adjusts the input sensitivity (volume) of the computer microphone. Enable the checkbox below this column to mute the computer microphone.
Ring Volume	Adjusts the ring volume of the ringer (from an incoming call). Enable the checkbox below this column to mute the ringer.
Wave File Volume	Adjusts the volume of .wav files played through Cisco IP SoftPhone.

Configure Your Voice Settings

You can configure your voice settings in the following ways:

- If your Cisco IP phone line is configured to operate in a high bandwidth region (for example, a LAN) but you are temporarily connected by means of a low bandwidth connection (for example, a dial-up modem or iDSL), enable the "Always use low bandwidth codec" feature.

- If you have more than one audio device configured on your PC, you can choose which device Cisco IP SoftPhone uses for audio reception and transmission of your phone calls.

Procedure

Step 1 Click the **Settings** toolbar icon.

Step 2 Select the **Audio** tab.

Step 3 Configure the settings described in Table 3-14.

Step 4 Click **OK**.

Table 3-14   Configure Your Voice Settings

Voice Setting	Description
• Always use low bandwidth codec	If your Cisco IP phone line is configured to operate in a high bandwidth region (for example, a LAN) but you are temporarily connected by means of a low bandwidth connection (for example, a dial-up modem or iDSL), be sure to select this option.
	To enable low bandwidth codec:
	• Click the checkbox next to the "Always use low bandwidth codec" field.
• Sound device for Playback (Speaker)	If you have more than one audio device configured on your PC, you can choose which device Cisco IP SoftPhone uses for audio reception of your phone calls.
	At the Sound device for Playback (Speaker) drop-down list box:
	• leave the default that your operating system has set, or
	• select a different audio device for your audio reception.
• Sound device for Transmit (Microphone)	If you have more than one audio device configured on your PC, you can choose which device Cisco IP SoftPhone uses for audio transmission of your phone calls.
	At the Sound device for Transmit (Microphone) drop-down list box:
	• leave the default that your operating system has set, or
	• select a different audio device for your audio transmission.

Configure Advanced Voice Settings

Use the Advanced Voice Settings option to:

- adjust the sound quality of your Cisco IP SoftPhone. For example, you can smooth out your audio or reduce audio delay. See "Change the Jitter Buffer Size" section on page 3-47.

- adjust the frequency processing to sharpen the audio and to improve the sound quality of your phone calls. See "Configure Frequency Processing" section on page 3-47.

Change the Jitter Buffer Size

Jitter buffer size impacts how you receive audio. The larger the jitter buffer size, the smoother the audio reception. However, larger jitter buffer size increases the audio delay.

Cisco IP SoftPhone supports a dynamic configuration of jitter buffer size. With dynamic configuration enabled, Cisco IP SoftPhone automatically adjusts the jitter buffer size per call depending on your PC and network conditions. With dynamic configuration enabled, the jitter buffer size is not used.

If your sound quality requires some adjustment, you can disable the dynamic configuration and change the jitter buffer size. To smooth out the audio on your Cisco IP SoftPhone, increase the jitter buffer size. To reduce any delay in the audio, decrease the jitter buffer size.

Configure Frequency Processing

Cisco IP SoftPhone allows you to set the frequency processing to sharpen the audio and to improve the sound quality of your phone calls. Post-processing handles audio reception and pre-processing handles audio transmission.

Cisco IP SoftPhone's default setting for frequency processing uses parameters from the ITU (International Telecommunications Union). Try the various parameters (None, ITU and Telecaster) and see which sound quality works for you and your callers. If you find the audio too sharp, you may want to change the post-processing and pre-processing to None.

Perform the following steps to adjust the audio quality of your
Cisco IP SoftPhone:

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Click the **Advanced** tab.

Step 3   Click the **Advanced Voice Settings** tab.

Step 4   Configure the settings described in Table 3-15.

Step 5   Click **OK**.

Table 3-15   Configure Advanced Voice Settings

Advanced Voice Setting	Description
• Enable dynamic jitter buffer	Enable dynamic jitter buffer is the default configuration. With this configuration, the Jitter Buffer Size field is inactive.
	If your sound quality requires some adjustment, you can disable the dynamic configuration and change the jitter buffer size. For example, to smooth out the audio on your Cisco IP SoftPhone, increase the jitter buffer size; to reduce any delay in the audio, decrease the jitter buffer size.
	To change the jitter buffer size:
	• Disable the dynamic jitter buffer size by unchecking the "Use dynamic jitter buffer" checkbox.
	• Enter a new jitter buffer size according to the guidelines shown in Table 3-16.
	Note You may increase the jitter buffer above the typical size, if required.

Table 3-15   Configure Advanced Voice Settings (continued)

Advanced Voice Setting	Description
• Frequency post-processing	This setting is used for audio reception. Cisco IP SoftPhone's options for frequency post-processing parameters are: • None • ITU (International Telecommunications Union), the default • Telecaster (Cisco IP Phone) Try the various parameters and see which sound quality works for you and your callers. For example, if you find the audio too sharp, try the post-processing frequency set to none.
• Frequency pre-processing	This setting is used for audio transmission. Cisco IP SoftPhone's options for frequency pre-processing parameters are: • None • ITU (International Telecommunications Union), the default • Telecaster (Cisco IP Phone) Try the various parameters and see which sound quality works for you and your callers. For example, if a caller says that your voice sounds too sharp, change the pre-processing frequency to None.

Table 3-16   Jitter Buffer Size

Operating System	Minimum Jitter Buffer	Typical Jitter Buffer
Windows 95/98/ME/NT	120 ms	180 - 360 ms
Windows 2000/XP	40 ms	60 - 180 ms

Choose Your Ringer Settings

You can configure the ringer settings as described here:

- If you have more than one audio device configured on your PC, you can select which device Cisco IP SoftPhone uses as your phone ringer. For example, if you are using a headset, you can redirect the ring to an external speaker.

- You can set your system speaker to beep when you receive a call. Use this feature to alert you of incoming calls when you have a headset plugged into the sound card but you are not wearing the headset.

✎

Note   The beep is available only on systems that have a system speaker. If you do not have a system speaker, the ring buzzer may play through your PC speaker.

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Select the **Audio** tab.

Step 3   Configure the settings described in Table 3-17.

Step 4   Click **OK**.

Table 3-17   Choose Your Ringer Settings

Ringer Setting	Description
• Sound device for Ringer	If you have more than one audio device configured on your PC, you can select which device Cisco IP SoftPhone uses as your phone ringer. For example, if you are using a headset, you can redirect the ring to an external speaker. • At the Sound device for Ringer drop-down list, choose the device where you want Cisco IP SoftPhone to ring.
• Enable ring buzzer	You can set your system speaker to beep when you receive a call. Use this feature to alert you of incoming calls when you have a headset plugged into the sound card but you are not wearing the headset. • At the Enable Ring Buzzer field, click the checkbox. **Note** The beep is available only on systems that have a system speaker. If you do not have a system speaker, the ring buzzer may play through your PC speaker.

Set Network Audio Settings

Cisco IP SoftPhone 1.2 and later includes network audio settings that allow you to perform the following tasks:

- Obtain the correct IP address (for voice streaming) of the PC on which Cisco IP SoftPhone is running.

- Establish two-way audio when you experience one-way audio.

You may experience one-way audio as result of one of the following conditions:

- You run Cisco IP SoftPhone over a Virtual Private Network (VPN) to connect to the corporate network.

- You use multiple Network Interface Cards (NICs) on the PC.

- You use Network Address Translation (NAT).

- You disconnect and reconnect to the network (for example, you undock and dock a laptop).

> **Note**   Cisco IP SoftPhone does not support Port Address Translation (PAT).

Configure Network Audio Settings

Before You Begin

Determine whether you have multiple NICs on your PC or whether you use a VPN or NAT to connect to your corporate network.

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Click the **Audio** tab.

Step 3   Click the **Network IP Settings** button to open the Network Audio Settings screen.

Table 3-18 describes how to configure the Network Audio Settings.

Table 3-18   Network Audio Settings

IP Address Setting	Description
• Automatic Selection	**Tip** This setting is highly recommended. ⚠ **Caution** For Automatic Selection to work, your administrator must have configured the URL and provided you with a valid URL. Choose this primary setting to run Cisco IP SoftPhone. This setting allows Cisco IP SoftPhone to obtain the correct IP address from a web page. **Automatic Selection** is the default setting for web installation.
• Select Address	Choose this setting under the following conditions: • The Automatic Selection for obtaining the IP address is not available. This may be, for example, because your web server does not support the active server pages or the active server pages are inaccessible to the user. • You installed Cisco IP SoftPhone from a CD-ROM. Select an address from the drop-down list box. You may need to randomly select a different address from the drop-down list box until you are able to establish two-way audio. **Select Address** is the default setting for CD installation.
• Specify Address	This field allows users to specify the IP address of their PC to which others will send their audio streams. ⚠ **Caution** Automatic Selection is the recommended setting. Use the Specify Address method **only** if Automatic Selection is not available.
Audio Input Port	
• Automatic Setting	Choose this setting if you want Cisco IP SoftPhone to automatically select the local UDP port from which it will receive incoming audio streams. **Automatic Setting** is the default setting.
• Specify Port	If you are not using the **Automatic Setting** for the Audio output port, use this field to specify the local UDP port for receiving incoming audio streams.

Table 3-18   Network Audio Settings (continued)

IP Address Setting	Description
Audio Output Port	
• Automatic Setting	Choose this setting if you want Cisco IP SoftPhone to automatically select the local UDP port from which it will send outgoing audio streams. **Automatic Setting** is the default setting.
• Specify Port	If you are not using the **Automatic Setting** for the audio output port, use this field to specify the local UDP port to transmit audio streams.

How to Configure Advanced Settings

Use the **Advanced** tab in the Settings dialog window to perform the following tasks:

- Configure user permissions (User Name and Password)

- Configure the primary CTI Manager server and (optionally) the backup of the primary CTI Manager server you use.

- Select the lines you want to control.

- Change the collaboration settings.

- Change the language settings.

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Select the **Advanced** tab.

Step 3   Configure the settings described in Table 3-19.

Step 4   Click **OK**.

Table 3-19   How to Configure Advanced Settings

Setting	Description
User Name and Password	Enter your Cisco CallManager UserName and Password here. **Note** If you installed Cisco IP SoftPhone from the Web or if you upgraded to a later version of Cisco IP SoftPhone, the User Name and Password fields are automatically filled in from the information entered during installation.
Primary CTI Manager and Backup CTI Manager	If your system administrator installed Cisco IP SoftPhone from a self-executable file, the Primary CTI Manager and Backup CTI Manager fields are automatically filled in. Enter the IP address of the Primary CTI Manager server and (optionally) the IP address of your Backup CTI Manager server. ⚠ **Caution** The IP address(es) must be valid for Cisco IP SoftPhone to work. **Note** If you installed Cisco IP SoftPhone from the Web or if you upgraded to a later version of Cisco IP SoftPhone, the Primary CTI Manager and (optionally) the Backup CTI Manager fields are automatically filled in.
Select Lines	Click **Select Lines...** to select the IP phone line(s) you want to control. See "How to Select Lines to Control" section on page 3-2 for more details.
Collaboration Setting	Enable the Virtual Conference Room option to use the collaboration features of Cisco IP SoftPhone. Enable the NetMeeting option to use the video collaboration features of Microsoft NetMeeting. You must restart Cisco IP SoftPhone to make these changes take effect.
Languages	Choose the language in which you want to run Cisco IP SoftPhone. You must restart Cisco IP SoftPhone for any changes to take effect.

How to Configure Advanced Settings

How to Use Virtual Conference Room

These sections help you understand and use the Virtual Conference Room desktop collaboration features of Cisco IP SoftPhone:

How to Verify Settings

Before you begin a collaboration session, verify the settings in Table 4-1.

> **Note** The collaboration features of Cisco IP SoftPhone do not work unless you configure settings for NetMeeting. See "How to Diagnose Problems with Collaboration" section on page A-17 for details on how to configure settings for NetMeeting.

Table 4-1   How to Verify Settings

Setting	Description
Collaboration	Open the Settings window and verify that "Virtual Conference Room" is selected for the Collaboration Setting on the Advanced tab.
Associated PC	Open your personal or public directory and verify that the correct host name or IP address is specified for the "Associated PC" entry for all participants in the collaboration session. (This includes yourself.) If you do not specify the "Associated PC" or if it is incorrect for a participant, you must add or update the entry in your personal directory, or contact your system administrator to update the public directory. When Cisco IP SoftPhone sets up a collaboration session, it first looks for the participants in your personal directory. If it does not find an entry, it then looks in the public directory. **Note** If you are using a public directory, make sure that the "Auto Network IP Setting" is properly configured and selected.
Microsoft NetMeeting	If you have upgraded your NetMeeting installation (version 3.01 or greater) since you installed Cisco IP SoftPhone, be sure to tune your audio settings and configure user settings for NetMeeting. NetMeeting version 3.01 is installed as part of the Cisco IP SoftPhone installation. You typically tune your audio settings and configure user settings for NetMeeting the very first time you run Cisco IP SoftPhone.

How to Use the Roster

When you click the Collaboration icon while in a call or audio conference, Cisco IP SoftPhone displays a roster window on your computer screen. The roster shows a list of the participants in the call and their phone numbers. It updates this list as participants join and exit the conference. The roster includes icons you can click to share a whiteboard, application, or document, or start a chat session with other participants in the call.

If participants are able to collaborate, the icon next to their name in the roster window is highlighted in green.

Tip   If the roster does not display a participant's name highlighted in green, verify that you have met all collaboration conditions. See the "How to Verify Settings" section on page 4-1 for details.

Related Topics

- Desktop Collaboration with Virtual Conference Room, page 1-7
- How to Verify Settings, page 4-1
- How to Use the Application Sharing Window, page 4-4
- Start a Document Sharing Session, page 4-5
- How to Start a Whiteboard Session, page 4-8
- How to Send a Chat Message, page 4-11

How to Use the Application Sharing Window

The Applications List button in the roster window displays a list of the applications and files you currently have open on your machine.

In the Application Sharing Window, you can perform the following tasks:

- To start a whiteboarding session, click the checkbox to the left of the Chat button.

- To start a chat session, click **Chat**.

- To initiate a data collaboration session or to collapse or expand the application window, click **Applications List.**

- To share a file with other participants, click on the file and drag it into the roster window.

Table 4-2 describes the application sharing controls in the button bar.

Table 4-2   Application Sharing Controls

Control	Description
Refresh button	Refreshes the list of applications in the roster window.
Share button	Shares the application or file selected in the roster window with all participants in the call.
Unshare button	Stops sharing the application or file selected in the roster window and removes the image from each participant's computer screen.
Browse button	Opens the file you choose, adds it to the list of applications in the roster window, and shares the associated application.
"Allow control of shared applications" checkbox	Assigns and removes control of shared applications. This option is active only when at least two parties in the call can collaborate.

Related Topics

Start a Document Sharing Session

When you start a document or application sharing session, Cisco IP SoftPhone opens a new window on each person's desktop and displays the shared file. Initially, you have control of the file. However, you can transfer control to any of the participants. This allows them to make changes even if they do not have the associated application installed on their computers.

You can share more than one program at a time and several people can share programs simultaneously. Also, you can share a whiteboard and document at the same time.

Note   To share applications and documents, you must list each participant in your public or personal directory with the correct Associated PC address configured. See "Add a Directory Entry" section on page 3-33 for details.

Procedure

Step 1   While in a call or audio conference, click the **Applications List** button on the roster.

A list of the applications that are currently active on your computer displays.

Step 2   Click **Browse** and choose the file you want to share, or open your Microsoft Windows Explorer and drag the file icon into the list of applications in the roster window.

Cisco IP SoftPhone opens the file and associated application on your desktop and adds it to the list of active applications in the roster.

Step 3   Select the file from the list of applications in the roster and click **Share**.

The file is displayed in a new window on each participant's computer screen, regardless of whether they have the associated application installed.

Initially, you have control of the file. However, you can allow transfer of control at any time. See the "Transfer Control of a Document" section on page 4-7 for details.

Tip   Another way to share an application or document is to drag it from the Windows Explorer into the roster window.

Caution   If you share a Windows Explorer window, such as My Computer, Control Panel, or a folder on your computer, you share all the Explorer windows you have open. Also, once you share such a window, every program you start while you are still in the meeting is automatically shared with the other participants.

Related Topics

- Desktop Collaboration with Virtual Conference Room, page 1-7
- Application and Document Sharing, page 1-8
- How to Verify Settings, page 4-1
- How to Use the Application Sharing Window, page 4-4
- Transfer Control of a Document, page 4-7
- Request Control of a Document, page 4-8
- End a Document Sharing Session, page 4-8

Transfer Control of a Document

While in a document or application sharing session, the person who initially shared the document or application controls the file. This person, called the "Top Provider" can transfer control of the file to other participants in the session. However, only one person can control a shared program at a time. When the Top Provider allows others to work on the program, the word **Controllable** appears in the title bar of the shared program window. Participants can send a request to the Top Provider to ask for control of the file. If the mouse pointer has a box with initials, then another meeting participant controls the program.

Note   You can only transfer and remove control of a shared file if you are the Top Provider.

Procedure

Step 1   Start a document sharing session.

See the "Start a Document Sharing Session" section on page 4-5.

Step 2   In the roster window, click on the participant to whom you would like to transfer control of the document.

Step 3   Click in the checkbox next to "Allow control of shared applications."

The roster displays "In Control" next to the participant's name. This person now has control of the file. **Controllable** appears in the title bar of the shared program window on each participant's computer screen.

To regain control of a shared application or file, double-click on the shared application.

Related Topics

- Request Control of a Document, page 4-8
- End a Document Sharing Session, page 4-8

Request Control of a Document

If you are a participant in a document sharing session, you can request control of the document from the Top Provider in a couple of ways: double-click in the document sharing application window, or choose **Control > Request Control**. Cisco IP SoftPhone sends a message to the Top Provider to accept or reject your request. For example,

```
Jane Smith would like to take control of your shared programs.
```

If the Top Provider does not respond to your request within 10 seconds, the request fails.

End a Document Sharing Session

To end a document sharing session, select the document in the roster window and click **Unshare**. This closes the document window for the shared file and removes the document from each participant's screen. Only the Top Provider can end a document sharing session.

How to Start a Whiteboard Session

When you start a whiteboard session, a whiteboard appears on each participant's computer screen. While in a whiteboard session, any participant can use the whiteboard tools to draw structured or free-hand objects on a shared screen. To dismiss the whiteboard, close it after (optionally) you save its contents. When you close the whiteboard, it disappears only from your computer screen; other participants can still see and participate in the whiteboard session. To re-enter an active whiteboard session at any time, click on the whiteboard button.

Only one whiteboard session may be open at a time. However, there can be a concurrent whiteboard and document sharing session.

Note   To whiteboard, you must list each participant in your public or personal directory with an entry in the "Associated PC" field. See "Add a Directory Entry" section on page 3-33 for details.

Procedure

Step 1 While in a call or audio conference, click the collaboration icon.

The roster displays all the participants in the call.

Step 2 Click the whiteboard icon in the roster.

An empty whiteboard window displays on each participant's computer screen.

Step 3 Use the whiteboard tools to illustrate your ideas in the whiteboard window. Each meeting participant sees your work without having access to your desktop.

For details on how to use the whiteboard tools, click the help button in the whiteboard window to access online help.

To limit control of the whiteboard, see the "Remove Whiteboard Synchronization" section on page 4-10.

Related Topics

- Desktop Collaboration with Virtual Conference Room, page 1-7
- Whiteboarding, page 1-7
- How to Verify Settings, page 4-1
- End a Whiteboard Session, page 4-10
- Remove Whiteboard Synchronization, page 4-10

End a Whiteboard Session

To end a whiteboard session, close the whiteboard window after (optionally) you save its contents. When you close the whiteboard, it remains open on each participant's computer screen. This allows them to save the contents on their local drive and then close the whiteboard window when they are done. If you leave a whiteboard session but remain in the call, click the whiteboard button at any time to re-join the whiteboard session.

Note   If you initiate a whiteboard session and exit Cisco IP SoftPhone while other participants remain in the whiteboard session, the whiteboard session automatically terminates on each participants' PC.

Remove Whiteboard Synchronization

Synchronization allows everyone to automatically view the same whiteboard page. By default, Cisco IP SoftPhone always selects synchronization when you first start a whiteboard session.

If you want to work on a page privately, you can remove synchronization so the page does not automatically display. Synchronization does not affect other participant's views of the current page. If you turn off synchronization and work on the current page, the other participants can view your actions.

Procedure

Step 1   Start a whiteboard session.

See "How to Start a Whiteboard Session" section on page 4-8.

Step 2   On the whiteboard screen, click **View > Synchronize**.

This removes the check mark next to "synchronization" that indicates it is active.

How to Send a Chat Message

The roster window includes a **chat** button that launches the Microsoft NetMeeting chat application. Use the chat application to send a message to all or selected meeting participants.

When someone sends you a chat message, the message appears in the Chat window. For example,

```
Jane Smith
Are You Ready?
```

For details on how to customize the fonts, information display, and message format for the chat application, click the help menu in the chat window.

Procedure

Step 1   While in a call or audio conference, click the collaboration icon.

The roster displays all the participants in the call.

Step 2   Click the **Chat** button to open the Chat window.

Step 3   In the **Message** block, type the message you want to send, then do one of the following:

- To send a message to all meeting participants, select **Everyone In Chat** from the **Send to** drop-down list.

- To send a message to just one person, select the person's name from the **Send To** drop-down list.

Step 4   Click the **Send Message** button or press **Enter** on your keyboard to send the chat message.

Related Topics

How to Prepare for a Video Collaboration Session

To use the video collaboration features of NetMeeting, disable Virtual Conference Room and enable NetMeeting as follows:

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Click the **Advanced** tab.

Step 3   Change the collaboration setting to NetMeeting.

Step 4   Click **OK**.

You must restart Cisco IP SoftPhone for this setting to take effect.

When you restart Cisco IP SoftPhone, Cisco IP SoftPhone uses the NetMeeting user interface to place calls. To start NetMeeting, open the roster and click the **Launch NetMeeting Call** button.

See the Microsoft NetMeeting online help for details on how to use the video collaboration features of NetMeeting.

Related Topics

How to Troubleshoot

These sections help you troubleshoot common problems you may experience you use Cisco IP SoftPhone:

Frequently Asked Questions (FAQs)

These Frequently Asked Questions (FAQs) help you resolve common problems you may experience with Cisco IP SoftPhone.

When I Start Cisco IP SoftPhone, Why Don't I See Any Lines to Control?

There are several possible causes for this:

Possible Cause   You have not selected a line.

Recommended Action   Refer to the "How to Select Lines to Control" section on page 3-2.

Possible Cause   Your system administrator has not assigned you a line on the Cisco CallManager.

Recommended Action   Ask your system administrator to assign and associate a line for you on the Cisco CallManager.

Possible Cause   You may not have properly configured Cisco IP SoftPhone to see lines.

Recommended Action   Check the Cisco IP SoftPhone configuration. See the "Verify the Cisco IP SoftPhone Configuration" section on page A-3.

Possible Cause   You may not have properly configured the Cisco local TSP (installed with Cisco IP SoftPhone).

Recommended Action   Verify the Cisco Local TSP configuration. See the "Verify the Cisco TSP Configuration" section on page A-4.

Possible Cause   You may not have restarted the Telephony Service on your computer.

Recommended Action   Restart the Telephony service. See the "Restart the Telephony Service" section on page A-6.

Possible Cause   You do not have proper network access.

Recommended Action   Verify Network Connectivity. See the "Verify Network Connectivity" section on page A-7.

Verify the Cisco IP SoftPhone Configuration

Use this procedure to verify that local TSP (Telephony Service Provider) is enabled on the Cisco IP SoftPhone.

Procedure

Step 1   Click the **Settings** toolbar icon.

Step 2   Click the **Advanced** tab.

Step 3   Verify that the User Name, the Password, the Primary CTI Manager and (optionally) the backup CTI Manager are correct.

Step 4   If there are errors, make any required corrections to these fields and restart the Telephony service.

See the "Restart the Telephony Service" section on page A-6.

Step 5   Launch Cisco IP SoftPhone.

If you still do not see any lines, see the "Verify the Cisco TSP Configuration" section on page A-4.

Verify the Cisco TSP Configuration

Use the following procedures to verify that the Cisco TSP is properly configured to communicate with the Cisco CallManager:

> ✎
>
> **Note** Ask your system administrator which Cisco CallManager version you use for Cisco IP SoftPhone.

Verify the Cisco TSP Configuration for Cisco CallManager 3.1 and later

Procedure

Step 1 From the Windows Control Panel, select **Telephony** (Windows 95/98/ME/NT) or **Phone and Modem Options** (Windows 2000/XP).

Step 2 Click the **Telephony Drivers** tab (Windows 95/98/ME/NT) or **Advanced** tab (Windows 2000/XP).

Step 3 Select **Cisco TSP001.tsp** in the selection box and click **Configure...**

If you do not see the **Cisco IP PBX Service Provider** telephony driver in the drop-down list box or if you see a list for **ciscotsp.tsp**, uninstall Cisco IP SoftPhone and run the install program again. If you still do not see any lines, see your system administrator.

Step 4 Configure (or verify) the following settings in the **Cisco IP PBX Service Provider** window:

    a. Click the **User** tab and re-enter the username and password assigned to this user on the Cisco CallManager.

    b. Click the **CTI Manager** tab and verify that the CallManager IP Address radio button is enabled and that the correct IP address is displayed for the Cisco CallManager.

       If the wrong IP address is displayed, enter the correct address.

    c. Click the **Advanced** tab and enter 15 in the "Synchronous Message Timeout" field.

Step 5   Click **OK**.

Step 6   Restart the telephony service.

See the "Restart the Telephony Service" section on page A-6.

Step 7   Launch Cisco IP SoftPhone.

If you still do not see any lines, see the "Verify Network Connectivity" section on page A-7.

Verify the Cisco TSP Configuration for Cisco CallManager 3.0

Procedure

Step 1   From the Windows Control Panel, open **Telephony** (Windows 95/98/ME/NT) or **Phone and Modem Options** (Windows 2000/XP).

Step 2   Click the **Telephony Drivers** tab (Windows 95/98/ME/NT) or **Advanced** tab (Windows 2000/XP).

Step 3   Select **Cisco IP PBX Service Provider** in the selection box and click **Configure...**

If you do not see the **Cisco IP PBX Service Provider** telephony driver in the drop-down list box or if you see a list for **ciscotsp.tsp**, uninstall Cisco IP SoftPhone and run the install program again. If you still do not see any lines, see system administrator.

Step 4   Configure (or verify) the following settings in the Cisco IP PBX Service Provider window:

    a.   In the Security section, re-enter the username and password assigned to this user on the Cisco CallManager.

    b.   In the CallManager Location section, verify that "CallManager IP Address" is enabled and that the correct IP address is displayed for the Cisco CallManager.

        If the wrong IP address is displayed, enter the correct address.

    c.   In the "Message Timeout" section, enter 15000.

Step 5   Click **OK**.

Step 6   Restart the telephony service.

See the "Restart the Telephony Service" section on page A-6.

Step 7   Launch Cisco IP SoftPhone.

If you still do not see any lines, see the "Verify Network Connectivity" section on page A-7.

Restart the Telephony Service

For Windows 95/98/ME:

Close all applications and wait for approximately 15 seconds. If this does not fix the problem for which you need to restart the telephony service, restart the computer.

For Windows NT/2000/XP:

Step 1   From the Windows Control Panel, open **Services** (Windows NT) or **Administrative Tools** and then **Services** (Windows 2000/XP).

Step 2   Scroll down and select **Telephony Service**.

Step 3   If the status is Started, click **Stop** and then **Start**.

You may be unable to stop the service, especially if other processes such as the Remote Access Connection Manager are running. If you are unable to stop the service, reboot the computer.

Step 4   If you still do not see any lines, see the "Verify Network Connectivity" section on page A-7.

Verify Network Connectivity

Use this procedure to verify that the client PC has network connectivity to the Cisco CallManager.

Procedure

Step 1   Open a DOS window or command prompt.

Step 2   Type **ping a.b.c.d** where "a.b.c.d" is the IP address of your Cisco CallManager.

If you are able to communicate with the Cisco CallManager, you receive a "reply" message with the Cisco CallManager IP address. If you are not able to communicate with the Cisco CallManager, you do not receive a "request timed out" message. This indicates there is a network problem.

Step 3   If you do not know how to fix the problem, reboot the computer.

I Can See a Line But When I Try To Open it, Cisco IP SoftPhone Displays a 'Could not open address' Error.

Possible Cause   This error typically occurs if another application has already opened the line (locally or on another computer), or the line is out of service. Each line can be opened only once. If the line has been opened before and the line is now out of service, the line will automatically go back in use. You do not have to do anything. If you tried to open a line that is out of service, you may need to restart the Telephony service and launch Cisco IP SoftPhone again.

Recommended Action   Restart the Telephony service. See the "Restart the Telephony Service" section on page A-6.

Possible Cause   This error may occur because your VPN connectivity is not up.

Recommended Action   To avoid this problem, be sure to launch VPN client before you launch Cisco IP SoftPhone. To resolve this problem, restart VPN client and launch Cisco IP SoftPhone again. See the "Restart VPN Client" section on page A-8.

Restart VPN Client

Use this procedure if you have problems using Cisco IP SoftPhone with VPN access:

Procedure

Step 1   Start your machine.

Step 2   Launch your VPN Client and confirm that it is working.

Step 3   Launch your Cisco IP SoftPhone.

Step 4   Verify that you can select a line to open and that you have 2-way audio:

   a.   Click the **Settings** toolbar icon.

   b.   Click the **Advanced** tab in the settings dialog window.

   c.   Click **Select Lines**... on the Advanced tab and select the line you want to control in the line selection dialog window.

Your line will open with 2-way audio.

If the line still does not open, the problem is not with VPN access. See the"When I Start Cisco IP SoftPhone, Why Don't I See Any Lines to Control?" section on page A-2.

Why Does the Audio Sound Jittery and Broken?

Possible Cause Your sound cards or audio drivers may be incorrectly installed.

Recommended Action Verify that your sound cards and audio drives are correctly installed. Check the documentation that came with your computer or sound cards or audio drivers.

Possible Cause The jitter buffer is set too small.

Recommended Action You may need to increase the size of the jitter buffer. Refer to "Change the Jitter Buffer Size" section on page 3-48.

Possible Cause You may be using too many applications that are CPU-intensive or network-intensive.

Recommended Action Close any unnecessary applications.

Why Do I Get One-way Audio?

One-way audio occurs when you fail to receive incoming audio.

Possible Cause   The audio stream is being misdirected.

Explanation   There are multiple Network Interface Cards (NICs) on the PC or the system uses Virtual Private Network (VPN) or Network Address Translation (NAT) to connect to the corporate network.

Recommended Action   Configure the Network Audio Settings. See the "Set Network Audio Settings" section on page 3-52.

Possible Cause   Your sound card is not a full-duplex card.

Recommended Action   Determine whether the you have a full-duplex or half-duplex sound card. See the "Determine Your Type of Sound Card: Full-duplex vs. Half-duplex" section on page A-11.

Possible Cause   The audio settings for your PC need adjustment.

Recommended Action   Adjust the audio settings for your PC. See the "How to Adjust the Audio Settings" section on page A-16.

Determine Your Type of Sound Card: Full-duplex vs. Half-duplex

Cisco IP SoftPhone requires a full-duplex sound card for proper operation. Full-duplex sound cards can capture audio and play audio at the same time which allows a conversation. The sound cards on most computers are full-duplex; however, in rare instances, you may find a computer with a half-duplex card. If you have one-way audio with Cisco IP SoftPhone, you may have a half-duplex sound card installed in your computer.

To determine which type of sound card you have, check the documentation that came with your computer or sound card. You can also perform this simple test to determine whether you have a full-duplex or half-duplex sound card.

Procedure

Step 1   Exit Cisco IP SoftPhone.

Step 2   Launch Microsoft NetMeeting.

Step 3   Make a Microsoft NetMeeting call to a friend running NetMeeting.

Make sure your friend is in the same building or campus and that the call does not go through a firewall.

Step 4   Once the call connects, begin to speak at the same time as your friend.

If you can hear your friend while you speak, and your friend can hear you, you have a full-duplex sound card.

If this test fails, you probably have a half-duplex sound card. You must install a full-duplex sound card for proper operation of Cisco IP SoftPhone.

Why Do I Get a "Could Not Initialize Audio Error" When I Start Cisco IP SoftPhone?

Possible Cause You do not have a sound card in your machine.

Recommended Action Install a full-duplex sound card in your machine.

Possible Cause You do not have the proper audio drivers installed.

Recommended Action Download the latest audio drivers for your sound card from the manufacturer's website. To verify that the audio drivers, microphone, and speaker work correctly, try to record and play audio with an application such as Microsoft Sound Recorder.

Possible Cause Another application may be using the microphone.

Recommended Action Close any applications that may be using the microphone. Use Microsoft Sound Recorder to see if you can hear your own recording. If the Sound Recorder fails, restart your PC.

How to Find and Change the IP Address for the Cisco CallManager

To determine which Cisco CallManager a Cisco IP Phone uses:

Step 1 Click the **Settings** button on the Cisco IP Phone and then select **Network Configuration** from the menu on the LCD.

Step 2 Scroll down until you see an entry for Cisco CallManager 1.

The IP Address for the Cisco CallManager displays as "Active." Use this address when you install Cisco IP SoftPhone.

Determine Which Cisco CallManager the Cisco IP SoftPhone Uses

Before You Begin

Ask your system administrator if you use Cisco CallManager 3.2, 3.1, or 3.0.

For an alternate method to determine your version of Cisco CallManager, click on the **Settings** button and then click on the **Advanced** tab. If the CTI Manager field displays, you have Cisco CallManager 3.2 or 3.1. If the CM Manager field displays, you have Cisco CallManager 3.0.

For Windows 95/98/ME/NT

Step 1   From the Windows Control Panel, select **Telephony**.

Step 2   Click the **Telephony Drivers** tab.

Step 3   Select the Cisco TSP Service Provider in one of the following ways:

- If you use Cisco CallManager 3.2 or Cisco CallManager 3.1, select **Cisco TSP001.tsp** in the selection box.

- If you use Cisco CallManager 3.0, select **Cisco IP PBX Service Provider** in the selection box.

Step 4   Click **Configure...**

The IP Address for the Cisco CallManager you use with Cisco IP SoftPhone displays in the CallManager Location of the Cisco IP PBX Service Provider window.

If this is not the same IP address that your Cisco IP Phone uses, you must edit it to match the Cisco IP Phone IP address.

For Windows 2000/XP

Step 1 From the Windows Control Panel, select **Phone and Modem Options**

Step 2 Click the **Advanced** tab.

Step 3 Select the Cisco TSP Service Provider in one of the following ways:

- If you use Cisco CallManager 3.2 or 3.1, select **Cisco TSP001.tsp** in the selection box.

- If you use Cisco CallManager 3.0, select **Cisco IP PBX Service Provider** in the selection box.

Step 4 Click **Configure...**

The IP Address for the Cisco CallManager you use with Cisco IP SoftPhone displays in the **CTI Manager** tab section of the Cisco IP PBX Service Provider window.

If this is not the same IP address that your Cisco IP Phone uses, you must edit it to match the Cisco IP Phone IP address.

Change the Cisco CallManager IP Address Configured for the Cisco IP SoftPhone

For Windows 95/98/ME/NT

Step 1   Type the IP Address of the Cisco CallManager to which you want to connect in the CallManager Location section of the Cisco IP PBX Service Provider window.

Step 2   In the Security section of the Cisco IP PBX Service Provider window, type the username and password assigned to you for that Cisco CallManager.

Step 3   Click **OK**.

Note   To use Cisco IP SoftPhone with a Cisco IP Phone, the username and password configured for Cisco IP SoftPhone must be exactly the same as the username and password assigned to this user on the Cisco CallManager.

For Windows 2000/XP

Step 1   Click **CTI Manager tab** in the Cisco IP PBX Provider window and select the IP address radio button.

Step 2   Type the IP address of the Cisco CallManager to which you want to connect in the IP Address field.

Step 3   Click the **User** tab of the Cisco IP PBX Service Provider window and type the username and password assigned to you for that Cisco CallManager.

Step 4   Click **OK**.

Note   To use Cisco IP SoftPhone with a Cisco IP Phone, the username and password configured for Cisco IP SoftPhone must be exactly the same as the username and password assigned to this user on the Cisco CallManager.

How to Adjust the Audio Settings

Frequently, the volume settings on client PC's are improperly set which prevents two-way audio in a telephone call. Use this procedure to check and adjust these settings.

Procedure

Step 1   Select **Start > Programs > Accessories > Multimedia > Sound Recorder.**

Step 2   Use the microphone to record your voice for 5-10 seconds.

Step 3   Play back the recorded voice.

If you hear your voice, your audio settings are properly set.

If you do not hear your recorded voice, close the Sound Recorder application and go to Step 4.

Step 4   Select **Start > Programs > Accessories > Multimedia > Volume Control**.

Step 5   Select **Options > Properties.**

Step 6   Under "Adjust volume for" select **Playback**.

Step 7   Under "Show the following volume controls" make sure every item in the list is checked.

Not all items are visible so be sure to scroll down to the end of the list.

Step 8   Click **OK**.

Step 9   Under "Adjust volume for" select **Recording** and repeat Steps 7 and 8.

Step 10   Select **Options > Advanced Controls**.

> **Note**   If your sound card does not support advanced controls, this feature is not available.

Step 11   In the Master Out volume control window, set all the volume controls to about 80 percent. Set all balance controls to the middle.

Step 12   Make sure that the Mute box is not checked for the Master Out control or the Wave control.

Step 13   Although it may seem strange, make sure the microphone's Mute box is checked in order not to route the microphone's input directly to the multimedia speakers or internal speaker for your computer.

You can mute the other controls as appropriate for your voice-computing applications.

Step 14   Select **Options > Properties** and verify that you use the proper audio device (sound card) to handle recording and playback.

Step 15   Repeat Steps 1 through 3.

If you still cannot get the Sound Recorder application to work, you do not have a Cisco IP SoftPhone problem. Ask your system administrator to help configure your audio settings.

How to Diagnose Problems with Collaboration

Symptom   I have defined the correct Associated PC for a person in my directory but I still cannot collaborate with him.

Possible Cause   The person has moved on the LAN/WAN (e.g., the person has a portable computer) and the directory services of the LAN have not yet updated to reflect the current IP address.

Recommended Action   Wait until Cisco IP SoftPhone detects the new IP address for the Associated PC and try to collaborate with that person again. Verify that the Net IP Audio Setting is set to Automatic and that the Cisco CallManager is properly configured.

Symptom I have met all the conditions on the Collaboration Checklist but I still cannot collaborate.

Possible Cause You have not tuned the audio settings or configured user settings for Microsoft NetMeeting. If you install a newer version of NetMeeting after you install Cisco IP SoftPhone, you need to configure user and audio settings for NetMeeting before you can collaborate. You need only do this one time. Perform the following steps to configure user and audio settings for NetMeeting.

Procedure

Step 1   Launch NetMeeting from the **Start > Programs** menu.

Step 2   Follow the directions to tune audio and configure user settings.

Step 3   Quit NetMeeting.

Step 4   Restart Cisco IP SoftPhone.

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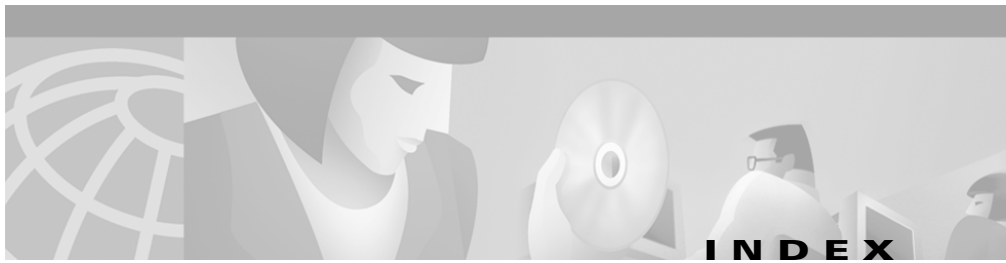
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