User Guide

CU-SeeMe® version 3.0

Windows 95 and Windows NT 4.0

Copyright Information

542 Amherst Street
Nashua, NH 03063
(603) 886-9050

Written by William Wiegler

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Chapter 1

Introduction

Videoconferencing (also known as Video Chat) takes place when two or more people communicate using video and some combination of audio, text, or graphics. CU-SeeMe is White Pine's videoconferencing software for your desktop computer featuring color video, audio, chat, and white board communications. You can use CU-SeeMe on the Internet or any TCP/IP network for real-time person-to-person or group conferencing, broadcasts, and chats. Whether you are an instructor conducting a training class, a business manager communicating to a customer, or someone wanting to chat with a friend, you will be amazed at the ways CU-SeeMe will bring you closer!

In this chapter you will learn where to find information about CU-SeeMe and what you need to install your software. You will also get an explanation of CU-SeeMe conference types. This is helpful to understand before you begin your first videoconference.

Where to Find Information

You are starting at the right place! With the help of this User Guide, you will be videoconferencing in minutes. This book guides you through the process of making your first connection, enabling you to see and speak with other people. This book also explains some of the most often used features of CU-SeeMe.

This PDF file can be viewed online using Adobe® Acrobat®. If you find that the graphics in this book are not clear when viewed online, you can change the zoom setting in Acrobat to increase the magnification. This PDF file can also be printed.

In addition to this book, there are other sources of information to help you use and enjoy CU-SeeMe:

Online Help

CU-SeeMe comes with online Help, a complete reference tool that includes step-by-step procedures and additional information about CU-SeeMe that is not covered in this book.

You can get Help in two ways:

- You can view the CU-SeeMe Help Contents window by choosing **CU-SeeMe Help Topics** from the **Help** menu. From the CU-SeeMe Help window you can select Help topics for more specific information.
- You can also get context-sensitive Help by clicking the **Help** button found in many dialog boxes and message windows.

Web Pages

See the CU-SeeMe World Wide Web pages (http://www.cuseeme.com) for more information about CU-SeeMe, including product updates and technical support.

Other Books

For information on Microsoft® Windows®, consult the Windows user guide provided with your version of Windows from Microsoft, Inc.

Because CU-SeeMe has become so popular around the world, many books have been written about it. Here are a few:

Enhanced CU-SeeMe by Robert Rustici is published by MIS:Press, ISBN 1-55828-490-7. This book explains the nuts and bolts and etiquette of videoconferencing with CU-SeeMe.

The Internet TV with CU-SeeMe by Michael Sattler is published by SAMS/ Macmillian, ISBN 1-57521-006-1. This book provides an in-depth look at the freeware version of CU-SeeMe.

Videoconferencing: The Whole Picture by Toby Trowt-Bayard is published by Flatiron Press, ISBN 0-936648-48-1. This book, a videoconferencing systems and network buyers guide, thoroughly describes all aspects of videoconferencing.

System Requirements

There are many ways to use CU-SeeMe, depending on the hardware and software you have. If you want to send video from your computer you need to have a video camera and a video capture card (sometimes referred to as a video digitizer card), or use a video camera that does not require a capture card, such as the Connectix QuickCam. You can receive video from other users even if you don't have a video camera or a video capture card, however other users will not be able to see you.

You need to make sure you have a sound card installed in your computer in order to send and receive audio.

White Pine maintains a list of recommended video capture cards, sound cards, and cameras that work with CU-SeeMe. This list is published online in our Frequently Asked Questions (commonly referred to as FAQs) on the World Wide Web at http://www.cuseeme.com/support.

Minimum System Requirements

To use CU-SeeMe, you need the minimum requirements listed in the following sections.

Computer Requirements:

- Windows 95 or Windows NT Version 4.0
- Pentium processor, 100 megahertz (MHz) minimum
- 16 megabytes (MB) of RAM (24 MB or more recommended)
- 10 MB of hard disk space

Network Connections:

- TCP/IP (Winsock-compliant), PPP for dial-up connection
- 28.8 Kbps modem, Ethernet, or ISDN connection
- IP address

To Send Video:

- Digitizer camera (such as Connectix QuickCam)

  - or -

- Video camera and video capture card

To Send Audio:

- Microphone
- 16-bit sound card and drivers

To Receive Audio:

- Speakers or headphones
- 16-bit sound card and drivers

CU-SeeMe Assistants

CU-SeeMe includes many Assistants to help you accomplish tasks while using the program. Assistants are step-by-step guides that lead you through a process, such as creating a Contact Card, creating a Personal Profile, creating a multicast conference, and more.

When you have finished installing CU-SeeMe and you run CU-SeeMe for the first time, the CU-SeeMe Setup Assistant appears. Follow the steps as it guides you through the process of configuring CU-SeeMe for your first videoconference connection. Using this Assistant, you will set up your video and audio sources, create communication settings based on your network connection, and choose whether to share information to make it easier for other people to contact you using CU-SeeMe. See “Using the Setup Assistant” on page 2-2 for more information.

CU-SeeMe Conference Types

When you communicate with someone using CU-SeeMe, your conversation is called a *conference*. A conference can include communication using video, audio, text, and graphics. CU-SeeMe allows you to communicate with people using several conference types:

- Point-to-Point Conference
- Group Conference
- Cybercast Conference
- Multicast Conference

The following sections will explain the first three conference types, since these are the most widely-used conferences. To learn more about multicast conferences, see "Multicast Conferences" on page 3-40.

Point-to-Point Conference

A point-to-point conference occurs when one person conferences directly with another person. Each person must have a computer running CU-SeeMe. You can be connected through the Internet or through a private network such as a local area network (LAN) or wide area network (WAN). A point-to-point conference is illustrated in Figure 1-1.

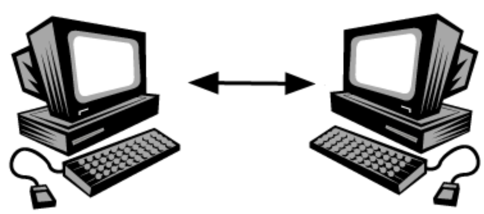


Figure 1-1. A point-to-point conference connects two people

As an example, suppose you want to videoconference directly with a friend. You would need to know that friend's Internet Protocol (IP) address. You can then use CU-SeeMe to call that IP address and conference with your friend, much like you would dial your friend's telephone number if you wanted to connect for a telephone call. Like a telephone number, an IP address is a unique numeric identifier except instead of identifying your telephone, it identifies your network-connected computer. (If you use an online directory service, you can eliminate the need to know an IP address to make a call. See "Registering With an Online Directory Service" on page 6-22 for more information.)

Group Conference

A group conference provides a collaborative environment where co-workers, students, or whole families can participate in a conference. The most common way to participate in a group conference is to connect to a computer running conference server software, such as the White Pine Reflector. Any video, audio, text, or graphics that you transmit is received by the conference server, then transmitted to all others connected to the conference. A group conference is illustrated in Figure 1-2.

Figure 1-2. A conference server connects a group of people in a collaborative environment

A group conference has an IP address or host name that you use to call it, just like a point-to-point conference. Some group conferences require a unique conference ID number or password to join the conference.

Cybercast Conference

A cybercast (or one-way conference) is similar to television broadcasting. One computer, running conference server software, transmits audio and video to all users who connect to it. The individual users can not send video, audio, text, or graphics; they can only receive broadcast data. A cybercast conference is illustrated in Figure 1-3.

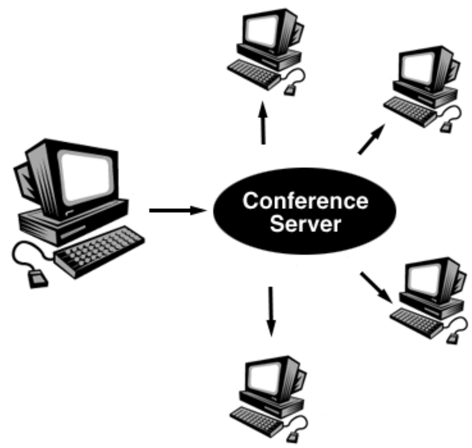


Figure 1-3. A cybercast conference is like a TV broadcast for your computer

Some examples of cybercast conferences are NASA-TV that broadcasts video and audio about space shuttle missions, teachers who cybercast their lessons to remote students, and trade shows that broadcast video and audio of keynote speakers.

Chapter 2

Making Your First Connection

Now that you have installed the CU-SeeMe software and checked to make sure your computer has the minimum system requirements (see page 1-4), you are ready to connect to your first videoconference. This chapter will guide you step-by-step into a videoconference where you will see and send video, talk with other people online, and exchange Chat text. Once you have taken the “Quick Start” approach presented in this chapter and you have participated in your first videoconference, you will want to try using additional features of CU-SeeMe. In subsequent chapters, you will discover all the fun and useful ways you can enhance your videoconference experience.

Remember, if you need more help, it is available online. See page 1-2 for information on using online Help.

Using the Setup Assistant

The first time you start CU-SeeMe, you will see the CU-SeeMe Setup Assistant. This helps you set up your computer and prepares you for your first videoconference.

When you installed CU-SeeMe, you were given the option of running CU-SeeMe immediately after installation. If you chose this option, then the Setup Wizard appeared automatically. If you did not choose this option, then you must start CU-SeeMe manually. To do this from the Windows desktop, click **Start**, point to **Programs**, point to **CU-SeeMe**, then click **CU-SeeMe for Windows**.

When CU-SeeMe starts, the CU-SeeMe Setup Assistant appears, as shown in Figure 2-1.

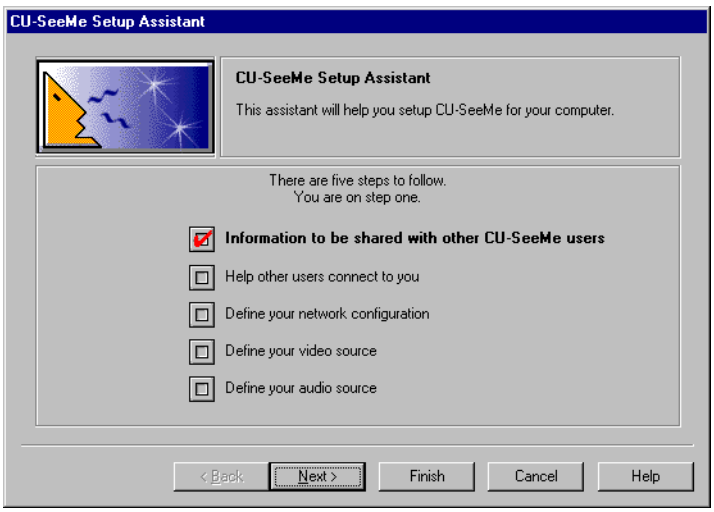


Figure 2-1. The CU-SeeMe Setup Assistant helps you prepare for your first videoconference

This Assistant guides you through five steps, after which you will be ready for your first connection. The first step will enable you to define the personal information that you want to share with other CU-SeeMe users. Click **Next** to proceed. The dialog box shown in Figure 2-2 appears.

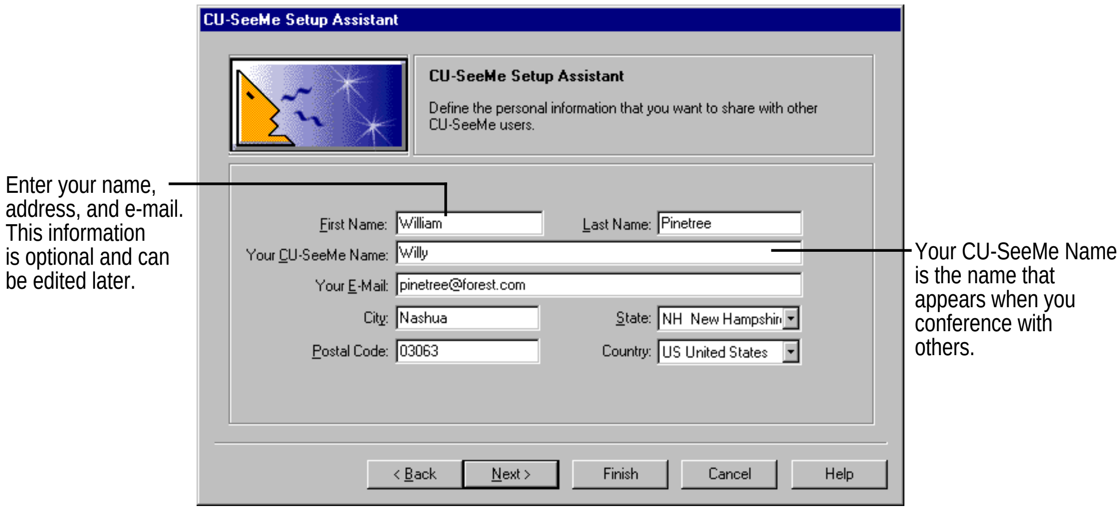


Figure 2-2. Define information to share with other CU-SeeMe users

The information in this dialog box is optional. Any information you enter here will be available to other CU-SeeMe users in a conference. You can enter, change, or delete any of this information at a later time. See “Editing a Personal Profile” on page 3-25 for more information. When you are done entering information, click **Next**.

You are now on step two, as shown in Figure 2-3.

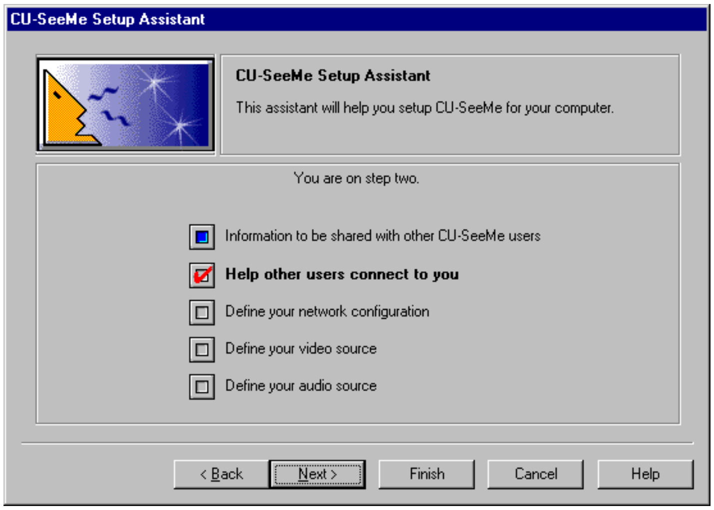


Figure 2-3. You are on step two

Click **Next** to proceed. The dialog box, shown in Figure 2-4, appears.

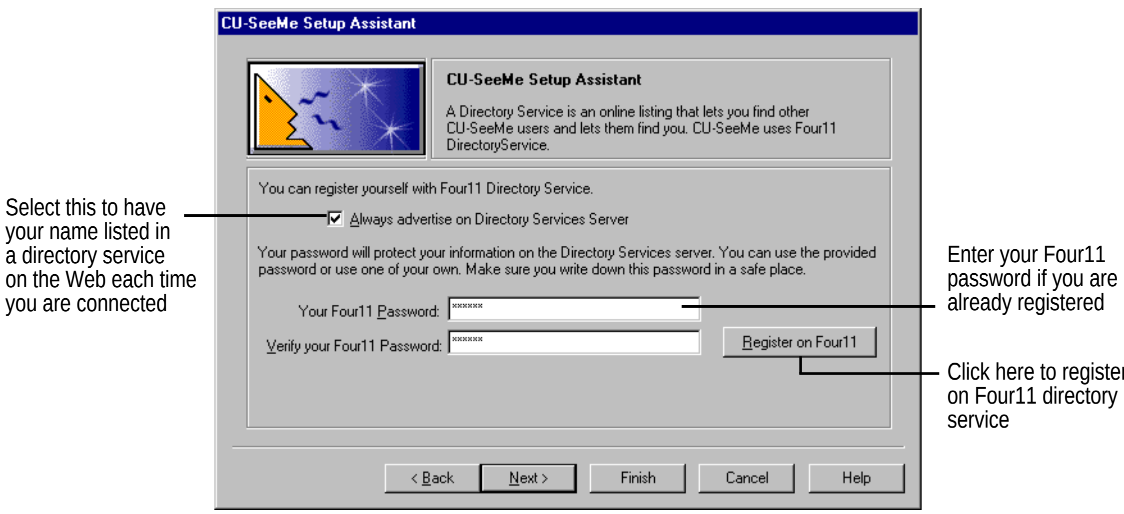


Figure 2-4. You can register with an online directory service

You can choose to register and list your name on a Web-based directory services server. This will allow other CU-SeeMe users to locate you and connect to you. This is optional. (To learn more about registering with Four11 directory service, see “Registering With an Online Directory Service” on page 6-22.) When you are done, click **Next**.

You are now on step three, as shown in Figure 2-5.

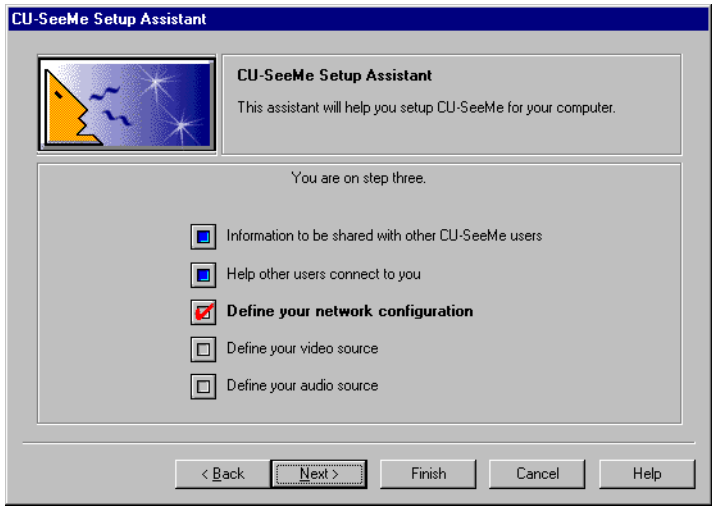


Figure 2-5. You are on step three

Click **Next** to proceed. The dialog box, shown in Figure 2-6, appears.

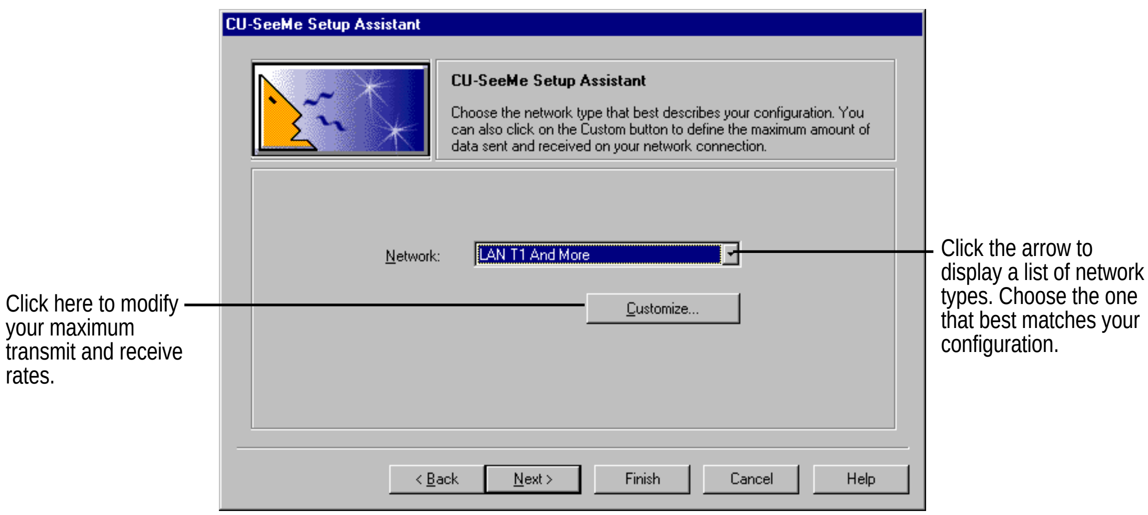


Figure 2-6. Choose your network type

Using the drop-down list, choose your network type. You must choose a network configuration type that best matches your network. For example, if you are using a modem, select the corresponding modem choice.

Click **Customize** to modify the maximum rates at which you can transmit and receive data. This step is optional. The default settings work best for most users. When you are done, click **Next**.

You are now on step four, as shown in Figure 2-7.

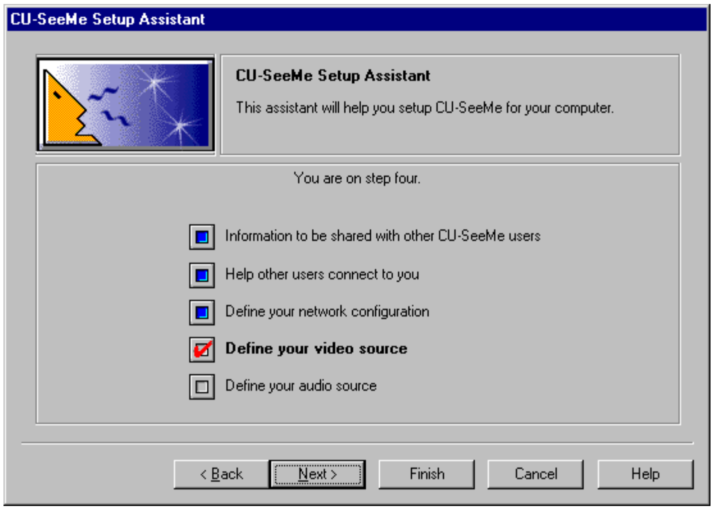


Figure 2-7. You are on step four

Click **Next** to proceed. The dialog box, shown in Figure 2-8, appears.

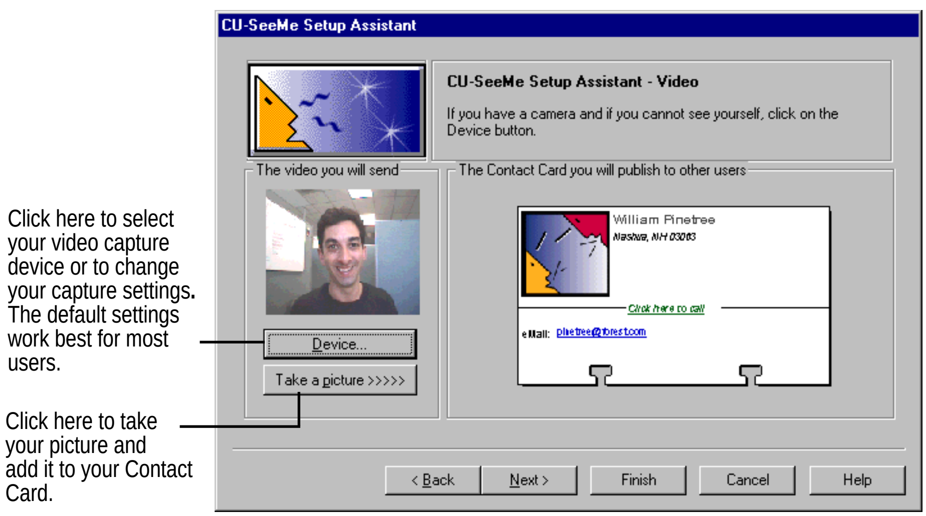


Figure 2-8. You can see the video that you will send to others

If you have a camera, you can use this dialog box to test the video image that you will be sending to others. This dialog box also displays a Contact Card, which is like a business card or a card in a rotary file. It is a convenient way to present and store information about a person or place. To learn more about Contact Cards, see “Contact Cards” on page 3-11. To learn more about storing information about yourself to send to others, see “Creating a Personal Profile” on page 3-22.

Click **Take a picture** to add your picture to the Contact Card. This is optional. The resulting card is shown in Figure 2-9.

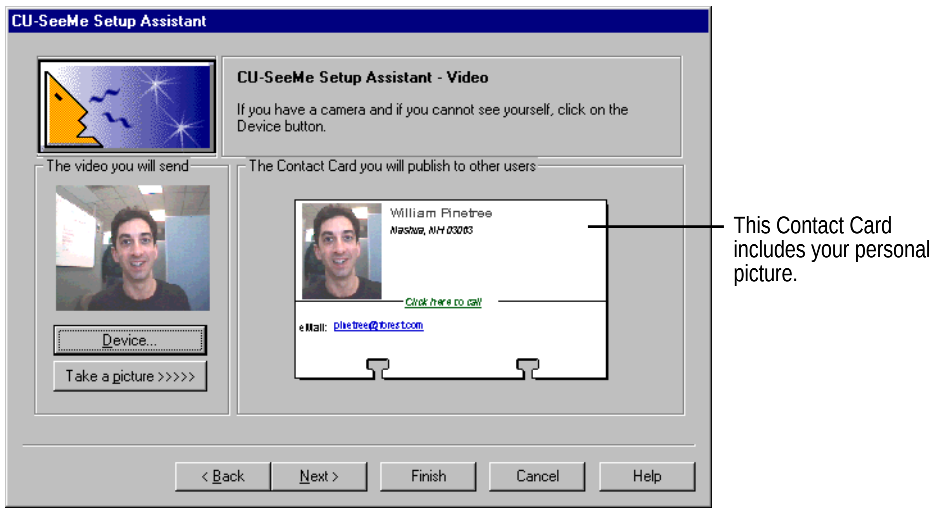


Figure 2-9. You can take your picture and add it to your Contact Card

When you are done, click **Next**.

You are now on step five, as shown in Figure 2-10.

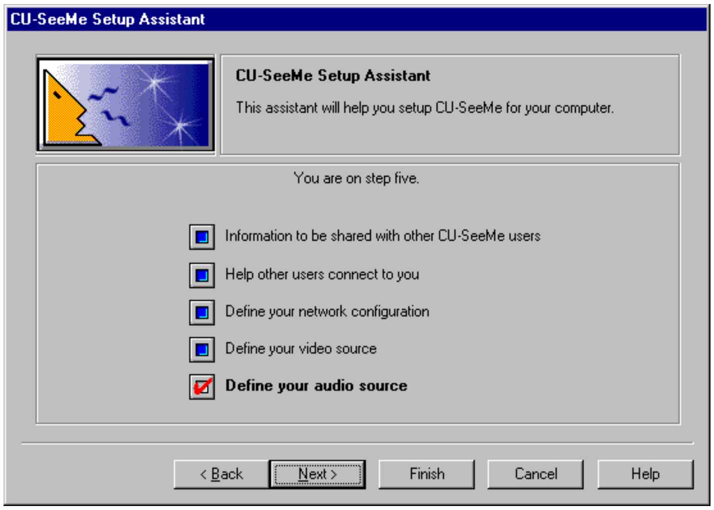


Figure 2-10. You are on step five

Click **Next** to proceed. The dialog box, shown in Figure 2-11, appears.

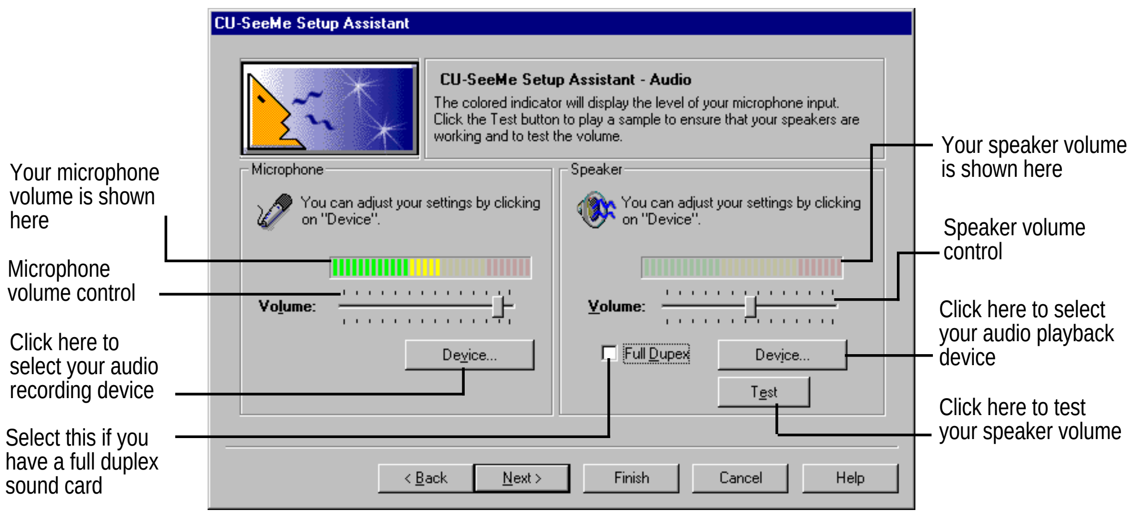


Figure 2-11. You can adjust your microphone and speaker

Use this dialog box to test your microphone and speaker and make audio adjustments.

When you are done, click **Next**.

You have now completed the CU-SeeMe Setup Assistant, as shown in Figure 2-12.

Figure 2-12. You are now ready to run CU-SeeMe and get connected

Continue to the next section to make your first connection and begin videoconferencing.

Getting Connected

If you are connecting to the Internet using an Internet Service Provider (ISP), you must be dialed into your ISP prior to starting CU-SeeMe.

CU-SeeMe is already set up to connect you to a group conference called the White Pine Cafe. This is a virtual cafe where you will meet other people who happen to be connected to the White Pine Cafe at the same time. These are real live CU-SeeMe users, just like you!

Are you ready? Let’s begin.

Connecting to the White Pine Cafe

If CU-SeeMe is not already running, you must start the program. To do this from the Windows desktop, click **Start**, point to **Programs**, point to **CU-SeeMe**, then click **CU-SeeMe for Windows**. The Quick Start & Tips window appears, as shown in Figure 2-13. (If the Quick Start & Tips window does not appear when you start CU-SeeMe, go to the Phone Book **Help** menu and click **Quick Start & Tips**.)

Figure 2-13. The Quick Start & Tips window helps you make your first connection

Click **Visit White Pine**. Your computer now dials the Internet Protocol (IP) address of the White Pine Cafe. A dialog box will appear, indicating that your computer is establishing a connection to the White Pine Cafe. Once the connection is made, a new dialog box appears, as shown in Figure 2-14.

Figure 2-14. You can choose from a variety of conferences in the White Pine Cafe

This dialog box offers a choice of conferences. Click **Join** to join the default conference. The next dialog box tells you that you are connected and then you are presented with White Pine Cafe's *Message of the Day*, shown in Figure 2-15.

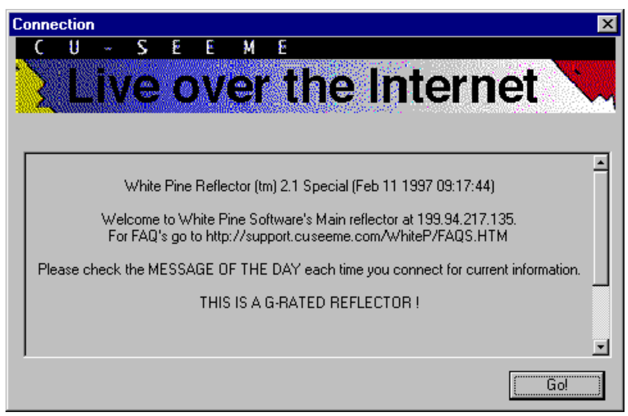


Figure 2-15. Message of the Day from the White Pine Cafe

The Message of the Day is sent by the people who manage the White Pine Cafe conference, introducing you to the rules of their conference. Read this message to learn about any special rules or conditions relating to this conference, and then click **Go!** A new window will appear, called the White Pine Cafe (see Figure 2-16). This is the Conference Room window where videoconferencing takes place. Think of it as a virtual meeting room where you see and talk to others, and share written messages and graphics. Whenever you connect to a person or place, you will work in a Conference Room window, similar to this.

Figure 2-16. The Conference Room window is where you see and talk to others

The Conference Room is divided into several sections, as shown in Figure 2-16. If you have a camera connected to your computer, you will see your video picture in one of the video windows. If other people are connected to the White Pine Cafe, you will see their names listed in the Participants List. You will also see video images of some of these people. For example, in Figure 2-16, Woodinator, DavidD, syzygy, and CU-Guy are other people who are in the cafe. Additional participants, such as Guillaume, Katrina, and others are also in the cafe but their video images are not currently displayed on your screen. When you are connected to the White Pine Cafe, you will not see the same list of names as shown in Figure 2-16 because you are connected to a changing group of real people. The list of participants will be different each time you connect. The number of video images you see depends on the type of network connection you have.

Your name appears in the Participants List as CU-SeeMe User (Local). *CU-SeeMe User* is the default name assigned by CU-SeeMe. You can choose a different user name by defining a new user profile. To learn how to do this, see “Creating a Personal Profile” on page 3-22. The word *(Local)* is added to your name to indicate that it is being sent from your computer. You are the local participant. Other people in the conference are remote participants. In Figure 2-16, *Willy* is the name of the local participant.

Seeing Other People

When the Conference Room opened, video images of some of the people in the Participants List appeared. By default, CU-SeeMe fills up all available video window frames with video images. To change this, see“Closing All Video Windows” on page 2-15. Continue reading to learn how to control which people appear on your screen.

There are two categories of participants: *senders* and *lurkers*. Senders are sending video images and you can choose to see their images. Lurkers are not sending video images. Perhaps they don't have cameras, or maybe they are choosing not to be seen. Whatever the reason, you will not receive a video image from a lurker. However, if you are sending video, both senders and lurkers can receive your image.

Look at the Participants List in Figure 2-17. This list contains both senders and lurkers.

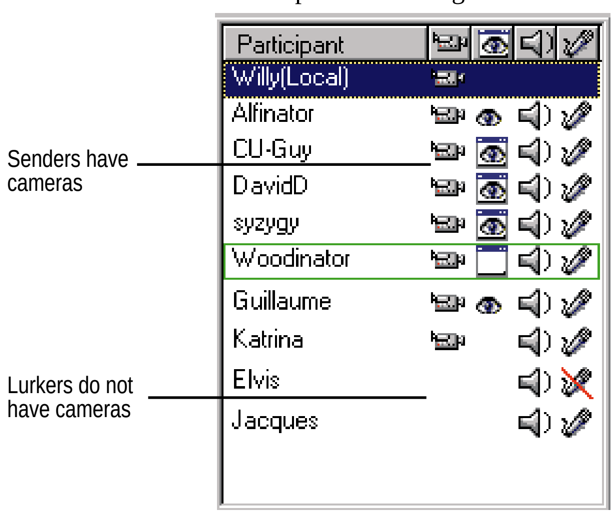


Figure 2-17. Participants List with senders and lurkers

To learn more about the Participants List and the information it presents, see “Participants List” on page 4-10.

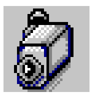
Swapping Video Images

If you want to see a sender who is not currently displayed on your screen, you can click on a participant's name to select it, and then drag it to a video window frame. This is called drag-and-drop. The new participant's image will replace the previous image in that video window frame.

Closing All Video Windows

If you don't want all the video windows filled with images, or if you want more control over who you see on your screen, you can close all the video windows and then select only those participants you want to view. Note that this does not disconnect you from the conference; it only closes the video windows. You are still connected and others can still see you.

To close all video windows:

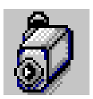


1. Click the **Video** button on the toolbar. This displays a list of all the participants who are sending video images.
2. Point to **Close All**, then click.
3. All the video images disappear.

Showing All Video Windows

To fill up all the video window frames again, follow these steps.

To show all video windows:



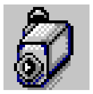
1. Click the **Video** button on the toolbar. This displays a list of all the participants who are sending video images.
2. Point to **Show All**, then click.
3. All the video window frames will fill up with available video images.

To select individual video images, read the following section, "Seeing a Participant".

Seeing a Participant

You can choose which video images you want to see displayed on your screen.

To see a participant:



1. Click the **Video** button on the toolbar. This displays a list of all the participants who are sending video images.
2. Point to the name of the participant you want to select, then click.
3. The video image is now displayed in one of the open video window frames.
4. You can repeat this process to see video images from other participants.

You can continue this until all the video window frames are full, or you can stop at any time. You do not need to fill all the video windows. In fact, *having fewer open video windows will increase the performance of your computer during the videoconference.*

Remember that the number of video images you can display depends on the type of network connection you have.To learn more about displaying video windows, see “Video Windows” on page 4-17.

Being Seen

Just as you can choose to see other people in the Participants List, other participants can also choose to see you if you are a sender. Remember, if you have a camera connected to your computer, you are a sender. However, you can choose to become a lurker which prevents others from seeing your video picture.

To switch between being a sender and a lurker:

1. Make sure that your local video image is displayed in one of the video window frames. If it is not currently displayed, see “To see a participant:” on page 2-16 to learn how to display your video window.
2. Using the right mouse button, click on your video image. A dialog box appears. If you see a ✔ next to **Send Video**, then you are a sender.
3. Click **Send Video** to become a lurker. The ✔ disappears. You have stopped sending your video image to other participants
4. If you click **Send Video** again, you become a sender. You have now turned your video on and other participants can choose to see your video picture.

Note that if you do not have a camera attached to your computer, you are always a lurker. Some group conferences limit the number of lurkers that can be connected at any given time. If that number has been reached and you switch from being a sender to being a lurker, then you may be disconnected from that conference. If this happens, call the conference again.

Chatting with Others

Now that you are seeing some of the other people in the Conference Room, you may wish to exchange messages with them. One way to do this is to send typed messages to other people using Chat. Chat enables you to communicate, even if you don't have a microphone or if your network connection is too limited to carry audio.

Chat Window

Chat messages appear in the Chat window, as shown in Figure 2-18.

Figure 2-18. The Chat window allows you to exchange typed messages

To use the Chat window:

1. Type a message in the lower pane of the Chat window.
2. Press ENTER.
3. Your message now appears in the upper pane of the Chat window.

Other participants will see your message and you will see the messages that others are typing. You can follow Chat conversations in the upper pane of the window. Messages appear in the order in which they are received.

To learn more, see "Chat Window" on page 4-23.

Sending and Receiving Audio

In addition to seeing others, and exchanging Chat messages, you can also talk to other participants and hear their voices. To hear other participants, you must have speakers or headphones connected to your computer. To talk to other participants, you must have a microphone connected to your computer.

To learn about the audio features of CU-SeeMe, see “Audio Modes” on page 4-29 and “Audio Controls and Indicators” on page 4-31.

Disconnecting From the Conference

When you are ready to leave the White Pine Cafe, you can disconnect from the conference in one of 2 ways.

To disconnect from a conference:

On the **Conference** menu, click **Hang Up**.

-or-

Click the **Hang Up** button on the toolbar.

This will disconnect you from the White Pine Cafe. Your videoconference session is over. The Conference Room window will close automatically and the Phone Book window will appear. Actually, it never disappeared; it remained on your desktop behind the Conference Room window. You can exit the application by choosing **Exit** from the **File** menu in the Phone Book. Or you can use the Phone Book to connect to other conferences. To learn more about using the Phone Book, see Chapter 3.

Chapter 3

Using the Phone Book

The CU-SeeMe interface has two main windows: the *Phone Book* and the *Conference Room*. This chapter explains how to use the Phone Book and its components. See Chapter 4 for information on how to use the Conference Room.

Think of the Phone Book as your personal directory where you can list your friends, family members, business contacts, or anyone you might want to call. You can also think of the Phone Book as a speed dial list. You can make videoconference calls directly from the Phone Book.

The Phone Book includes a collection of Contact Cards. You can have a Contact Card for each person or place that you call. Some cards are included in CU-SeeMe to get you started and you can add or delete cards at any time.

You can also use the Phone Book to set up a Personal Profile for yourself. This profile defines information about you and your connections, such as your CU-SeeMe user name and communication settings. When you set up your Personal Profile, you create a Profile Contact Card about yourself. This card stores information which you can share with others.

Components of the Phone Book

The components of the Phone Book are shown in Figure 3-1.

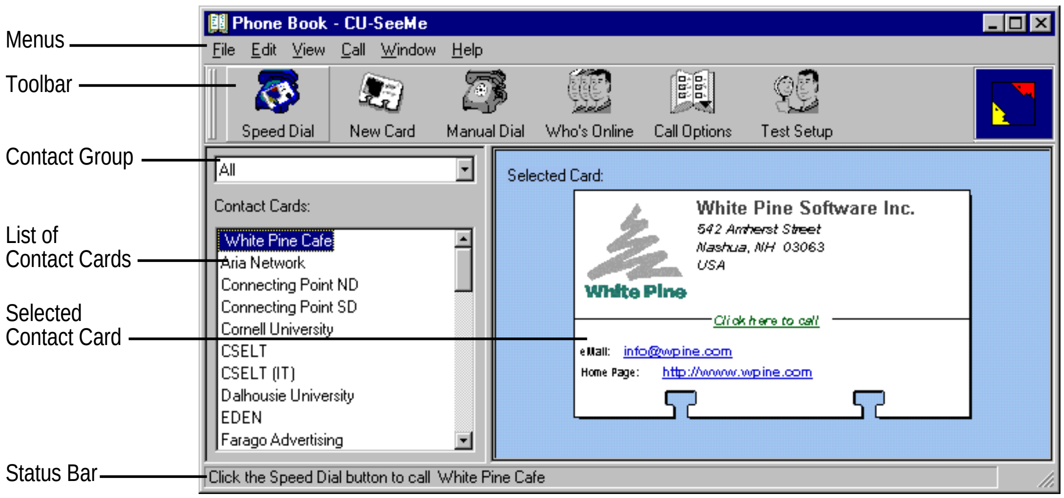


Figure 3-1. The Phone Book has several components

The components are explained in the following sections, as shown in Table 3-1.

Table 3-1. Where to find information on Phone Book components

To find out information about...	Go to...
Phone Book Menus	page 3-3
Phone Book Toolbar	page 3-10
Contact Cards	page 3-11
Contact Groups	page 3-12
Status Bar	page 3-14

Phone Book Menus

You can access CU-SeeMe commands from the Phone Book menus. You activate a menu by clicking on it. When you do, the menu's commands are displayed. If a command is not available to you, it appears dimmed. Commands in the menu that are followed by ellipsis (...) need more information from you before they execute. These commands display dialog boxes that ask you for more information. Commands in the menu that are followed by a triangle indicate that a submenu is available. Pause your mouse pointer over that command and a submenu will appear.

The commands and their descriptions are explained in the following sections.

File Menu

The commands under the File menu are described in Table 3-2.

Table 3-2. The commands under the File menu in the Phone Book

File Command	Description
New Contact Card Assistant...	Opens the Contact Card Assistant, a step-by-step guide to creating a new Contact Card. This command is also available by clicking the **New Card** button on the Phone Book Toolbar.
New Contact Card	Creates a new Contact Card, which can be edited later.
Import...	Imports data and creates new Contact Cards.
Export >	Saves the selected Contact Card to a file.
Send Mail...	Sends e-mail to the address on the selected Contact Card. (Note that your e-mail program must be configured to use MAPI. See your e-mail vendor's documentation to learn if it is MAPI-compliant.)
Print Setup...	Displays the Print Setup dialog box where you can change the printer and print options.
Print Preview	Displays the Print Preview dialog box, where you choose whether to preview a selected Contact Card or a group of Contact Cards.
Print...	Displays the Print dialog box, where you choose whether to print a selected Contact Card or a group of Contact Cards.
1: *most recent connection* 2: *previous connection*	Lists the most recent connections you have made. Click on a name in this list to reconnect.
Exit	Exits the CU-SeeMe program.

Edit Menu

The commands under the Edit menu are described in Table 3-3.

Table 3-3. The commands under the Edit menu in the Phone Book

Edit Command	Description
Undo	Reverses the last text edit, such as renaming an entry in the list of Contact Cards.
Cut	Removes the selected Contact Card from your Phone Book and puts it on the Clipboard.
Copy	Copies the selected Contact Card to the Clipboard.
Paste	Pastes the current content of the Clipboard.
Delete	Deletes the selected Contact Card.
Select All	Selects all the Contact Cards in the current Contact Group.
Find	Displays the Find a Card dialog box where you can initiate a search of your Contact Cards.
Find Next	Finds the next Contact Card, based on the search information you entered in the Find a Card dialog box.
Call Options...	Displays the Call Options dialog box where you can change settings for Profiles, Listener, Security, and Phone Book options. This command is also available by clicking the **Call Options** button on the Phone Book Toolbar.
Contact Card Properties...	Displays the Contact Card Editor dialog box where you can modify the properties of the selected Contact Card, including network settings used when calling the person or place on the selected card.
Edit Profile...	Displays the Calling Options dialog box, where you can modify your Personal Profiles.

Table 3-3. The commands under the Edit menu in the Phone Book

Edit Command	Description
Test Setup...	Displays the Test Setup dialog box where you can test and modify your video, microphone, speaker, and network settings. This command is also available by clicking the **Test Setup** button on the Phone Book Toolbar, or from the Quick Start and Tips window.

View Menu

The commands under the View menu are described in Table 3-4.

Table 3-4. The commands under the View menu in the Phone Book

View Command	Description
Status Bar	Turns on and off the option of viewing the Status Bar at the bottom of the Phone Book. A ✔ indicates that the option is turned on.
Contact Card	Turns on and off the option of viewing Contact Cards in the Phone Book. A ✔ indicates that the option is turned on.
Groups >	Displays the list of Contact Groups and the Edit Groups command. The current group is indicated with a ✔.
Who's Online...	Displays the a list of users who are currently online using CU-SeeMe (and are registered with Four11 directory service). This command is also available by clicking the **Who's Online** button on the Phone Book Toolbar.
Directory Services...	Opens a Web browser and connects to the Four11 directory service Web page.

Call Menu

The commands under the Call menu are described in Table 3-5.

Table 3-5. The commands under the Call menu in the Phone Book

Call Command	Description
Speed Dial *current listing*	Calls the person or place on the selected Calling Card. This command is also available by clicking the **Speed Dial** button on the Phone Book Toolbar.
Favorites >	Displays a list of Contact Cards in your *Favorites* Contact Group. You can select a card from this group and call the person or place listed on the card.
Manual Dial...	Displays the Dial dialog box where you can type an IP address to make a call. This command is also available by clicking the **Manual Dial** button on the Phone Book Toolbar.
Create Multicast Conference...	Opens the Multicast Assistant, a step-by-step guide to creating a multicast conference.

Window Menu

The commands under the Window menu are described in Table 3-6.

Table 3-6. The commands under the Window menu in the Phone Book

Window Command	Description
Phone Book	Displays the Phone Book window. This command appears dimmed if the Phone Book is currently displayed.
Conference Room	Brings the Conference Room window to the front. This command appears dimmed if you are not currently connected to a conference.
WhiteBoard	Brings the WhitePineBoard window to the front. This command appears dimmed if you are not currently in a WhitePineBoard session.

Help Menu

The commands under the Help menu are described in Table 3-7.

Table 3-7. The commands under the Help menu in the Phone Book

Help Command	Description
CU-SeeMe Help Topics	Opens the CU-SeeMe Help file and displays the Contents page.
Search for Help On	Opens the CU-SeeMe Help file and displays the Find page.
CU-SeeMe Events	Opens a Web browser and displays a Web page showing a schedule of events to which you can connect using CU-SeeMe.
Technical Support	Opens a Web browser and displays the White Pine Software Technical Support Web page.
Registration	Opens a Web browser and displays the White Pine Software Product Registration Web page, allowing you to register your copy of CU-SeeMe online.
Quick Start & Tips	Displays the Quick Start and Tips window.
About CU-SeeMe...	Displays information about your version of CU-SeeMe.

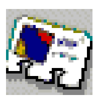
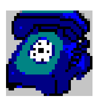
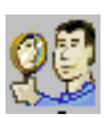
Phone Book Toolbar

The Phone Book toolbar has buttons that provide shortcuts to many commands. As you move your mouse pointer over each button, the selected button becomes highlighted. You can then click the button to select it.

When you pause your mouse pointer on each button, a tool tip appears. No clicking is necessary. The tool tip gives you information about the function of each button.

The Phone Book toolbar buttons are explained in Table 3-8.

Table 3-8. The Phone Book toolbar buttons

Toolbar Button	Description
 Speed Dial	Calls the person or place on the selected Calling Card.
 New Card	Opens the Contact Card Assistant, a step-by-step guide to creating a new Contact Card.
 Manual Dial	Displays the Dial dialog box where you can type an IP address to make a call.
 Who's Online	Displays a list of users who are currently online using CU-SeeMe.
 Call Options	Displays the Call Options dialog box where you can change settings for Profiles, Listener, Security, and Phone Book options.
 Test Setup	Displays the Test Setup dialog box where you can test and modify your video and audio settings. To learn more testing your setup, see "Test Your Setup" on page 6-13.

Contact Cards

A Contact Card is like a business card or a card in a rotary file. It is a convenient way to present and store information about a person or place, including contact information. The list of Contact Cards contains the names of people and places you might want to call. Some cards are already in this list and you can add and delete cards at any time.

Selected Card

You can display a Contact Card for each entry in your Phone Book. The Contact Card currently displayed in your Phone Book corresponds to the highlighted name in the Contact Card list. When you click on another Contact Card name in the list, a different Contact Card is displayed.

A sample Contact Card is shown in Figure 3-2.

Figure 3-2. A Contact Card allows you to store information and make connections

To learn how to create a Contact Card, see “Adding Entries in the Phone Book” on page 3-19. To learn how to make a call using a Contact Card, see “Making Calls from the Phone Book” on page 3-15.

When you create a Personal Profile (see “Creating a Personal Profile” on page 3-22), you also create a Profile Contact Card about yourself. You can share your Profile Contact Card with others and receive cards from other people. This is similar to exchanging business cards, except that you distribute a card file electronically, rather than handling paper cards. To learn more, see “Getting Information About a Participant” on page 4-34.

Contact Groups

You can organize your collection of Contact Cards into categories, or Contact Groups. For example, you might want a group containing all of your business contacts and another group containing all of your social contacts. Or if you share you computer with other people, each person might want his/her own Contact Group. You can have the same name listed in more than one Contact Group. For example, you might want a co-worker listed in your Business Contact Group and also in your Social Contact Group.

You can select a Contact Group by clicking the arrow (as shown in Figure 3-3) or you can select or edit Groups from the **View** menu.

Figure 3-3. The list of Contact Groups is displayed

To select Contact Groups from the View menu:

1. On the **View** menu, point to **Groups**.

2. Point to the Contact Group you want to select, then click.

3. The group you selected is now displayed in your Contact Card list and the first card in the list is shown as the selected card. If you select the **All** Contact Group, you will see all the Contact Cards in your Phone Book.

To edit Contact Groups:

1. On the **View** menu, point to **Groups**.
2. Point to **Edit Groups**, then click. The Edit Groups window is displayed, as shown in Figure 3-4.

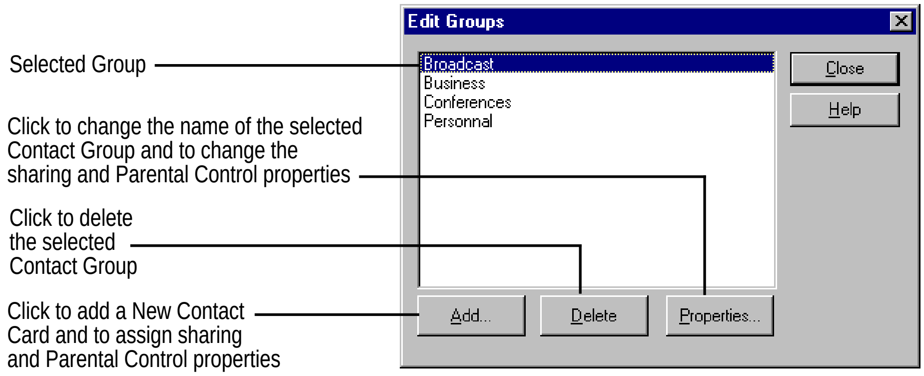


Figure 3-4. The Edit Groups window lets you add, delete, and modify Contact Groups

If you delete a Contact Group that contains Contact Cards, these cards will still be available from the All group.

To learn how to move a Contact Card from one Contact Group to another, see “Editing a Contact Card” on page 3-21. To learn about Parental Control, see “Using Parental Control” on page 3-35.

Status Bar

The Status Bar, located at the bottom of the Phone Book, provides tips and information about your current status. For example, when you click and hold on a toolbar button, the Status Bar presents information about that button. Also, when you pause your mouse pointer on a menu command, the Status Bar presents information about that command.

When you are not connected to a conference, the Status Bar displays information telling you which Phone Book entry you have selected. Once you have made a connection, the Phone Book Status Bar tells you how long you have been connected.

Making Calls from the Phone Book

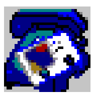
You can make videoconference calls directly from the Phone Book. To make a call, you can use the Speed Dial function, you can manually dial a number, or you can select a person to call from a list of who's online. These methods are explained in the following sections.

Speed Dialing

The Speed Dial allows you to call a person or place listed on the selected Contact Card.

To call using Speed Dial:

1. Click on a Contact Card listed in the Phone Book.



2. Click the **Speed Dial** button on the Phone Book toolbar. This begins your connection to the person or place listed on the selected Contact Card.

3. While your computer is establishing the connection, you will see the window shown in Figure 3-5. If you have a camera and are sending video, you will see your picture in this window. You will also see the Contact Card of the person or place to which you are connecting.

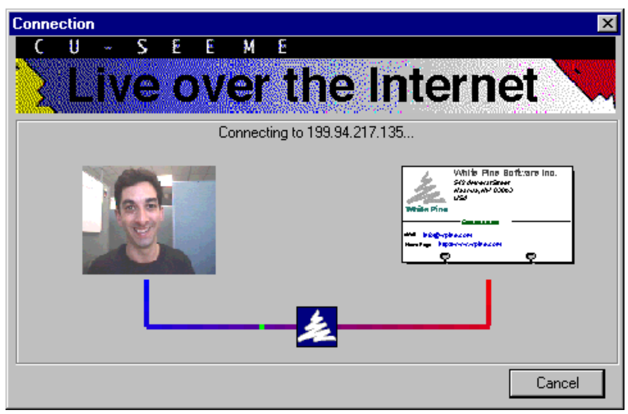


Figure 3-5. Your computer is establishing a connection

4. Once the connection is made, this window will change to display a list of conferences you can join (see Figure 3-6). Select a conference, then click **Join**.

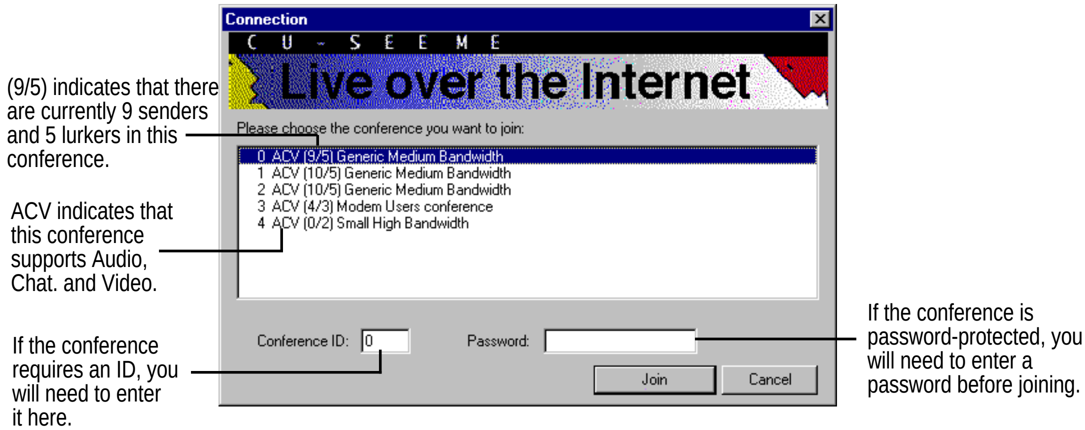


Figure 3-6. Choose a conference to join

5. After you select a conference, the window will display a Message of the Day as shown in Figure 3-7. This message is unique to each conference. Read this message to learn about any special rules or conditions relating to this conference.

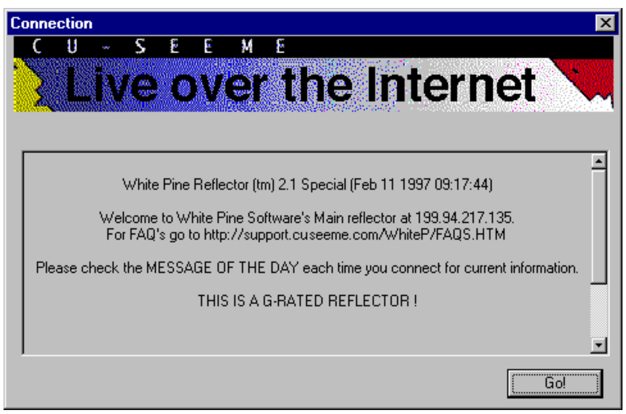


Figure 3-7. Message of the Day

6. Click **Go!** to enter the conference.

In addition to these steps, there are other ways you can call using Speed Dial. These are described next.

Other ways to call using Speed Dial:

- Double-click on a Contact Card in the list.

  \- or -

- Click on the phrase **Click here to call** on the selected Contact Card.

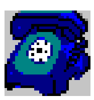
  \- or -

- Using the right mouse button (right-click), select a Contact Card in the list. A dialog box appears. Click **Speed Dial**.

Manual Dialing

At times you might want to dial a person or place that is not already listed in your Phone Book. To do this, you can manually dial a number by typing the Internet Protocol (IP) address of the person or place you want to call.

To call using Manual Dial:



1. Click the **Manual Dial** button on the Phone Book toolbar.
2. The Dial dialog box appears. Type the IP address or the host name of the person or place you want to call.

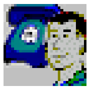
   <u>Optional</u>: Click the Advanced tab. Type the Conference ID and Password for the conference server to which you want to connect, if a password is required.
3. Click **Dial**. This begins your connection.

Calling Who's Online

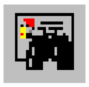
CU-SeeMe can tell you who is currently online using CU-SeeMe. You can select one of these names to call.

To find out who's online:

1. Click the **Who's Online** button on the Phone Book toolbar.
2. The Who's Online window appears listing users who are currently online using CU-SeeMe. Click on a name in the Who's Online list.



3. Click the **Speed Dial** button on the Who’s Online toolbar. This begins your connection.



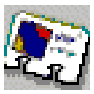
4. You can also click the **Web Search** button to open a Web browser and connect to the Four11 directory service Web page.

The names appearing in the Who’s Online list are people who are currently online using CU-SeeMe *and* have registered with Four11 directory service. To learn more about registering with Four11 directory service, see “Registering With an Online Directory Service” on page 6-22.

Adding Entries in the Phone Book

You can add new Contact Cards to the Phone Book. The easiest way to do this is using the Contact Card Assistant. The Contact Card Assistant guides you through the steps needed to create a new Contact Card.

To use the Contact Card Assistant:



1. Click the **New Card** button on the Phone Book toolbar.
2. The New Contact Card Assistant is displayed, as shown in Figure 3-8.

Figure 3-8. The New Contact Card Assistant makes it easy to create new Contact Cards

Follow the steps in the New Contact Card Assistant. It guides you through the creation of a Contact Card and adds a new entry to the Contact Card list.

You can also add a new entry in the Phone Book without using the Assistant. This is useful if you want to add an entry but don't have much information to complete a Contact Card.

To add a simple Phone Book entry:

1. On the **File** menu, click **New Contact Card**.
2. A new Contact Card is created with the name *Untitled*. To rename this card, type the new name now. This new name will appear in the Contact Card List in the Phone Book.

The name you typed will be added to your Contact Card List and a New Contact Card will be created. This card will have minimal information, and you can edit this card at any time to add or change information. You can also change the name of the Contact Card as it appears in the Contact Card list.

You can also import files which contain data that can be converted into Contact Cards.

To import data into your Phone Book:

1. On the **File** menu, click **Import**.
2. The Open dialog box is displayed, as shown in Figure 3-9.

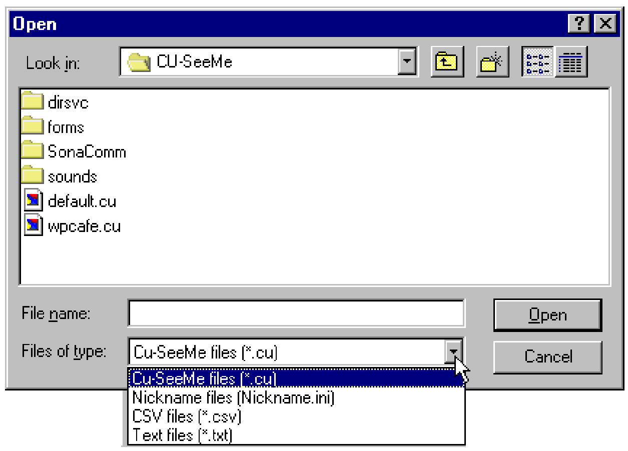


Figure 3-9. You can import files and convert the data to Contact Cards

3. You can import several types of files. Click the arrow (as shown in Figure 3-9) to display a list of file types that you can import.

CU-SeeMe files (*.cu) and CSV files (*.csv) can be imported directly as contact cards into the currently selected Contact Group. Nickname files (Nickname.ini) contain the data from the Phone Book in earlier versions of CU-SeeMe. If you have an earlier version of CU-SeeMe, you can import the Nickname files to bring your old Phone Book entries into your new Phone Book. If you select Text files (*.txt), the Phone Book Import Assistant is displayed. This is a step-by-step guide to creating new Contact Cards using existing text files.

Editing a Contact Card

Once you have created a Contact Card, you can edit it to add or change information, or you can delete the card to remove it from the Phone Book

To edit a Contact Card:

1. Select the entry in the Contact Card list.

2. On the **Edit** menu, click **Contact Card Properties**. The Contact Card Editor appears, as shown in Figure 3-10.

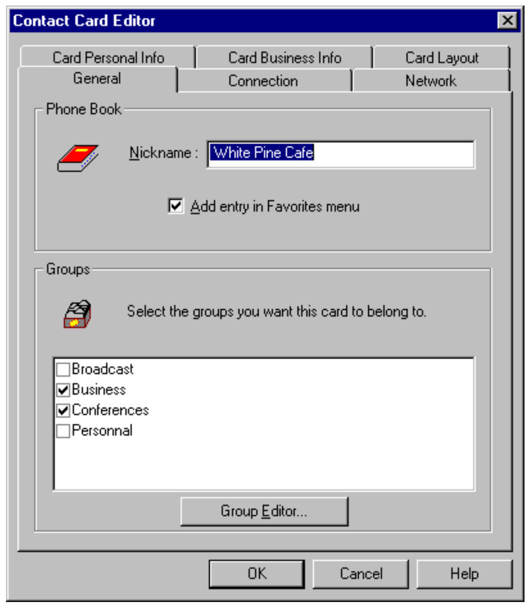


Figure 3-10. The Contact Card Editor lets you modify Contact Cards

3. Select a tab to choose what aspect of the card you want to edit. For example, the General tab lets you edit the Nickname text field, which is the name that appears in the Contact Card list.

4. When you have completed all your edits to the Contact Card, click **OK**.

To delete a Contact Card:

1. Select the entry in the Contact Card list.

2. On the **Edit** menu, click **Delete**.

3. You are asked if you are sure you want to delete this card. Click **Yes** to delete the card or **No** to cancel the delete process.

Creating a Personal Profile

A Personal Profile identifies you to other people on the network.Your Personal Profile includes your CU-SeeMe name, which is your on-screen name that others see when you are conferencing. When you create a Personal Profile, you also create a Profile Contact Card about yourself. Your Profile Contact Card is like a business card that you can exchange with others electronically. To learn how to exchange Contact Cards with others, see “Getting Information About a Participant” on page 4-34.

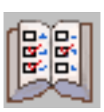
If you choose to videoconference on public conferences, your Profile Contact Card can be seen and saved by anyone with CU-SeeMe; therefore, you should be careful what information you choose to display on your Profile Contact Card. For example, if you do not want strangers to have your phone number, then you should not list it on your Contact Card.

Your Personal Profile also contains information about Parental Control options, and your computer setup. To learn more about Parental Control, see “Using Parental Control” on page 3-35.

You can create one or more Personal Profiles. For example, you might want one profile for personal use and one for home use, or you might want different profiles for different members of your family.

To create a Personal Profile:

1. Be sure that you are not connected to a conference when you create your Personal Profile. The Phone Book window should be your active window. If it is not, then click on the Phone Book window to make it the active window.



2. Click the **Call Options** button on the Phone Book toolbar. Point to **Profiles**, then click.

3. The CU-SeeMe Call Options dialog box appears (with the Profiles tab displayed), as shown in Figure 3-11.

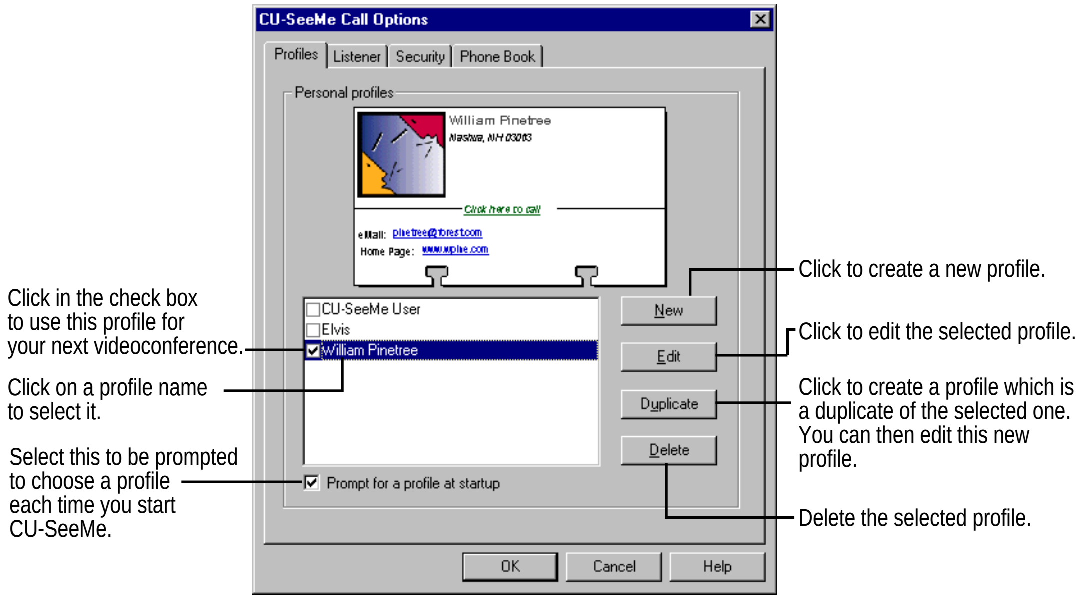


Figure 3-11. You can create and edit your Personal Profile

4. Click **New**.

5. The Personal Profile Assistant is displayed, as shown in Figure 3-12.

Figure 3-12. The Personal Profile Assistant makes it easy to create a Personal Profile

Follow the steps in the Personal Profile Assistant. It guides you through the creation of a Personal Profile including a Profile Contact Card. You can repeat these steps to add additional profiles.

Editing a Personal Profile

You can edit your profiles if you want to add or change any information. For example, you might want to change your CU-SeeMe name, which is your on-screen name that others see when you are conferencing.

To edit a Personal Profile:

1. Click the **Call Options** button on the Phone Book toolbar. Point to **Profiles**, then click.
2. The CU-SeeMe Call Options dialog box appears (with the Profiles tab displayed), as shown in Figure 3-11.
3. Click **Edit**.
4. The Personal Profile Editor appears, as shown in Figure 3-13.

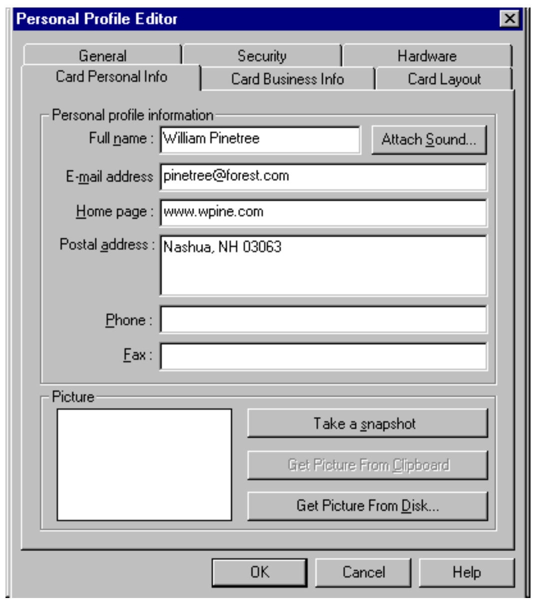


Figure 3-13. The Personal Profile Editor lets you modify your profile

5. Select a tab to choose what aspect of the Personal Profile you want to edit. For example, the General tab lets you edit your CU-SeeMe name, which is the user name that appears when you conference with others.
6. When you have completed all your edits to the Personal Profile, click **OK**.

To delete a Personal Profile:

1. Click the **Call Options** button on the Phone Book toolbar. Point to **Profiles**, then click.

1. The CU-SeeMe Call Options dialog box appears (with the Profiles tab displayed), as shown in Figure 3-11

2. Click **Delete**.

3. You are asked if you are sure you want to delete this profile. Click **Yes** to delete the profile or **No** to cancel the delete process.

Using the Listener

The Listener is a program that lets you know if someone is trying to call your computer for a videoconference, even when CU-SeeMe is not running or when you are already connected to a conference or another call. It will listen for incoming calls and it will notify you. You can accept, ignore, or refuse the call.

The Listener is automatically turned on when CU-SeeMe is running. This means that if you are in a videoconference and someone else calls you, you will be notified of the call so you can accept it or not. If you accept it, you will be disconnected from your current videoconference because you cannot be connected to two conferences simultaneously. You will then be connected to the new, incoming call.

Enabling the Listener

If you want to have the Listener running even when CU-SeeMe is *not* running, you will need to enable the Listener to run as a start-up program. This means that the Listener will start automatically when Windows starts on your computer. In this scenario, you will be notified of an incoming call even when CU-SeeMe is not running. You can accept or deny the call. If you accept the call, the Listener automatically starts CU-SeeMe so you can begin conferencing with the caller.

To enable the Listener:

1. Click the **Call Options** button on the Phone Book toolbar. Point to **Listener**, then click.

2. The CU-SeeMe Call Options dialog box appears (with the Listener tab displayed), as shown in Figure 3-14.

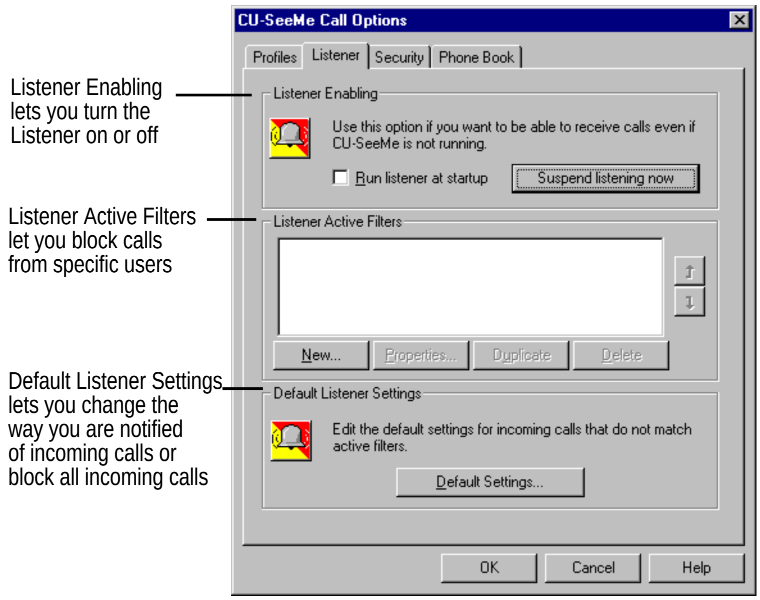


Figure 3-14. You can enable the Listener to notify you of incoming calls

3. Select the check box labeled **Run listener at startup**, as shown in Figure 3-15.

Figure 3-15. You can enable the Listener to run even when you are not running CU-SeeMe

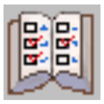
4. The button next to this check box toggles between two modes. It says either **Suspend listening now** or **Resume listening now**. If you decide that you want to stop running the Listener temporarily, click **Suspend listening now**. When you click it, the button changes to say **Resume listening now**. The label on the button tells you what will happen when you click the button. When you want to resume using the Listener, click the button again. For now, the button should say **Suspend listening now**.

5. The next time you restart Windows on your computer, the Listener will be enabled to run even when CU-SeeMe is not in use. You will see the Listener icon  in the Windows Taskbar, letting you know that the Listener is running. To turn the Listener off, right-click on the icon in the Taskbar, point to **Disable Listening**, then click. The icon changes  to indicate that the Listener is turned off.

Changing Listener Default Settings

The Listener is set up to notify you of all incoming calls by displaying a Notification dialog box, and ringing ten times. If you do not accept an incoming call within ten rings, the call is automatically refused. You can change these default settings.

To change the Listener default settings:



1. Click the **Call Options** button on the Phone Book toolbar. Point to **Listener**, then click.
2. The CU-SeeMe Call Options dialog box appears (with the Listener tab displayed), as shown in Figure 3-14.
3. At the bottom of this dialog box is a section called **Default Listener Settings**. Click the **Default Settings** button to display the Listener Default Settings dialog box, shown in Figure 3-16.
4. There are two sections of this tab that you can modify. One is a section called **Get my attention**, which defines how you want to be notified of incoming calls, and the other section is called **Call response**, which defines how you want the Listener to respond if you don't answer the incoming call. These are explained in the following sections.

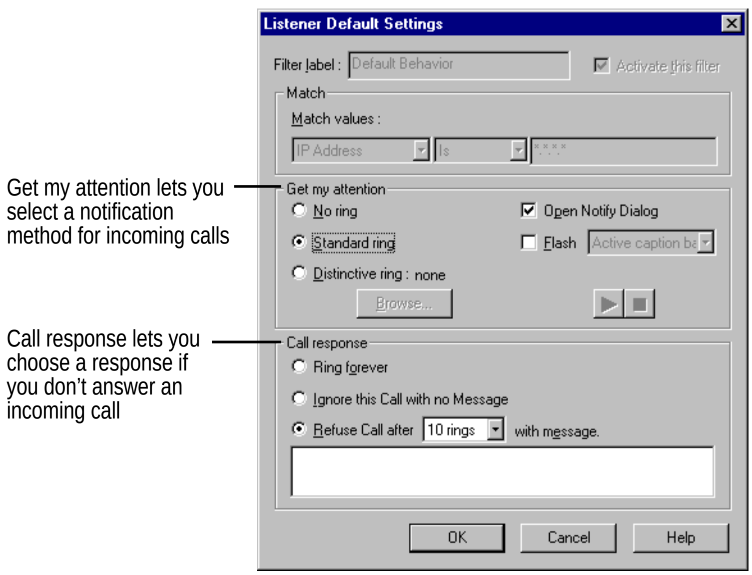


Figure 3-16. You can modify the default settings of the Listener

Modifying the Notification Method

Using the Listener Default Settings dialog box, you can define how you want to be notified of incoming calls. In the section of the Listener Default Settings dialog box called **Get my attention**, you can select the sound you want to hear when you are notified of a call. This section is shown in Figure 3-17.

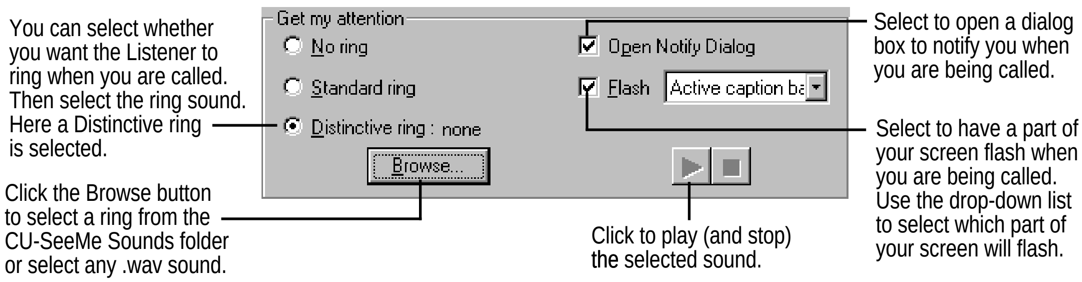


Figure 3-17. You can define how you want to be notified of incoming calls

You can select one of the following ring options:

- No ring
- Standard ring
- Distinctive ring

If you select Distinctive ring, you then need to click the **Browse** button to find a .wav file on your hard disk. For example, you can browse to the CU-SeeMe folder (usually on the C: drive at C:\Program Files), then the sounds folder, and finally select **conflist.wav** or any other .wav file.

Use the Play button to listen to the sound. This sound will replace the standard ring to notify you of an incoming call.

If the **Open Notify Dialog** check box is selected, you will also see a dialog box whenever you receive an incoming call. This dialog box makes it easy to respond to the call.

If the **Flash** check box is selected, a portion of your screen will flash to get your attention and let you know that you are being called. If you select Flash, then you can use the drop-down list to select which portion of the screen will flash.

Modifying the Listener Response

Using the Listener Default Settings window, you can define how you want the Listener to respond if you don't answer the incoming call. In the section of the Listener Default Settings dialog box called **Call response** (shown in Figure 3-18), you can select the following response options:

- Ring forever

  This means that the Listener will continue to ring until the caller disconnects.

- Ignore this call with no message

  This means that calls will automatically be refused and the caller will receive no feedback from your computer. If this is selected, you will *not* be notified of incoming calls.

- Refuse call after *x* rings with message

  This means that you can define how many times the Listener will ring before refusing calls. If you type a message into the box below this choice, that message will be sent to the caller once the call is refused. For example, you can send the following message to your caller:

  "I am not at my computer right now. Please call again later."

Choose how CU-SeeMe should respond when you don't answer an incoming call. Here, the call will be refused after 10 rings and a message will be displayed to the caller.

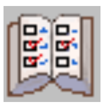
Type the message that you want to caller to receive.

Figure 3-18. You can define how the Listener will respond if you don't answer the call

Creating Listener Active Filters

There may be times when you don't want the Listener to use the default settings. For example, you might want to block out calls from one particular caller, but receive notification when anyone else calls. Or you might want to be notified of calls from only a small group of special friends. You can override the default settings by creating Listener Active Filters.

To create Listener Active Filters:



1. Click the **Call Options** button on the toolbar. Point to **Listener**, then click.
2. The CU-SeeMe Call Options dialog box appears (with the Listener tab displayed), as shown in Figure 3-14.
3. There is a section of this dialog box called **Listener Active Filters**. Click the **New** button to create a new filter. The New Listener Filter dialog box appears, as shown in Figure 3-19.

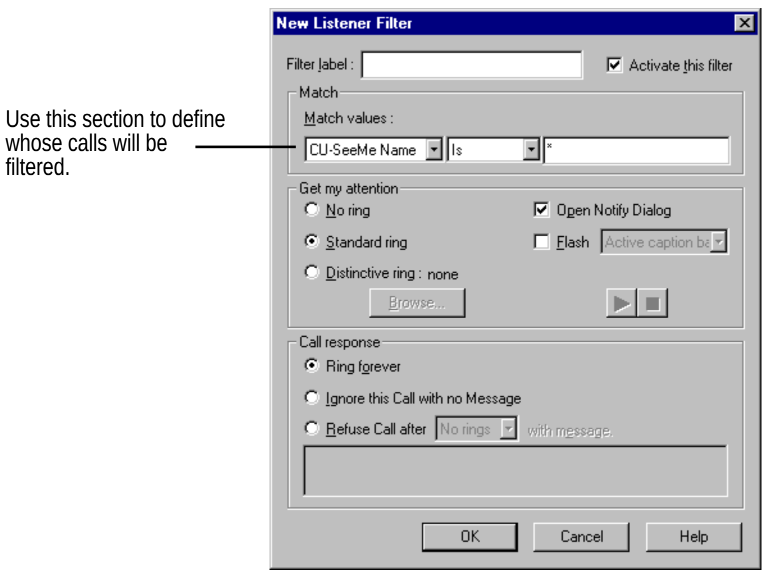


Figure 3-19. You can customize the Listener for specific incoming calls using filters

You can create a filter that will override the default Listener settings. For example, using the sample filter shown in Figure 3-20, if a user with the CU-SeeMe name of Jason tries to call you, the call will automatically be refused and Jason will receive the following message:

"I am not accepting your call at this time."

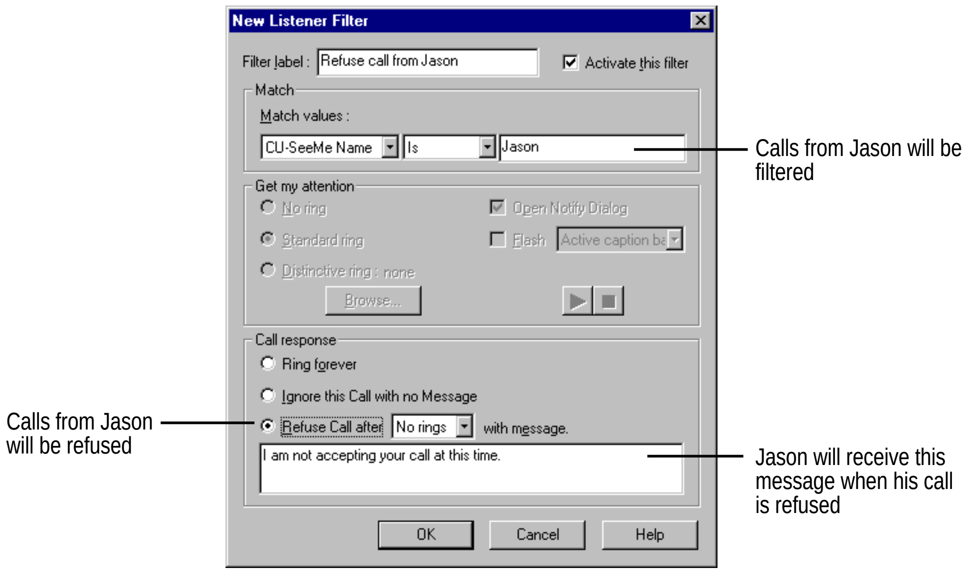


Figure 3-20. This sample Listener Filter will stop incoming calls from Jason

You can also use the Listener Filter to notify you of certain calls even if your default setting ignores all calls. Simply create a Listener Filter to accept a call from a specific user. The filters always override the default settings.

If you create multiple filters, CU-SeeMe implements the filters in sequence, from the top of the list to the bottom. You can change the sequence of the filters, using the up and down arrows next to the list of filters, as shown in Figure 3-14.

Answering an Incoming Call

If you have selected the default Listener settings, the Listener Status window (see Figure 3-21) appears when another user is calling CU-SeeMe on your computer.

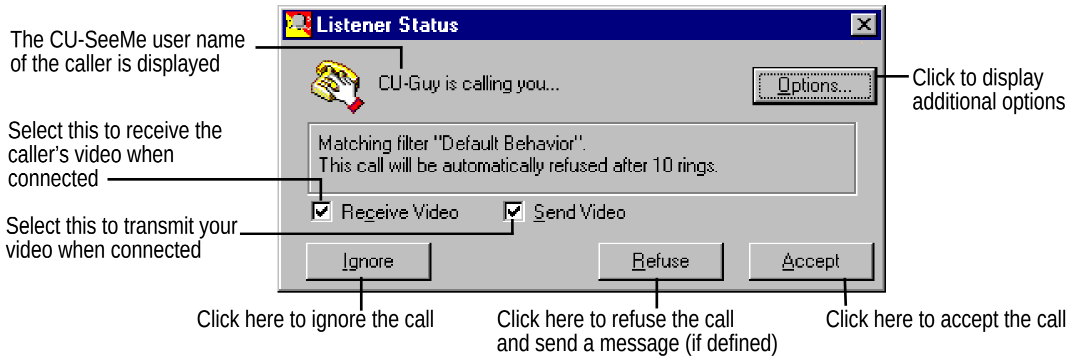


Figure 3-21. The Listener Status dialog box notifies you of incoming call

You can choose to accept the call or you can reject the call. You can reject the call in two ways. If you click **Ignore**, the caller will not connect to your computer. If you click **Refuse**, the caller will not connect to your computer and, if you defined a message in the Listener Default Settings dialog box (see Figure 3-16), that message will be sent to the caller.

Using Parental Control

CU-SeeMe parental control allows you to put restrictions on the CU-SeeMe calls that are made from your computer and the calls accepted by your computer.

Configuring Parental Control

You can configure parental control to restrict other users from accessing all the features of CU-SeeMe. You decide which features you want disabled.

To configure parental control:

1. Click the **Call Options** button on the Phone Book toolbar. Point to **Security**, then click.
2. The CU-SeeMe Call Options dialog box appears (with the Security tab displayed), as shown in Figure 3-22.

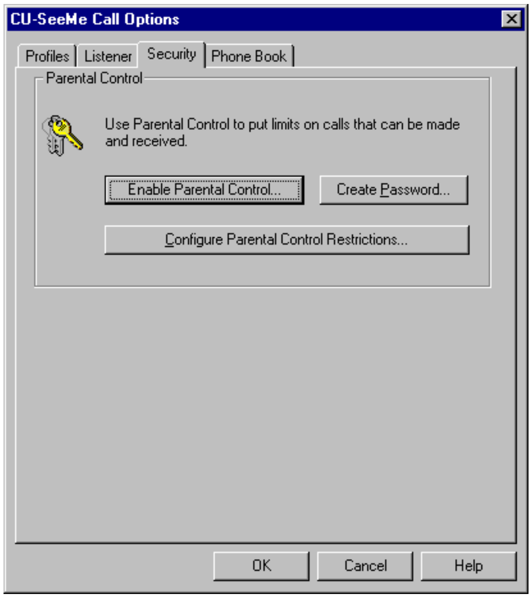


Figure 3-22. You can configure and enable parental control

3. Click the button labeled **Configure Parental Control Restrictions**.The Parental Control Restrictions window appears.

4. Click the **Communications** tab (see Figure 3-23).

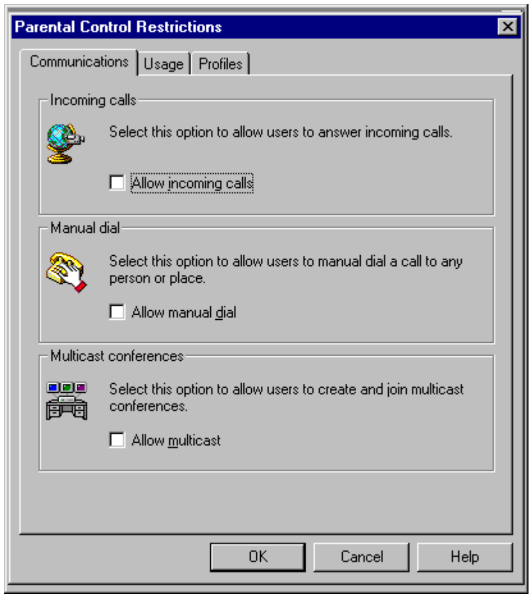


Figure 3-23. You can restrict incoming and outgoing calls, as well as multicast conferencing

5. Click the items you want to allow access to.

6. Click **OK**.

7. Click the **Usage** tab (see Figure 3-24).

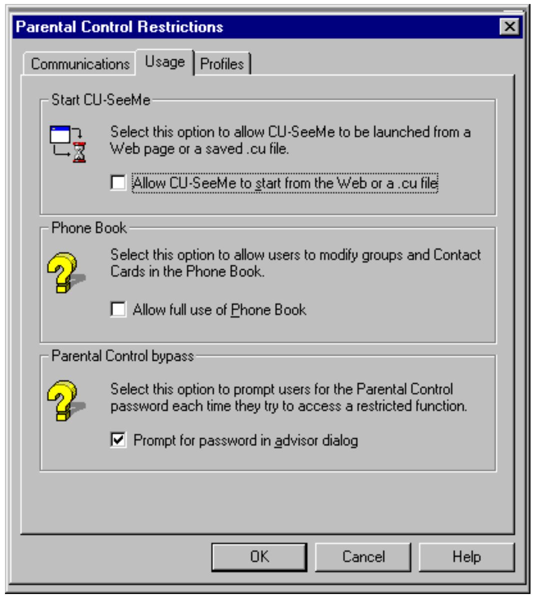


Figure 3-24. You can restrict access to Web launching and Phone Book features

8. Click the items to indicate the privileges you want to allow.

9. Click **OK**.

10. Click the **Profiles** tab (see Figure 3-25).

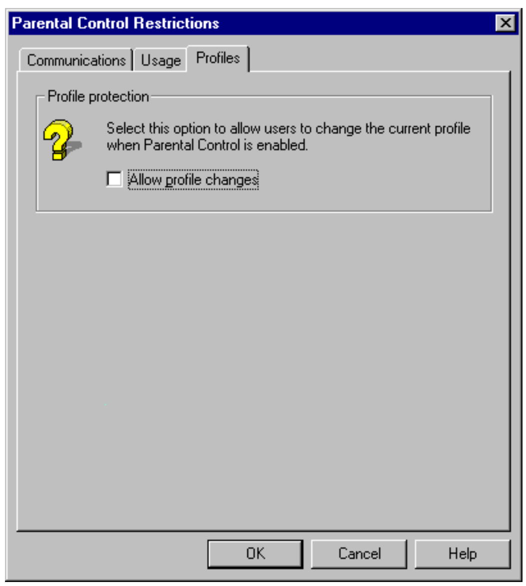


Figure 3-25. You can restrict a user from changing profiles

11. Click the items to indicate the privileges you want to allow.

12. Click **OK**. You are returned to the Security tab.

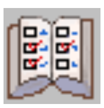
13. Click **OK** again.

You have now configured parental control options; however, you have not yet enabled, or turned on parental control. To do this, read the following section.

Enabling Parental Control

Parental control is password-protected. A parent can set controls which can be turned on or off and modified only by someone who knows the password.This prevents others from tampering with the control configurations you chose in the previous section.

To create a password:



1. Click the **Call Options** button on the Phone Book toolbar. Point to **Security**, then click.

2. The CU-SeeMe Call Options dialog box appears (with the Security tab displayed), as shown in Figure 3-22.

3. If you have not yet created a password, you will need to do this. Click the **Create Password** button. The New Parental Control Password dialog box appears, as shown in Figure 3-26.

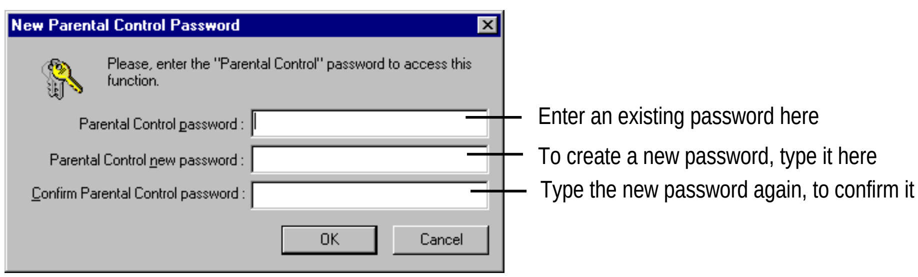


Figure 3-26. Enter or create a password to protect the parental controls

4. Enter an existing password or create a new password. Then click **OK**.

To enable parental control:

1. In the CU-SeeMe Call Options dialog box (see Figure 3-22), click **Enable Parental Control**.
2. Type your password in the Parental Control Password dialog box. This turns on parental control.
3. Repeat this step to turn off parental control.
4. Click **OK** when you are done.

Multicast Conferences

CU-SeeMe allows you to conference with multiple users (Windows users only at this time) in a *multicast* conference. In a multicast conference, you send a stream of video, audio, Chat, WhitePineBoard, and conference control data over a network to many users simultaneously. Joining a multicast conference is similar to connecting to a conference on a Reflector. Only users with CU-SeeMe Version 2.1 (or later) can participate in a multicast conference.

Once the multicast conference has been created (see "Creating a Multicast Conference" on page 3-42), any user can join the multicast conference by selecting the conference from the Phone Book. Users can also join by connecting (point-to-point) to any participant who has already joined the conference. The Participants List will not display any participants until a user (in addition to the conference creator) connects to the IP address of the multicast conference.

CU-SeeMe multicast conferences are "loosely coupled" which means that participants can join the multicast, or disconnect from the multicast at any time. Even the creator of the conference can disconnect and the conference will continue to exist as long as more than one user is still connected to this multicast. When all participants disconnect from the multicast conference, then that conference no longer exists.

Multicast is a special TCP/IP protocol for sending data over an IP network from a single source to many recipients. This requires a TCP/IP stack that supports multicast. The Microsoft VxD TCP/IP stack, which is included with the Windows 95 and Windows NT operating systems, supports multicast.

Because multicast is a relatively new TCP/IP protocol, not all routers, bridges, and gateways support multicast. Therefore you may not be able to multicast over the Internet or over your LAN or WAN. Many modem users may find that they are not able to join or create multicast conferences. If you want to use multicast over your corporate LAN or WAN, check with your Systems Administrator or your Internet Service Provider first.

Your ability to participate in a multicast conference also depends on the network interface card (commonly called a NIC, or an Ethernet card) installed in your computer. Please consult your hardware supplier and Internet Service Provider to find out if they support multicast conferencing. For more information on compatible network interface cards check the CU-SeeMe Frequently Asked Questions on the World Wide Web at http://www.cuseeme.com/support.

There are two types of multicast conferences:

- Group Conference

  This is an interactive conference where all users who are connected can send and receive audio and video, and can use the other features of CU-SeeMe, such as Chat and the WhitePineBoard.

- Cybercast

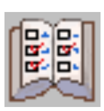
  This is a one-way conference where only the conference creator can send out video and audio. Others who are connected can see and hear the “cybercasted” audio and video, but they cannot send audio and video.

Multicast conferences have no limit to the number of participants that can join. However, due to bandwidth considerations, a multicast group (interactive) conference should generally not exceed100 participants. A multicast cybercast conference (one-way) has no limits on the number of participants. Multicast cybercast conferences will not have a Participants List. However the conference creator can see how many participants are viewing the broadcast.

Enabling Multicast

Before you can create or join a multicast conference, you must be sure that your Personal Profile is set to enable a multicast.

To enable multicast:



1. Click the **Call Options** button on the Phone Book toolbar. Point to **Profiles**, then click.
2. The CU-SeeMe Call Options dialog box appears (with the Profiles tab displayed), as shown in Figure 3-11.
3. Click **Edit**.
4. The Personal Profile Editor appears, as shown in Figure 3-13. Select the General tab.

5. Select the **Enable Multicast Connections** check box to turn on the ability to participate in multicast conferences. When you select this check box, CU-SeeMe will check to see if a TCP/IP stack with multicast support is installed in your computer. If this stack is found, then this box will remain selected. If an appropriate TCP/IP stack is not found, this box will revert to being unselected and you will not have the option of creating or joining a multicast conference.

6. Click **OK**.

Creating a Multicast Conference

If you have multicast-capable network connections and you have multicast enabled, you can create a multicast conference. CU-SeeMe includes a Multicast Assistant to guide you.

To create a multicast conference:

1. From the **Call** menu, click **Create Multicast Conference**.

2. The Multicast Conference Assistant is displayed, as shown in Figure 3-27.

Figure 3-27. The Multicast Conference Assistant makes it easy to create a multicast conference

3. Click **Next** to define the type of multicast conference you want to create.

4. Click the **Group conference** option to create an interactive conference where all participants can exchange video and audio, Chat, and share WhitePineBoard workbooks.

   - or -

   Click the **Broadcast conference** option to create a one-way conference (a cybercast) where only you can send video and audio. Participants who connect to this conference can see and hear you, but they cannot send data.

5. Select an area from the **Area** drop-down list. These areas determine how far your multicast conference will reach. Before selecting Region, Continent, or World as your multicast conference area, contact your network manager to ask whether you have the appropriate Internet access.

   - **Subnet** - Stay within your local area network (LAN). Your multicast will not go through routers.
   - **Site** - Stay within your Wide Area Network (WAN). For example, your multicast may stay within your corporate network. This will work only if your WAN has multicast routers.
   - **Region** - Extend to the Internet for a defined Time to Live (TTL). Your multicast will be limited to a defined area on the Internet. Click **Advanced Configuration** to define the TTL.
   - **Continent** - Extend to the Internet for an extended Time to Live (TTL). Your multicast will be limited to a defined area on the Internet. A Continent will have a greater Time to Live value than a Region. Click **Advanced Configuration** to define the TTL.
   - **World** - Extend to the widest range for a defined Time to Live (TTL). Your multicast will be capable of extending globally. Click **Advanced Configuration** to define the TTL.

6. Click **Next**. Click **Next** again to enter information to describe the conference.

7. Type a conference name. This will appear in the Phone Book of any CU-SeeMe user who is able to connect to your conference. See“Joining a Multicast Conference” on page 3-44 for information about how multicast conferences appear in the Phone Book.

8. Type a description of your conference. This will appear on a Contact Card for your multicast conference. This Contact card will also appear in the Phone Book of any CU-SeeMe user who is able to connect to your conference.

9. Click **Next**. Click **Next** again to enter contact information.

10. Contact information allows other users to contact you for more information about the multicast conference you have created. This information is optional. You can type your name, a URL for your Web page, and your phone number. Your Web page could include information about your multicast conference. Your phone number allows people to contact you directly via the telephone. Remember to include your complete phone number because participants in your conference could be located anywhere in the world.
11. Click **Next**. You are now presented with a Contact Card for your conference. This will automatically appear in the Phone Book of any user who is able to connect to your conference.
12. Click **Finish**. This closes the Multicast Assistant and begins the multicast conference.

Joining a Multicast Conference

If you have multicast-capable network connections and you have multicast enabled, you can join multicast conferences. All multicast conferences that are available to you are listed in your Phone Book.

To join a multicast conference:

1. On the **View** menu, point to **Groups**.
2. Point to the Multicast Contact Group, then click.
3. The multicast group is now displayed in your Contact Card list and the first card in the list is shown as the selected card. You can call a multicast conference as you would call any other conference. (See “Making Calls from the Phone Book” on page 3-15.) If this list is empty, it means that no multicast conferences are currently available to you.

Chapter 4

Using the Conference Room

The CU-SeeMe interface has two main windows: the *Phone Book* and the *Conference Room*. This chapter explains how to use the Conference Room. See Chapter 3 for information on how to use the Phone Book. To enter the Conference Room, you must make a call from either the Phone Book (see “Making Calls from the Phone Book” on page 3-15) or the Quick Start window (see “Connecting to the White Pine Cafe” on page 2-10).

The Conference Room window is where videoconferencing takes place. Think of it as a virtual meeting room where you see and talk to others. Whether you are connected in a point-to-point conference, a group conference, or a cybercast, you will be doing it in the Conference Room.

The Conference Room window was introduced in Chapter 2. This chapter describes additional features.

Components of the Conference Room

The components of the Conference Room window are shown in Figure 4-1.

Figure 4-1. The Conference Room window

The components are explained in the following sections, as shown in Table 4-1.

Table 4-1. Where to find information on Conference Room components

To find out information about...	Go to...
Conference Room Menus	page 4-3
Conference Room Toolbar	page 4-8
Participants List	page 4-10
Video Windows	page 4-17
Chat Window	page 4-23
Audio Controls and Indicators	page 4-31
Status Bar	page 4-33

Conference Room Menus

You can access CU-SeeMe commands from the Conference Room menu. You activate a menu by clicking on it. When you do, the menu's commands are displayed. If a command is not available to you, it appears dimmed. Commands in the menu that are followed by ellipsis (...) need more information from you before they execute. These commands display dialog boxes that ask you for more information. Commands in the menu that are followed by a triangle indicate that a submenu is available. Pause your mouse pointer over that command and a submenu will appear.

The commands and their descriptions are explained in following sections.

File Menu

The commands under the File menu are described in Table 4-2.

Table 4-2. The commands under the File menu in the Conference Room

File Command	Description
Close	Disconnects you from your current connection and closes the Conference Room window. The Phone Book window remains on your screen.
Send Mail...	Opens your default e-mail program. (Note that your e-mail program must be configured to use MAPI. See your e-mail vendor's documentation to learn if it is MAPI-compliant.)
Page Setup...	Displays the Print Setup dialog box where you can change the printer and print options.
Print...	Displays the Print dialog box, where you can print Chat text or video images.
Exit	Disconnects you from your current connection and exits the CU-SeeMe program.

Edit Menu

The commands under the Edit menu are described in Table 4-3.

Table 4-3. The commands under the Edit menu in the Conference Room

Edit Command	Description
Undo	Reverses the last text edit in the Chat window input pane.
Cut	Cuts the selected Chat text and puts it on the Clipboard.
Copy	Copies the selected Chat text to the Clipboard.
Paste	Pastes the current content of the Clipboard.
Delete	Deletes the selected Chat text.
Select All	Selects all the Chat text.
Customize...	Displays the Customize dialog box where you can change settings for the Conference Room including video layout, Chat, audio, video, network and more. This command is also available by clicking the **Customize** button on the Conference Room toolbar.

Conference Menu

The commands under the Conference menu are described in Table 4-4.

Table 4-4. The commands under the Conference menu in the Conference Room

Conference Command	Description
Speak To >	Displays a list of conference participants. Click on a name in the list to send audio to only that person. If you do not select a name, you will send audio to everyone in the conference. You must have a sound card and microphone to send audio. This command is also available by clicking the **Speak To** button on the Conference Room toolbar.
Mute >	Displays a list of conference participants. Click on a name in the list to stop receiving audio from that person. If you do not select a name, you will receive audio from everyone in the conference. You must have a sound card and speakers to receive audio.
Chat to >	Displays a list of conference participants. Click on a name in the list to send Chat text to the selected person only. This is called Private Chat. If you do not select a name, you will send Chat to everyone in the conference. This is called Public Chat.
Video >	Displays a list of conference participants who are sending video. Click on a name in the list to display that participant's video. This command is also available by clicking the **Video** button on the Conference Room toolbar.
Get Contact Card of >	Displays a list of conference participants who are have Contact Cards available. Click on a name in the list to get that person's contact card.
Hold	Temporarily freezes the audio and video that you send and receive. It does not freeze Chat text.

Table 4-4. The commands under the Conference menu in the Conference Room

Conference Command	Description
Speakers	Turns your speakers on and off.
Hang Up	Disconnects you from the current conference and closes the Conference Room. This command is also available by clicking the **Hang Up** button on the Conference Room toolbar.

Window Menu

The commands under the Window menu are described in Table 4-5.

Table 4-5. The commands under the Window menu in the Conference Room

Window Command	Description
Phone Book	Displays the Phone Book window. This command is also available by clicking the **Phone Book** button on the Conference Room toolbar.
WhiteBoard	Starts the WhitePineBoard program. Brings the WhitePineBoard window to the front if you are currently running the WhitePineBoard. This command is also available by clicking the **WhiteBoard** button on the Conference Room toolbar.

Help Menu

The commands under the Help menu are described in Table 4-6.

Table 4-6. The commands under the Help menu in the Conference Room

Help Command	Description
CU-SeeMe Help Topics	Opens the CU-SeeMe Help file and displays the Contents page.
Search for Help On	Opens the CU-SeeMe Help file and displays the Find page.
CU-SeeMe Events	Opens a Web browser and displays a Web page showing a schedule of events to which you can connect with CU-SeeMe.
Technical Support	Opens a Web browser and displays the White Pine Software Technical Support Web page.
Registration	Opens a Web browser and displays the White Pine Software Product Registration Web page, allowing you to register your copy of CU-SeeMe online.
Quick Start & Tips	Displays the Quick Start and Tips window.
About CU-SeeMe...	Displays information about your version of CU-SeeMe.

Conference Room Toolbar

The Conference Room toolbar has buttons that provide shortcuts to many commands. As you move your mouse pointer over each button, the selected button becomes highlighted. You can then click the button to select it.

When you pause your mouse pointer on each button, a tool tip appears. No clicking is necessary. The tool tip gives you information about the function of each button.

The Conference Room toolbar buttons are explained in Table 4-7.

Table 4-7. The Conference Room toolbar buttons

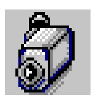
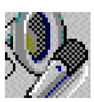
Toolbar Button	Description
 Phone Book	Displays the Phone Book window.
 WhiteBoard	Starts the WhitePineBoard program.
 Video	Displays a list of conference participants who are sending video. Click on a name in the list to display that participant's video. Also allows you to fill all available video window frames with video images (Open All), or close all video images on your screen (Close All).
 Speak To	Displays a list of conference participants. Click on a name in the list to send audio to only that person. If you do not select a name, you will send audio to everyone in the conference. You must have a sound card and microphone to send audio.
 Customize	Displays the Customize dialog box where you can change settings for the Conference Room including video layout, Chat, audio, video, network and more.

Table 4-7. The Conference Room toolbar buttons

Toolbar Button	Description
 Hang Up	Disconnects you from the current conference and closes the Conference Room.

Participants List

The Participants List shows the names of the people currently in the conference. In addition to listing names, the Participants List shows information about each of the participants, such as whether the person is a sender (sending a video image) or lurker (not sending a video image), is watching your video, and more. Once you understand which participants are senders and lurkers, you can decide whose video images you want to display on your screen. You can try to display the video image of a lurker, but instead of a picture you will get a blank frame with a message telling you that the chosen participant has “No Video Stream.”

To learn how to display the video images of participants in a conference, see “Seeing Video Images” on page 4-17. To learn how to change your own status from a sender to a lurker (and back again) see “Being Seen” on page 4-19.

Participants List Views

The Participants List displays the CU-SeeMe user name of each person in the conference, as well as status information about each participant. You can choose whether to view the Participants List as a detailed list, or as a group of large or small icons. By default, CU-SeeMe displays the Participants List as a detailed list. Try each view and choose the one that you prefer.

If you choose to view the Participants List as icons, then the information about each participant is conveyed using pictures. These pictures, or icons, illustrate whether the person is a sender or lurker, is watching your video image, and more.

To learn more about the detailed list view, see “Participants List Viewed as a Detailed List” on page 4-12. To learn more about the small icon view, see “Participants List Viewed as Small Icons” on page 4-14. To learn more about the large icon view, see “Participants List Viewed as Large Icons” on page 4-15.

To change the Participants List view:

1. Click the **Customize** button on the Conference Room toolbar. Point to **General**, then click. The Customize dialog box appears (with the General tab displayed), as shown in Figure 4-2.

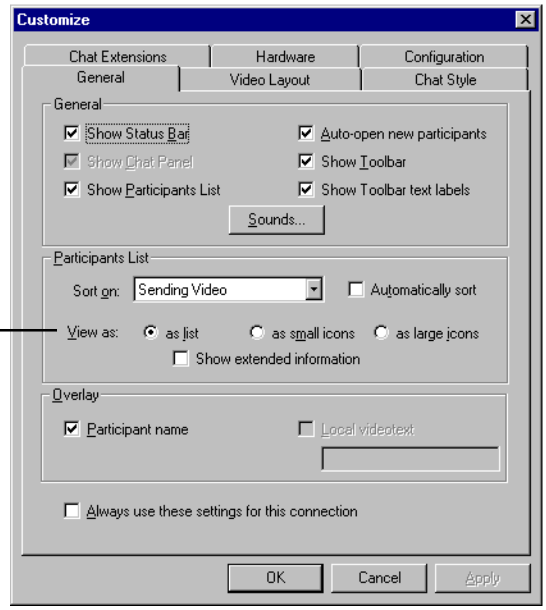


Figure 4-2. You can choose from three Participant List views

2. Select a Participants List view (**as list**, **as small icons,** or **as large icons**).

3. Click **OK** when you are done. The selected Participants List is now displayed in your Phone Book.

Participants List Viewed as a Detailed List

By default, CU-SeeMe displays the Participants List as a detailed list. The detailed list shows the names of all the participants in the conference. It also shows icons, organized in columns, which indicate different things about the status of each participant. These icons are explained in Table 4-8.

Table 4-8. Icons in the detailed list

This icon...	Indicates this about the participant...
	This participant is sending video.
	This participant’s video is currently displayed on your screen.
	This participant is currently watching your video.
	This participant and you are both watching each other’s videos.
	This participant is hearing audio that you send.
	This participant can send audio.
	You have muted this participant. Therefore, you will not hear any audio sent by this participant.

Figure 4-3 shows how these icons appear in the Participants List.

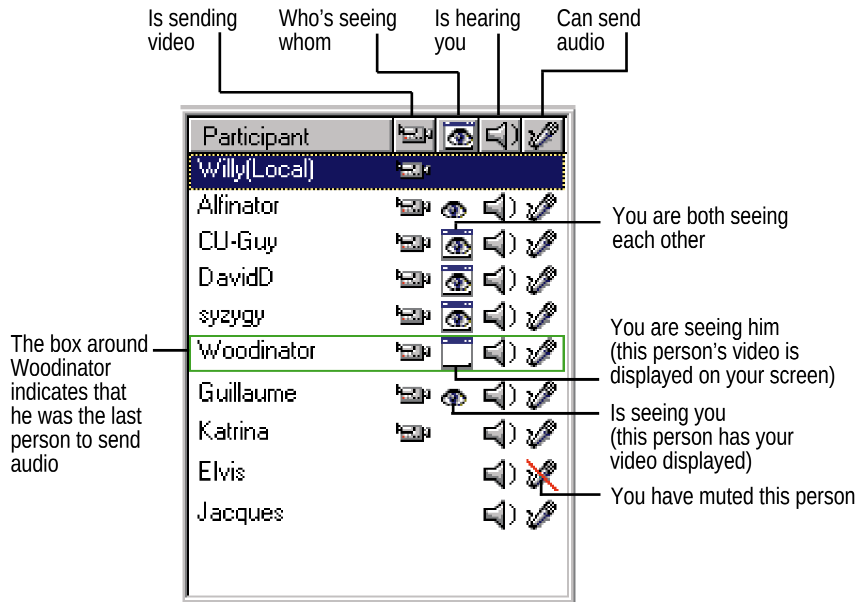


Figure 4-3. The Participants List shown as a detailed list

You can click on the heading at the top of each column to sort the list:

- Click on the **Participant** heading to sort the list so that the user names appear alphabetically.
- Click on the heading to sort the Participants List so that all the senders are grouped at the top and all the lurkers are grouped at the bottom.
- Click on the heading to group all the users who are currently seeing you.
- Click on the heading to group all the users who have speakers turned on.
- Click on the heading to group all the users who can send audio.

Your name will always appear at the top of the list. You can extend the columns in the detailed list to show additional information about the participants.

To see extended information:

1. Using the right mouse button, right-click on a blank area of the Participants List, such as the area below the list of names. A dialog box appears.
2. Point to **Extended Info**, then click.

3. The Participants List now displays additional columns of information. You may need to scroll the Participants List to the right or resize the Participants List to see all the information. (See “Resizing the Participants List” on page 4-16 to learn how to enlarge the Participants List.)

You can also display the extended information by selecting the **Show extended information** check box shown in Figure 4-2.

The new columns of information show the video and audio codec used, as well as the IP Address of each participant. To hide the extended information, repeat the previous steps (or deselect the **Show extended information** check box shown in Figure 4-2).

To learn how to view the Participants List in alternate ways, see “Participants List Views” on page 4-10.

Participants List Viewed as Small Icons

When you choose to view the Participants List as small icons, a small icon appears next to each name in the Participants List. Understanding these icons will enable you to know who is seeing you, hearing you, and more. Figure 4-4 explains the components of a small icon that represents a participant in a conference.

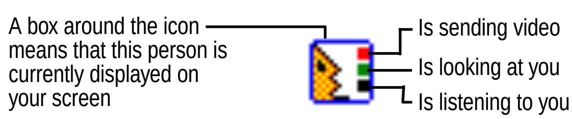


Figure 4-4. The components of the small icon used in the Participants List

Figure 4-5 shows the meaning of the small icons used to represent you (the local participant) in a conference.

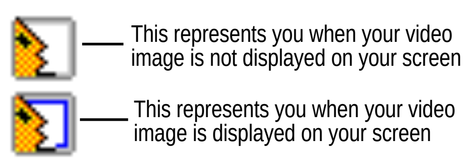


Figure 4-5. These icons represent you (the local participant) in the small icon view

Participants List Viewed as Large Icons

When you choose to view the Participants List as large icons, a large icon appears next to each name in the Participants List. Understanding these icons will enable you to know who is seeing you, hearing you, and more. Figure 4-6 explains the components of a large icon that represents a participant in a conference.

Figure 4-6. The components of the large icon representing a remote participant

Figure 4-7 shows the meaning of the large icons used to represent you (the local participant) in a conference.

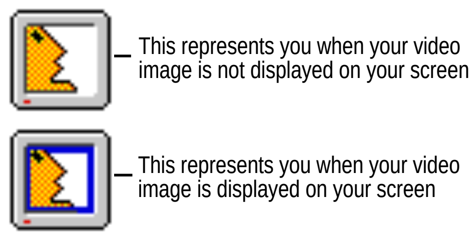


Figure 4-7. These icons represent you (the local participant) in the large icon view

Moving the Participants List

The Participants List can be moved from the left side of the Conference Room to the right side. It can also be dragged out of the Conference Room window, becoming a separate, floating window.

To move the Participants List:

1. Click on the frame around the Participants List.

2. Hold the mouse button down while you drag the Participants List to the right side of the Conference Room. Release the mouse button. If you have enough room on your monitor screen, you can drag the Participants List out of the Conference Room. This technique is called *drag-and-drop*.

3. You can drag-and-drop the Participants List back to its original location at any time.

Note that when you move the Participants List, the audio controls and indicators move also. When you move them out of the Conference Room, they form a new window called the Conference Control Center, as shown in Figure 4-8.

Figure 4-8. You can drag-and-drop the Participants List and audio controls out of the Conference Room window

Resizing the Participants List

You can change the size of the Participants List to make it more narrow or wide.

To resize the Participants List:

1. Move your mouse pointer over the splitter bar between the Participants List and the Video windows. The mouse pointer changes to a double arrow.
2. Click and drag the splitter bar to the right or left to change the size of the Participants List.

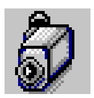
Video Windows

Video images of conference participants appear in video window frames in the Conference Room. You can display multiple video windows simultaneously.

Seeing Video Images

Some participants in the conference may be sending video images (these people are called senders). Some participants may not be sending any video (these people are called lurkers). You can choose which senders' video images you want to see displayed on your screen. You can try to display the video image of a lurker, but instead of a picture you will get a blank frame with a message telling you that the chosen participant has "No Video Stream."

To see a participant:



1. Click the **Video** button on the toolbar. This displays a list of all the participants who are sending video images.
2. Point to the name of the participant you want to select, then click.
3. That person's video image is now displayed in one of the open video window frames on your screen.
4. You can repeat this process to see video images of other participants.

You can continue this until all the video window frames are full, or you can stop at any time. You do not need to fill all the video windows. In fact, having fewer open video windows will increase the performance of your computer during the videoconference.

In addition to the steps described previously, there are other ways you can display the video image of a participant. These methods are described next.

Other ways to see a participant:

- ◆ Double-click on a participant's name. That person's video image will appear in one of the open video window frames.

  - or -

- Using the right mouse button (right-click), select a participant's name. A dialog box appears. Click **Show Video**. That person's video image will appear in one of the open video window frames.

  - or -

- Click a participant's name to select it, and then drag it to an open video window frame. (This is called *drag-and-drop*.) That person's video image will appear in the window frame to which you dragged it. This method allows you to place a video image in a specific frame. If you drag the participant's name to a frame that already has a video image, the new participant's image will replace the previous image.

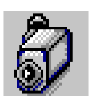
  - or -

- On the **Conference** menu, point to **Video**. This displays a list of conference participants who are sending video. Click on a name to display that person's video.

Closing Video Windows

You may want to close some of the video windows displayed on your screen. You can use the same methods that you used to display the video windows.

To close a video window:



1. Click the **Video** button on the toolbar. This displays a list of all the participants who are sending video images. The participants who are currently displayed on your screen are indicated by a ✔ in this list.
2. Point to the name of a participant who is displayed on your screen, then click.
3. That person's video image is no longer displayed in a video window frame on your screen.
4. You can repeat this process to close video windows of other participants.

In addition to the steps described previously, there are other ways you can close the video image of a participant. These methods are described next.

Other ways to close a video window:

- Double-click on a participant's name. That person's video image is no longer displayed in a video window frame on your screen.

  \- or -

- Using the right mouse button (right-click), select a participant's name in the Participants List. A dialog box appears. If that person's video is currently displayed on your screen, you will see a ✔ next to Show Video. Click **Show Video**. That person's video image is no longer displayed in a video window frame on your screen.

  \- or -

- Using the right mouse button (right-click), select a video window. A dialog box appears. Click **Hide**.

  \- or -

- Double-click on a displayed video window. That person's video image is no longer displayed in a video window frame on your screen.

  \- or -

- On the **Conference** menu, point to **Video**. This displays a list of conference participants who are sending video. The participants who are currently displayed on your screen are indicated by a ✔. Point to the name of a participant who is displayed on your screen, then click. That person's video image is no longer displayed in a video window frame on your screen.

Being Seen

Just as you can choose to see other people in the Participants List, other participants can also choose to see you if you are a sender. Remember, if you have a camera connected to your computer, you are a sender. However, you can choose to become a lurker which prevents others from seeing your video picture.

To switch between being a sender and a lurker:

1. Make sure that your local video image is displayed in one of the video window frames. If it is not currently displayed, see "Seeing Video Images" on page 4-17 to learn how to display your video window.
2. Using the right mouse button, click on your video image. A dialog box appears. If you see a ✔ next to **Send Video**, then you are a sender.

3. Click **Send Video** to become a lurker. The ✔ disappears. You have stopped sending your video image to other participants
4. If you click **Send Video** again, you become a sender. You have now turned your video on and other participants can choose to see your video picture.

Note that if you do not have a camera attached to your computer, you are always a lurker.

Changing the Layout of the Video Windows

You can arrange your video window frames to allow different combinations and sizes of video windows.

To change the video layout:

1. Click the **Customize** button on the Conference Room toolbar. Point to **Video Layout**, then click. The Customize dialog box appears (with the Video Layout tab displayed), as shown in Figure 4-9.

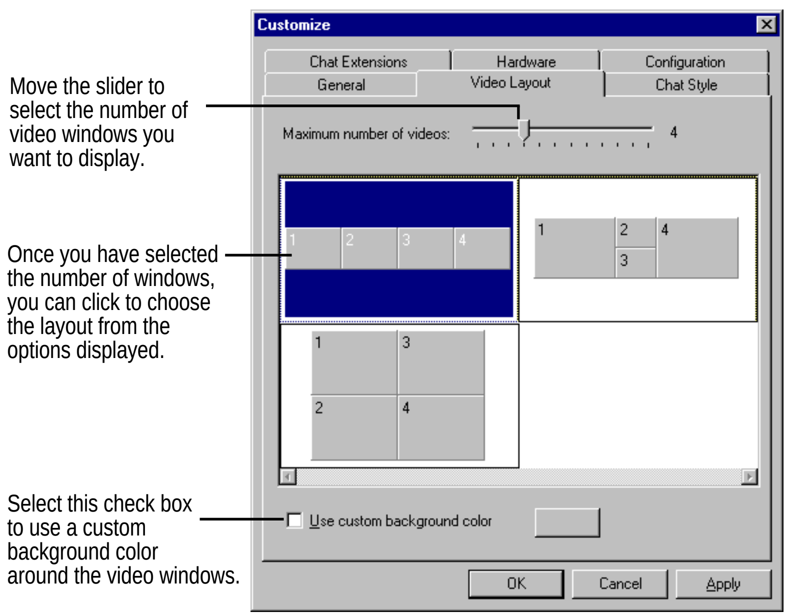


Figure 4-9. You can customize the number and layout of video windows on your screen

2. Move the slider to select the maximum number of video windows you want to display.

3. Once you have selected the number of windows, the layout options are displayed in the dialog box. In some cases, only one layout option is available; in other cases multiple layouts are available. Click on a layout to select it.

4. If you want to customize the color that appears in the border around the video window frames, click to select the option named **Use custom background color**.

5. Click the **Color** button. The Color dialog box appears. Click to select a color from the basic colors table. If you want more color choices, click **Other**. Chose a color from the palette shown. Use the slider to the right of the custom color palette to fine-tune the exact color you desire. When you have chosen the color you want, click **OK**. This closes the Color dialog box.

6. Click **OK** when you are done. The video layout you selected is now shown in the Conference Room.

Moving Video Windows

Once you have a video image displayed on your screen, you can move that image to other locations on your screen. You can even drag it out of the Conference Room window, where it becomes a separate, floating window!

To move a video window:

1. Click on a video image displayed on your screen.

2. Hold the mouse button down while you drag the video image. Release the mouse button when you have dragged the image where you want it to go. For example, you can drag the image and drop it on your Chat window, or even outside of your Conference Room window.

3. Now you can resize the video image. Pause your mouse pointer over one of the edges of the video image frame, or over a corner of the frame. The pointer turns into a double arrow. Click and drag the double arrow to enlarge the video image. You can make the image as big as you want. You can shrink the image by dragging the double arrow again.

4. If you want to return the video image to the Conference Room, simply drag-and-drop it on the video window frames in the Conference Room window. The image will drop into the Conference Room and will automatically resize itself to fit the open frame.

You can also drag-and-drop a name from the Participants List to any other location on your screen to display that participant’s video image.

Resizing the Video Window display area

You can change the size of the Video Window display area to make it larger or smaller. The video images will automatically adjust to fit the new size.

To resize the video window display area:

1. Move your mouse pointer over the splitter bar between the Participants List and the Video windows. The mouse pointer changes to a double arrow.
2. Click and drag the splitter bar to the right or left to make the video images wider or narrower.
3. Now, move your mouse pointer over the splitter bar between the Chat window and the Video windows. The mouse pointer changes to a double arrow.
4. Click and drag the splitter bar up or down to make the video images taller or shorter.

Chat Window

You can use Chat to exchange typed messages with other participants. This is especially helpful if either you or other users don't have cameras or microphones, or if your bandwidth connection is too limited to carry audio.

The Chat window is located in the lower right portion of the Conference Room window and is divided into two sections (or panes), separated by a row of toolbar buttons and macro buttons, as shown in Figure 4-10.

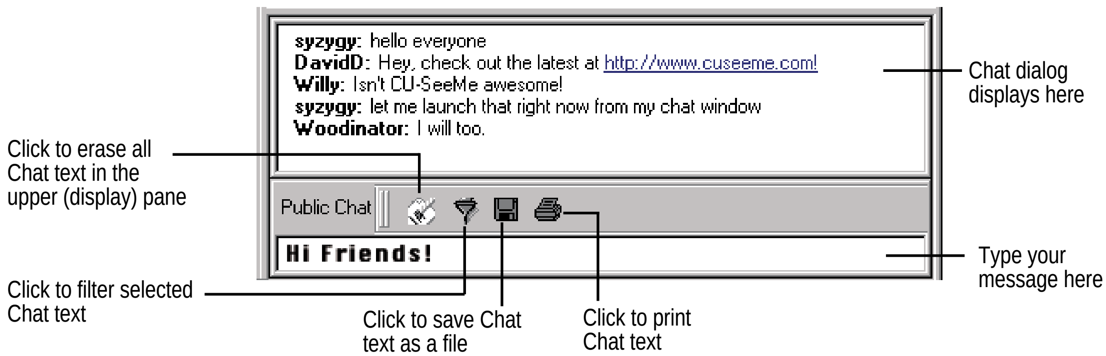


Figure 4-10. The Chat window contains two panes, toolbar buttons, and macro buttons

To type Chat text:

1. Type a message in the lower pane of the Chat window. This is the input pane.
2. Press ENTER. Your message now appears in the upper pane of the Chat window. This is the display pane where the chat dialog appears.

Other users will see your message and you will see the messages they are typing. You can follow Chat conversations in the upper pane of the window. Messages appear in the order they are received.

Customizing Chat Style

You can modify the way text appears in the Chat window.

To customize Chat style:

1. Click the **Customize** button on the Conference Room toolbar. Point to **Chat Style**, then click. The Customize window appears (with the Chat Style tab

displayed), as shown in Figure 4-11.

Figure 4-11. You can customize the appearance of Chat text

2. Select a category of text that you want to customize, such as all Chat Text, Participant Name, or URL.

3. Select a font type, size, and color. Select bold, italic or underlined text.

4. Select **Enable URL Highlighting** to display URL's in a different font. (A URL, or Uniform Resource Locator, is an address used to locate information on the Internet. An example of a URL is http://www.wpine.com.) Select **Enable URL Launching** to turn URL's in the Chat window into active links that launch a Web browser and connect you to that URL.

5. Select **Enable Keyword Highlighting** to assign specific words to appear in a different font or color. For example, if you want the words *White Pine* to appear in the color red in bold, 12 point size whenever it appears in a Chat discussion, follow these steps:

   - Click to select **Enable Keyword Highlighting**.
   - Click **Add**. The Add/Edit Text dialog box appears.
   - Change the font size to 12.
   - Change to the color to red.
   - Click the bold button.

- In the text box, type `White Pine`.
- Click **OK**.

6. Click **OK** when you have completed customizing the Chat style.

Using Chat Macros

A macro is a series of simple commands that allow you to automate tasks. You can use macros in the Chat window to eliminate typing of words, phrases, or symbols that you use often. Macros can be used for such things as your e-mail address, your favorite phrase, or even a smiley face.

To create Chat macros:

1. Click the **Customize** button on the Conference Room toolbar. Point to **Chat Extensions**, then click. The Customize window appears (with the Chat Extensions tab displayed), as shown in Figure 4-12.

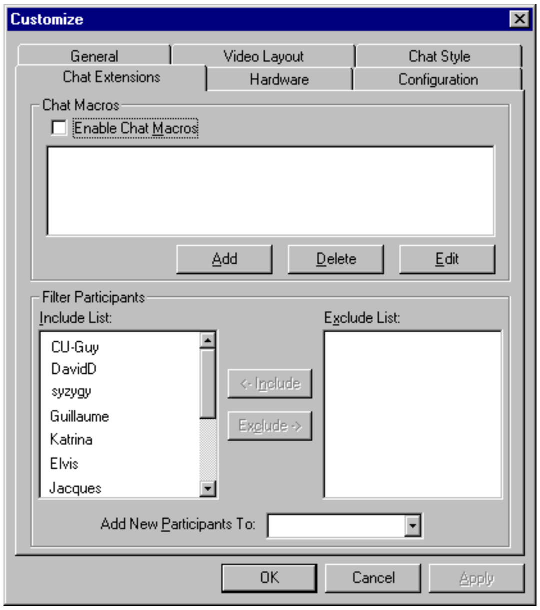


Figure 4-12. You can assign Chat macros and filters

2. Select **Enable Chat macros**.
3. Click **Add** to create a new macro.
4. Type the text that you want the macro button to represent.

5. Select an icon from the list provided.
6. Click **OK**.

The selected icon will now appear in the toolbar in the Chat window. When you are typing Chat, you can click that macro button to insert the desired word or phrase. Note that when you create the macro, you can choose to press ENTER at the end of the macro text. This will cause the macro text to automatically appear in the upper Chat window pane when you click the macro button. If you do not press ENTER when composing your Chat macro text, your text will appear in the lower Chat window pane and you will need to press ENTER to send it.

Filtering Chat Text

There are times when you may not want your Chat window to show the messages of all the conference participants. Fortunately, CU-SeeMe allows you filter out unwanted text from your Chat window. Chat filters prevent you from seeing undesired Chat text sent by others, but they do not prevent the Chat text that you send from being seen by other participants. To send Chat to one selected participant only, see “Having a Private Chat” on page 4-27.

To filter Chat text:

1. Click the **Customize** button on the Conference Room toolbar. Point to **Chat Extensions**, then click. The Customize dialog box appears (with the Chat Extensions tab displayed), as shown in Figure 4-12.

   (You can also open this dialog box by clicking the filter button  on the toolbar in the Chat window.)

2. The Macro Filters section of the dialog box shows a list of all participants in the current conference. Click on a name in that list. Then click **Exclude**.
3. The name is now moved to the Exclude List. This means that Chat text from the selected person will *not* appear in your Chat window. You have excluded this person, or *filtered* this person from your Chat window.
4. You can repeat this process with other names to filter out more participants.
5. Now click on a name in the Exclude List. Then click **Include**. The name is now moved back to the Include List. Chat text from the selected person will appear in your Chat window once again.

6. Using the option at the bottom of the dialog box, you can choose to have new participants in the conference automatically join either the Include List or the Exclude List.

7. Click **OK** when you are done.

Having a Private Chat

You can establish a private Chat with another participant. This means that even in a busy conference, you can have your Chat messages go to only one person whom you select. Other participants will not see what you type in the Chat window, however you will continue to see Chat text from all the other participants.

To establish a private chat:

1. On the **Conference** menu, point to **Chat to**.

2. Point to the name of the person to whom you would like to send private chat. Then click.

3. Now, anything you type in the Chat window will be sent only to the selected person.

4. To stop sending private chat to that person, go to the **Conference** menu, point to **Chat to.**

5. Point to the name of the person to whom you would like to send private chat. Then click.

6. Now, you are have returned to public chat mode.

When you are sending private Chat, you will see an indicator (●) next to your name in the Chat window, reminding you that you are sending private Chat. When another participant is sending private Chat to you, you will also see an indicator (●) next to that participant's name in the Chat window, letting you know that you are receiving private Chat from that person. In addition, the words **Public Chat** in the Chat window changes to **Private Chat to <*name*>**. You can send private Chat to only one person at a time.

Resizing the Chat Window

You can change the size of the Chat Window display area to make it larger or smaller. The video images will automatically adjust to fit the new size.

To resize the Chat window:

1. Move your mouse pointer over the splitter bar between the Participants List (or Audio Controls) and the Chat window. The mouse pointer changes to a double arrow.
2. Click and drag the splitter bar to the right or left to make the Chat window wider or narrower.
3. Now, move your mouse pointer over the splitter bar between the Chat window and the Video windows. The mouse pointer changes to a double arrow.
4. Click and drag the splitter bar up or down to make the Chat window taller or shorter.

Audio Modes

Your computer must have a sound card installed if you want to send and receive audio. If you have a full-duplex sound card, you can send and receive audio simultaneously. This is similar to a telephone which allows you to talk and hear at the same time. If you have a half-duplex sound card, you send and receive audio, but you cannot do both at the same time. This is similar to a walkie-talkie with which each person must take turns speaking.

With CU-SeeMe, you can transmit audio in your choice of two modes:

- Hands Free

  You transmit audio continuously. Everything you say is transmitted. If you have a full-duplex sound card, CU-SeeMe selects Hands Free as your default audio mode.

- Push To Talk

  You only transmit audio when you push a button. If you have a half-duplex sound card, CU-SeeMe selects Push To Talk as your default audio mode.

You can switch between Hands Free and Push To Talk modes while you are connected to a conference.

To switch between Hands Free and Push To Talk modes:

1. Click the **Customize** button on the Conference Room toolbar. Point to **Configuration**, then click. The Customize dialog box appears (with the Configuration tab displayed), as shown in Figure 4-13.

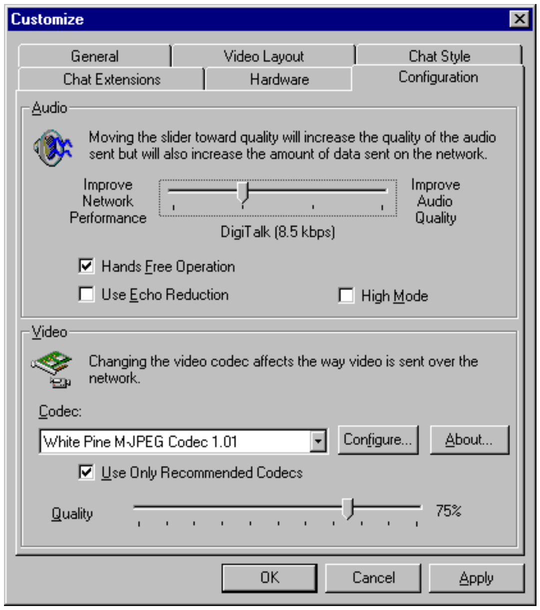


Figure 4-13. You can switch between Hands Free and Push To Talk modes

2. The upper portion of this dialog box is for audio settings. If the Hands Free Operation check box is selected, CU-SeeMe is in Hands Free mode. If this check box is not selected, CU-SeeMe is in Push To Talk mode. Click this check box to switch between these modes.

3. If you select Hands Free Operation, you can select additional check box options (Use Echo Reduction and High Mode). If you select Push To Talk, you can select only the High Mode option.

   - **Use Echo Reduction**

     This is used to eliminate feedback which can occur if your microphone is located near your speakers. Select this check box to eliminate feedback if it is a problem.

   - **High Mode**

     For most users, this check box should *not* be selected. Selecting High Mode results in a larger amount of redundant audio data transmitted. This may be useful if you have noisy network lines, however it sends more data and therefore uses more bandwidth.

4. Click **OK** when you are done.

To learn about audio codecs, see “Choosing an Audio Codec” on page 6-9.

Audio Controls and Indicators

The audio controls and indicators consist of buttons, level indicators, and sliders, as shown in Figure 4-14.

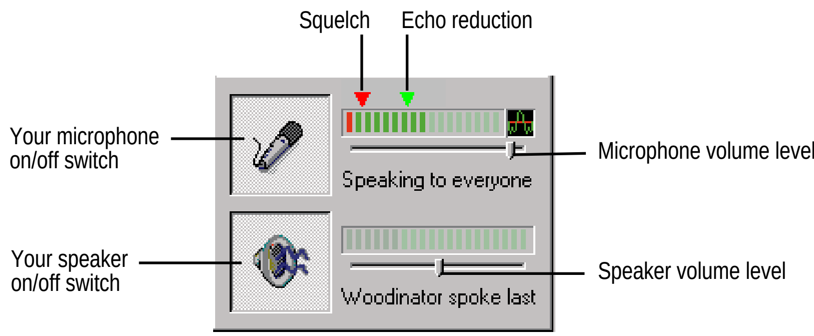


Figure 4-14. Audio controls and indicators are grouped together in the Conference Room

Turning Your Speakers Off and On

To turn your speaker off, click the speaker button. A red slash appears on the button, indicating that this control is turned off. Click it again to turn it on.

Using Your Microphone in Hands Free Mode

If you are in Hands Free mode, click the Microphone button to turn it on or off. Note that if you have a half-duplex sound card, and you select Hands Free mode and turn your microphone on, your speaker will be turned off. This is because with a half-duplex sound card, your microphone and speaker cannot be turned on at the same time. You will need to turn your microphone off in order to receive audio, or switch to Push To Talk mode.

Using Your Microphone in Push To Talk Mode

If you are in Push To Talk mode, you must click and hold the microphone button in order to transmit audio. This is the recommended mode if you have a half-duplex sound card. To learn more about Hands Free and Push To Talk modes, see “Audio Modes” on page 4-29.

Adjusting Audio Levels

Use the volume sliders (shown in Figure 4-14) to raise and lower the level of sound being sent from your microphone and being played through your speakers. Move the sliders to the right to increase the levels and to the left to decrease the levels. The level indicators show the level of sound being sent or received.

If you are in Hands Free mode, you will see a red triangle above the microphone level indicator (see Figure 4-14). This is the Squelch control and it is *only* displayed when you are in Hands Free mode. This control sets the minimum level for sound to be sent from your microphone when you are *not* receiving audio. Any sound below this level will not be transmitted. Drag the Squelch control to the right to raise the minimum level of sound that you will transmit. This can be useful when there is background noise in your environment. You can adjust the squelch level so that the background noise is not transmitted.

If you are in Hands Free mode and you have Echo Reduction turned on, you will also see a green triangle above the microphone level indicator (see Figure 4-14). This is the Echo Reduction control. Echo Reduction is similar to Squelch control, except that it works when you *are* receiving audio. When you are receiving audio and sending audio simultaneously, the Echo Reduction control can prevent your microphone from sending sound that is coming from your speakers. Dragging the Echo Reduction control to the right will raise the minimum level of sound that you will transmit. Echo Reduction will also eliminate feedback, which can occur if your microphone is placed near your speakers.

When you are sending audio above the minimum level, then your audio is actually being sent on the network and others can hear you. When your audio is being transmitted, you will see an animated sound wave appear next to the microphone level indicator, as shown in Figure 4-14.

Sending audio and video simultaneously takes a large amount of bandwidth. If you are using a low bandwidth connection, such as a modem, you can freeze your local video window to increase the amount of bandwidth available for sending audio. To do this, right-click on your local video window. Then click **Freeze Video**. A ✓ appears, indicating that your video is frozen. Click it again when you want to return to sending full-motion video.

Status Bar

The Status Bar, located at the bottom of the Conference Room window, provides tips and information about your current status. For example, when you click and hold on a toolbar button, the Status Bar presents information about that button. When you pause your mouse pointer on a menu command, the Status Bar presents information about that command. In addition, the Status Bar tell you how long you have been connected to the current conference.

Getting Information About a Participant

You can get information about a participant in a conference. One way is to get a participant’s Contact Card, which provides you with contact information about that person. To learn how to do this, see “Exchanging Contact Cards” on page 4-36. You can also get information about a participant’s software version, codecs, network connection, and more in a separate floating window, called the Info window.

To display the Info window:

1. Using the right mouse button (right-click), select a video window or a name in the Participants list. A dialog box appears. Click **Info**.

2. The Info window is displayed, as shown in Figure 4-15. Click on any of the four tabs in the Info window to see the following information about the selected participant:

   - The version of CU-SeeMe
   - The audio and video codecs
   - Whether the participant is sending video, looking at you, hearing you, and can send audio
   - Sending and receiving statistics (maximum, minimum, and current transmission and reception rates; packet loss; and frame rate measured in frames per second)

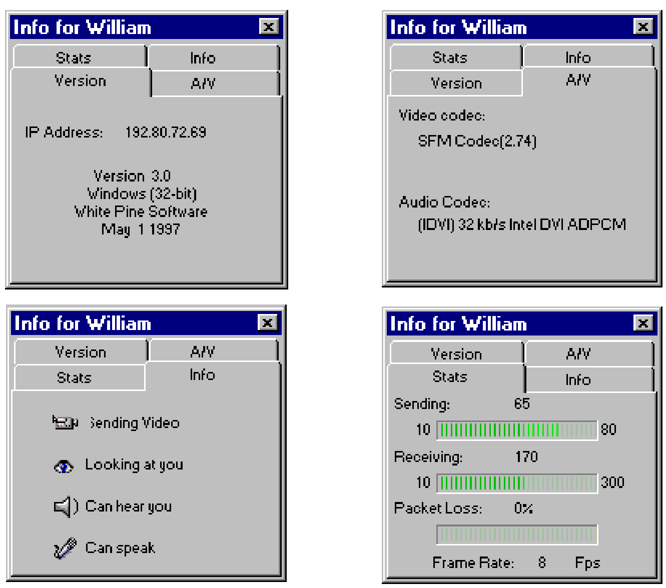


Figure 4-15. You can get information about a participant’s software and network

3. Click on another video window or name in the Participants List. The Info window changes to display information about the new participant that you selected.
4. Click the close button to close the Info window.

Exchanging Contact Cards

A Contact Card is like a business card or a card in a rotary file. It is a convenient way to present and store information about a person or place, including contact information. Some users of CU-SeeMe have created Contact Cards about themselves. You can get Contact Cards from these people electronically and add these cards to your Phone Book. This will enable you to store contact information about these people and call them directly from your Phone Book.

When you created a Personal Profile, you also created a Profile Contact Card. Just as you can get the Contact Cards of other users, they can get your Contact Card. If you choose to videoconference on public conferences, your Profile Contact Card can be seen and saved by anyone with CU-SeeMe; therefore, you should be careful what information you choose to display on your Profile Contact Card. For example, if you do not want strangers to have your phone number, then you should not list it on your Contact Card.

To get a contact card from a participant:

1. On the **Conference** menu, point to **Get Contact Card of**. This displays a list of all the participants who have Contact Cards.
2. Point to the name of the participant you want to select, then click.
3. The Contact Card of the selected participant is now displayed in a separate window, as shown in Figure 4-16.

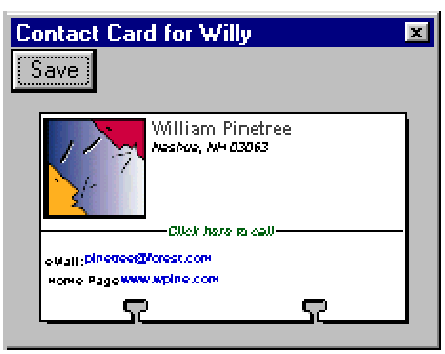


Figure 4-16. You can get a Contact Card from another CU-SeeMe user

4. If you want to save the card, click **Save**. This will save the Contact Card in your Phone Book. You can change the Nickname for the card (as it will appear in your Contact Card list) and you can assign it to a Contact Group. For more information see “Contact Groups” on page 3-12.

5. Click **OK**.

To find out how to create your own Contact Card that can be shared with others see “Creating a Personal Profile” on page 3-22.

Disconnecting From a Conference

When you are ready to leave a conference, you can disconnect from the conference in one of 2 ways.

To disconnect from a conference:

◆ On the **Conference** menu, click **Hang Up**.

- or -

◆ Click the **Hang Up** button on the toolbar.

This will disconnect you from the current conference. The Conference Room window will close automatically and the Phone Book window will appear. You can exit the application by choosing **Exit** from the **File** menu in the Phone Book. Or you can use the Phone Book to connect to other conferences. To learn more about using the Phone Book, see Chapter 3.

Chapter 5

Using the WhitePineBoard

WhitePineBoard is the document conferencing component of CU-SeeMe. It can be used for document review, business presentations, online training, and more. You can share documents and graphics so that multiple people can work on the same files at the same time from remote sites. The WhitePineBoard provides Workbooks that allow you to easily share your images and documents. Any participant in the conference can mark up images, highlight important items in the WhitePineBoard, or transfer files to all or selected participants without disturbing the conference. The Synchronized Scroll and Common Frame features ensure that participants are always viewing the same information at the same time.

When you are in a CU-SeeMe conference and want to share your files with other remote users, you open a WhitePineBoard Workbook. A Workbook is a collection of Pages contained in a file with the extension .fst. Each Page in a Workbook is a window that displays the information you want to share, such as a picture, a document, or a chart.

Starting WhitePineBoard

You can use WhitePineBoard in a point-to-point conference and in a group conference. See “CU-SeeMe Conference Types” on page 1-7 for more information about point-to-point and group conferences.

The WhitePineBoard included in this version of CU-SeeMe is only compatible with CU-SeeMe Version 3.0 and later. This means that you will be able to share WhitePineBoard Workbooks with other users with CU-SeeMe Version 3, but not with users running earlier versions.

Sharing in a Point-to-Point Conference

A point-to-point conference occurs when one person conferences directly with another person.

To use WhitePineBoard in a point-to-point conference:

1. Click the **WhiteBoard** button on the Conference Room toolbar. This opens the WhitePineBoard window, which is described in“WhitePineBoard Window” on page 5-6.
2. Note that you have opened the WhitePineBoard window on *your* computer screen only. The person to whom you are connected will also need to open WhitePineBoard on his/her computer.
3. To begin sharing information, you or the other person need to *share* a workbook. See “Opening and Sharing a Workbook” on page 5-13.

Sharing in a Group Conference

A group conference occurs when multiple people are connected to a separate computer running conference server software. Newer versions of conference server software include Net.120, which is a component of the server that centralizes data streams and allows for a more stable and higher-performing WhitePineBoard session. You can conference with WhitePineBoard whether or not you are connected to a conference server supporting Net.120, however, there are some differences which are noted in the following steps.You do not need to know whether the conference server to which you are connected conforms to Net.120 standards. The conference server will present you with the correct information.

To use WhitePineBoard in a group conference:

1. Click the **WhitePineBoard** button on the Conference Room toolbar.
2. **On a conference server with Net.120:**

   A dialog box appears. Click **Interactive** to create a WhitePineBoard where all participants can contribute and interact. Click **View-Only** to create a WhitePineBoard where you are the only person who can change the contents, and everyone else can view your WhitePineBoard. Click **Cancel** to cancel the WhitePineBoard.

   Note that you have opened the WhitePineBoard window on *your* computer screen only. Other participants in the conference can join your WhitePineBoard session by clicking the WhitePineBoard button on their Conference Room toolbars. This will present them with the same dialog box and will then open WhitePineBoard windows on their screens. To begin sharing information, you or the other participants need to *share* a workbook. See “Opening and Sharing a Workbook” on page 5-13.

   If the person who started the WhitePineBoard session disconnects from the conference or closes the WhitePineBoard, the WhitePineBoard session will continue to exist for the remaining participants. This is an advantage offered by Net.120.

3. **On a conference server without Net.120:**

   A dialog box appears listing existing WhitePineBoard sessions from which to choose. It also offers the option of creating your own WhitePineBoard session.

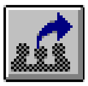
   Note that you have opened the WhitePineBoard window on *your* computer screen only. Other participants in the conference can join your WhitePineBoard session by clicking the WhitePineBoard button on their Conference Room toolbars. This will present them with the same dialog box and will then open WhitePineBoard windows on their screens. To begin sharing information, you or the other participants need to *share* a workbook. See “Opening and Sharing a Workbook” on page 5-13.

   If the person who started the WhitePineBoard session disconnects from the conference or closes the WhitePineBoard, then the entire session is closed.

Ending a WhitePineBoard Session

A conference participant may leave a WhitePineBoard session at any time; however, in some cases, if the person who started the session leaves, the session is over (see “To use WhitePineBoard in a group conference:” on page 5-3). In a point-to-point conference, if one person leaves the WhitePineBoard session, the session ends.

To end a WhitePineBoard session:



1. Click on the **Leave Conference** button (or click on the **Conference** menu, then on **Leave**). When a message appears asking if you are sure you want to leave the conference, click on **Yes**. Another message box appears asking if you want to retain copies of the shared Workbooks.

2. If you do not want to retain copies of the shared Workbooks, click on **No** and leave the conference.

3. If you want to retain shared Workbooks on your computer or network, click on **Yes**. You leave the conference, but the Workbooks remain open and are converted to private Workbooks. To save the Workbooks, see “Saving and Naming a Workbook” on page 5-20.

Sharing Information with WhitePineBoard

There are two basic ways to share information with WhitePineBoard:

- Use Workbooks and Pages
- Use File Transfer

Workbooks and Pages

When you are using WhitePineBoard and want to share your files with other remote users, you open a Workbook. A Workbook is a collection of Pages contained in a file with the extension .fst. Each Page in a Workbook is a window that displays the information you want to share, such as a picture, a document, or a chart. To learn more about Workbooks, see “Opening and Sharing a Workbook” on page 5-13.

File Transfer

WhitePineBoard allows you to send actual files to all or selected participants during a conference. The transfer does not interrupt the conference because it takes place in the background. To learn more about file transfer, see “Opening and Sharing a Workbook” on page 5-13.

For more information on how to share information with WhitePineBoard, see the online Help.

WhitePineBoard Window

The WhitePineBoard window, shown in Figure 5-1, contains the Menus, Toolbars, and the Status Bar. The workspace in the center is used to hold WhitePineBoard Workbooks.

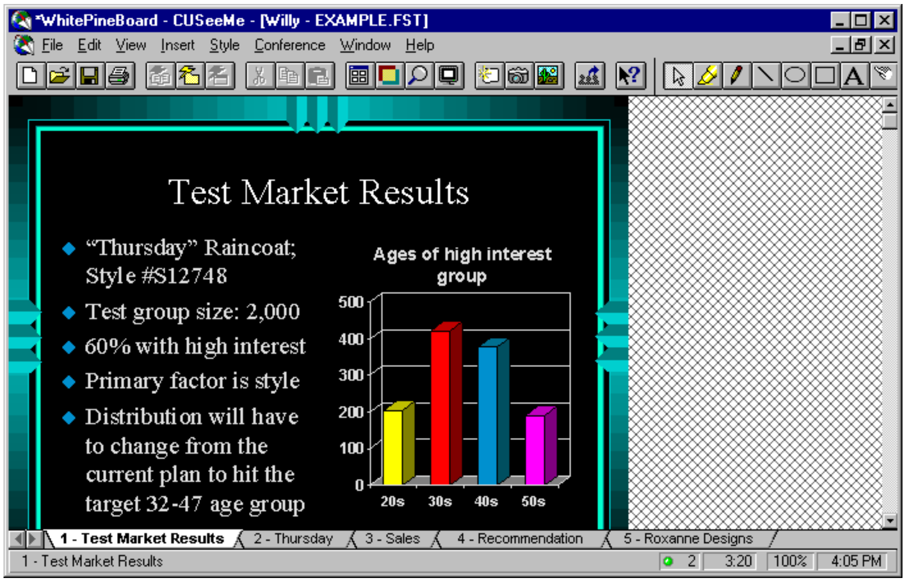


Figure 5-1. A sample WhitePineBoard window

Using the Menus

The Menus are located just below the WhitePineBoard Title Bar. When you have a Workbook open, all of the menus appear. The menus are: File, Edit, View, Insert, Style, Conference, Window, and Help. When you click on a menu, it drops down to reveal commands that can be selected with a click of the mouse button. A command that appears dimmed is not available for use, usually because the operation is not appropriate at the time.

Using Toolbars

Toolbars contain buttons that enable you to select frequently used commands quickly. The permanent toolbars in the WhitePineBoard window are:

- **Standard Toolbar**—Buttons to open, save, and print Workbooks, edit objects, use Full Screen, sort and zoom Pages, as well as create a WhitePineBoard conference, invite participants, and join and leave a WhitePineBoard conference (see Figure 5-2).

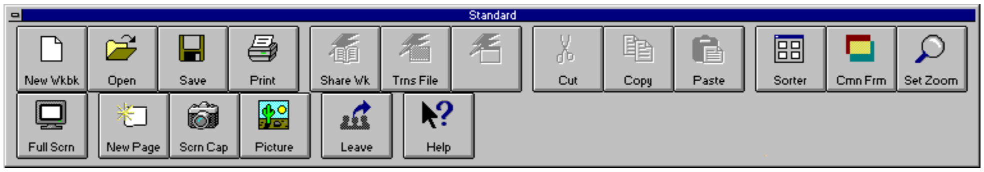


Figure 5-2. The WhitePineBoard Standard Toolbar

- **Drawing**—Buttons to select and highlight objects, draw lines, ellipses, rectangles, enter text, and turn on a Conference Pointer that can be seen by remote users (see Figure 5-3).

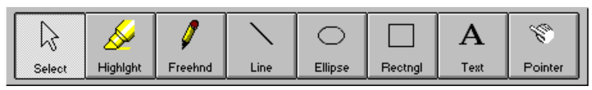


Figure 5-3. The WhitePineBoard Drawing Toolbar

- **Navigation—**Buttons to change Pages quickly, moving to the first, previous, next, or last Page. To view any other Page, click on **Jump to Page**. In the Jump dialog box, click on the number of the Page you want to view, then click on **OK** (see Figure 5-4).

Figure 5-4. The WhitePineBoard Navigation Toolbar

- **Full Screen**—Buttons to change Pages quickly, select and highlight objects, draw freehand, turn on a Conference Pointer, and return to the WhitePineBoard main window (see Figure 5-5). This toolbar appears only after you select the Full Screen command.

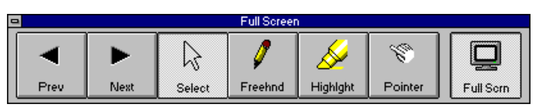


Figure 5-5. The WhitePineBoard Full Screen Toolbar

Point to each toolbar button and read the Status Bar to find out what the tool does.

Moving a Toolbar

To move a toolbar to a more convenient location, follow this procedure:

1. Place the tip of the mouse pointer on the Title Bar or gray non-button area of the toolbar.
2. Click and hold down the left mouse button while you drag the toolbar to a new location.
3. Release the mouse button to drop the toolbar.

To *dock* a toolbar (send it to the top of your window), double-click on its **Title Bar** or drag it to the top of the window. To undock a toolbar, drag it off the dock area or double-click anywhere on the gray non-button area.

Resizing a Toolbar

Click on the toolbar frame and drag to resize the toolbar so that it is vertical or horizontal.

Restoring a Lost Toolbar

If you click on the Control-menu box in the upper left corner of a toolbar, the toolbar disappears. To restore it, follow this procedure:

1. Click on the **View** menu, then on **Toolbars**. The Toolbars dialog box appears.
2. In the Toolbars list, click on the name of the toolbar that disappeared and then on **OK**. The toolbar reappears on your screen.

Turning a Toolbar Off and On

You can turn off a toolbar to have more viewing space.

1. Click on the **View** menu, then on **Toolbars**. The Toolbars dialog box appears, as shown in Figure 5-6.

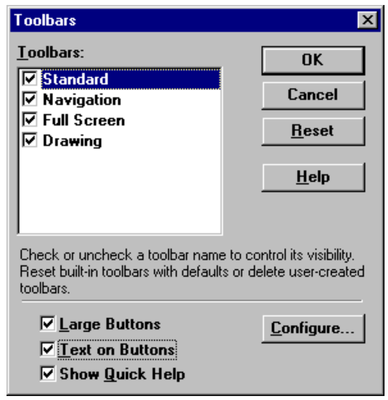


Figure 5-6. The WhitePineBoard Toolbars dialog box lets you customize your view of Toolbars

2. In the Toolbars list, click on the box next to the toolbar you want to turn off. The ✓ in the box is removed.

3. Click on **OK**. The toolbar no longer appears on your screen.

To turn a toolbar on, repeat these steps, except click on the empty box to place the ✓ next to the toolbar you want to turn on.

To learn another way to turn a toolbar off, use the right mouse button to click on either the Title Bar or the gray non-button area of any toolbar. A shortcut menu appears. Click on the name of the toolbar you want to turn off.

Status Bar

The Status Bar displays the following information:

- The name of the current Page.
- Informational messages, such as a description of a tool or menu command when you point to it.
- Error messages.

- A light that indicates that a conference is in progress. (A yellow light appears after you create a conference; a green light appears when there are two or more participants.)
- The number of participants in a conference.
- The time elapsed since creating or joining a conference.
- The current Zoom level.
- The current time.

Turning the Status Bar Off and On

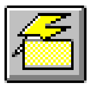
Click on the **View** menu, then on **Status Bar**. The check mark is removed and the Status Bar no longer appears on your screen. To turn the Status Bar on, click again on the **View** menu, then on **Status Bar**.

It is best to keep the Status Bar turned on so that important information is always visible.

Transferring a File

WhitePineBoard allows you to send files to all or selected participants during a WhitePineBoard conference. The transfer takes place in the background and does not interrupt your conference.

To transfer a file, follow these steps:



1. Click on the **Transfer File** button (or click on the **File** menu, then on **Transfer**). The File Transfer dialog box appears as shown in Figure 5-7.

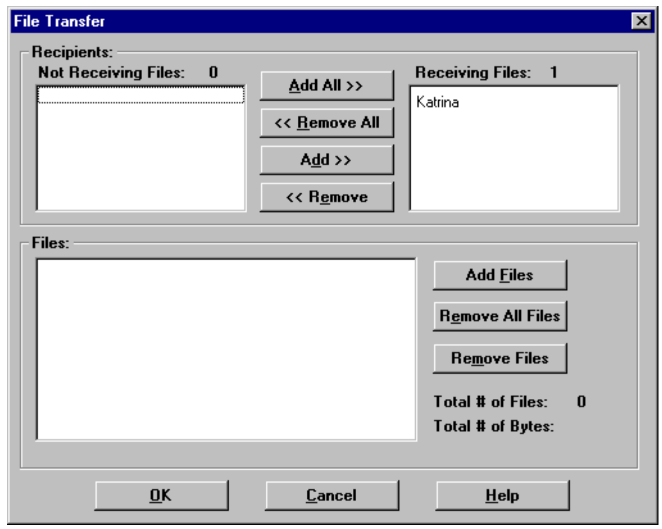


Figure 5-7. The File Transfer dialog box allow you to select files and recipients

2. By default, all conference participants are listed in the Receiving Files box. If you do not want to send a file to a participant, double-click on the name and it is moved to the Not Receiving Files box. Use the Add, Remove, Add All, and Remove All buttons to move selections from one box to the other.

3. When the list of recipients is satisfactory, click on the **Add Files** button. The Select File(s) to Transfer dialog box appears.

4. Select the drive and directory that contain the file(s) and then select the file.

   To select more than one file, hold down the **SHIFT** key and click on several file names, or hold down the **CTRL** key and click on non-adjacent file names.

5. Click **OK.** The File Transfer dialog box returns and the file name(s) appears in the Files list.

6. Click **OK**. The file(s) is compressed if you requested compression in the Preferences dialog box. The File Transfer Acceptance dialog box appears.

7. Use the numbers next to the three status messages to determine how many recipients have accepted, declined, or not responded to the transfer. After everyone accepts, or if you decide not to wait for a recipient, click on the **Transfer Now** button to transfer the files. If you change your mind, click on the **Abort Transfer** button.

8. After you send a file, the Sending Files dialog box displays the file transfer progress.

Receiving a Transferred File

When files are sent to you, follow these steps:

1. The Receive Files dialog box appears on your screen listing the file(s) offered (if you have not turned on Always Accept Files Sent to You in the Preferences dialog box).

2. Click **No** if you do not want to receive the file(s). The dialog box disappears.

3. To send file(s) to another directory, click on the **Receive File(s) Directory** button. The Receive File(s) Directory dialog box appears. Select the drive and directory where you want to store the file(s). Click on **OK**. The Receive Files dialog box reappears.

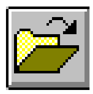
4. Press **CTRL** and click on any file(s) you do not want to receive. Click on **Yes** to receive the file(s) and have them sent to the Receive File(s) Directory. The Receiving Files dialog box displays the progress of the file transfer.

5. After the file(s) arrives, check the directory to verify that it contains the file.

Opening and Sharing a Workbook

The Workbooks you create for use in WhitePineBoard may be private (only you can see the Workbook) or shared (all conference participants can see the Workbook).

When you are connected in a WhitePineBoard conference, remote users can *only* see Pages in Workbooks that are designated as shared.



1. Click on the **Open** button (or click on the **File** menu, then on **Open**). The File Open dialog box appears.
2. Select the drive and directory that contain the Workbook.
3. Type or select the Workbook name in the File Name box. Click **OK**. The Share Workbook Now dialog box appears, as shown in Figure 5-8.

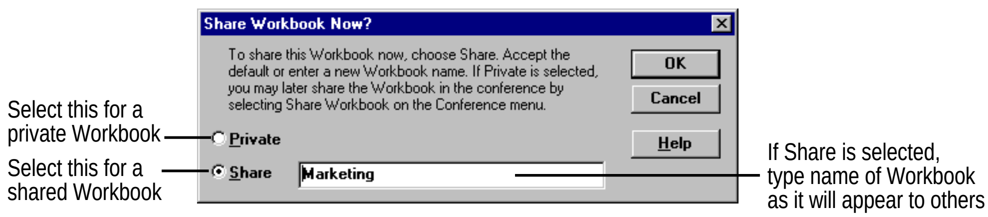


Figure 5-8. You can choose to share a Workbook or keep it private

4. Click on the Share button. Leave your Conference User Name in the box, or enter another name and click on OK.

   The Title Bar of the shared Workbook has the following format on all of the participants' screens:

   Workbook Name - Filename.fst

At the end of a WhitePineBoard session, you can convert shared Workbooks to private Workbooks and save them as your own. For more information, see "Ending a WhitePineBoard Session" on page 5-4.

Private Workbooks have the word *(Private)* in the Title Bar so that participants can easily distinguish between shared and private Workbooks while in a conference.

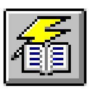
Active Workbook

While in a WhitePineBoard conference that has two or more shared Workbooks, only one Workbook is active (in focus) at any time. The Active Workbook focus is synchronized among all conference participants. Any conference participant may change the Active Workbook focus. If you open a private Workbook, it is not affected by the Active Workbook. When you are ready to return to the conference flow, click on the **Window** menu, then on **Active Workbook**. The focus on your screen shifts automatically to the Active Workbook.

Sharing a Private Workbook

You can change a private Workbook to a shared Workbook at any time.

To share a private Workbook:



1. Click on the **Share Workbook** button (or click on the **Conference** menu, then on **Share Workbook**). The Shared Workbook Title dialog box appears.
2. Enter a name in the box and click **OK**. The Workbook is shared, and the same name appears in the Workbook Title Bar on the remote users' screens and on your own.

Using Full Screen View

Use Full Screen when you want the Pages in your Workbook to appear as large as possible.

To use Full Screen view:

1. With a Workbook open, click on the **Full Screen** button (or click on the **View** menu, then on **Full Screen**). The WhitePineBoard window features disappear and the current Page is centered and expanded to its maximum size. The Full Screen Toolbar appears.

2. Move the Full Screen Toolbar to a convenient location. The next time you select Full Screen, the toolbar will appear in the location where you left it.

3. To turn off the Full Screen Toolbar, click the right mouse button, then click on **Hide Toolbar**.

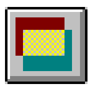
4. To turn the Full Screen Toolbar on, click the right mouse button, then click on **Show Toolbar**.

5. When you are ready to return to the main WhitePineBoard window, click on the **Full Screen** button on the Full Screen Toolbar. You can also press **ESC**. The WhitePineBoard window returns.

Using Common Frame

Use Common Frame to see an outline surrounding the area viewed by all conference participants. This feature is extremely useful because screen resolutions can vary.

To turn on Common Frame:



Click on the **Common Frame** button. (Or, click on the **View** menu, then on **Common Frame**. A ✓ appears to indicate that Common Frame is on.)

A frame indicating the size of the remote user's Workbook appears (see Figure 5-9). If your Workbook is the smallest, the frame appears around its border. The Common Frame may change if any participant changes Workbook sizes.

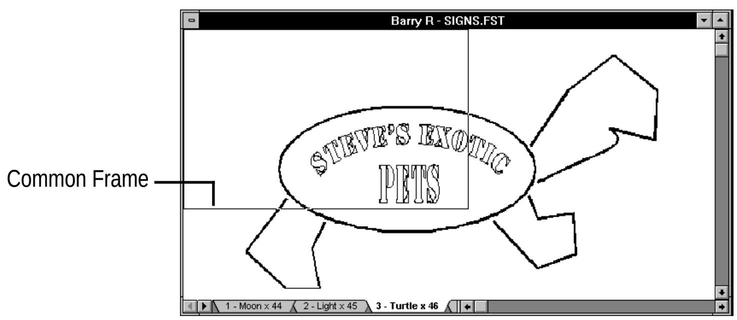


Figure 5-9. The Common Frame highlights the area viewed by all conference participants

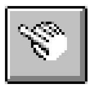
To turn off Common Frame:

Click on the **Common Frame** button. (Or, click on the **View** menu, then on **Common Frame**.) The ✓ is removed, indicating that Common Frame is off.

Common Frame is only available during a WhitePineBoard session. It is a local function that does not affect remote users, unless they turn it on themselves.

Pointing With the Conference Pointer

After the WhitePineBoard session is underway, you might want to point to a particular area or item on a Page. If you point with your normal mouse pointer, remote users will not see it, but they can see the Conference Pointer.



Using the Conference Pointer:

1. To activate the Pointer, click on the **Conference Pointer** in the Drawing Toolbar. The Pointer appears, replacing your normal mouse pointer.
2. Change the shape of the Pointer to suit your purpose. Click on the **Style** menu, then on **Pointer Shape**. The available Pointer styles appear. Click on the one you want. The Pointer will be visible on the remote users' screens and can be used to indicate any item in a Workbook.

Closing the Conference Pointer

Point to any other tool on the Drawing Toolbar and click. The Pointer changes to the normal mouse pointer.

Annotating During a WhitePineBoard Session

Use the Drawing Tools to mark up, or annotate, your Pages during a WhitePineBoard session. For example, if you have a map on a Page, you can draw the route using the Freehand Tool located on the Drawing Toolbar. See “Using WhitePineBoard Objects” on page 5-32 for information about drawing objects and entering text.

The Drawing Tools are:

- Highlighter Tool
- Freehand Tool
- Line Tool
- Ellipse Tool
- Rectangle Tool
- Text Tool

Remember, the annotations you make are actual objects. You can adjust their attributes, move, resize, cut, copy, paste, or delete them. During a conference, everything you draw on the Page is seen by the other remote users.

In a group conference, each participant can annotate with a different color to avoid confusion.

WhitePineBoard Workbooks

The image (such as a picture, a document, or a chart) that you want to share with a remote user must be contained in a special window called a Page. Pages are grouped together for convenience and stored in a Conference Workbook.

Shared and Private Workbooks

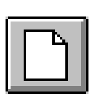
All Workbooks that you have just opened or created are private, or unshared, by default. You may choose to keep a Workbook private for various reasons, such as to withhold an announcement until the proper time, or to preserve proprietary or financial information. Private Workbooks have *(Private)* in the Title Bar.

During a WhitePineBoard session, remote users can only see the images on your Pages if you share your Workbook with them. By sharing a Workbook, you allow remote users not only to view and discuss the Pages, but also to perform the following procedures:

- Select Pages by clicking on Page tabs
- Use the annotation tools on the Drawing Toolbar to mark up the images on Pages
- Add new blank Pages
- Delete Pages
- Move Pages to and from other Workbooks
- Save the shared Workbook and name it
- Print the shared Workbook

Workbooks must be deliberately shared during a WhitePineBoard session. After the session is ended, the Workbooks that you shared become unshared, or private, again. See “Opening and Sharing a Workbook” on page 5-13 for more information.

Creating a New Workbook



Click on the **New Workbook** button (or click on the **File** menu, then on **New**). A new empty Workbook appears.

When you create new Workbooks, WhitePineBoard assigns consecutive numbers to them (such as Workbook 1, Workbook 2). To give your Workbook a more meaningful name, use the procedure below for saving and naming a Workbook.

Selecting a Workbook

You must select a Workbook before you can perform any procedures on it. To select a Workbook, click on its **Title Bar**. The color of the Title Bar changes to show that the Workbook is selected.

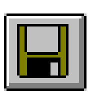
Saving and Naming a Workbook

Use this procedure to save a Workbook you have created or to save any Workbook shared during a WhitePineBoard session as your own copy.

1. Click on the Workbook's **Title Bar** to select it. Click on the **File** menu, then on **Save As**. The File Save As dialog box appears.
2. Select the drive and directory where you want to store the Workbook.
3. Type a name in the File Name box. The name should be no more than eight characters long and be followed by the extension .fst. If you do not type the extension, WhitePineBoard does it for you.
4. Enter a description of the file if you desire. (The description appears when you open the file later.)
5. Click **OK**. The Workbook is saved under the name you gave it.

Saving a Workbook

Use this procedure to save a previously named Workbook.



- Click on the Workbook's **Title Bar** to select it. Click on the **Save** button,

  \- or -

- Click on the Workbook's **Title Bar** to select it. Click on the **File** menu, then on **Save**. Your Workbook is saved with its existing name.

Arranging Workbooks

During a WhitePineBoard session, you may want to work with several Workbooks at the same time. Depending on your purpose, Workbooks may be arranged on the screen in three ways:

- Click on the **Window** menu, then on **Tile Horizontal**. This maximizes Workbook width.
- Click on the **Window** menu, then on **Tile Vertical**. This maximizes Workbook height.
- Click on the **Window** menu, then on **Cascade**. This overlaps Workbooks, but you can see each Title Bar.

Your window arrangement does not affect the arrangement of Workbooks on the remote users' screens.

Closing a Workbook

If you have made changes to a Workbook, save the Workbook before closing it. To close a Workbook, click on its **Title Bar** to select it. Click on the **File** menu, then on **Close**.

WhitePineBoard Pages

Pages are the special windows that contain the images you want to share. Pages are stored in a Workbook and can be viewed by clicking on the Page tabs at the bottom of the Workbook. The names of the Pages are shown on the tabs and on the left side of the Status Bar.

Whenever you make changes to a Page, you should save the Workbook that contains the Page if you want to keep those changes.

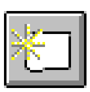
Selecting a Page

You must select a Page before you can perform procedures on it or on the objects or images it contains. To select a Page, click on its **tab**. The tab lightens to show that the Page is selected.

Inserting a new Page

To insert a new Page in a Workbook, follow this procedure:

1. Decide which Page will be directly in front of the new one and click on its tab.



2. Click on the **Insert New Page** button (or click on the **Insert** menu, then on **New Page)**. The new Page appears.

Renaming a Page

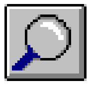
To change the name of a Page, follow this procedure:

1. Click on the Page's tab to select it.
2. Click on the **Edit** menu, then on **Rename Page**. The Rename Page dialog box appears.
3. In the Name box, type the new name over the existing name. Click **OK**. The new name appears on the Page tab, the Status Bar, and in the Page Sorter label.

Zooming a Page

To display an enlarged or reduced version of a Page, follow this procedure:

1. Click on the Page's tab to select it.



2. Click on the **Set Zoom** button (or click on the **View** menu, then on **Zoom)**. The Zoom Level dialog box appears.

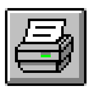
3. Select the level of magnification you want, or type a precise percent (between 10 and 1000) in the Custom box. Turn on the Zoom All Pages option if you want all Pages in your Workbook reduced or enlarged.

4. Click **OK**. The image changes to the magnification level you have chosen.

5. The normal size of an image is displayed when it is viewed at 100%. Images are always saved at this level.

Printing a Page

1. Select the Workbook that contains the Pages you want to print by clicking on the Workbook's Title Bar.



2. Click on the **Print** button (or click on the **File** menu, then on **Print**). The Print dialog box appears.

3. To print a Page(s), make sure that Workbook Pages is selected in the drop-down list box. To print handouts (2-6 images per page), click on the drop-down list box and select the number of images you want.

4. In the Print Range box, click on either **All Pages**, **Current Page**, or **Pages**. If you select Pages, you can print a single Page by entering the Page number in both the From and To boxes. To print a range of Pages, type the first Page number in the From box and the last Page number in the To box.

5. Complete the other boxes in the Print dialog box.

6. To see how your printout will look, click on the **Preview** button. When you are finished, click on the **Print** button to return to the Print dialog box.

7. Click **OK**. It may take a few minutes for your Page(s) to print, especially if it contains a complex image.

Exporting a Page

To save a Page in a format that can be imported by other applications, follow this procedure:

1. Click on the desired Page.

2. Click on the **File** menu, then on **Export Page**. The Export Page As dialog box appears.

3. Select the drive and directory containing the file you want to export.
4. Click on the down arrow in the List Files of Type box and select the type of file that you want to export, such as .pcx or .tif.
5. Type a name in the File Name box and add the appropriate extension.
6. Select the number of colors that you want the exported image to have. Click **OK**.

Clearing a Page

To clear a Page of all objects, including text objects, and leave the empty Page in the Workbook, follow this procedure.

1. Click on the Page’s tab.
2. Click on the **Edit** menu, then on **Clear**. A cascading menu appears.
3. Click on **Active Page**. The Page is cleared of all objects, but it remains in the Workbook.

Deleting a Page

To remove a Page permanently from a Workbook, follow this procedure:

1. Click on the Page’s tab.
2. Click on the **Edit** menu, then on **Delete Page**. A dialog box appears.
3. Click on **Yes** to delete the Page. The Page disappears.

Use the shortcut menu to insert a new Page, rename, or delete a Page. Click the right mouse button on the Page tab to produce the shortcut menu, then click on the command you want to use.

Working with Page Sorter

The Page Sorter displays thumbnail versions of the Pages in a Workbook, as shown in Figure 5-10). Using Page Sorter, you can easily insert and delete Pages, rearrange the Workbook, and move or copy Pages from one Workbook to another.

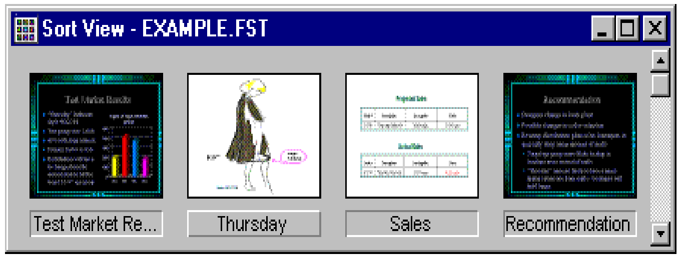


Figure 5-10. Page Sorter displays thumbnail versions of Pages in a Workbook

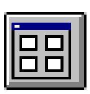
The name of each Page appears in a *label* below the thumbnail. To change the name, see “Renaming a Page” on page 5-22.

You may use Page Sorter during a WhitePineBoard session. Remote users will not see this window unless they also select Page Sorter. However, any changes you make while you are using Page Sorter (such as reordering or inserting Pages) will be received by remote users.

You may have one Page Sorter window for each Workbook that you have open.

Opening Page Sorter

1. Select the Workbook for which you want to see the Page Sorter thumbnails.



2. Click on the **Page Sorter** button (or click on the **View** menu, then on **Page Sorter**). Thumbnail versions of the Pages in your Workbook appear in a new window.

If you double-click on the thumbnail of a Page, the corresponding full Page image appears in the Workbook and the Sorter view stays selected.

Closing Page Sorter

Close the Page Sorter window by double-clicking on the **Control-menu** box (or click on the **Control-menu** box, then on **Close)**.

Selecting Pages in Page Sorter

Before you can work with a thumbnail Page in Page Sorter, the thumbnail must be selected. A selected thumbnail appears with a dark border around it.

- Selecting one Page
  Place the mouse pointer on a thumbnail and click. (Do not click on the thumbnail label.)

- Selecting two or more Pages
  Click on one thumbnail, then hold down the **SHIFT** key and click on the others. Use the **SHIFT** key to select thumbnails that are not in consecutive order.

- Using the Marquee method to select Pages
  Click in the gray area near a thumbnail to produce the marquee, or selection rectangle. Hold the mouse button down and move the pointer to touch each thumbnail that you want to select.

Clicking on a thumbnail label or in the space between thumbnails will deselect all thumbnails. To deselect a specific thumbnail from a selected group, hold the **SHIFT** key down and click on the thumbnail with the mouse pointer.

General Procedures in Page Sorter

The following procedures are performed in Page Sorter just as they are in the normal Page view:

- Inserting a New Page (see “Inserting a new Page” on page 5-22)
- Renaming a Page (see “Renaming a Page” on page 5-22)
- Printing a Page (see “Printing a Page” on page 5-23)
- Deleting a Page (see “Deleting a Page” on page 5-24)

Moving Pages within a Workbook

If you do not like the order of the Pages in a Workbook, you can easily rearrange them in Page Sorter.

1. Select the Workbook and open Page Sorter.
2. Click on the thumbnail of the Page to be moved, hold down the mouse button, and drag the thumbnail to its new position.

3. Release the mouse button to complete the move.

To move more than one Page at a time, select the thumbnail Pages using the **SHIFT** key or marquee method and drag them as a group. Release the mouse button when they are in the proper position.

Copying Pages Within a Workbook

To make a copy of a Page within a Workbook, follow this procedure:

1. Select the Workbook and open Page Sorter.
2. Click on the thumbnail of the Page to be copied, hold down the mouse button, press **CTRL** and drag the copy to the desired position.
3. Release the mouse button to place the copy.

Copying or Moving Pages to Another Workbook

To copy or move a Page to another Workbook with Page Sorter, follow this procedure:

1. Open one of the two Workbooks and open Page Sorter for it. Minimize the Workbook. Repeat for the second Workbook.
2. Click on a Page Sorter window to select it. Click on the **Window** menu, then on **Tile Vertical**.
3. Click and hold the mouse button down on the thumbnail Page you want to copy or move. Drag the thumbnail from one Workbook to the other.
4. Release the mouse button when the thumbnail is in the new position. To copy or move more than one thumbnail at a time, select the thumbnails using the **SHIFT** key or marquee method and drag them as a group.
5. To *move* a thumbnail Page instead of copying it, go back to the thumbnail Page in the original Workbook and delete it.

Preparing WhitePineBoard Pages

Before conducting a WhitePineBoard session, it is helpful to plan your presentation and prepare a Workbook to be shared with remote users. Workbook Pages can be prepared by using any of the following methods:

- Print Capture
- Screen Capture
- Insert Picture
- Video Capture
- WhitePineBoard Drawing Tools

Print Capture

Use this method to prepare Pages from a document in another Windows-based application.

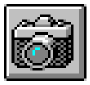
1. Open the Windows-based application and the document that you want to capture for use in WhitePineBoard.
2. Use the application's **Print Setup** command to select **WhitePineBoard Print Capture on DISK** as your printer. Click **OK**.
3. Use the application's **Print** command to print the file. Select the page(s) you want to print and click on **OK**.
4. In the dialog box that appears, enter the drive, directory, and file name for the Workbook in which you want to store the Pages.
5. When printing is completed, open WhitePineBoard and then open the Workbook to which you printed. If WhitePineBoard is already running, your captured image will display as the current Workbook.
6. Each page of your document that is denoted by a page break becomes a separate Page in the Workbook. If you print to an existing Workbook, you may choose to overwrite or append the Pages to the end of the Workbook.

Screen Capture

Use this method when you want to capture a screen image from another application.

1. If you want the captured image to appear on an existing Page, select the Page now;

otherwise, the default setting puts it on a new Page.



2. Click on the **Insert Screen Capture** button (or click on the **Insert** menu, then on **Screen Capture**). The WhitePineBoard window disappears and the floating Capture Toolbar appears, as shown in Figure 5-11.

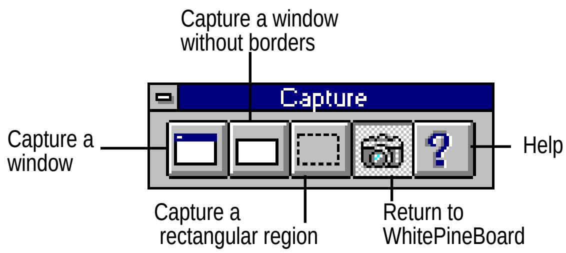


Figure 5-11. The Capture Toolbar

3. Open the application of your choice and open or create the image you want to capture.

4. Click on the appropriate button in the Capture Toolbar to select the capturing method.

5. If you want to stop a screen capture operation, press the **ESC** key.

6. Click on the window you wish to capture,

   - or -

   Click and drag a rectangle around the portion of the screen to be captured.

7. Release the mouse button to capture the image. A preview of the capture appears. If you want it on an existing Page, turn off the Insert as New Page box. If you are satisfied with the preview of the capture, click **OK**.

   If you are not satisfied with the preview of the capture, click on the **Cancel** button and return to step 4.

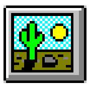
8. After you have captured the image, the WhitePineBoard window reappears with the captured image on the Page you have chosen.

9. To capture the entire desktop, click on either the **Capture a Window** or **Capture a Window without borders** button. Then click on an empty area of the desktop to capture everything.

Insert Picture

Use this method when you already have a graphic image that you want to import, such as clip art or a diagram.

1. If you want the image to appear on an existing Page, select that Page now; otherwise, the default setting puts the image on a new Page.



2. Click on the **Insert Picture** button (or click on the **Insert** menu, then on **Picture)**. The Insert Picture dialog box appears.

3. In the **List Files of Type** box, click on the format extension of the image that you want to insert. Table 5-1 lists the file formats supported by WhitePineBoard.

Table 5-1. You can insert pictures from these file types into WhitePineBoard

File type	Used by these applications
.bmp	(Windows Bitmap) Microsoft Windows
.dib	(Device Independent Bitmap) Microsoft Windows
.pcx	Paint and desktop publishing software
.tif	(Tagged Image File Format) Desktop publishing and scanning software
.jpg	(JPEG) Software for compressing photographic images
.tga	(Targa files) Scanning and paint software
.pct	(PICT) Macintosh computers
.eps	(Encapsulated PostScript) PostScript printers
.wpg	(WordPerfect Graphic File) WordPerfect
.wmf	(Windows Metafile Format) Microsoft Windows

4. Click on the drive and directory that contain the file with the image.

5. In the File Name box, type or click on the name of the file with the image you want to insert. If you want the image on an existing Page, turn off the Insert as New Page box.

6. If your display is configured at 256 colors or less, leave the Limit Images to 256 Colors option turned on.

7. Click **OK**. The image appears on the screen.

WhitePineBoard Drawing Tools

Use the built-in WhitePineBoard Drawing Tools on the Drawing Toolbar to create a Page of your own design. For example, you might want to type a conference agenda directly on the first Page in a Workbook. You can draw directly on a Page and combine your objects with other images. For information about working with objects, see "Using WhitePineBoard Objects" on page 5-32.

Using WhitePineBoard Objects

An *object* is any text or graphic that is placed on a Page, including graphic images imported from another application.

The following procedures will help you work with objects both before a WhitePineBoard session, when you are preparing Workbooks, and during a session, when you are annotating shared Workbooks.

Creating Objects

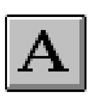
You can create objects by using the Drawing Tools on the Drawing Toolbar.

Drawing an object

1. On the Drawing Toolbar, click on the Drawing Tool of your choice: **Line**, **Ellipse**, **Rectangle**, or **Freehand**. These tools, along with the Text Tool and the Highlighter Tool, are used to mark up, or annotate, the images on your Pages.
2. Position the pointer where you want to start drawing.
3. Hold down the left mouse button and drag to draw the object.
4. Release the button to complete the object.
5. You may continue to draw separate objects with the same tool, or click on the **Select Tool** to stop drawing.

You can create a square with the Rectangle Tool, or a circle with the Ellipse Tool, by holding down the **SHIFT** key while drawing.

Entering text



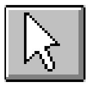
1. On the Drawing Toolbar, click on the **Text Tool**.
2. Place your cursor where you want to begin typing and click the mouse button. (The pointer changes to an *I-beam*.)
3. Type the desired text. Since text does not wrap, use the **ENTER** key to start each new line of text. Use the arrow keys to move around within the text.

To select text, use the Select Tool. See “Selecting objects” on page 5-33.

Selecting objects

Before you can work with objects, including text objects, they must be selected. A selected object has resize handles, or black squares, around it.

Selecting a single object



1. Click on the **Select Tool** on the Drawing Toolbar. The pointer changes to the Select pointer.
2. Place the pointer on the object and click the left mouse button. Resize handles appear around the object.

Selecting a group of objects

1. Click on the **Select Tool** on the Drawing Toolbar. The pointer changes to the Select pointer.
2. Hold down the **SHIFT** key as you click on each object you want to select. Resize handles appear around each object as it is selected.

You can also select a group of objects by placing the pointer outside all the objects, pressing the left mouse button, and dragging a selection rectangle (or marquee) over all the objects you want to select.

Selecting all objects on a Page

Click on the **Edit** menu, then on **Select All**.

Changing Attributes of Objects

You may want to change the color, line width, fill pattern, or font of the annotation objects you create. Follow this basic procedure:

1. Select the object or objects you wish to change.
2. Click on the **Style** menu, then on the attribute you want to change, such as **Line Width** (see Figure 5-12).

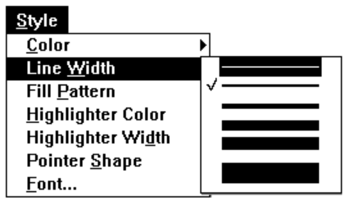


Figure 5-12. You can change attributes of objects, such as line width

3. Click on the new attribute. The selected object(s) changes to reflect your choice.

Changing the color of text

1. Click on the **Style** menu, then on **Font**. The Font dialog box appears.
2. Click on the down arrow in the Color box. The drop-down color list appears.
3. Click on the color you want, then click **OK**.

Moving Objects

Click on the object and hold the mouse button down. Drag to move the object around the Page. Release the mouse button when the object is in the desired location.

Resizing Objects

Select the object, then click on a resize handle and drag to reduce or enlarge the object.

To resize text, select it, click on the **Style** menu, then on **Font**. Click on the point size you want, then on **OK**.

Clearing Objects

Objects are deleted with the Clear command. Cleared objects are not placed on the clipboard and cannot be reinserted on a Page.

Clearing one object

1. Select the object that you want to delete.
2. Click on the **Edit** menu, then on **Clear**. A cascading menu appears.
3. Click on **Selection**. The selected object is removed.

Clearing all objects

1. Click on the Page's tab.
2. Click on the **Edit** menu, then on **Clear**. A cascading menu appears.
3. Click on **All Annotations.** All objects are deleted.

Rearranging Stacked Objects

You may want to change the stacking order of objects if they are created on top of other existing objects, or if an image has been inserted on a Page that already contained another object.

Placing a particular object in front or back

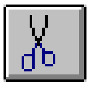
1. Select the object you want to relocate.
2. Click on the **Edit** menu, then click on **Bring to Front** or **Send to Back**. The object is moved to the front or back of the stack.

Cutting, Copying, and Pasting Objects

You can cut (remove), copy, and paste objects by using the clipboard, a temporary holding area for text objects and graphics. A copy of an object can be pasted on the same Page as the original or on another Page.

Cutting an object

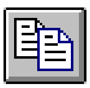
1. Select the object.



2. Click on the **Cut** button (or click on the **Edit** menu, then on **Cut**). The object is removed from the Page and placed on the clipboard. (Any information currently on the clipboard is replaced.)

Copying an object

1. Select the object.

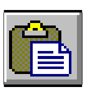


2. Click on the **Copy** button (or click on the **Edit** menu, then on **Copy**). The original object remains in place. A copy of the object is placed on the clipboard.

Pasting an object

Follow this procedure to paste an object that has been cut or copied from a Page:

1. Select the Page that is to receive the object. (Click on the Page's tab.)



2. Click on the **Paste** button (or click on the **Edit** menu, then on **Paste**). The object is moved from the clipboard to the Page.

If you copy an object to the same Page, the object appears exactly on top of the original object. Click on the copy and drag it to the desired position.

Chapter 6

Configuring Your System

You can use CU-SeeMe on any IP-based network or connection and on many types of computers. The performance of your system will depend on many factors, including the type of communication channel you are using (such as a modem, an ISDN line, an Ethernet connection, and so on), the processing speed of your computer, and the number of video windows simultaneously displayed on your screen.

There are steps you can take to configure and customize your CU-SeeMe software to get the best possible videoconference experience. Some of these steps are explained in this chapter. Other information is available in online Help and in the Frequently Asked Questions (FAQs) on the CU-SeeMe Web pages at http://support.cuseeme.com.

Choosing a Video Codec

CU-SeeMe uses special codec (COmpressor/DECcompressor) software to compress and decompress your video (or audio) data so that it can be sent more efficiently across a network. You can choose among several video codecs to best work with your network connection and the type of computer you are using.

CU-SeeMe lets you choose from 4 video codecs:

- White Pine M-JPEG

  The Motion JPEG (or M-JPEG) codec offers high quality video on local area networks (LANs) and ISDN (or higher) network connections. It will also work with modems, however lower quality settings (15% to 25%) are recommended. It works with 8-bit, 16-bit, and 24-bit input (sometimes referred to as high color or true color). If you have any difficulty using M-JPEG, you should choose the White Pine Color or Cornell CU-SeeMe Gray codec instead of M-JPEG.

- White Pine H.263

  This is a good codec for general use on local and wide area networks (LANs and WANs), however it uses more CPU power than the other codecs. This codec is not recommended for modem users as it will likely result in slow performance.

- White Pine Color

  This codec can be used on LANs, WANs, and modems. It is the best choice for sending color video on a modem. The White Pine Color codec works well with most 24-bit capture devices with the exception of parallel port capture devices.

- Cornell CU-SeeMe Gray

  This codec only sends grayscale images. The other three let you send color images (if you are using a color camera). It is an excellent codec for modem users, as well as on LANs and WANs. You should choose this codec if your camera or capture device does not support color.

Previous versions of CU-SeeMe did not include all of these video codecs. People using earlier versions of CU-SeeMe software will not be able to receive video sent with some of the newer codecs. Table 6-1 explains who can see your video image, depending on your choice of video codec.

Table 6-1. Determining who can see your video image

If you are using this codec	These users will be able to see your video image
White Pine M-JPEG	Any user with CU-SeeMe V3.0 or Enhanced CU-SeeMe V2.1.1. Currently, only Windows 95 and NT users can see M-JPEG video images.
White Pine H.263	Any user with CU-SeeMe V3.0.
White Pine Color	Any user with Enhanced CU-SeeMe V2.0 or higher or CU-SeeMe V3.0.
Cornell CU-SeeMe Gray	Any user with *any* version of CU-SeeMe (including Cornell freeware).

To choose a video codec:

1. Click the **Customize** button on the Conference Room toolbar. Point to **Configuration**, then click. The Customize dialog box appears (with the Configuration tab displayed), as shown in Figure 6-1.

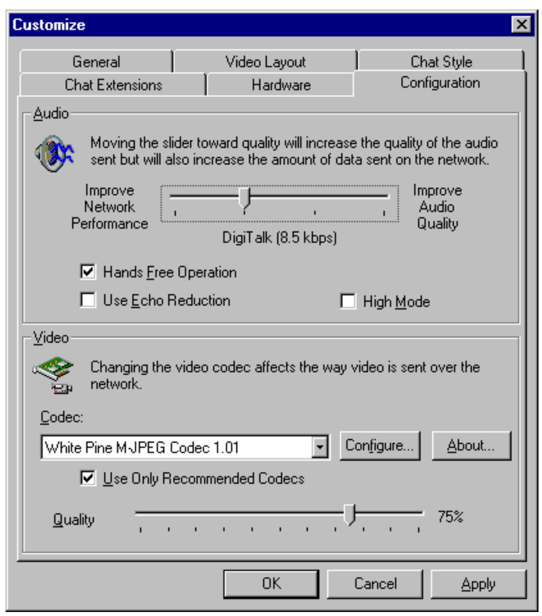


Figure 6-1. You can select a video codec to best fit your hardware and network setup

2. The video codec section is presented in the lower portion of the dialog box. Click the arrow next to the video codec to display a list of available codecs. Click on the name of the desired codec.

3. Click **Configure**. Some codecs allow you to make additional configuration settings and other codecs do not. For example, you cannot change configuration settings for White Pine M-JPEG and White Pine H.263 codecs.

4. The **Quality** slider is preset for each codec; however, you can adjust it manually. Note that Quality only affects the video that you send to others. It does *not* affect the video that you see displayed on your screen. Lowering the Quality setting sends a lower quality video image and sends less data. Therefore, a lower Quality setting will work better with a lower bandwidth network connection, such as a modem.

5. Click **OK** when done.

Changing Video Codec Settings

The best way to adjust a video codec is using the Test Setup feature in the Phone Book. This allows you to see your local and remote video images simultaneously so you can observe the effects of the changes you make. See “Test Your Setup” on page 6-13 for more information. You can also change video codec settings from the Conference Room while in a videoconference.

To change video codec settings in the Conference Room:

1. Click the **Customize** button on the Conference Room toolbar. Point to **Configuration**, then click. The Customize dialog box appears (with the Configuration tab displayed), as shown in Figure 6-1.

2. Use the video codec **Quality** slider to increase the clarity of the video image you send. Higher Quality settings use more bandwidth and cause a longer time delay in your video picture. The higher the Quality setting, the more time delay there is between when you move and when the movement is seen by others. The Quality setting does not affect your local video window. Choose the lowest Quality setting that provides an acceptable remote video image. If you are using a modem, you will need to use a lower Quality setting than if you are using LAN or WAN.

3. When you have finished adjusting Quality, click **OK**.

Recommended Settings for Each Video Codec

The best settings for each codec depend on a number of factors including your network connection. While there is no ideal setting for all conditions, recommendations are described below. They are intended as a starting point, however you may find that you need to adjust your settings from the recommended values.

Configuration refers to the Configure button shown in Figure 6-1. Quality refers to the slider, also shown in Figure 6-1, and described on page 6-4.

Settings for White Pine M-JPEG

Configuration

There is nothing to configure for this codec.

Quality

For a LAN or WAN, the recommended quality setting is between 25 and 65%. The settings are dependent on available bandwidth, your network connection, and the processing speed of your computer's CPU. For a modem, the recommended setting is between 15 and 25%. See page 6-4 to learn how to adjust Quality.

Settings for White Pine H.263

Use this codec with 24-bit capture for best quality. This codec is not compatible with all video capture cards. If you have difficulty using this codec, switch to White Pine Color or White Pine M-JPEG.

Configuration

There is nothing to configure for this codec.

Quality

For a LAN or WAN, the recommended quality setting is between 20 and 40%. This codec is not recommended for modem users as it will result in slow performance. See page 6-4 to learn how to adjust Quality.

Settings for White Pine Color

Configuration

1. Click **Configuration**. The Configure dialog box appears, as shown in Figure 6-2.

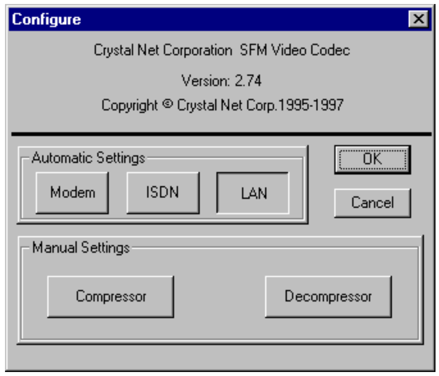


Figure 6-2. The White Pine Color codec features automatic settings

2. Select an automatic setting that matches your network connection: Modem, ISDN, or LAN. Then click **OK**.

3. Although the automatic settings work well for most users, you have the option of adjusting the codec manually. Using manual settings, you adjust the Compressor and Decompressor settings separately. (A codec includes both Compressor and Decompressor capabilities.)

4. Click **Compressor**. The Manual SFM Compressor Settings dialog box appears, as shown in Figure 6-3.

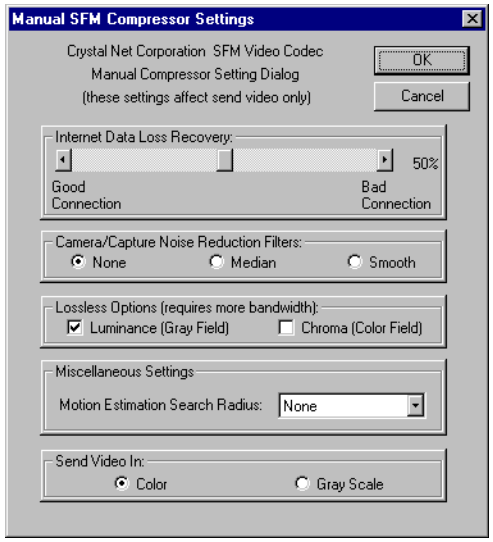


Figure 6-3. The compressor in the White Pine Color codec can be adjusted manually

5. The options in the Manual SFM Compressor Settings dialog box are explained as follows:

   - **Internet Data Loss Recovery**

     Your video data is transmitted as a series of frames, which are updated continuously. In order to get the smoothest possible video with the least amount of data loss, the video codec looks at the changes from one video frame to the next, compresses this changed data, and then adds this data to the previous frame. The result is that the video image you transmit is updated as you move in front of your camera. Unfortunately, there is usually some unavoidable loss of data as your video image is sent across a network. To compensate for this loss and to make sure unwanted “noise” won't build up on the connection, a full frame (containing ten times more data than a typical frame which only includes the changes since the previous frame) is periodically distributed over a number of frames. A lower setting means that this full frame is inserted more often.

     The default setting is 50%, which takes into account the amount of noise on a typical Internet connection. For connections over a LAN or WAN (considered a *Good Connection*) where there is much less noise, the rate of insertion can be increased, which means changing the setting to a lower number (or moving the slider to the left).

- **Camera/Capture Noise Reduction Filters**

  This option allows you to improve the video image from a lower quality camera. The default setting is **None**. If you see static or white spots in your local video image, change the setting to **Median**. If this doesn't improve your video image sufficiently, change the setting to **High**.

  Moving to a higher setting can sometimes cause your video image to appear blurry. If this happens, reduce your setting to at lower value (for example, change from High to Median, or Median to None).

- **Lossless Options**

  Normal compression causes a loss of picture quality. Lossless options compensate for this.The term lossless means a perfect replication of a picture so that the picture, after it has been compressed and decompressed, is exactly the same as it was before entering this process. That is, no quality is lost in the picture.

  Luminance preserves brightness and contrast. Select **Luminance** if you are transmitting in grayscale. Chroma preserves colors. Select both **Luminance** and **Chroma** if you are transmitting in color.

  Turning on lossless options uses more bandwidth so you may choose to turn them off if you are using a modem.

Quality

For a LAN or WAN, the recommended quality setting is between 40 and 60%. For a modem, the recommended setting is between 10 and 30%. See page 6-4 to learn how to adjust Quality.

Settings for Cornell CU-SeeMe Gray

Configuration

There is nothing to configure for this codec.

Quality

For a LAN or WAN, the recommended quality setting is between 35 and 55%. For a modem, the recommended setting is between 20 and 35%. See page 6-4 to learn how to adjust Quality.

Choosing an Audio Codec

CU-SeeMe uses codec software to efficiently send video and audio data across a network, as explained in “Choosing a Video Codec” on page 6-2. Your choice will depend on your computer environment, especially whether you are communicating using a modem, a LAN, or an ISDN line. Use Table 6-2 to choose the best audio codec for your computer.

Table 6-2. Audio codec recommendations

You can use this audio codec	If you are using this means of communication		
	Modem	**ISDN**	**LAN**
Voxware (2.4 Kbps)	✔	✔	✔
DigiTalk (8.5 Kbps)	✔	✔	✔
Delta-Mod (16 Kbps)		✔	✔
Intel® DVI (32 Kbps)		✔	✔

As with the video codecs, previous versions of CU-SeeMe did not include all of these audio codecs. People using older versions of the software will not be able to receive audio sent with some of the newer codecs. Table 6-3 explains who can hear your audio, depending on your choice of audio codec.

Table 6-3. Determining who can hear your audio

If you are using this codec	These users will be able to see hear your audio
Voxware (2.4 Kbps)	Any user with CU-SeeMe V3.0 or Enhanced CU-SeeMe V2.0 or higher (Windows 95 and NT users only)
DigiTalk (8.5 Kbps)	Any user with CU-SeeMe V3.0 or Enhanced CU-SeeMe V2.0 or higher (Windows users only)
Delta-Mod (16 Kbps)	Any user with *any* version of CU-SeeMe (including Cornell freeware) and Enhanced CU-SeeMe
Intel® DVI (32 Kbps)	Any user with *any* version of CU-SeeMe (including Cornell freeware) and Enhanced CU-SeeMe

The DigiTalk and Voxware audio codecs both work well with low bandwidths and therefore are usable with most modems. The DigiTalk codec is able to transmit both voice and music, whereas the Voxware codec is able to send voice only. Although the Delta-Mod and Intel® DVI codecs can both be heard by any CU-SeeMe user, they require large amounts of bandwidth (Delta-Mod requires the most bandwidth), and therefore may slow the overall performance of CU-SeeMe.

Sending audio and video simultaneously takes a large amount of bandwidth. If you are using a low bandwidth connection, such as a modem, you can freeze your local video window to increase the amount of bandwidth available for sending audio. To do this, right-click on your local video window. Then click **Freeze Video**. A ✓ appears, indicating that your video is frozen. Click it again when you want to return to sending full-motion video.

To choose an audio codec:

1. Click the **Customize** button on the Conference Room toolbar. Point to **Configuration**, then click. The Customize dialog box appears (with the Configuration tab displayed), as shown in Figure 6-4.

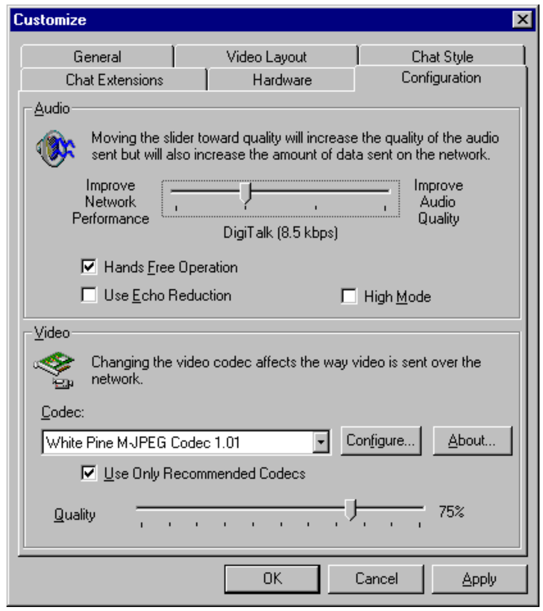


Figure 6-4. You can select an audio codec

2. The audio codec section is presented in the upper portion of the dialog box. Move the audio codec slider to select an audio codec. Note that moving the slider to the right improves the quality of the audio you send, but it also decreases performance of your computer. Moving the slider to the left increases performance but lowers the quality. A lower quality audio codec will work better with a lower bandwidth network connection, such as a modem. See "Choosing an Audio Codec" on page 6-9 for information to help you select an audio codec.

3. Select the Hands Free Operation check box if you have a full-duplex sound card. If you select Hands Free, you will also see a check box labeled **Use Echo Reduction**. When you are receiving audio and sending audio simultaneously, the echo reduction control can prevent your microphone from sending sound that is coming from your speakers. This will eliminate feedback, which can occur if your microphone is placed near your speakers. Select this check box to use echo reduction. When echo reduction is selected, (and you have clicked **OK** or **Apply**), you will see red and green triangle sliders above the microphone indicator in the audio control section of the Conference Room Window. To learn how to use these sliders and to learn more about Hands Free mode, see "Using Your Microphone in Hands Free Mode" on page 4-31.

4. Select the High Mode check box if you are sending audio over a high loss network. High mode adds more redundant audio data across the network which helps your audio to be clearer even if some data is lost. High mode also causes your audio to be delayed several seconds.

5. Click **OK** when done.

Test Your Setup

The best way to adjust your video and audio settings is using the Test Setup feature. To use this, click the **Test Setup** button on the Phone Book toolbar. The Test Setup dialog box appears, as shown in Figure 6-5.

Figure 6-5. Test Setup dialog box allows you to easily configure your video and audio

The Test Setup dialog box has two tabs, one for testing video and the other for testing audio.

Testing Video

The Test Video tab is shown in Figure 6-5. If you have a video camera and it is connected and configured correctly, you will see two video images of yourself. The one on the left is your local video and the one on the right is your remote video image. The remote video image shows how others will see you in a conference. The remote video image is helpful because you can change codec settings and see how it affects the video that you send.

To change video codec settings:

1. Click the arrow next to the video codec to display a list of available codecs. Click on the name of the desired codec.

2. Click **Configure**. Some codecs allow you to make additional configuration settings and other codecs do not. For example, you cannot change configuration settings for White Pine M-JPEG and White Pine H.263 codecs.

3. The compression adjustment slider is preset for each codec; however, you can adjust it manually. Note that moving the slider to the right improves the quality of the image you send, but it also decreases performance of your computer. Moving the slider to the left increases performance but lowers the quality. Lowering the quality setting sends a lower quality video image and sends less data. Therefore, a lower quality setting will work better with a lower bandwidth network connection, such as a modem.

   Higher quality settings use more bandwidth and cause a longer time delay in your video picture.You can observe this by setting your quality to a high setting, viewing both your local video and remote video simultaneously, and then waving your hand in front of the video camera. The higher the quality setting, the more time delay there is between when you move your hand and when the movement is shown in the remote video window. You will see that the quality setting does not affect your local video window. Choose the lowest quality setting that provides an acceptable remote video image. If you are using a modem, you will need to use a lower quality setting than if you are using LAN or WAN.

4. Click the arrow next to the capture device to display a list of video capture devices installed in your computer. Click on the name of the desired device.

5. Click **Format** or **Source** to make additional settings adjustments.

6. Click **OK** when done.

Testing Audio

If you have a microphone, speaker, and sound card, you can test and adjust your audio settings using the Test Setup feature.

To change audio settings:

1. Click the **Test Setup** button on the Phone Book toolbar. The Test Setup dialog box appears. Click on the **Test Audio** tab. The Test Audio tab is shown in Figure 6-6.

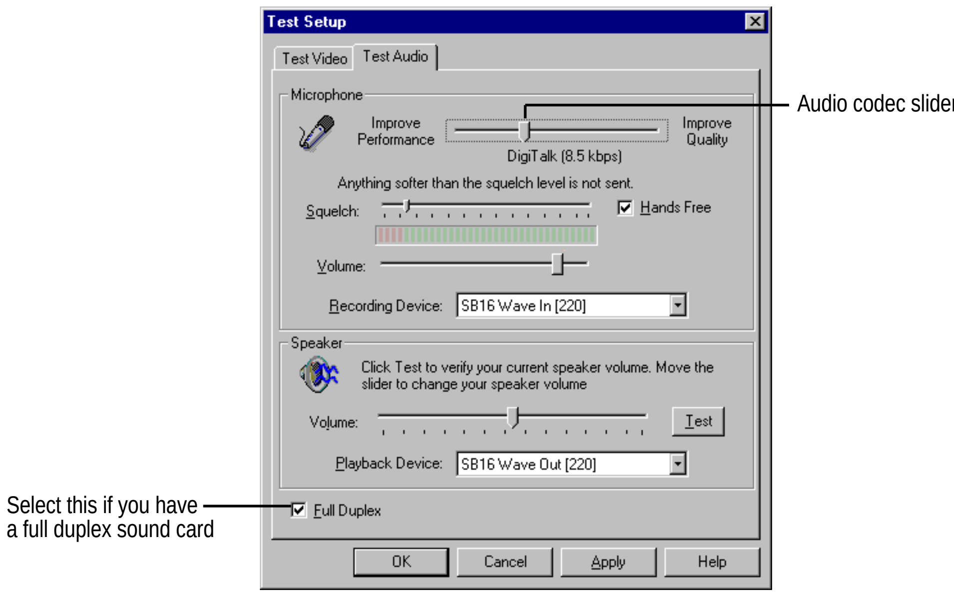


Figure 6-6. Test your audio setup

2. Move the audio codec slider to select an audio codec. Note that moving the slider to the right improves the quality of the audio you send, but it also decreases performance of your computer. Moving the slider to the left increases performance but lowers the quality. A lower quality audio codec will work better with a lower bandwidth network connection, such as a modem. See “Choosing an Audio Codec” on page 6-9 for information to help you select an audio codec.

3. Select the Hands Free check box if you have a full-duplex sound card. (To learn more about Hands Free mode, see “Using Your Microphone in Hands Free Mode” on page 4-31.) If you are in Hands Free mode, you will see the Squelch slider. The Squelch control is *only* displayed when you are in Hands Free mode. This control sets the minimum level for sound to be sent from your microphone when you are *not* receiving audio. Any sound below this level will not be transmitted. Drag the Squelch slider to the right to raise the minimum level of sound that you will transmit. This can be useful when there is background noise in your environment. You can adjust the squelch level so that the background noise is not transmitted.

4. Speak into your microphone to test the volume level. Move the microphone volume slider to raise or lower the level.

5. Click the arrow next to the recording device to display a list of audio recording devices installed in your computer. Click on the name of the desired device.

6. Click **Test** to play a sound sample. Move the speaker volume slider to raise or lower the sound level.

7. Click the arrow next to the playback device to display a list of audio playback devices installed in your computer. Click on the name of the desired device.

8. Click **OK** when done.

Setting Transmission and Reception Rates

For best performance you may need to adjust the rate at which you send and receive video and audio signals. Table 6-4 shows general guidelines for setting maximum transmission and reception rates.

Table 6-4. Suggested transmission and reception rates

When using	Set transmission and reception rates to
Modem	Match the speed of your modem, such as 28 Kbps or 33 Kbps
ISDN	40 Kbps or higher, depending on the properties of your ISDN line
LAN	80 Kbps or higher, depending on the configuration of your LAN

CU-SeeMe selects 80 Kbps as the default transmission rate. If you are on a LAN or have a connection with higher bandwidth, you can increase this rate for better performance. However, if you are transmitting with a 28.8 Kbps modem, you will be limited to a transmission rate of 28 Kbps and you should adjust your rate accordingly.

The reception options set the rate at which you receive audio and video. Limiting reception may be important if you have a 28.8 Kbps modem connection. If you are set to receive 30 Kbps for example, you may not be able to send any signals out because you will be using all of your available bandwidth to receive signals.

When you join a group conference, you may find that some conferences will not admit you until you make adjustments in your transmission and receptions rates. Other conferences may ask you if you would like to have your rates adjusted automatically. You can choose this automatic adjustment option if it is presented to you.

Setting Rates for a Contact Card

You can set minimum and maximum transmission and reception rates for each entry in your Phone Book using the Contact Card Editor. This is useful because some conference servers require lower transmission rates than others and you can preset your rates for each conference server individually by editing the Contact Card in the Phone Book.

To set transmission and reception rates using the Contact Card Editor:

1. Select the entry in the Contact Card list by clicking on a Contact Card or a name in the list of Contact Cards.

2. On the **Edit** menu, click **Contact Card Properties**. The Contact Card Editor appears. Select the **Network** tab as shown in Figure 6-7.

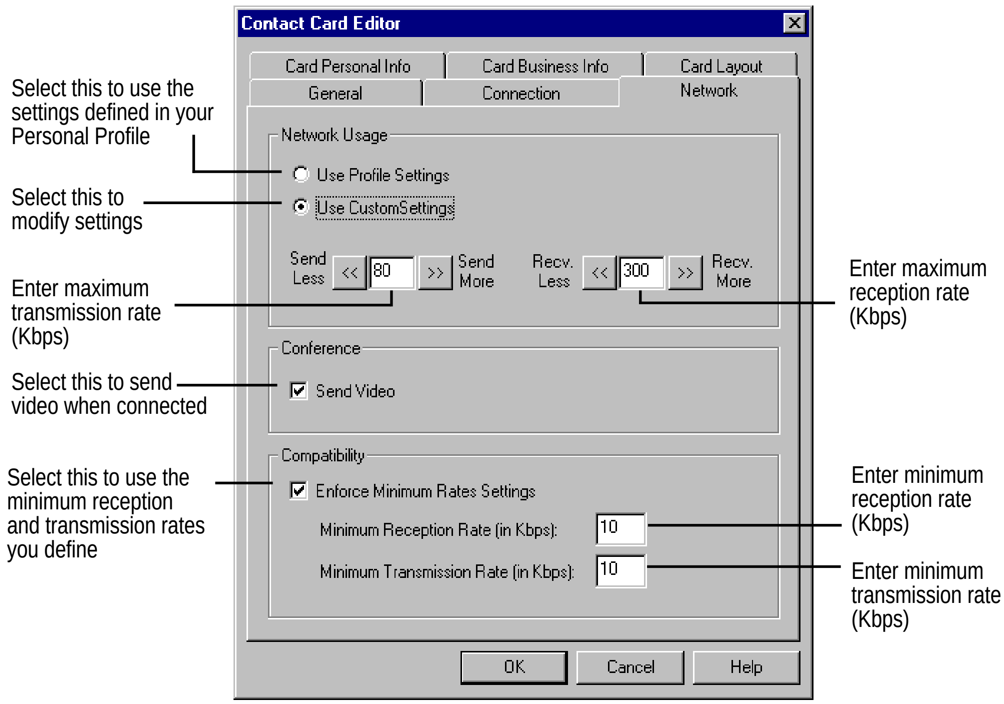


Figure 6-7. The Contact Card Editor lets you modify transmission and reception rates

3. Change the maximum transmission and reception rates by clicking on the arrows or typing a new rate in the text boxes (see Figure 6-7).

4. Change the minimum transmission and reception rates by typing in the text boxes (see Figure 6-7).

5. When you have completed all your edits to the Contact Card, click **OK**. These changes will be saved in your Contact Card. Any time you connect to the person or place on that Contact Card, you will use these new settings.

Setting Rates While In a Conference

In addition to setting rates for each Contact Card, you can also change your maximum transmission and reception rates while you are in a conference. This change will affect the current connection only.

To set transmission and reception rates in a conference:

1. Click the **Customize** button on the Conference Room toolbar. Point to **Hardware**, then click. The Customize dialog box appears (with the Hardware tab displayed), as shown in Figure 6-8.

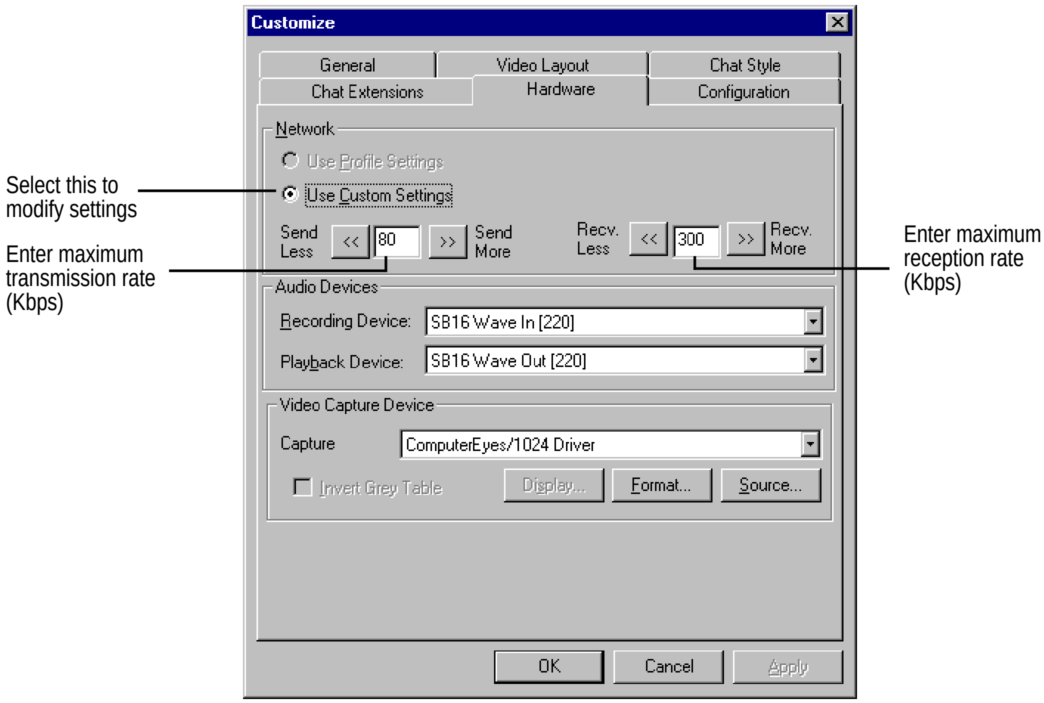


Figure 6-8. You can change transmission and reception rates while in a conference

2. Change the maximum transmission and reception rates by clicking on the arrows or typing a new rate in the text boxes (see Figure 6-8). Note that you cannot change the minimum rates while you are connected. To change minimum rates, you must hang up from the conference and change the rates using the Contact Card Editor. For more information, see “To set transmission and reception rates using the Contact Card Editor:” on page 6-18.

3. When you have completed your changes, click **OK**.

Setting Rates for a Personal Profile

You can set maximum transmission and reception rates for each Personal Profile that is stored in your Phone Book. For example, if you have a portable computer that uses a LAN from your office and a modem from your home, you would want to have two different sets of maximum transmission and reception rates, one for each location. In this instance, you would define one Personal Profile to use from your office and another to use from your home. Each profile would have rates defined for the specific network type.

To set transmission and reception rates for a Personal Profile:

1. Click the **Call Options** button on the Phone Book toolbar. Point to **Profiles**, then click.
2. The CU-SeeMe Call Options dialog box appears (with the Profiles tab displayed).
3. Select a Profile from the list. Then click **Edit**.
4. The Personal Profile Editor appears. Select the Hardware tab, as shown in Figure 6-9.

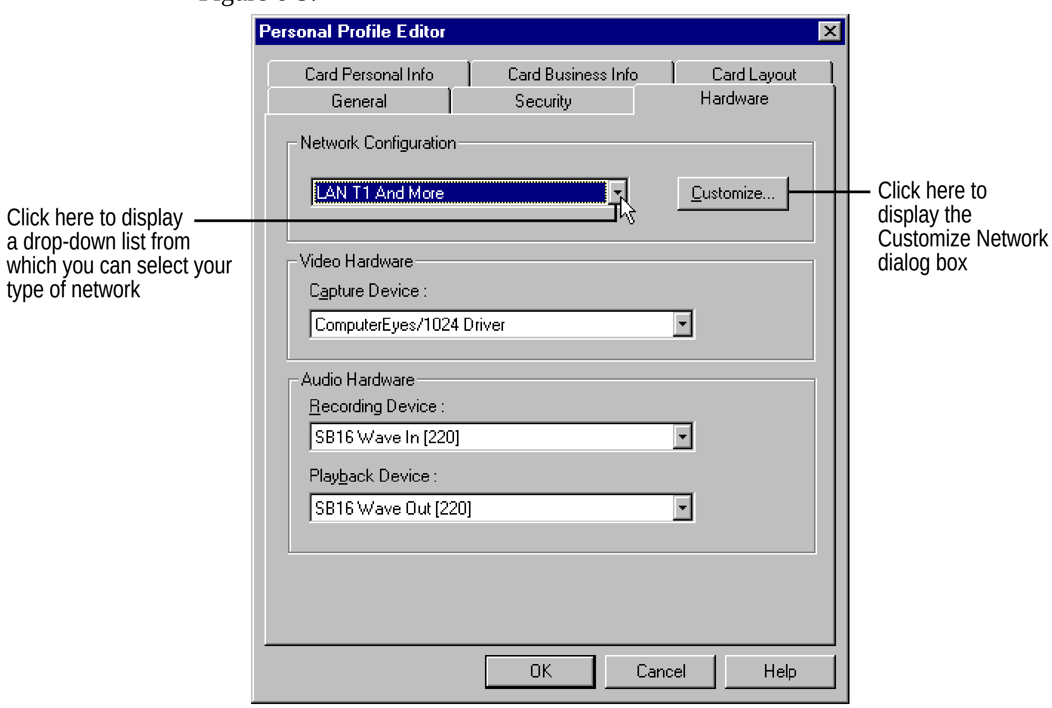


Figure 6-9. Select a network configuration in the Personal Profile Editor

5. In the Network Configuration section, use the drop-down list to select the network type that most closely matches yours. Then click **Customize**.

6. The Customize Network dialog box appears, as shown in Figure 6-10.

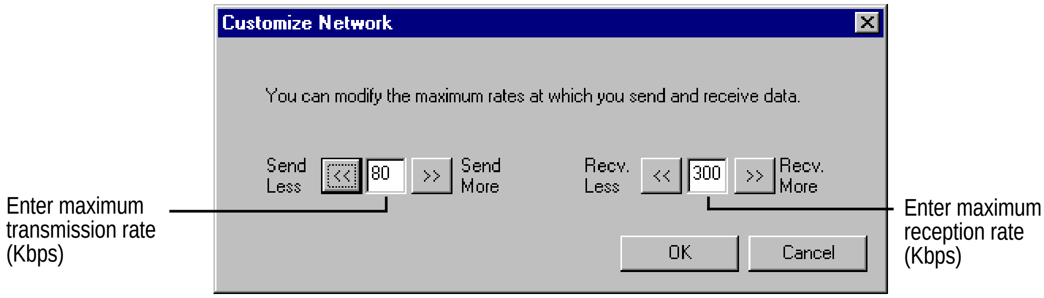


Figure 6-10. You can modify minimum and maximum transmission and reception rates

7. Change the maximum transmission and reception rates by clicking on the arrows or typing a new rate in the text boxes (see Figure 6-10). Note that you cannot change the minimum rates for a Personal Profile. To change minimum rates, you must change the rates using the Contact Card Editor. For more information, see "To set transmission and reception rates using the Contact Card Editor:" on page 6-18.

8. Click **OK**.

9. When you have completed all your edits to the Personal Profile, click **OK**.

10. Then click **OK** again to close the CU-SeeMe Call Options dialog box.

Registering With an Online Directory Service

A directory service is a Web-based listing that allows users of CU-SeeMe to find each other, see if they are online, and connect directly to them.

Each user on the Internet has an Internet Protocol (IP) address that is a unique identifier. Many Internet Service Providers and online services assign IP address dynamically; that is, you get a new IP address each time you connect to the Internet. This is like changing your telephone number each time you place a call, and it has made it difficult in the past for online users to find and connect to each other. The Web-based directory service solves this problem by automatically registering your current IP address as soon as you connect to the Internet, making it easy for other people to locate you.

When you set up CU-SeeMe on your computer, you were given the opportunity to register with Four11 directory service (see “Using the Setup Assistant” on page 2-2). If you chose this option, you are now listed in this Web-based directory and other CU-SeeMe users will be able to locate you online. If you did not choose this registration option during set up, you can still register at any time.

To register with Four11 directory service:

- From the Windows desktop, click **Start**, point to **Programs**, point to **CU-SeeMe**, then click **Four11 Registration**. Your Web browser will open and you will be connected to the Four-11 CU-SeeMe registration page.

  \- or -

- Using a Web browser, go to the Four11 Web page at http://www.four11.com.

Appendix A
Technical Support

This Appendix contains information on how to contact White Pine for technical support and sales information.

Getting Technical Support

White Pine Software provides telephone support to all registered users after registering the product. Only purchased copies of the product can be registered, meaning that you can not register any of the freeware versions of CU-SeeMe available through Cornell University.

Registering CU-SeeMe

You must register with White Pine in order to receive technical support. You can register in any of the following ways:

- Complete the registration card included with CU-SeeMe and mail it to White Pine.
- From the Help menu in CU-SeeMe, click Registration. This opens a Web browser and displays the White Pine Software Product Registration Web page, allowing you to register your copy of CU-SeeMe online.
- Using any Web browser, go to the CU-SeeMe Web page at http://www.cuseeme.com and select **Register Software**. Fill out the online form to register your copy of CU-SeeMe.

Support on the World Wide Web

The White Pine Web pages offer a variety of information about the company, products, and demo versions of released software, in addition to technical support.

The Technical Support pages offer online registration, technical support through an interactive form, and a list of Frequently Asked Questions about using CU-SeeMe.

You can reach the White Pine Software technical support Web page at http://www.cuseeme.com/support.

Support Through E-Mail

White Pine’s technical support staff also answers questions through e-mail. In your e-mail message, be sure to include your name, company name (if applicable) and phone number so that the technical support staff can contact you to meet your support needs.

Before You Contact Technical Support

White Pine Software provides technical support to registered users. Return your user registration card promptly or register CU-SeeMe using online registration (see “Registering CU-SeeMe” on page A-2). Product registration guarantees you new product notification and product upgrades.

To get your problems solved as quickly as possible, the technical support staff requires as much pertinent information as possible. If you can supply us with this information at the time of your call, we can understand and resolve your problem much faster. You should have this information ready and be at your computer when you call for technical support and be ready to reproduce the problem while talking to a technical support staff member.

Please fill out the following information before calling:

Serial #: ____

Product: ____

Version: ____

Date Purchased: ____

Original Purchaser: ______________________________________

Your Computer Configuration

Make and Model: ______________________________________

DOS Type and Version: _________________________________

Microsoft Windows Version: ____________________________

Disk Space: ____

Memory (RAM): _______________________________________

Video Card Manufacturer and Model: ____________________

Video Capture Card Manufacturer and Model: _____________

Sound Card Manufacturer and Model: ____________________

Camera Manufacturer and Model: _______________________

Microphone Manufacturer and Model: ____________________

Contents of the following files:

- Network configuration files, if applicable (for example, TCP.CFG or NET.CFG)
- WIN.INI
- SYSTEM.INI
- AUTOEXEC.BAT
- CONFIG.SYS

Communications Configuration

Internet Connection:

Ethernet: _______ ISDN: _______ Modem: ________

Modem Manufacturer and Model: ________________________

Model of your Ethernet board: __________________________

Network drivers and other communication software installed on your system:

- TCP/IP Driver: ____
- Dial-up PPP (if using a modem): _________________________
- Internet Service Provider (ISP): _________________________

Contacting White Pine Software

While our Technical Support staff often takes calls immediately, there are times when a representative may be unavailable. If your problem can not be resolved during your initial call, the issue will be discussed with our product specialists and engineering staff, and a representative will contact you.

Technical Support

E-mail: cusupport@wpine.com
Phone: 603-594-2804 8:00 am - 8:00 pm EST
408-446-9203 8:00 am - 8:00 pm PST

Corporate Headquarters

White Pine Software, Inc.
542 Amherst Street
Nashua, NH 03063 USA
Phone: 603-886-9050
Fax: 603-886-9051
E-mail: info@wpine.com
WWW: http://www.wpine.com

West Coast Office

White Pine Software, Inc.
1485 Saratoga Avenue
San Jose, CA 95129-4934 USA
Phone: 408-446-1919
Fax: 408-446-0666
E-mail: info@wpine.com

European Headquarters

White Pine Software, SA

9551, route de Saint Laurent du Var
06610 La Gaude France
Phone: +33.4.93.59.43.43
Fax: +33.4.93.24.76.06
E-mail: euro-info@whitepine.fr

Sales Hot Line

For more information about all White Pine Software products, please contact the White Pine Software sales department. Demos and product information are also available on the World Wide Web.

U.S. E-Mail: info@wpine.com
U.S. Phone: 1-800-241-PINE (7463)

Europe E-Mail: euro-info@whitepine.fr
Europe Phone: +33.4.93.59.43.43

WWW: http://www.cuseeme.com

Glossary

Bandwidth

The capacity to send information on a network. It is usually measured in bits per second (bps) or kilobits per second (Kbps).

Browser

A software program that allows a user to access resources on the Internet.

Chat Macro

Shortcut buttons that allow you to automate typing of words, phrases, or symbols that you use often.

Chat Window

A feature of CU-SeeMe that allows users to converse using text messages. The Chat window is a component of the CU-SeeMe Conference Room window.

Codec

COmpressor/DECompressor; Hardware or software that compresses and decompresses audio and video data. CU-SeeMe uses software codecs.

Conference ID

A number between 1 and 32768 that is provided to attendees of a private conference session. This ID number is needed for some conferences.

Conference Room

The CU-SeeMe window in which videoconferencing takes place. It is like a virtual meeting room where you can see and talk to others.

Conference Server

Software that delivers multimedia group interaction across IP networks. A conference server is the server program in a client/server videoconferencing solution. (CU-SeeMe is the client program.)

Contact Card

A convenient tool for storing information about a person or place. It is like a business card or a card in a rotary file. Contact Cards are displayed in the CU-SeeMe Phone Book Window.

Contact Group

A collection of Contact Cards.

CU-SeeMe

Videoconferencing software for desktop computers.

CU-SeeMe Name

Your user name that appears when you conference with others. Your CU-SeeMe name and the CU-SeeMe names of other participants appear in the Participants List in the Conference Room window.

Cybercast Conference

The transmission of the same data to a selected group of destinations.

Full-Duplex

Allows both parties to send and receive audio at the same time. This affects the receiver only.

Half-Duplex

Allows only one person to talk at a time. This affects the receiver only.

Internet

A global network that uses the TCP/IP protocol.

Internet Service Provider

A company that provides a connection to the Internet for a fee.

IP Address

The unique numeric address for every computer that is connected to the Internet. It has four sections separated by a dot, for example, 100.1.1.1. An IP address can be dynamic and is often provided by Internet service providers.

IP Name

The unique name for every computer that is connected to the Internet.

ISDN

Integrated Services Digital Network; A high bandwidth network used to move large amounts of data over phone lines.

Kbps

An abbreviation meaning kilobits per second, used for measuring bandwidth.

Listener

A CU-SeeMe feature that alerts you to an incoming call.

Local Area Network (LAN)

A network made up of two or more computers connected together. They are usually within the same building or within a very short distance (a mile or less) to each other.

Local Video

The window containing your video image on your computer screen. This video image can be sent to other people using CU-SeeMe.

Lurker

A CU-SeeMe conference participant who is not sending a video image.

Message of the Day (MOTD)

A dialog box that appears when users connect to a conference. It can provide information about the conference, current and upcoming cybercasts, etc.

Multicast

The ability to send one stream of video data and one stream of audio data over a network, and many users can simultaneously connect to and receive these streams of data without the use of additional software.

Parental Control

A security feature that allows you to put restrictions on the CU-SeeMe calls that are made from your computer and the calls accepted by your computer.

Participants List

A component of the Conference Room window that lists the people currently connected to a conference.

Personal Profile

A Personal Profile identifies you to other people on the network. It includes your CU-SeeMe name, contact information, Parental Control options, and more.

Phone Book

A CU-SeeMe feature that works like a personal directory where you can list anyone you might want to call. You use the Phone Book to initiate a CU-SeeMe videoconference call.

Point-to-Point Conference

A direct connection between two CU-SeeMe users.

PPP

Point-to-Point Protocol. A protocol that allows a computer to make a TCP/IP connection using a telephone line and a modem.

Profile Contact Card

When you create a Personal Profile, you also create a Profile Contact Card. It is like a business card that you can exchange with others electronically.

Protocol

Standards that allow programs on different computers to communicate.

Remote Video

The window that contains the video sent by another participant in a conference.

Router

A computer system or software package that connects two or more networks. Routers look at the destination addresses of the IP packets and forward them to the correct address.

Sender

A CU-SeeMe conference participant who is sending a video image.

TCP/IP

Transmission Control Protocol/Internet Protocol. The protocol that defines the Internet.

Time-to-Live (TTL)

A value used by routers that is decremented as it is passed from router to router.

URL

Uniform Resource Locator. An “address” used to locate information on the Internet.

WhitePineBoard

A feature of CU-SeeMe that allows users to view, create and/or share the same document at the same time.

Wide Area Network (WAN)

A large network made of connected LANs.

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