



Cisco HealthPresence User Guide

V 2.0 for AMD
January 2, 2012

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
<http://www.cisco.com> Tel: 408 526-4000

Support: 877-871-7255 or 512-340-3793
Web portal: <https://ros.cisco.com/Portal>
E-mail: healthpresence-support@cisco.com

Text Part Number: 78-20625-01

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The following information is for FCC compliance of Class A devices: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to correct the interference at their own expense.

Modifications to this product not authorized by Cisco could void the FCC approval and negate your authority to operate the product.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

CCDE, CCENT, CCSI, Cisco Eos, Cisco HealthPresence, Cisco IronPort, the Cisco logo, Cisco Nurse Connect, Cisco Pulse, Cisco SensorBase, Cisco StackPower, Cisco StadiumVision, Cisco TelePresence, Cisco Unified Computing System, Cisco WebEx, DCE, Flip Channels, Flip for Good, Flip Mino, Flipshare (Design), Flip Ultra, Flip Video, Flip Video (Design), Instant Broadband, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn, Cisco Capital, Cisco Capital (Design), Cisco:Financed (Stylized), Cisco Store, Flip Gift Card, and One Million Acts of Green are service marks; and Access Registrar, Aironet, AllTouch, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Lumin, Cisco Nexus, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, Continuum, EtherFast, EtherSwitch, Event Center, Explorer, Follow Me Browsing, GainMaker, iLX, IOS, iPhone, IronPort, the IronPort logo, Laser Link, LightStream, Linksys, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, PCNow, PIX, PowerKEY, PowerPanels, PowerTV, PowerTV (Design), PowerVu, Prisma, ProConnect, ROSA, SenderBase, SMARTnet, Spectrum Expert, StackWise, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0910R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

Cisco HealthPresence is intended for use by licensed healthcare professionals with those certain independent third party medical devices listed as compatible in the Cisco Health Presence Instructions for Use. The user is to refer to the third party instructions for use concerning any further information about the use of those certain medical devices. Cisco HealthPresence is not intended to perform real-time, active, or online patient monitoring, and does not transmit or display any real-time data that is intended to alert the user of alarms or other conditions that require immediate action or response. The user is advised that Cisco Systems makes no representations or warranties concerning jurisdictional requirements related to the licensed practice of medicine or healthcare using Cisco HealthPresence.

Cisco HealthPresence User Guide

© 2011 Cisco Systems, Inc. All rights reserved.





CONTENTS

CHAPTER 1

Introducing the Cisco HealthPresence Solution 1-1

About This User Guide	1-2
An Overview of the Cisco HealthPresence Solution	1-2
Details of the Components and Equipment	1-3
Components at the Attendant Station	1-3
Supported Medical Devices	1-4
Components at the Provider Station	1-4
The Importance of User Roles	1-5
A Sample Workflow	1-6
The Attendant Begins the Appointment	1-6
The Provider Joins In	1-6
The Examination Begins	1-7
The Appointment Ends	1-7
Basic System Tasks	1-8
Gaining Access to the System (If Necessary)	1-8
Logging In to the Cisco HealthPresence System	1-9
Locking and Unlocking the Application	1-10
Changing Your Password	1-11
Logging Out of the System	1-11

CHAPTER 2

The Attendant Workflow 2-1

Preparing for the Appointment	2-2
Step 1 – Prepare the Cisco HealthPresence System	2-2
Step 2 – Check the Equipment	2-3
Starting the Appointment	2-4
Step 1 – Fill in (or Retrieve) the Patient's Personal Data	2-4
Step 2 – Select a Provider	2-5
Step 3 – Select Appointment Options (if Applicable)	2-6
Gathering and Sharing Patient Vitals	2-9
Step 1 – Weigh, Measure, and Position the Patient	2-9
Step 2 – Gather the Patient's Vitals	2-9
Step 3 – Notify the Provider that You are Ready to Begin	2-11
Step 4 – Share the Patient's Vitals	2-12
Step 5 – Join the Teleconference	2-13

Conducting the Examination	2-14
Optimize the Audio Volume	2-14
Share Video Images	2-15
Share Stethoscopic Sounds	2-16
Completing the Appointment	2-17
Step 1 – Save the Patient Data	2-17
Step 2 – Conclude the Appointment	2-18
Using Special Features and Functions	2-19
Chat with the Provider(s)	2-19
Consult With a Specialist	2-20
Print Patient Data	2-21
Pause the Scope Image	2-23
View and Print Prescriptions	2-24

CHAPTER 3

The Provider Workflow 3-1

Arriving at the Appointment	3-2
Step 1 – Log in to the Cisco HealthPresence System	3-2
Step 2 – Choose an Appointment	3-2
Step 3 – Look Over the Patient’s Personal Data	3-3
Step 4 – Look Over the Patient’s Vitals	3-4
Step 5 – Join the Teleconference	3-5
Conducting the Examination	3-7
Optimize the Audio Volume	3-7
View Video Images	3-8
Listen to Stethoscopic Sounds	3-9
Exit the Appointment	3-9
Using Special Features and Functions	3-10
Chat with the Attendant	3-10
Consult With a Specialist	3-11
Print Patient Data	3-12
Pause the Scope Image	3-14
Write, View, and Print Prescriptions	3-15

CHAPTER 4

The Medical Conferencing Feature 4-1

About Conferencing in General	4-2
Types of Conferences	4-2
The Conference Environment	4-2
The Players and Their Roles	4-3
Ending a Conference	4-3

Possible Scenarios	4-4
Controlling the Audio Volume	4-4
Starting or Entering a Conference	4-5
Starting a Conference	4-5
Entering a Conference	4-6
Starting or Entering a Business-to-Business Conference	4-7
Starting a B2B Conference	4-7
Entering a B2B Conference	4-8
Presenting a Conference	4-9
To Share Patient Vitals	4-9
To Start the Teleconference	4-9
To Share Live Video or Audio	4-10

APPENDIX A
Maintaining the System **A-1**

Morning Maintenance Tasks	A-1
Throughout the Day	A-2
Evening Maintenance Tasks	A-2

APPENDIX B
Types of Audio Equipment **B-1**

Supported Audio Equipment	B-1
Using the Phone for Other Purposes	B-2

GLOSSARY



CHAPTER 1

Introducing the Cisco HealthPresence Solution

Revised: January 2, 2012, 78-20625-01

This introduction explains the audience, purpose, and scope of this user guide. It provides an overview of the Cisco HealthPresence solution, and then describes the system equipment, functionality, and requirements in more detail. These topics are included in this chapter:

- About This User Guide
- An Overview of the Cisco HealthPresence Solution
- Details of the Components and Equipment
 - Components at the Attendant Station
 - Supported Medical Devices
 - Components at the Provider Station
- The Importance of User Roles
- A Sample Workflow
 - The Attendant Begins the Appointment
 - The Provider Joins In
 - The Examination Begins
 - The Appointment Ends
- Basic System Tasks
 - Gaining Access to the System
 - Logging In to the System
 - Locking and Unlocking the Application
 - Logging Out of the System
 - Changing Your Password



Note

Read the [Cisco HealthPresence Specifications, Warnings and Precautions¹](http://www.cisco.com/en/US/docs/solutions/Verticals/Healthcare/HealthPresence/Version_2/Specifications_Warnings_Precautions/CHP_WarningsPrecautions.pdf) before using this solution in a clinical setting.

1. http://www.cisco.com/en/US/docs/solutions/Verticals/Healthcare/HealthPresence/Version_2/Specifications_Warnings_Precautions/CHP_WarningsPrecautions.pdf

About This User Guide

This User Guide is for licensed health care professionals who use the Cisco HealthPresence™ device. It assumes that these users will be primarily medical experts, but will also have some experience with personal computers. For those who could use a reminder, elementary computer terminology is included in the Glossary.

This guide describes the components of the Cisco HealthPresence solution, and explains how various types of users interact with the system. The chapters in this guide are organized according to user roles, which are described in [“The Importance of User Roles” on page 1-5](#).



Note

Instructions for using specific medical devices are not provided here. Such equipment may be from a number of different third-party manufacturers who will probably have supplied their own user's manuals.

An Overview of the Cisco HealthPresence Solution

The Cisco HealthPresence solution allows a health care Provider (usually a physician) to evaluate a patient regardless of the physical location of the patient. For example, Providers can see images from an ear, nose, and throat (ENT) scope just as they would if they were in the room with the patient. A special camera zooms in to allow the physician to get close ups of a patient's throat. As another example, an Attendant can place a stethoscope on a patient's chest, and the physician can hear the heartbeat from a remote location.

The system allows patients to consult with specialists without traveling to the specialist's location. If the multi-party feature has been implemented, the specialist and the attending physician can both participate in the same patient conference.

To see an example of the system in a clinical setting, refer to [Figure 1-1](#). The table ([Table 1-1](#)) on the following page explains the roles and components shown in the illustration.

Figure 1-1 *The Cisco HealthPresence Solution Attendant Station*



Table 1-1 *Components and Roles in a Clinical Setting*

Item	Explanation
Attendant	The licensed health care professional who attends the patient. This role includes greeting the patient, taking the patient's vitals, and using the medical devices to assist the Provider in evaluating the patient. An Attendant can be a medical technician, a nurse, a nurse practitioner, or a physician.
Attendant Station	The place where the patient and the Attendant meet. This area contains the medical device(s) used by the Attendant, the video conferencing system, and the Cisco HealthPresence Attendant Appliance. For more details about this station, see "Components at the Attendant Station" on page 1-3 .
Medical Device	The devices used with the system allow the Attendant to measure and report medical information remotely. The medical device shown in Figure 1-1 is an Exam Camera. Other supported devices are described in "Supported Medical Devices" on page 1-4 .
Patient	The person who has made an appointment to be evaluated using the Cisco HealthPresence system.
Provider	The licensed medical professional who provides medical evaluations from a remote site. Most often this will be a physician, a physician's assistant, or a nurse practitioner.
Provider Station	The place where the Provider sits during the teleconference. This area contains the video conferencing system and the Cisco HealthPresence Provider Appliance. For more details about this station, see "Components at the Provider Station" on page 1-4 .

Details of the Components and Equipment

This section describes the components of the Cisco HealthPresence solution, and the devices that can be used with the system.

Components at the Attendant Station

The components at the Attendant station include:

- A video conferencing system (monitor, speakers, phone, etc.) to facilitate teleconferencing among sites.
- The Cisco HealthPresence Attendant Appliance, which connects to all of the medical devices, and allows the Attendant to initiate conferences and to share data with the Provider.
- Medical devices approved for use with Cisco HealthPresence solution. These are listed in the next section.

Supported Medical Devices

The third-party medical devices that can be used with this system include:

- AMD 400 (or AMD 500) Image and Illumination System and its related components:
 - AMD-2015 ENT Scope
 - AMD-2030 Dermascope
 - AMD-2020 Direct Ophthalmoscope
- AMD 8221 Welch Allyn Spot Vital Signs LXi (which includes an oximeter, a blood pressure monitor, and a thermometer)
- AMD 2500 General Exam Camera
- AMD 3700 Telephonic Stethoscope



Warning

The Cisco HealthPresence-Connect software is not intended to perform real-time, active, or online patient monitoring, and does not transmit or display any real-time data that is intended to alert a physician of alarms or other conditions that require a physician's immediate action or response.

Components at the Provider Station

Components at the Provider station include:

- A video conferencing system (monitor, speakers, phone, etc.) to facilitate teleconferencing among sites.
- The Cisco HealthPresence Provider Appliance, which allows the Provider to evaluate data supplied from the Attendant station, where the patient is located.
- Headphones, which the Provider uses to listen to the telephonic stethoscope remotely.
- An E-Pen for writing prescriptions, if this feature is supported at this site.

The Importance of User Roles

Your user role determines which screens you see, and which functions you can perform. User accounts are configured so that users with a particular role (or roles) see only the screens and options appropriate to that job description. Any given user can have from one to five roles.

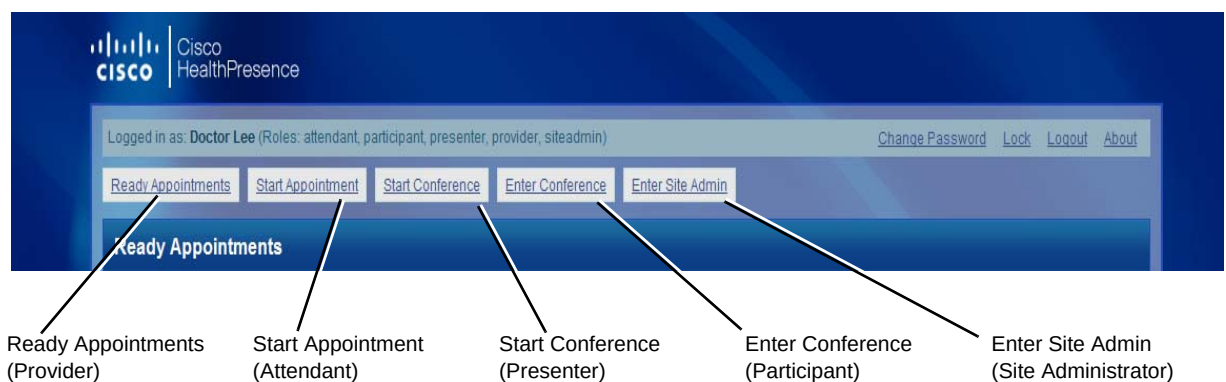
The five different user role types are listed in [Table 1-2](#). The roles are ranked in the order shown in the table. For example, someone with both a Provider and Presenter role would default to the Provider screen. As another example, if the Site Administrator is also a Presenter, the default would be Presenter, which is higher up on the list.

When you log in, you see the main screen for your highest level user role; however, you can move to another screen by clicking the appropriate screen name. The screen selections for each user role are shown in [Figure 1-2](#). In the example, the user has access to all five screens. The window displayed is the *Ready Appointments* window, as the Provider role is the highest in the list.

Table 1-2 Five Possible User Roles

User Role	Primary Screen
Provider	The physician or other medical professional who evaluates the patient data begins with the <i>Ready Appointments</i> screen.
Attendant	The medical professional who attends the patient begins with the <i>Start Appointment</i> screen.
Presenter	The person who initiates the conference begins with the <i>Start Conference</i> screen.
Participant	A person who joins a conference begins with the <i>Enter Conference</i> screen.
Site Administrator	The person who maintains user accounts on the system begins with the <i>Enter Site Admin</i> screen.

Figure 1-2 Task Links Appropriate to Each User Role



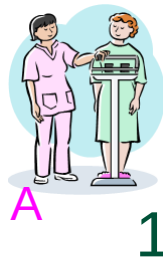
A Sample Workflow

This section provides a sample screen sequence of a typical medical session. All of these functions are described in detail later in this guide.

The Attendant Begins the Appointment

Think of this section as an executive summary. You aren't expected to try to read the details of the screens shown in these illustrations. You will see full-sized versions of all of these screens in later chapters. However, if you want to see the details now, you can click the appropriate cross-reference.

Step 1 The Attendant (A) gets the patient's measurements, seats the patient at the Attendant station, and fills in the patient's personal data. For details, see [Figure 2-1 on page 2-4](#).



Step 2 The Attendant displays a list of Providers, and selects a Provider. For details, see [Figure 2-3 on page 2-5](#).

Step 3 The Attendant takes the patient's vitals, transfers the vitals to the system, and then alerts the Provider that this consultation can begin (see [Figure 2-9 on page 2-11](#)). This appointment appears on the Provider's *Ready Appointments* list.

The Provider Joins In

Step 4 The Provider (P) comes into the Provider station, logs in, and sees a list of all of the "ready" appointments that have selected him or her as a Provider. For details, see [Figure 3-1 on page 3-2](#).

Step 5 The Provider clicks the appointment he or she wants to join. The appropriate appointment screen automatically displays (see [Figure 3-2 on page 3-3](#)).

The Examination Begins

- Step 6** The Attendant shares the patient's vitals with the Provider.

The Provider can now see the patient's vitals. For details see [Figure 2-10 on page 2-12](#).

- Step 7** Both the Attendant and the Provider join the conference (see [Figure 2-11 on page 2-13](#)).

The patient and the Attendant can see the Provider on the screen at the Attendant station. The Provider can see the patient and the Attendant on the screen at the Provider station.

- Step 8** The Attendant uses one or more medical devices to examine the patient, and sends the data to the Provider.

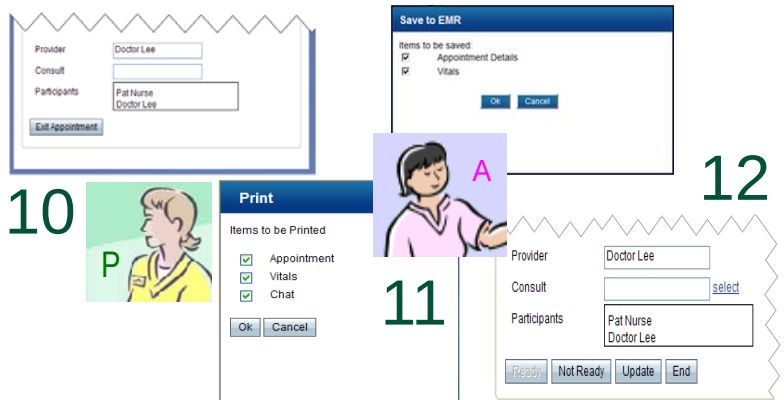
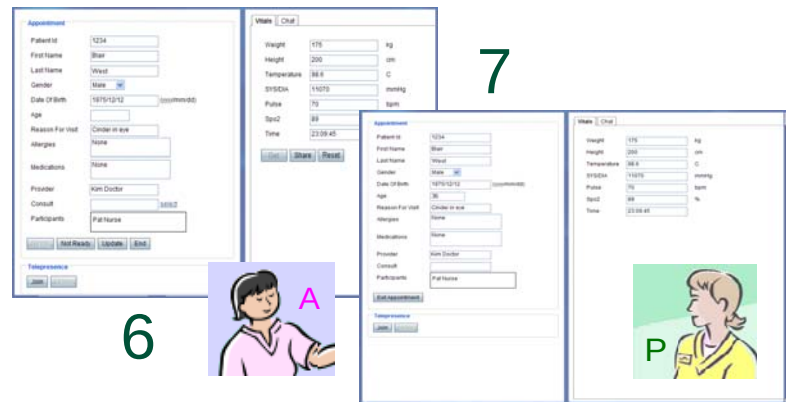
- Step 9** The Provider evaluates the data, and communicates with the patient and the Attendant. For details see [Figure 3-5 on page 3-8](#).

The Appointment Ends

- Step 10** The Provider exits the appointment (see [Figure 3-6 on page 3-9](#)).

- Step 11** The Attendant does any necessary post-appointment work, such as saving (Figure 2-14 on page 2-17) or printing (Figure 2-18 on page 2-21) the patient data.

- Step 12** The Attendant ends the appointment. For details, see [Figure 2-14 on page 2-18](#).



Basic System Tasks

The instructions in the remainder of this guide are based on your user role, for example, Attendant, Provider, Presenter, and so forth. The instructions here apply to all types of users.

Gaining Access to the System (If Necessary)

Normally, you will begin your sessions from the Cisco HealthPresence *Login* screen (shown in [Figure 1-6 on page 1-9](#)); however, if you do not see that screen:

- You may need to click the CHP Portal quick link.
- You may need to log in to Windows.
- You may need to log off and log in again.

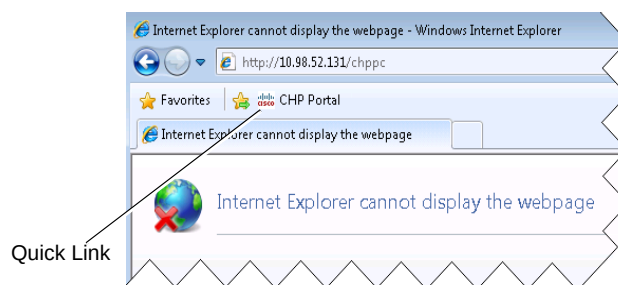
**Note**

If the suggestions provided here do not work, you may need to contact support. When your Cisco HealthPresence system was installed, your site was provided with the appropriate numbers to call.

Using the CHP Portal Quick Link

If you see the message *Page Not Found*, *Service Unavailable*, or something similar, click the CHP Portal quick link (see [Figure 1-3](#)).

If you are logged in, and you see a *You have been logged out...* message, and, when you click *OK*, you see *Page Not Found*, *Service Unavailable*, or a similar message, click the CHP Portal quick link every minute or so for about five minutes. If service is not restored by then, call support.

Figure 1-3**The CHP Portal Quick Link**

Windows 7 User Login

Figure 1-4**A Sample Windows 7 User Icon**

If your system has been powered off, either deliberately or accidentally, you will need to click on *chpuser* (see [Figure 1-4](#)), and then enter the Windows password for your installation. You will then see the Cisco HealthPresence login screen ([Figure 1-6 on page 1-9](#)).

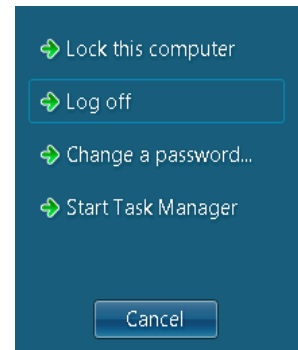
Log Off and then On Again

If you see a blank screen, it may be because someone has accidentally closed the Internet Explorer browser. If this happens:

1. Press the Ctrl + Alt + Del keys on your keyboard.
You will see a screen like the one shown in [Figure 1-5](#).
2. Click on the **Log off** selection.

The system will display the Cisco HealthPresence *Login* screen (see [Figure 1-6](#)).

Figure 1-5 The Log Off Selection



Note

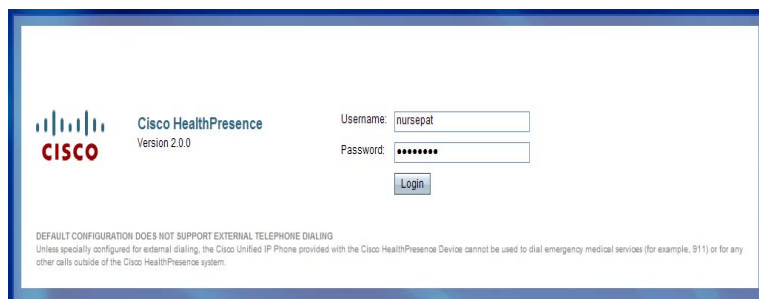
This is the standard Windows operating system procedure for logging on and off. What isn't standard is that Internet Explorer automatically launches when someone logs in at the Cisco Health Presence login screen.

Logging In to the Cisco HealthPresence System

Normally, you will begin your sessions from the Cisco HealthPresence *Login* screen (see [Figure 1-6](#)); however, if you don't see that screen, see [“Gaining Access to the System \(If Necessary\)”](#) on page 1-8

1. Type your *Username* and *Password* in the boxes provided.
2. Click the **Login** button.

Figure 1-6 The Cisco HealthPresence Login Screen



Locking and Unlocking the Application

If you leave your station, you should be careful to lock the application before you go. This prevents unauthorized access, and, if an appointment is active, it prevents anyone else from seeing the appointment data. You can unlock the application, returning to the same window, when you come back.



Warning

If you do not lock the applicatoin, and you leave it unattended for a certain length of time (determined when your system was configured), the system will log you out automatically. However, while the application is locked, automatic logout does not apply.

Lock the Application When You Leave

To lock the application:

1. Click **Lock** at the top right of the window (shown in [Figure 1-7](#)).
2. In the *Lock* confirmation message dialog box, click **Yes**.

The *Unlock* window displays. It contains your *Username* and a place for your *Password*. (A portion of this screen is shown at the right in [Figure 1-7](#).)



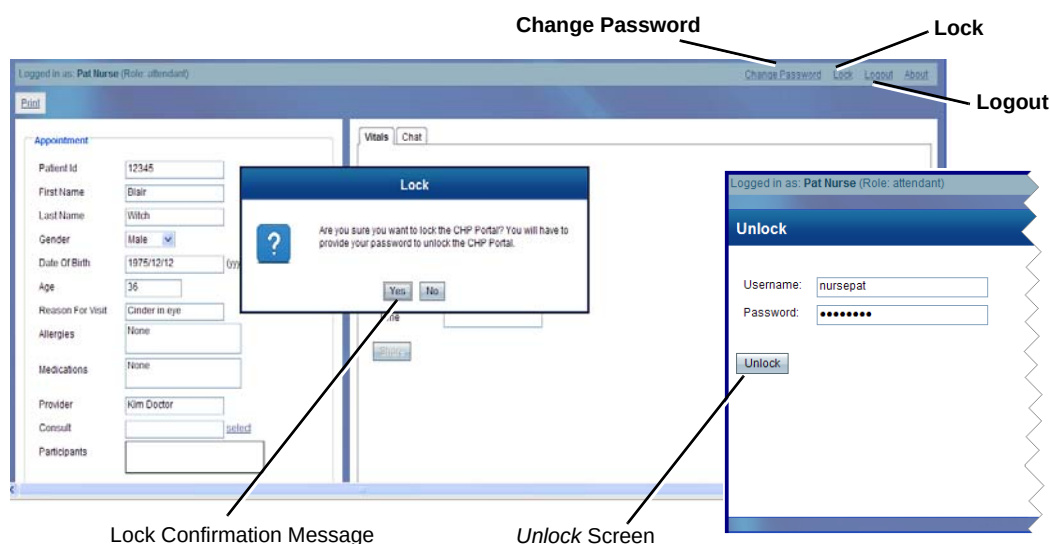
Tip

Keep in mind that another user can type over your name, and log into this station, ending any active appointment. You will be automatically logged off.

Unlock the Application When You Return

To unlock your screen, type in your *Password* (your *Username* will already be entered), and click **Unlock**.

Figure 1-7 Locking and Unlocking the Application



Changing Your Password

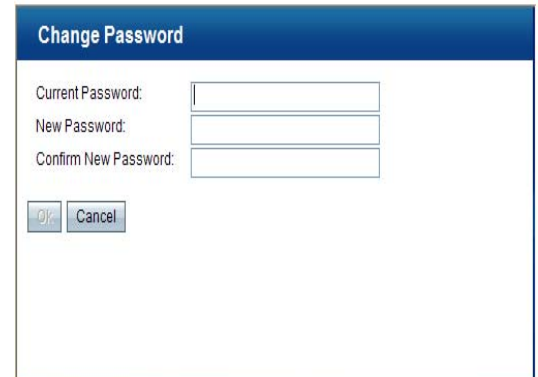
If you see a *Change Password* link at the top right of your screen (shown in [Figure 1-7](#)), your user account is authenticated by the Cisco HealthPresence system. You can change your password with these steps:

1. Click **Change Password** at the top right of the screen.

You see a screen such as the one in [Figure 1-8](#).

2. Fill in the old and new passwords in the boxes provided.
3. Click **OK**.

Figure 1-8 The Change Password Dialog Box



The dialog box is titled "Change Password" and has a blue header bar. It contains three text input fields labeled "Current Password:", "New Password:", and "Confirm New Password:". Below the fields are two buttons: "OK" and "Cancel".

Logging Out of the System

You should log out of the system entirely:

- At the end of the day.
- If you will not be the next person to use this station.
- If you will be gone for some time.

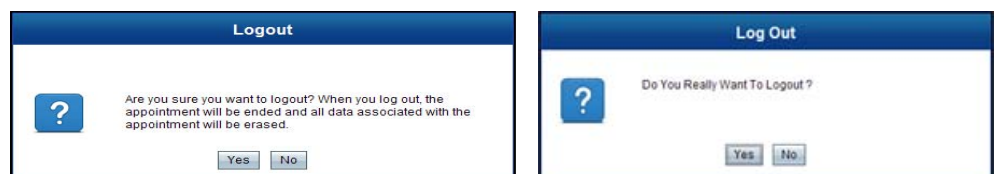
Make sure you have saved any appointment data first. To log out:

1. Click **Logout** at the top right of the window (shown in [Figure 1-7](#)).

You see one of the confirmation messages shown in [Figure 1-9](#). (The first message appears if you have an Attendant user account.)

2. Click **Yes**.

Figure 1-9 Logout Messages



Two dialog boxes are shown side-by-side. The left dialog box is titled "Logout" and contains a question mark icon and the text: "Are you sure you want to logout? When you log out, the appointment will be ended and all data associated with the appointment will be erased." It has "Yes" and "No" buttons. The right dialog box is titled "Log Out" and contains a question mark icon and the text: "Do You Really Want To Logout ?". It also has "Yes" and "No" buttons.



CHAPTER 2

The Attendant Workflow

Revised: January 2, 2012, 78-20625-01

This chapter describes the tasks performed by the licensed health care professional in the role of Cisco HealthPresence Attendant. The Attendant ensures that the station is ready, and that the medical devices are operational. Once the patient arrives, the Attendant gathers patient data, joins in a teleconference with the Provider, gathers and shares data using medical devices, and then saves the data.

In this list of chapter topics major tasks are listed in the order that they are performed. The final section describes tasks that are not always done during every appointment, but can be useful.

- Preparing for the Appointment
 - Prepare the System
 - Check the Equipment
- Starting the Appointment
 - Fill in (or Retrieve) the Patient's Personal Data
 - Select a Provider
 - Select Appointment Options (if applicable)
- Gathering and Sharing Patient Vitals
 - Weigh, Measure, and Position the Patient
 - Gather the Patient's Vitals
 - Notify the Provider that You are Ready to Begin
 - Share the Patient's Vitals with the Provider
 - Join the Teleconference
- Conducting the Examination
 - Optimize the Audio Volume
 - Share Video Images
 - Transmit Stethoscopic Sounds
- Completing the Appointment
 - Save the Patient Data
 - Conclude the Appointment
- Using Special Features and Functions
 - Chat with the Provider(s)
 - Consult with a Specialist
 - Print Patient Data
 - Pause the Scope Image
 - View and Print Prescriptions

Preparing for the Appointment

Attendant tasks that should be done before the medical appointment fall into two categories: 1) tasks that need to be done only once each day, and 2) tasks that should be done before every patient.

Each installation will have its own protocol about how often testing needs to be done, and who will be responsible for doing it. Appendix A contains a list of suggested tests to ensure that the Medical Devices are working correctly. Those tests only need to be performed once a day.

The tasks listed here should be done before each appointment.

Step 1 Prepare the Cisco HealthPresence system.

Step 2 Check the medical equipment.



Tip

The teleconference microphone can transmit ambient noise in the surrounding area, such as audible conversations in or near the same area. Try to reduce or eliminate background noise before beginning a patient appointment.

Step 1 – Prepare the Cisco HealthPresence System

Normally, you will begin your sessions from the Cisco HealthPresence *Login* screen (see [Figure 1-6 on page 1-9](#)); however, if you do not see that screen, see “[Gaining Access to the System \(If Necessary\)](#)” on [page 1-8](#).

When the *Login* screen is displayed:

1. Type your *Username* and *Password* in the spaces provided.
2. Click the **Login** button.

Once you have logged in, if you have an Attendant role, the *Start Appointment* screen displays (see [Figure 2-1 on page 2-3](#)).



Note

If you have other roles as well as an Attendant role, for example, conference Presenter and/or Participant, you will have the option of going to a different screen by clicking the screen name. In the example, the Attendant could also go to the *Start Conference* or *Enter Conference* screens.

Figure 2-1 The Start Appointment Screen

Start Conference Enter Conference Device Status

Cisco HealthPresence

Logged in as: Pat Nurse (Roles: attendant, participant, presenter) [Change Password](#) [Lock](#) [Logout](#) [About](#)

[Start Appointment](#) [Start Conference](#) [Enter Conference](#) [Device Status](#) ✓

Start Appointment

Patient Id: 0123 [retrieve](#)

First Name: Blair

Last Name: West

Gender: Male

Date Of Birth: 1975/12/12 (yyyy/mm/dd)

Reason For Visit: cinder in eye

Allergies: none

Medications: none

Provider: [select](#)

B2B Call: ☐

B2B Group: --

Call Type: ☐ Multi-Party ☒ Two Party

[Start Appointment](#)

Copyright © 2009-2011 Cisco Systems, Inc. All rights reserved.

Step 2 – Check the Equipment

As part of your pre-appointment preparation, you should verify that the medical devices you will need are available by looking at the status code at the top right-hand side of the screen (see [Figure 2-1](#)). The code meanings are shown in [Table 2-1](#). The code provides status for these devices:

- Oximeter
- Blood Pressure Monitor
- Thermometer

Table 2-1 Device Status Codes

Code	Color	Meaning
	Green	All devices are available.
	Yellow	Some devices are available. Click the <i>Device Status</i> link for more information.
	Red	No devices are available. Check the equipment.

Starting the Appointment

After you have logged in and made sure that the medical equipment is ready, you can start the appointment. The steps are summarized below, and then detailed later in this section.

-
- Step 1** Fill in (or retrieve) the patient's personal data [*Retrieve*].
- Step 2** Select a Provider [*Select*].
- Step 3** Select Appointment Options, if applicable.

Step 1 – Fill in (or Retrieve) the Patient's Personal Data

The *Start Appointment* screen has fields for you to fill in the patient's personal data. If you have the Electronic Medical Records application integrated into this system, you will be able to retrieve some of the information, rather than typing it all in (see [Figure 2-2](#)).



Tip

All of the fields on this screen are optional.

Figure 2-2 Filling in Patient Data

To fill in (or retrieve) the patient's personal data, follow these steps:

1. If your screen has a **Retrieve** link, type in the Patient Id, and then click this link to retrieve the patient's name, gender, and date of birth.

If your screen does not have a **Retrieve** link, type in the patient's name, select the appropriate gender, and type the date of birth.

2. Add the reason for the visit (up to 30 characters).
3. List any allergies (up to 300 characters).
4. List any current medications (up to 300 characters).

The screenshot shows the 'Start Appointment' form with the following fields and values:

- Patient Id: 0123 (with a 'retrieve' link)
- First Name: Blair
- Last Name: West
- Gender: Male (dropdown menu)
- Date Of Birth: 1975/12/12 (format: yyyy/mm/dd)
- Reason For Visit: cinder in eye
- Allergies: none
- Medications: none
- Provider: (empty field with a 'select' link)
- B2B Call: ☐
- B2B Group: -- (dropdown menu)
- Call Type: ☒ Multi-Party, ☐ Two Party

Annotations on the right side of the form:

- Retrieve**: Points to the Patient Id field and the 'retrieve' link.
- Select**: Points to the Provider field and the 'select' link.
- Start Appointment**: Points to the 'Start Appointment' button at the bottom.

Copyright © 2009-2011 Cisco Systems, Inc. All rights reserved.

Step 2 – Select a Provider

To select a Provider, follow these steps.

1. Click **Select** on the Start Appointment screen (see [Figure 2-1 on page 2-3](#)). The system displays a screen listing the available Providers and their specialties (see [Figure 2-3](#)). The availability of each Provider is shown by a color-coded symbol.
 - Green indicates that the Provider is available now.
 - Yellow indicates that the Provider is logged in, but is participating in another appointment.
 - Gray indicates that the Provider is not logged in.

Figure 2-3 The Select Provider Screen

Start Appointment Button

List of Providers

Start Appointment

Logged in as: **Pat Nurse** (Roles: attendant, participant, presenter) [Change Password](#) [Lock](#) [Logout](#) [About](#)

[Start Appointment](#) [Start Conference](#) [Enter Conference](#) [Device Status](#) ☒

Start Appointment

Patient Id: 0123 [retrieve](#)

First Name: Blair

Last Name: West

Gender: Male

Date Of Birth: 1975/12/12

Reason For Visit: cinder in eye

Allergies: none

Medications: none

Provider:

B2B Call: ☐

B2B Group:

Call Type: ☐ Multi-Party ☒ Two Party

[Start Appointment](#)

Select Provider

Provider	Specialty
☒ Barnard, Christiaan	Cardiothoracic Surgery
☐ Blackwell, Elizabeth	General Practitioner
☐ Doctor, Kim	General Practitioner
☐ Elders, Joycelyn	Pediatrician
☐ Johnson, Timothy	Medical Journalist
☐ Salk, Jonas	Virologist

[Close](#)

Copyright © 2009-2011 Cisco Systems, Inc. All rights reserved.

2. Click on the name of the Provider you want to choose.
The *Start Appointment* screen now shows the Provider name filled in.
3. Check to see if your system is configured with Appointment Options:
 - If the **Start Appointment** button is directly beneath the *Provider* field (as it is in the figure above) you do not need to select any Appointment Options, so you can skip Step 3 (Selecting Appointment Options). Click the **Start Appointment** button to display the *Patient Vitals* screen, and go to [“Step 2 – Gather the Patient’s Vitals” on page 2-9](#).
 - If your system does have Appointment Options (Multi-party calls, or Business-to-Business Conferencing), these options will be listed between the *Provider* field and the **Start Appointment** button. Go to [“Step 3 – Select Appointment Options \(if Applicable\)” on page 2-6](#).

Step 3 – Select Appointment Options (if Applicable)

There are two appointment options that not every installation will have. These are:

- Two-Party or Multi-Party Calling
- Business-to-Business (B2B) Calls

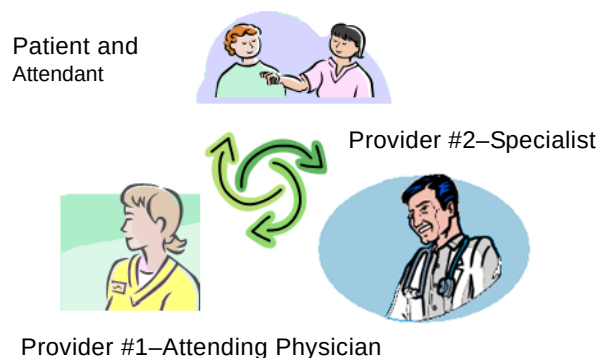
Your site may have none, one, or both of these options. The sample screens in [Figure 2-4](#) show both of these options. Note that the options are listed between the *Provider* field and the **Start Appointment** button.

Figure 2-4 Appointment Options

The figure displays two side-by-side screenshots of the 'Start Appointment' web form. Both forms include fields for Patient Id (1234), First Name (Blair), Last Name (Witch), Gender (Male), Date Of Birth (1975/12/12), Reason For Visit (Cinder in eye), Allergies (None), Medications (None), and Provider (Kim Doctor). The left screenshot highlights the 'Call Type' section with radio buttons for 'Multi-Party' (selected) and 'Two Party'. The right screenshot highlights the 'B2B Options' section, showing a checked 'B2B Call' checkbox and a 'B2B Group' dropdown menu set to 'B2BTestGroup'. Both forms have a 'Start Appointment' button at the bottom.

Choosing a Call Type

Figure 2-5 A Multi-Party Call



If your system is configured to support multi-party calls, you choose whether the call is going to be a two-party call (a point-to-point call) or a multi-party call (a bridge call) by clicking on the appropriate radio button (see [Figure 2-4](#) above).

An example of a multi-party call would be if the consulting physician wants to include a specialist in the consultation. In this case, there would be two Provider stations involved in a single call.

Setting Up a Business-to-Business (B2B) Appointment

Some installations are configured to allow the Attendant to make appointments with Providers located in another institution if that institution belongs to the same Business Group as the Attendant. This is called a Business-to-Business appointment. To set up a B2B appointment:

1. Click the B2B box so that it contains a checkmark (see [Figure 2-4](#)).
2. Select the appropriate business entity from the drop-down list.

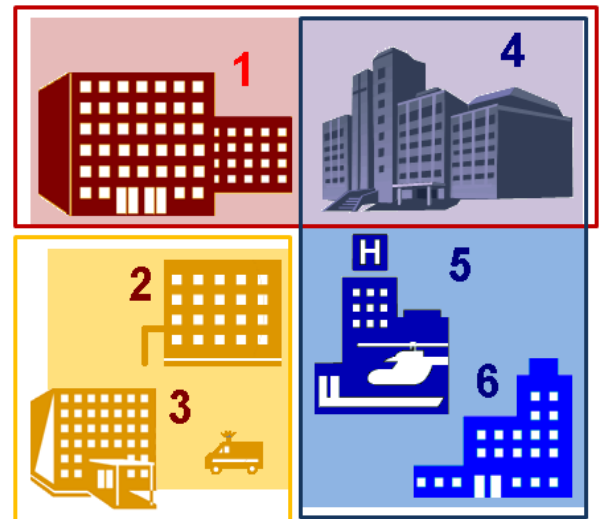
Understanding the Business-to-Business Concept

The Business-to-Business concept allows for a number of appointment consultation possibilities. The drawing below illustrates some of these possibilities.

Figure 2-6 Business-to-Business Groups

The illustration shown here includes business entities and the groups that these business entities are in:

- #1 = Large corporation. It is in the Red group along with #4.
- #2 = An office of primary care physicians. It is in the Gold group with #3.
- #3 = A hospital specializing in cardiac care. It is in the Gold group with #2.
- #4 = A major teaching hospital. It is in the Red group with #1 and in the Blue group with #5 and #6. Because it is in both the Red and Blue groups, it is colored purple.
- #5 = A university hospital. It is in the Blue group with #4 and #6.
- #6 = Another university hospital. It is in the Blue group with #4 and #5.



Possible Scenarios and Use Cases

With the businesses and groups structured as shown, these are the possibilities:

- Attendant and Provider stations in #1 (large corporation) can share appointments with #4 (major teaching hospital) because they are both in the Red group. For example, a corporation could offer employees an on-site clinic using the resources of a large hospital.
- Attendant and Provider stations in #2 (primary care physicians) and #3 (cardiology specialists) can share appointments because they are both in the Gold group. In this way, general practitioners can provide specialized health care by calling in a consultant if the situation warrants it.
- Attendant and Provider stations in #4, #5, and #6 can share appointments and/or conferences with one another. As these are all university teaching hospitals, this would be a convenient way for them to share research results.

Accessing the Provider List for a Different Business Entity

If your installation is configured to support B2B calls, you have the option of selecting a Provider from a different business entity, as long as that business entity is in your Business Group. To access another Provider list, you must first have selected the B2B option and selected a B2B Group (see [Figure 2-4 on page 2-6](#)). Then, follow these steps:

1. Click **Select** next to the Provider field.
2. Choose a business entity from the drop-down *Business* menu.
3. Click on the name of the Provider you want to choose.

That Provider's name appears in the *Provider* field.

Figure 2-7 **Selecting a Provider from a Different Business Entity**

The screenshot shows the 'Start Appointment' window with a 'Select Provider' dialog box open. The dialog box has a 'Business' dropdown menu set to 'Seton'. Below it is a table of providers with columns 'Provider' and 'Specialty'. Arrows point to the 'Business' dropdown and the provider table with labels 'Select Business Entity' and 'Select Provider' respectively.

Provider	Specialty
Doctor Alay	Internal Medicine
Chuck Doctor 81	General Medicine
Kelly Doctor	Internal Medicine
Kim Doctor	Internal Medicine
Hanna	cardiologist
SJD0c181	

Gathering and Sharing Patient Vitals

After you have selected a Provider and picked Appointment Options (if necessary), you are ready to position your patient, collect your patient's vitals, begin the teleconference, and share the vitals with the Provider you have chosen. The steps for this process are summarized below, and then detailed later in this section.

-
- Step 1** Weigh, measure, and position your patient.
 - Step 2** Gather the patient's vitals [*Get*].
 - Step 3** Notify the Provider that You are Ready to Begin [*Ready*].
 - Step 4** Share the patient's vitals with the Provider [*Share*].
 - Step 5** Join the Teleconference [*Join*].

Note: Steps 4 and 5 can be reversed. Pros and cons are explained later.

Step 1 – Weigh, Measure, and Position the Patient

Before you seat your patient at the Attendant station, you will need to get the patient's weight and height, so that you can enter it in the Vitals section of the screen. When that is done, follow these steps to position your patient appropriately.

1. Seat the patient in front of the video camera.
2. Adjust the seat height, if necessary, so that the patient's head is 6-12 inches below the top of the video display.

**Note**

If at all possible, the patient should sit in a chair in front of the camera. If the patient needs to lie down during the exam for medical reasons, the Provider and patient can still see each other, but the patient may be outside of the camera's optimal focal range, and will appear smaller in the Provider's screen. Also, patient facial expressions and true skin color may be harder for the Provider to see. Eye contact may not be possible.

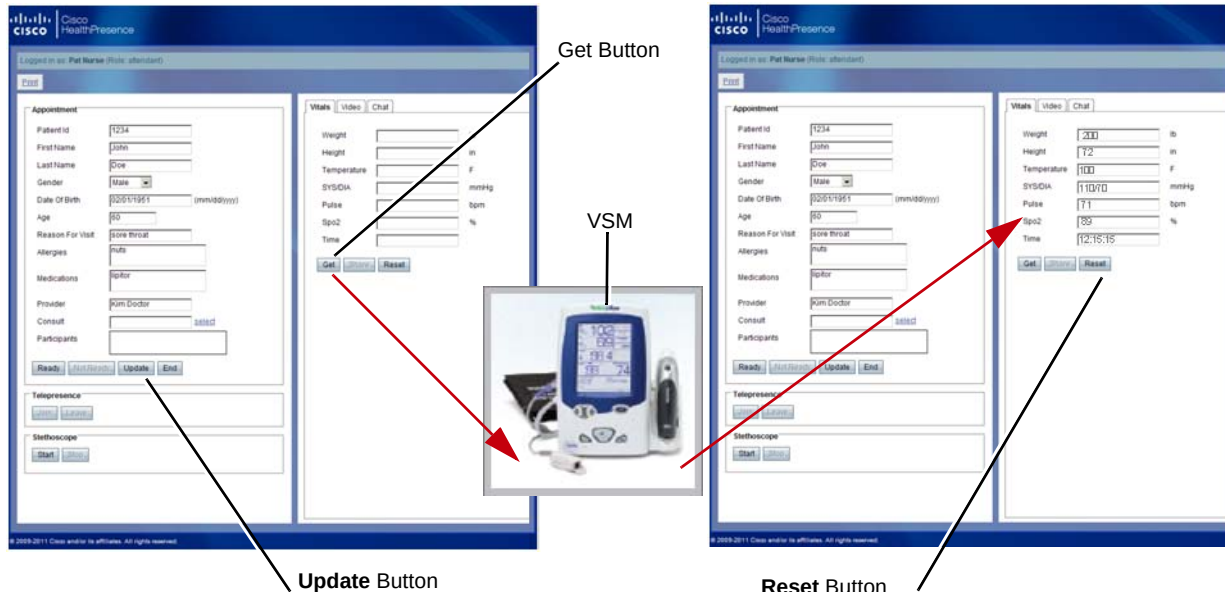
Step 2 – Gather the Patient's Vitals

Take the patient's vitals using the Welch Allyn Vital Signs Monitor (VSM).

1. Turn on the VSM and check for the green status light.
2. Take the patient's temperature, pulse, and blood pressure.
3. When you have all the readings on the VSM, remove the oximeter from the patient's finger and the thermometer from the patient's mouth.
4. Wait for the VSM display to stop blinking.
5. Click the **Get** button at the bottom of the *Vitals* screen.

The vitals data is transferred electronically from the VSM to the Cisco HealthPresence system as shown in [Figure 2-8](#).

If any readings are missing, you can either click **Get** again or simply type in the missing figures.

Figure 2-8 Gathering the Patient's Vitals

Resetting the Vitals Data

If you need to clear the Vitals data on the Welch Allyn VSM, click the **Reset** button in the Vitals section of the screen (see [Figure 2-8](#)). This will clear the information from the Welch Allyn device as well as from your screen .

Updating the Vitals Data

If you need to change any of the patient information, first make the changes, and then click **Update** to share the updated data with the Provider (see [Figure 2-8](#)).



Note

The standard unit of measurement is determined when the system is configured. The exception is the thermometer, which has a switch that allows you to select either Celsius or Fahrenheit. Whatever is set on the thermometer is what is displayed on this screen.



Warning

In B2B appointments, the standard unit of measurement will be what is configured for the Attendant station. Be aware that Providers from other institutions may see a measurement that is not standard at their locations.

Step 3 – Notify the Provider that You are Ready to Begin

Clicking **Ready** is the equivalent of placing a paper chart outside the door to the examining room. It lets the Provider know that you and the patient are ready for the Provider.

You can share the patient's vitals with the Provider either before or after you join the teleconference. Many Providers prefer to "read the chart" before seeing the patient, so that is the way the steps are listed here. However, both the Attendant and the Provider can join the teleconference, and then share the vitals file. This means that you and the patient will be able to see the Provider receiving and reading the vitals. The Provider will be looking down at the screen, and not at the patient.



Tip

The Provider can indicate through the Chat feature when he or she wants you to share the vitals.

Once you have gathered the patient's vitals you are ready to have the Provider join in the appointment.

1. Click **Ready** at the bottom of the window.

Your name appears in the participant list on both your system and on the systems of any other participants who are a part of this consultation, AND this appointment displays on the Provider's system (see [Figure 2-9](#)).

2. If you want to share the patient's vitals with the Provider before you both join the conference (see each other on camera), go to ["Step 4 – Share the Patient's Vitals" on page 2-12](#).

If you prefer to see the Provider on the screen before you share the patient's vitals, go to ["Step 5 – Join the Teleconference" on page 2-13](#).

Figure 2-9 Ready Appointments

Appointment

Patient Id: 1234
 First Name: Blair
 Last Name: West
 Gender: Male
 Date Of Birth: 1975/12/12
 Age:
 Reason For Visit: Cinder in eye
 Allergies: None
 Medications: None
 Provider: Kim Doctor
 Consult:
 Participants: Pat Nurse

Ready Appointments

	Time	Patient	Reason For Visit	Attendant	Attendant Location	Provider
select	12:44 PM	Blair West	Cinder in Eye	Pat Nurse	East Wing	Doctor Kim

Appointment appears on Provider's list.

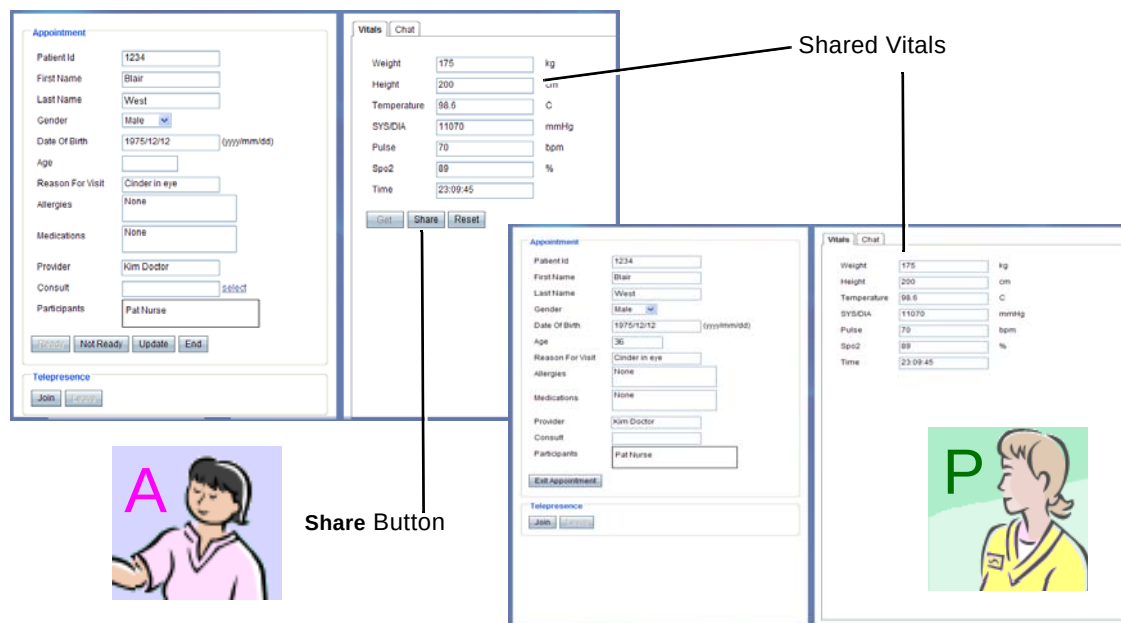
Attendant's name appears in Participants box.

Ready Not Ready Update End

Step 4 – Share the Patient’s Vitals

To share the patient’s vitals, click the **Share** button (see [Figure 2-10](#)). In the example shown, neither the Provider nor the Attendant has joined the conference yet.

Figure 2-10 Share the Patient’s Vitals



Step 5 – Join the Teleconference

The “Join” function allows you, your patient, and the Provider to communicate with one another orally and visually. Both the Attendant and the Provider must click **Join** to see each other on the video monitors.

To join the teleconference, follow these steps:

1. Click the **Join** button.

If the Provider has already clicked **Join**, you will see the Provider immediately.

2. Once you are in the teleconference, adjust the volume using the volume controls, the touch pad, or the remote control, depending on which equipment you have (see [Appendix B, “Types of Audio Equipment”](#)).

The illustration below shows the **Join** button at the Attendant station, and the video monitor once both parties have connected. You can see the Provider on your monitor and the Provider can see you and the patient on the monitor at the Provider’s station (see [Figure 2-11](#)).

Figure 2-11 Join the Teleconference

The screenshot shows the Cisco HealthPresence web interface. On the left, there is a 'Patient' section with fields for Patient ID (1234), First Name (Blair), Last Name (Wich), Gender (Male), Date of Birth (12/15/12), Age, Reason for Visit (Colder in eye), Allergies (None), Medications (None), Provider (Kim O'Connor), and Consult (Pat Nurse). On the right, there is a 'Vitals' section with fields for Weight (175 lb), Height (200 cm), Temperature (98.6 C), SYS/DIA (110/70 mmHg), Pulse (70 bpm), SpO2 (89 %), and Time (23:09:45). At the bottom of the Patient section, there is a 'Join' button. A line points from the text 'The Join Button' to this button.



The Patient and Attendant see the Provider

The Join Button

The Provider sees the Patient and the Attendant



Conducting the Examination

A major purpose of the Cisco HealthPresence system is to support the real-time audio and video that enables the Attendant to operate the medical devices, and to have the results interpreted by a Provider at a remote site.

You may use the Exam Camera alone, or the Scope Camera with various scopes attached. The devices that you can use with the Cisco HealthPresence are listed and described in [“Supported Medical Devices” on page 1-4](#). The manufacturers of these devices may have provided you with user manuals, and you may also have received training on each of the instruments that you are expected to use. This chapter does not talk about operating the instruments, but about using the instruments with the Cisco HealthPresence system.

You will not use every piece of equipment you have for every appointment. These are the things you can do:

- Optimize the Audio Volume
- Share Video Images
- Share Stethoscopic Sounds

Optimize the Audio Volume

The phone at the Attendant station may be one of several types. The types of phones and their volume controls are described in [Appendix B, “Types of Audio Equipment”](#).



Warning

Some video systems use an integrated IP phone to connect video conference calls and to control the volume of conference calls. Depending on how your system was configured, if you have one of these IP phones, outside calls may or may not be supported. This includes 911 calls.

Share Video Images

The Provider may ask you to share video images from the Exam Camera itself or from the Scope Camera with a specialized scope attached.

From the Exam Camera

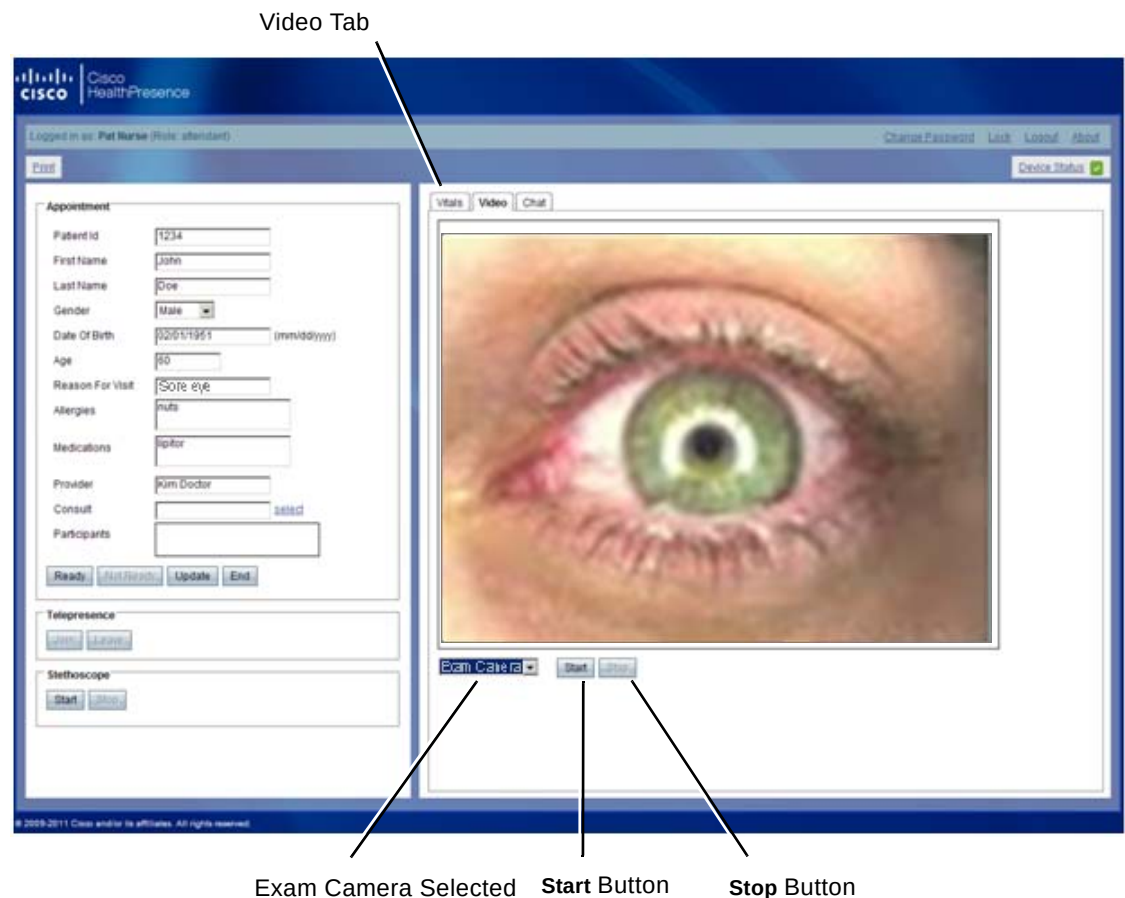
If the Provider asks you to share video coverage using the Exam Camera, follow these steps:

1. Click the *Video* tab (see [Figure 2-12](#)).
2. Use the pull-down menu to select *Exam Camera*.
3. Click the **Start** button.

The video image is displayed on your screen and on the Provider's screen.

4. When the Provider tells you to stop, click **Stop**.

Figure 2-12 *Sharing Video Images from the Exam Camera*



From One of the Approved Scopes

There are several devices that you can attach to the Scope Camera (for example, an ENT scope, a dermascope, or a direct ophthalmoscope). If the Provider asks you to share video from one of these scopes, follow these steps:

1. Click the *Video* tab.
2. Use the pull-down menu to select *Scope*.
3. Click the **Start** button.

The image captured by the AMD 400 (or 500) video camera (through any of these scopes) is displayed on your screen and on the Provider's screen.

4. When the Provider tells you to stop, click **Stop**.

Share Stethoscopic Sounds

If the telephonic stethoscope is part of this exam, you can set up your system to transfer the patient's heart and lung sounds to your headset and to the Provider's headset. Each of you controls the volume that you hear using your own controls. The volume controls are shown in [Figure 2-13](#).

If the Provider asks you to use the telephonic stethoscope, put on your headphones, and then:

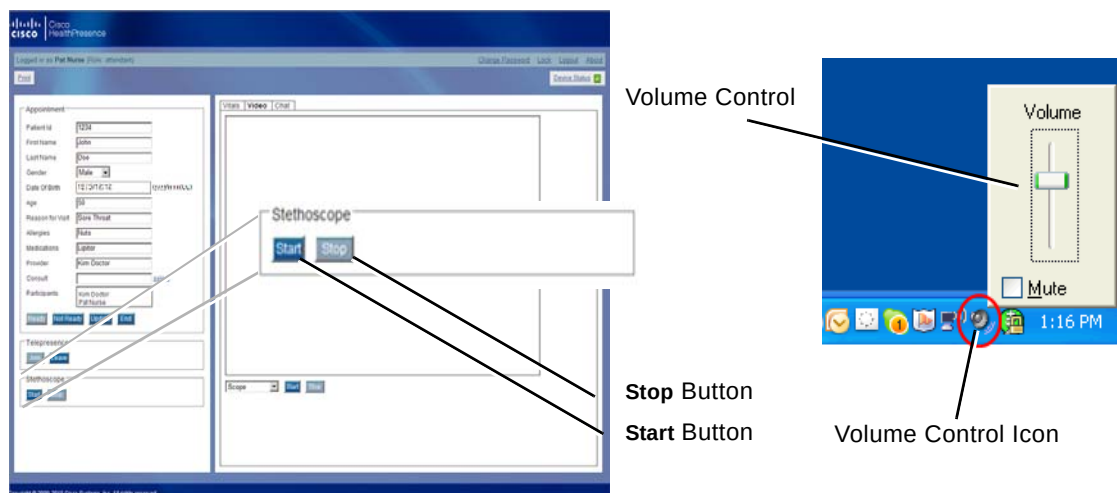
1. Position the stethoscope appropriately.
2. Click **Start** in the Stethoscope section at the bottom left of your computer screen.
3. Click the audio icon at the lower right of your screen to display the control, then adjust the slide up or down.
4. When the Provider tells you to stop, click **Stop**.



Tip

It's a good idea to make sure that the volume on the computer is set to the lower third of its range when you first begin to listen through the headphones.

Figure 2-13 *Sharing Stethoscopic Sounds*



Completing the Appointment

As the appointment comes to a close, you will need to save the information you have gathered, and then conclude the appointment. There are several ways to perform both of these tasks.

- Step 1** Save the Patient Data
- Step 2** Conclude the Appointment

Step 1 – Save the Patient Data

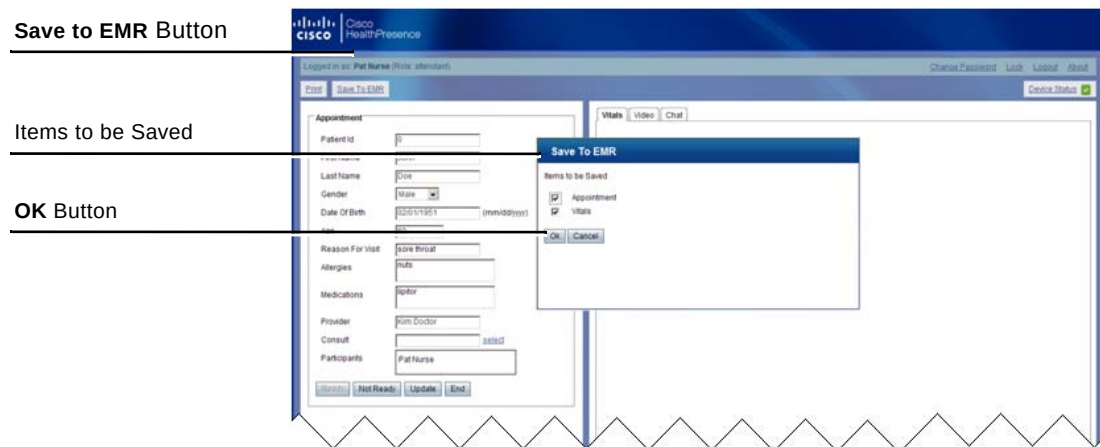
After the consultation is over, you will want to save the data that you have collected. How you do this depends on whether or not your Cisco HealthPresence system is connected to an Electronic Medical Records application.

Saving Data Using Electronic Medical Records

If your system has an interface to an Electronic Medical Records application, you will be able to save data by clicking a button. Only the Attendant can save data this way; this feature is not available from the Provider's system. Follow these steps:

1. Click the **Save to EMR** button in the upper left of your screen (see [Figure 2-14](#)).
The *Save to EMR* dialog box is displayed.
2. Click to place a checkmark in the boxes next to the types of items you want to save.
You can save appointment data, vitals, or, if your site has the E-pen application, the prescription. The only options shown will be the ones with content in them. If you want to save still images or video, you can print them out, and put them in the patient's physical file (see ["Print Patient Data" on page 2-21](#)).
3. To save the data you have selected, click **OK**.

Figure 2-14 Saving Patient Data



Saving Data Without Electronic Medical Records

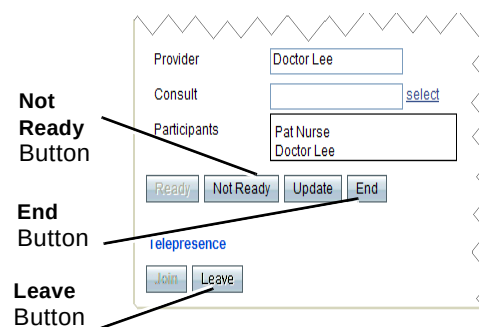
If you do not have Electronic Medical Records connected to your Cisco HealthPresence system, you can transcribe the data to the patient's permanent record, or you can print out the data and file the printout in the patient's file.

Step 2 – Conclude the Appointment

As the appointment is finishing up, there are three possible commands you can choose, depending on what you want to do next. You can begin with the **Leave** button, then go to the **Not Ready** button, and finally go to the **End** button, or you can go directly to **Not Ready**, and then to **End**, or you can go directly to **End**. All of these buttons are shown in [Figure 2-14](#).

Figure 2-15 Concluding the Appointment

- Leave the teleconference [*Leave*]
- Finish up the appointment details [*Not Ready*]
- End the session entirely [*End*]



Leave the Teleconference

If you use the **Leave** button to leave the teleconference, neither party can see or hear the other. You can start the teleconference up again by clicking the **Join** button.

Finishing Up the Appointment Details

If you would like to take a minute to save the appointment information (such as vitals, image captures or chats), click the **Not Ready** button. This prevents anyone from joining the appointment, but does not erase appointment information.

End the Session Entirely

If you have totally finished with this appointment, and are ready to go on to the next patient or leave the Attendant station, click **End**. This clears the patient information and returns you to the home page.



Note

Be careful not to click **End** until you have saved the patient data by sending it to EMR, printing it, or transcribing it. You might also consider adding the Provider's notes, perhaps through the Chat feature.

Using Special Features and Functions

The items included in this section are all features that you may find useful, but are not necessarily a part of every appointment. These features include:

- Chat with the Provider
- Consult with a Specialist
- Print Patient Data
- Pause the Scope Image
- View and Print Prescriptions

Chat with the Provider(s)

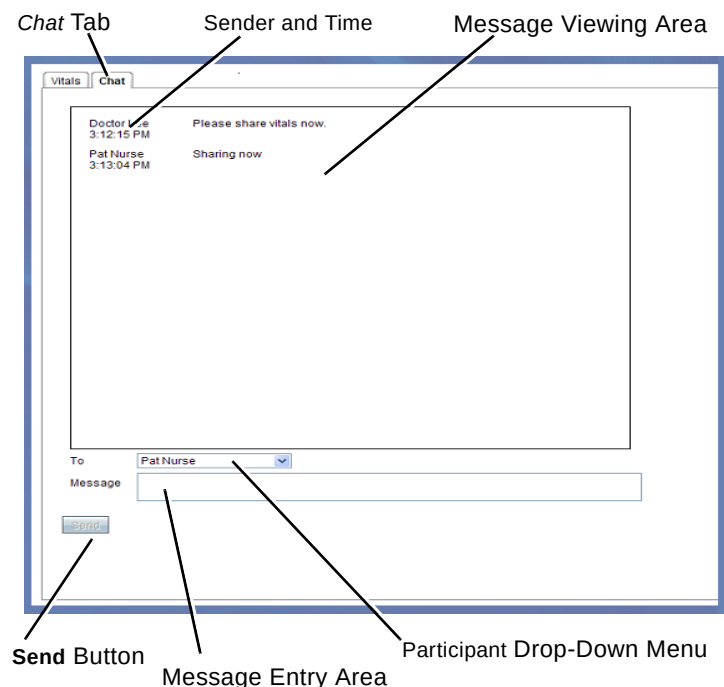
The Chat feature allows you to confer with the Provider(s) using text messages. You can use Chat to clarify communication, if there is a language difference. A specialist could share a URL related to the ailment or treatment.

A major bonus of the Chat feature is that, unlike with verbal communication, anything that you or the Provider “say” can be saved as part of the permanent record by being printed out.

To use the Chat feature:

1. Click on the **Chat** tab.
2. Select the participant(s) from the drop down list.
3. Type the message.
4. Click **Send** (or press the **Enter** key on your keyboard).

Figure 2-16 Using the Chat Feature



Tip

It is quite possible that the patient can see the screen, so don't type anything you would not want the patient to see.



Tip

Keep in mind that the contents of the Chat box will include all text that has been sent during this session. For example, if you are just beginning a chat with a particular Provider, but you have selected *All Participants*, the new person will see not only the message that you are sending now, but anything else that has been entered.

Consult With a Specialist

If your installation has the multi-party capability, and if you selected “multi-party” when you set up the appointment, you can consult with a specialist within the context of this appointment. When there is more than one Provider, the one that appears on the video screen will be the one who is speaking, or, if neither is speaking, the one who has spoken last.

You can also consult with a specialist using the B2B feature if you have selected B2B when you set up this appointment (see [Figure 2-4 on page 2-6](#)).

To bring the specialist into the appointment, follow these steps:

1. Move your cursor to the right of the *Consult* field, and click **Select**.

A pop-up dialog box with a list of Providers is displayed.

2. If this is a B2B Consult (as in the example in [Figure 2-17](#)), select a Business entity from the drop-down list.
3. Select the appropriate consultant Provider from the list.

If the consulting Provider is logged into the system, the appointment shows up in that Provider’s list of “Ready” appointments. When the consultant selects the appointment, his or her name appears in the *Participants* box

Figure 2-17 Using the Consult Feature for B2B

Logged in as: Pat Nurse (Role: attendant)

Print

Appointment

Patient Id: 01234567

First Name: Robin

Last Name: Redbreast

Gender: Male

Date Of Birth: 10/10/2010 (mm/dd/yyyy)

Age: 7 month(s)

Reason For Visit: Rash

Allergies: Unknown

Medications: None

Provider: Doctor Lee

Consult: **select**

Participants:

Ready Not Ready Update End

Select Provider

Business: SETON

Provider	Specialty
Kelly Doctor	Internal Medicine
Kim Doctor	Internal Medicine
sdoc	Neurosurgeon
Manol	

Select Business Entity

Select Provider

Consult Box

Select Button (for Consultant)

Print Patient Data

If your site has a printer attached to the Cisco HealthPresence system, you can print out most of the data you collected as part of the appointment. You can print the text portions of the appointment (see [Figure 2-18](#)) and you can also print images (see [Figure 2-19 on page 2-23](#)).

Printing Text Information

To print out the patient data, follow these steps:

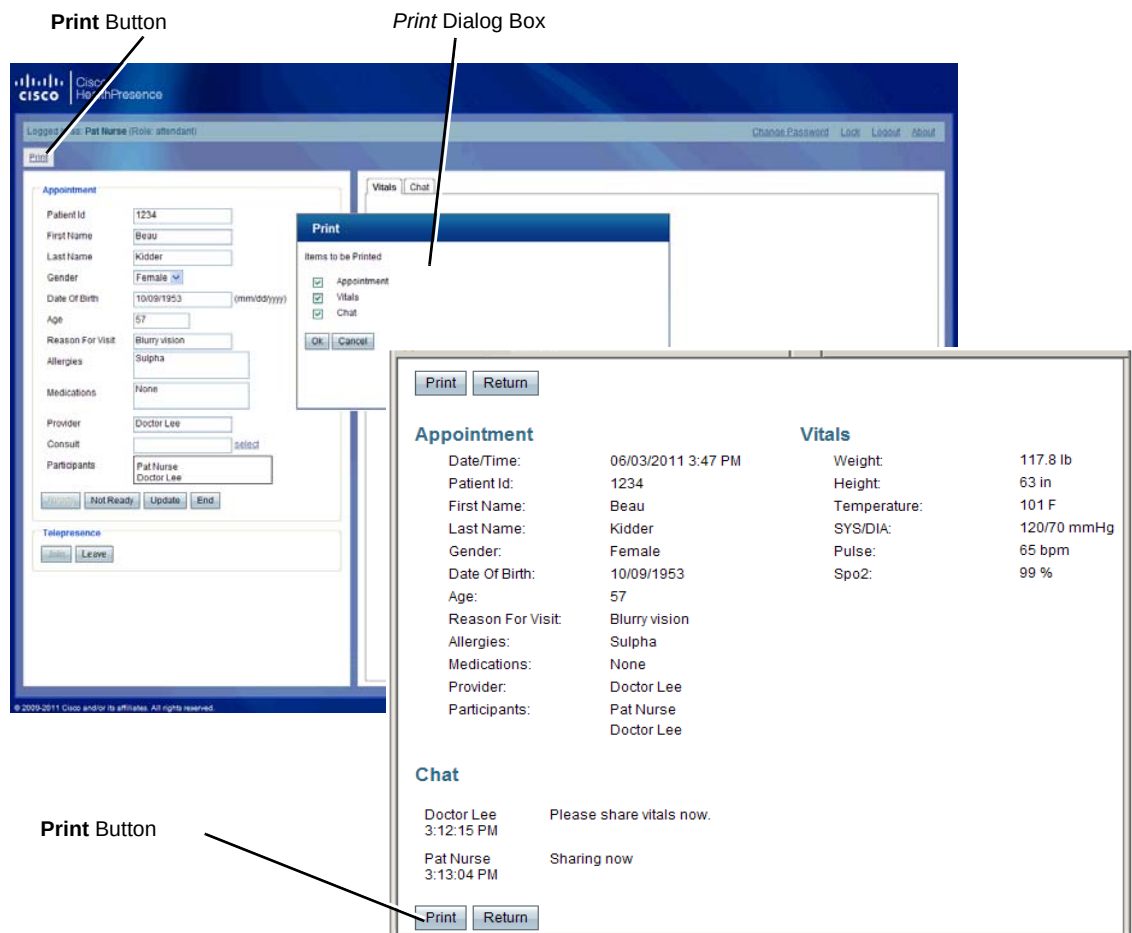
1. In the upper left-hand corner of the screen, click **Print**.

A pop-up dialog box lists the items that you can choose to print.

2. Check the boxes for the things that you want to print, and click **OK**.

A Print Preview is displayed. If this is what you want to print, click **Print** at the bottom left of the preview screen.

Figure 2-18 *Printing Textual Data*



Printing Text Information with Images

If the video tab is displayed on your system, you can also print patient data that includes images. This may involve using the **Pause** and **Print** buttons on the *Print* window. The video footage will be in motion until the Attendant presses the Pause button on the Exam Camera, or until the Attendant or Provider clicks the **Pause** button on the screen. There is no Pause button on the Scope Camera.

Here are the possibilities:

- If the exam is being conducted with the Exam Camera, the Attendant can press the Pause button on the camera, which is simpler than trying to click the **Pause** button on the screen while holding the camera. This pauses the image for both the Attendant and the Provider.
- If the exam is being conducted using one of the scopes, either the Attendant or the Provider can pause the image using the **Pause** button on the screen; however, this will pause the image only at the station where the button was clicked. For example, if the Attendant clicks the **Pause** button on the screen at the Attendant station, it will not affect what the Provider sees.
- If the exam is being conducted using one of the scopes, and if it is the Attendant and not the Provider who needs the printout, the Attendant can manage both the scope and keyboard using the tip below.

**Tip**

You can make this process simpler if you tab the keyboard focus so that it is on the **Pause** button, then position the scope where you want it, and, finally, to pause, press the **Enter** key on the keyboard. Or, you could start by positioning the mouse over the **Pause** button. When you are ready to pause, you need only press the left mouse button.

To print out the patient data including the image(s), follow these steps:

1. In the upper left-hand corner of the screen, click **Print**.
A pop-up dialog box lists the items that you can choose to print.
2. Choose one of the methods described above for pausing the camera.
3. Check the boxes for the things that you want to print, and click **OK**.

A print preview is displayed. If this is what you want to print, click **Print** at the bottom left of the preview screen (see [Figure 2-19 on page 2-23](#)).

The Print Preview with an Image

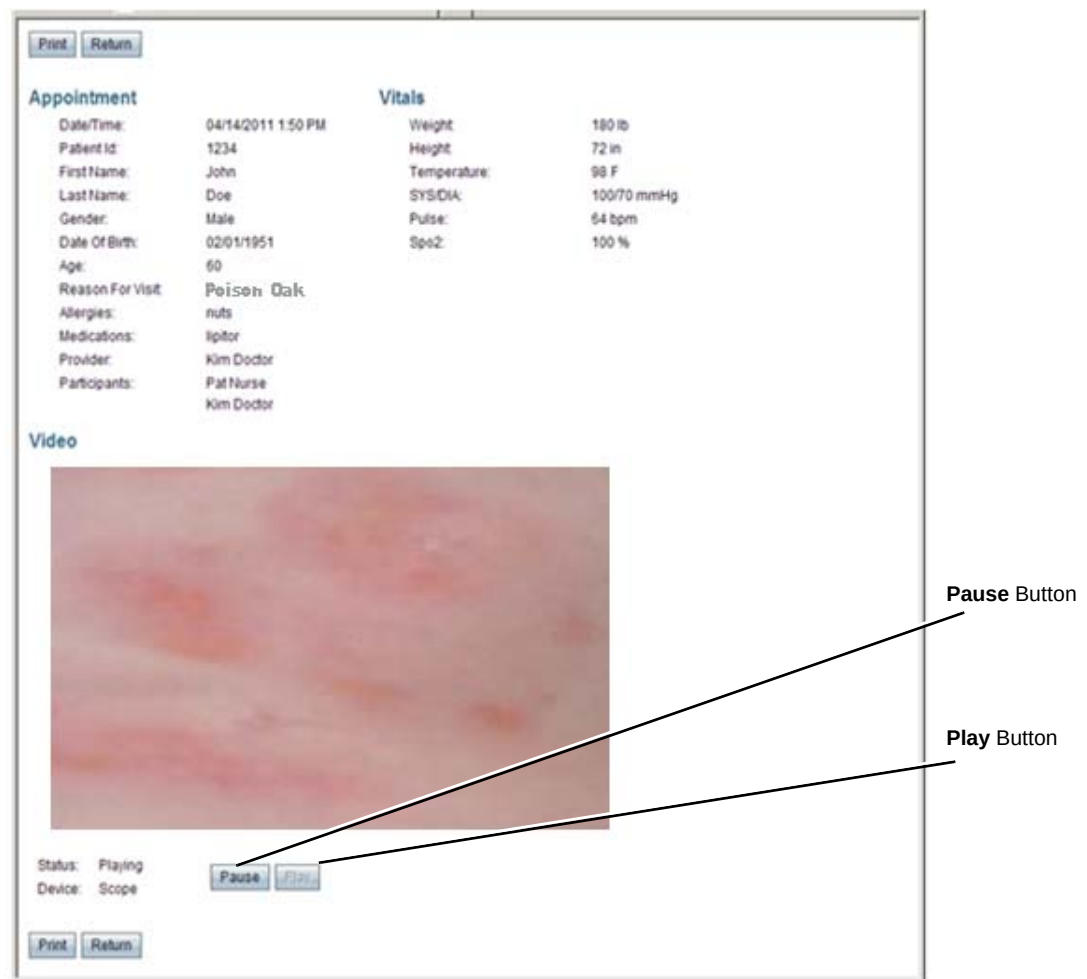
If you are viewing images on the video screen when you click the **Print** button, these images are displayed in the Print Preview. You use the **Pause** and **Play** buttons below the image to get the exact shot that you want.



Tip

Unlike the Pause button on the Exam Camera, which pauses the image for both you and for the Provider, if you click the **Pause** button on the screen to pause the Scope Camera, this only pauses the image on your screen; it does not affect the image on the Provider's screen.

Figure 2-19 *Printing Image Data*



Pause the Scope Image

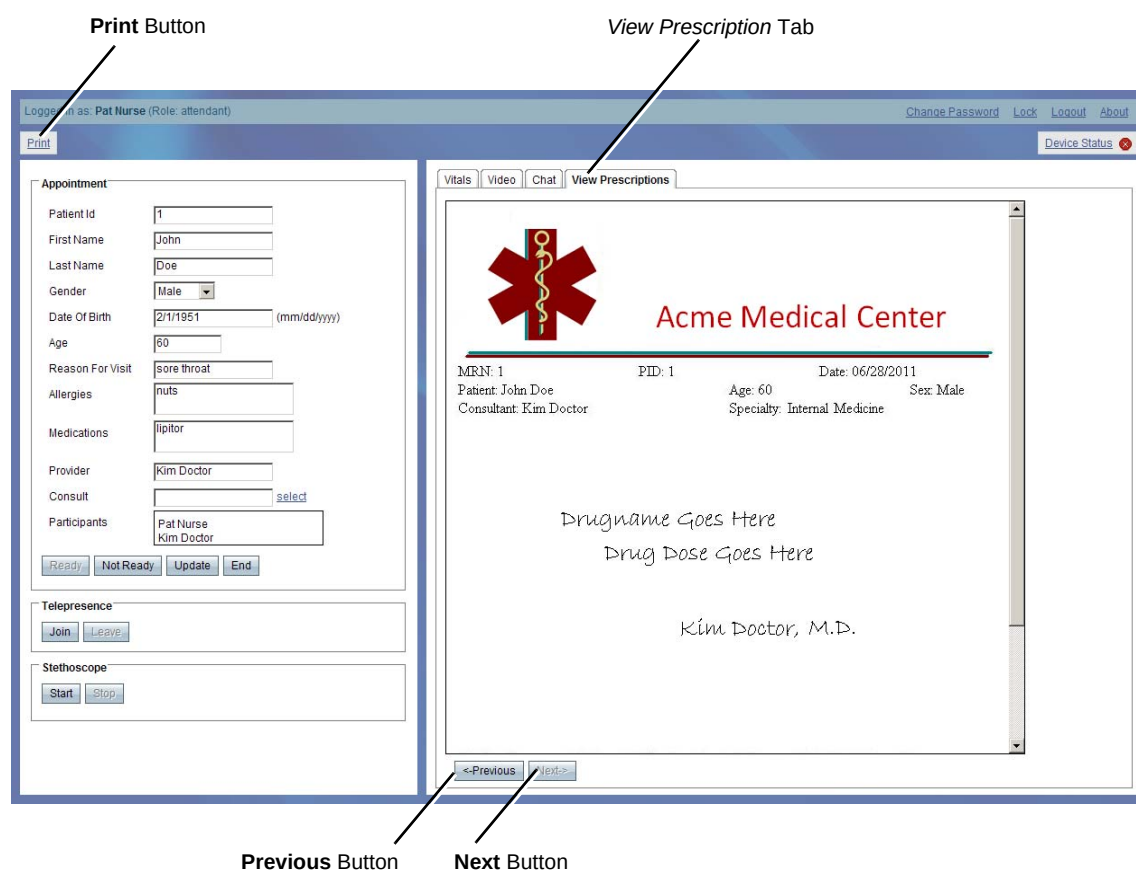
Even if you aren't planning to print the image, you can click the **Pause** button at the bottom of the Print Preview to halt the camera motion. Sometimes this can make it easier to see a particular detail, or perhaps there is something that you would like to show the patient.

View and Print Prescriptions

If your site supports the E-Pen feature, a physician can write prescriptions on the Cisco HealthPresence system using an E-Pen. Providers write prescriptions on the *Write Prescription* tab (which doesn't appear on the Attendant's screen), and Attendants (and other participants) view these prescriptions from the *View Prescription* tab (see [Figure 2-20](#)). Either can print the prescription.

The *View Prescription* tab is displayed at the Attendant station only if a Provider has written a prescription for this appointment and shared it with the Attendant at this appointment. If there are multiple prescriptions, any of the participants can click the **Next** and **Previous** buttons. Only the Provider who wrote the prescription has a **Delete** button.

Figure 2-20 Viewing Prescriptions





CHAPTER 3

The Provider Workflow

Revised: January 2, 2012, 78-20625-01



Note

If you are a Provider you do not necessarily need to read the chapter that describes the Attendant tasks. However, it is important that both Attendant and Provider read the Introduction, as this material is not repeated in later chapters.

This chapter describes the tasks performed by the licensed health care professional in the role of Cisco HealthPresence Provider. During the appointment, the Attendant gathers patient data, and then shares it with the Provider.

When the Attendant and Provider are ready for the examination to begin, both join the teleconference. You communicate with the Attendant and patient throughout the appointment, and, as the consultation proceeds, you will ask the Attendant to gather data using appropriate medical devices.

In this list of chapter topics, the primary sections are the major tasks, which are listed in the order that they need to be performed. The secondary items are subtasks, or sometimes, steps.

- Arriving at the Appointment
 - Log In to the Cisco HealthPresence System
 - Choose an Appointment
 - Look Over the Patient's Personal Data
 - Look Over the Patient's Vitals
 - Join the Teleconference
- Conducting the Consultation
 - Optimize the Audio Volume
 - View Video Images
 - Listen to Stethoscopic Sounds
 - Exit the Appointment
- Using Special Features and Functions
 - Chat with the Attendant
 - Consult with a Specialist
 - Print Patient Data
 - Pause the Scope Image
 - Write, View, and Print Prescriptions

Arriving at the Appointment

After you arrive at the Provider's station, you are ready to begin your part in the appointment. The steps for this process are summarized below, and then detailed later in this section.

Step 1 Log in to the Cisco HealthPresence system.

Step 2 Choose an appointment.

Step 3 Look over the patient's personal data.

Step 4 Look over the patient's vitals.

Step 5 Join the Teleconference.

Note: Steps 4 and 5 can be reversed. Pros and cons are explained later.

Step 1 – Log in to the Cisco HealthPresence System

Normally, you will begin your sessions from the Cisco HealthPresence *Login* screen (see [Figure 1-6 on page 1-9](#)); however, if you don't see the login screen, see [“Gaining Access to the System \(If Necessary\)” on page 1-8](#).

When the *Login* screen is displayed:

1. Type your *Username* and *Password* in the spaces provided.
2. Click the **Login** button.

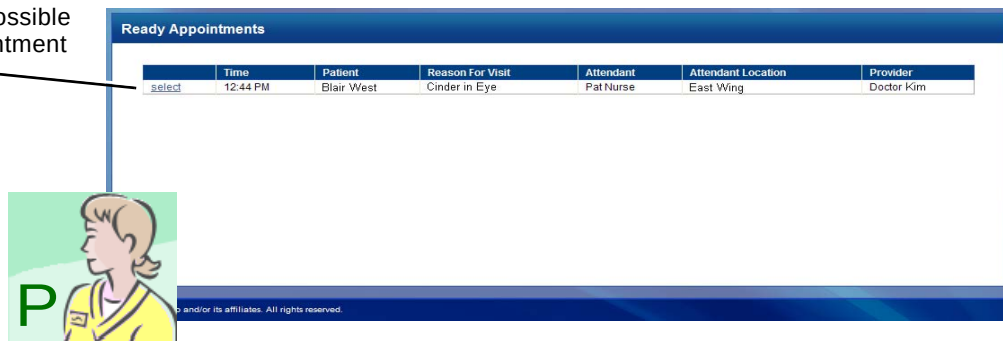
If you have a Provider role, the *Ready Appointments* screen is displayed (see [Figure 3-1](#)).

Step 2 – Choose an Appointment

You may choose an appointment based on your calendar, the reason for the visit, or the amount of time the patient has been waiting. Click *Select* to the right of the appointment you want to join. In the example shown in [Figure 3-1](#) there is only one possible appointment that the Provider can choose.

Figure 3-1 The Ready Appointments Screen

One Possible Appointment



Ready Appointments						
	Time	Patient	Reason For Visit	Attendant	Attendant Location	Provider
select	12:44 PM	Blair West	Cinder in Eye	Pat Nurse	East Wing	Doctor Kim

Step 3 – Look Over the Patient’s Personal Data

Before listing the appointment on your *Ready Appointments* screen, the Attendant will have entered the patient’s personal data. This data is shown on the left side of your screen (see [Figure 3-2](#)). At this point the vitals information (right side of the screen) may or may not be filled in. In the example shown in [Figure 3-2](#), the vitals have not yet been shared.

When you choose the appointment, your name is displayed in the *Participants* box on your screen and on the Attendant’s screen. In the example shown in [Figure 3-2](#), both the Attendant (Pat Nurse) and the Provider (Kim Doctor) are listed in the Participants box. In the example shown in [Figure 3-3](#), you can see that Pat Nurse and Kim Doctor are both listed in the Participants boxes in both the Attendant’s and the Provider’s screens.

Figure 3-2 The Provider’s Appointment Screen

Patient's Personal Data

Patient's Vitals (Blank)

Participants Box

Appointment

Print

Logged in as: Doctor Lee (Roles: attendant, participant, presenter, provider, siteadmin)

Patient Id: 1234

First Name: Beau

Last Name: Kidder

Gender: Female

Date Of Birth: 10/09/1953 (mm/dd/yyyy)

Age: 57

Reason For Visit: Blurry vision

Allergies: Sulpha

Medications: None

Provider: Doctor Lee

Consult:

Participants: Pat Nurse, Doctor Lee

Exit Appointment

Vitals | Chat

Weight: lb

Height: in

Temperature: F

SYS/DIA: mmHg

Pulse: bpm

Spo2: %

Time:

Telepresence

Join | Leave

P

Step 4 – Look Over the Patient’s Vitals



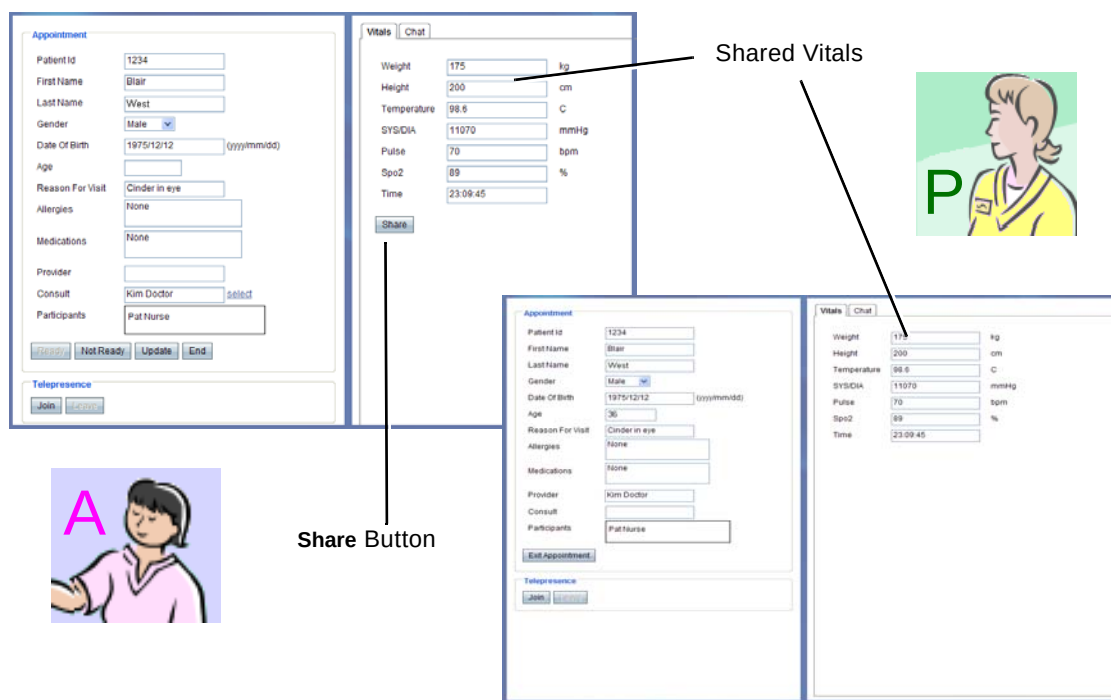
Note

The Attendant may choose to share the patient’s vitals either before or after you join the teleconference. Many Providers prefer to “read the chart” first; however, both the Attendant and the Provider can join the teleconference first, and then share the vitals file.

The Attendant takes the patient’s vitals using the Welch Allyn Vital Signs Monitor (VSM). After the Attendant clicks **Share**, you can see the vitals on your *Vitals* tab.

If the Attendant has shared the vitals with you before you have both joined the conference, you will see the vitals now. If not, you can use the Chat feature to request that the Attendant share the vitals now, or you can go to “[Step 5 – Join the Teleconference](#)” on page 3- 5, and come back to this step after you have joined the teleconference.

Figure 3-3 The Attendant Shares the Patient’s Vitals



Note

The standard unit of measurement is determined when the system is configured. The exception is the thermometer, which has a switch that allows the Attendant to select either Celsius or Fahrenheit. Whatever is set on the thermometer is what is displayed on this screen.



Warning

The standard unit of measurement will be what is configured for the Attendant station. Be aware that the measurement you see may not be what is standard for you.

Step 5 – Join the Teleconference

The “Join” function allows you, the patient, and the Attendant to communicate with one another orally and visually. Both the Attendant and the Provider must click **Join** to see each other on the video monitors.

**Note**

When using CUVA in the Cisco HealthPresence Provider Appliance, do not maximize the browser or you will not be able to see the video image of the participants. The browser should be about 75% of the window. You may need to adjust the browser size when you first log in.

Positioning the Patient

The Attendant will most likely have positioned the patient in a chair in front of the camera, as this is the optimal viewing situation. If you require an adjustment, you can let the Attendant know.

If the patient needs to lie down during the exam for medical reasons, you and the patient can still see each other, but the patient may be outside of the camera’s optimal focal range, and will appear smaller on your screen. Also, the patient’s facial expressions and true skin color may be harder to see. Eye contact may not be possible.

Making Eye Contact

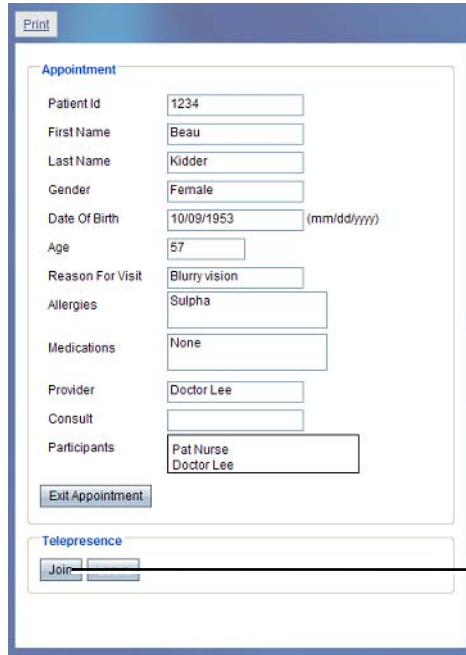
If you are not used to consulting by teleconference you may need to remember that if you look into the camera, you can establish eye-contact with the patient. However, if you look at the patient's eyes on the video screen, it appears as if you are looking lower down.

Joining the Teleconference

To join the teleconference, click the **Join** button. If the Attendant has already clicked **Join**, you will see the Attendant and patient immediately.

The illustration (Figure 3-4) shows the **Join** button at the Provider station, and the video monitors for both the Attendant and Provider stations once both parties have connected.

Figure 3-4 The Provider Joins the Teleconference



The screenshot shows a web application with a 'Print' button at the top left. Below it is a form titled 'Appointment' with the following fields:

Patient Id	1234
First Name	Beau
Last Name	Kidder
Gender	Female
Date Of Birth	10/09/1953 (mm/dd/yyyy)
Age	57
Reason For Visit	Blurry vision
Allergies	Sulpha
Medications	None
Provider	Doctor Lee
Consult	
Participants	Pat Nurse Doctor Lee

Below the 'Appointment' form is an 'Exit Appointment' button. Underneath is a section titled 'Telepresence' containing a 'Join' button and a text input field.

The Patient and Attendant see the Provider



The Provider sees the Patient and the Attendant



The Join Button

Conducting the Examination

A major purpose of the Cisco HealthPresence system is to support the real-time audio and video that enable the Attendant to operate the medical telemetry devices, and allow you to interpret the results from a remote site. The devices that the Attendant can use with the Cisco HealthPresence are listed and described in [“Supported Medical Devices” on page 1- 4](#).

You will probably not ask the Attendant to use every piece of equipment for every appointment. These are the things you may want to do:

- Optimize the Audio Volume
- View Video Images
- Listen to Stethoscopic Sounds

Optimize the Audio Volume

The phone at the Attendant station may be one of several types. The types of phones and their volume controls are described in [Appendix B, “Types of Audio Equipment”](#).



Tip

The video conferencing microphone can transmit ambient noise in the surrounding area, such as audible conversations in or near the same area. If this seems to be a problem, ask the Attendant to try to reduce or eliminate background noise before continuing with the patient appointment.



Warning

Some video systems use an integrated IP phone to connect video conference calls and to control the volume of conference calls. Depending on how your system was configured, if you have one of these IP phones, outside calls may or may not be supported. This includes 911 calls.

View Video Images

The Attendant controls the video images from the exam camera and from the various scopes. These are the types of scopes that you can ask the Attendant to use:

- ENT scope
- Dermascope
- Ophthalmoscope

To view video from the exam camera or any of the scopes:

1. Instruct the Attendant which device to use, and what image you require.

The Attendant will set up that piece of equipment, and click **Start**.

The image appears on your screen in the Video tab, the device status shows *Started*, and the device type is listed in the *Device* field. (The device type will be either Exam Camera or Scope, as all of the scopes use the same attached camera to collect and transmit digital images.)

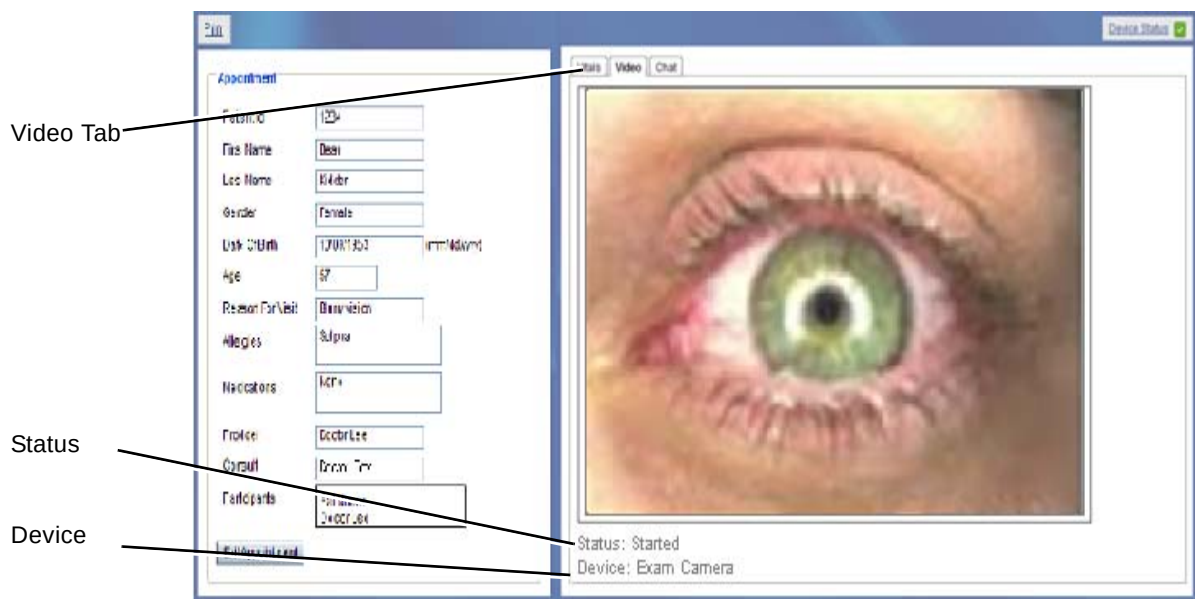


Tip

There may be a slight delay between what you see on your screen and what the Attendant sees at the Attendant station. You may need to remind the Attendant to move the equipment slowly.

2. If you want to see a fixed image, ask the Attendant to click **Stop**.

Figure 3-5 Viewing Video Images



Listen to Stethoscopic Sounds

If you want the telephonic stethoscope to be part of this exam, the Attendant can set up the system at the Attendant's station to transfer the patient's heart and lung sounds to your headset (and to the headset at the Attendant's station). Each of you controls the volume that you hear using your own controls (see [Figure 3-6](#).)

To use the telephonic stethoscope:

1. Let the Attendant know that you want to use the stethoscope, and where you want him or her to place the stethoscope on the patient's back or chest.

The Attendant positions the stethoscope, and clicks **Start**.

You can hear the stethoscope sounds through your headset, and the Stethoscope Status indicator on your screen changes from *Idle* to *Starting*.

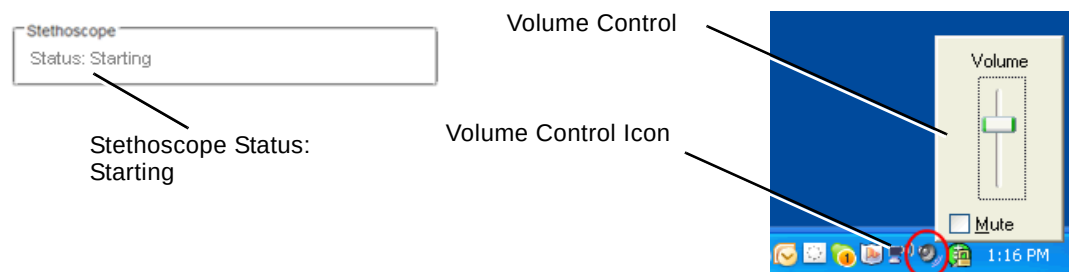
2. Let the Attendant know if you'd like to have the scope repositioned. (You will be able to see where the scope is located using the video.)
3. When you have what you need, ask the Attendant to click **Stop**.



Tip

It's a good idea to make sure that the volume on the computer is set to the lower third of its range when you first begin to listen through the headphones.

Figure 3-6 *Listening to Stethoscopic Sounds*



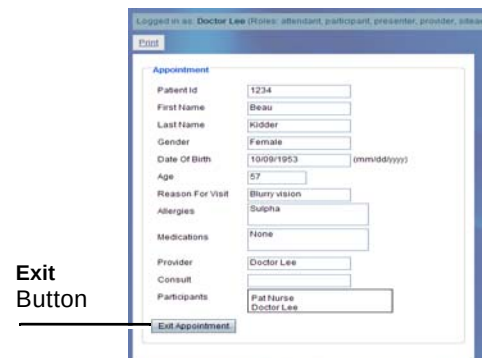
Exit the Appointment

When you have finished, click **Exit** to leave the appointment.

You can proceed to another appointment, or you can log off the Provider station entirely.

If you exit the appointment and return while the appointment is still active, you will see the vitals and any current video. When you exit an appointment, it has no impact on the cached patient data.

Figure 3-7 *Exit the Appointment*



Using Special Features and Functions

The items included in this section are all features that you may find useful, but that are not necessarily a part of every appointment. These features include:

- Chat with the Attendant
- Consult a Specialist
- Print Patient Data
- Pause the Scope Image
- Write, View, and Print Prescriptions

Chat with the Attendant

The Chat feature allows you to confer with the Attendant and any of the other appointment participants using text messages. For example, if there is a language difference, you can use Chat to clarify communication. As another example, a specialist could share a URL related to the ailment or treatment.

A major bonus of the Chat feature is that, unlike with verbal communication, anything that you or the other participants “say” can be saved as part of the permanent record by being printed out.

To use the Chat feature:

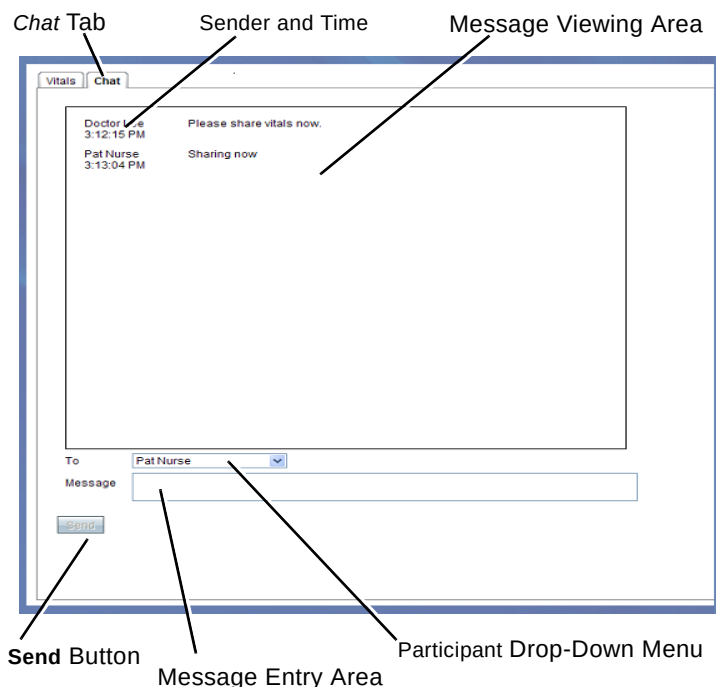
1. Click on the **Chat** tab.
2. Select the participant(s) from the drop down list.
3. Type the message.
4. Click **Send** (or press the **Enter** key on your keyboard).



Tip

It is quite possible that the patient can see the screen, so don't type anything you would not want the patient to see. [Figure 3-6](#)

Figure 3-8 Using the Chat Feature



Consult With a Specialist

If your installation has the multi-party capability, the Attendant can set up the teleconference so that you can consult with a specialist (or other physician) within the context of this appointment. When there is more than one Provider, the one that appears on the Attendant's video monitor will be the one who is speaking or, if neither is speaking, the one who has spoken last.

You can also consult with a specialist from another business entity if the Attendant has chosen the B2B feature when setting up the appointment.

Figure 3-9 The Consult Feature from the Provider's Station

Print

Appointment

Patient Id	1234
First Name	Beau
Last Name	Kidder
Gender	Female
Date Of Birth	10/09/1953 (mm/dd/yyyy)
Age	57
Reason For Visit	Blurry vision
Allergies	Sulpha
Medications	None
Provider	Doctor Lee
Consult	Doctor Fox
Participants	Pat Nurse Doctor Lee

Exit Appointment

Consult Box

To bring the specialist (or other physician) into the appointment, ask the Attendant to select a Provider for the *Consult* field.

If this consultation has been arranged in advance, the Attendant can select the appropriate Provider (whose name will be on the Provider's list). If you have not already arranged for this consultation, you can ask the Attendant to read you the list of available physicians with the speciality you need. (You will not be able to see the Provider list from your system).

Once the Attendant has selected a consulting Provider, this appointment will appear on his or her *Appointments Ready* screen (just as it did on yours). The consultant's name appears in the *Consult* box (see [Figure 3-9](#)). When the specialist joins the teleconference, his or her name appears in the *Participants* box.

Print Patient Data

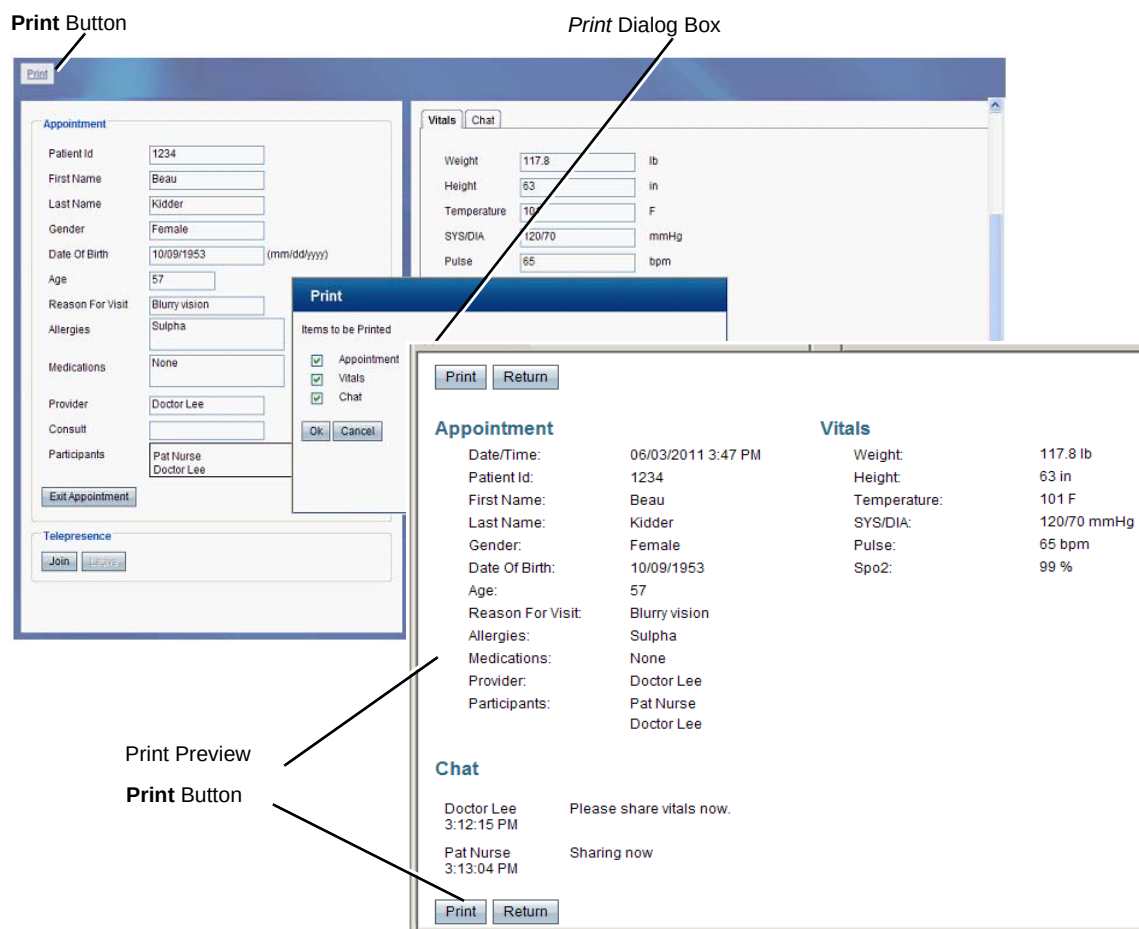
If your site has a printer attached to the Cisco HealthPresence system, you can print out most of the appointment data. You can print the text portions of the appointment (see [Figure 3-10](#)) and you can also print images (see [Figure 3-11 on page 3-14](#)).

Printing Text Information

To print out the textual patient data:

1. In the upper left-hand corner of the screen, click **Print**.
A pop-up dialog box provides a list of the items that you can choose to print.
2. Check the boxes for the things that you want to print, and click **OK**.
A print preview is displayed.
3. If this is what you want to print, click **Print** at the bottom left of the preview screen.

Figure 3-10 *Printing Textual Data*



Note

Although there are **Print** and **Return** buttons at both the top and the bottom of the Print Preview screen, these do not show up on the printout.

Printing Text Information with Images

If the video tab is displayed on your system, you can also print patient data that includes images. This may involve using the **Pause** and **Print** buttons on the *Print* window. The video footage will be in motion until the Attendant presses the Pause button on the Exam Camera, or until the Attendant or Provider clicks the **Pause** button on the screen. There is no Pause button on the Scope Camera.

Here are the possibilities:

- If the exam is being conducted with the Exam Camera, the Attendant can press the Pause button on the camera, which is simpler than trying to click the **Pause** button on the screen while holding the camera. This pauses the image for both the Attendant and the Provider.
- If the exam is being conducted using one of the scopes, either the Attendant or the Provider can pause the image using the **Pause** button on the screen; however, this will pause the image only at the station where the button was clicked. For example, if the Attendant clicks the **Pause** button on the screen at the Attendant station, it will not affect what the Provider sees.
- If the exam is being conducted using one of the scopes, and if it is the Attendant and not the Provider who needs the printout, the Attendant can manage both the scope and keyboard using the tip below.

**Tip**

You can make this process simpler if you tab the keyboard focus so that it is on the **Pause** button, then position the scope where you want it, and, finally, to pause, press the **Enter** key on the keyboard. Or, you could start by positioning the mouse over the **Pause** button. When you are ready to pause, you need only press the left mouse button.

To print out the patient data including the image(s), follow these steps:

1. In the upper left-hand corner of the screen, click **Print**.
A pop-up dialog box lists the items that you can choose to print.
2. Choose one of the methods described above for pausing the camera.
3. Check the boxes for the things that you want to print, and click **OK**.

A print preview is displayed. If this is what you want to print, click **Print** at the bottom left of the preview screen (see [Figure 3-11 on page 3-14](#)).

The Print Preview with an Image

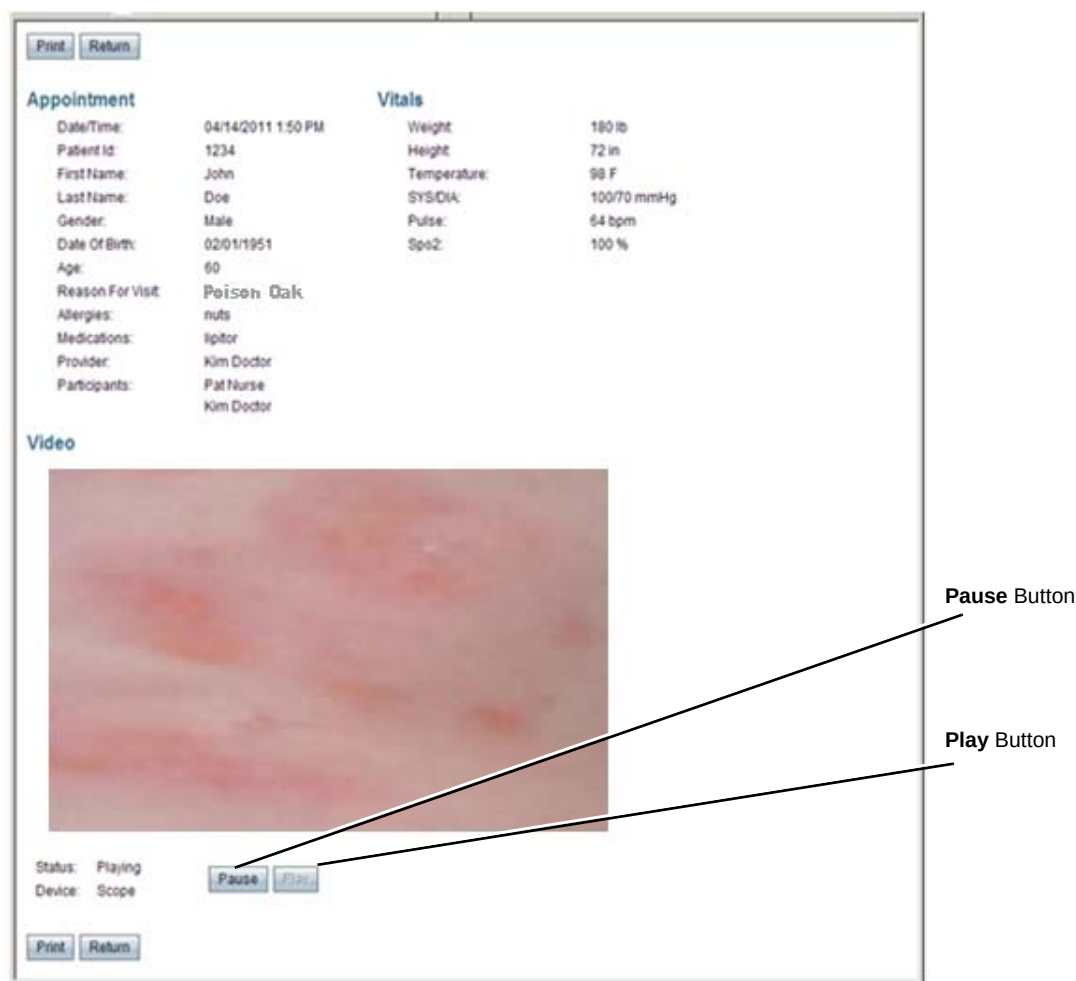
If you are viewing images on the video screen when you click the **Print** button, these images are displayed in the Print Preview. You use the **Pause** and **Play** buttons below the image to get the exact shot that you want.



Tip

Unlike the Pause button on the Exam Camera, which pauses the image for both Attendant and Provider, if you click the **Pause** button on the screen to pause the Scope Camera, this only pauses the image on your screen; it does not affect the image on the Attendant's screen, and vice versa.

Figure 3-11 *Printing Image Data*



Pause the Scope Image

Even if you aren't planning to print the image, you can click the **Pause** button at the bottom of the Print Preview to halt the camera motion. Sometimes this can make it easier to see a particular detail, or perhaps there is something that you would like to have the Attendant show the patient.

Write, View, and Print Prescriptions

If your site supports the E-Pen feature, a physician can write prescriptions on the Cisco HealthPresence system using an E-Pen. Providers write prescriptions on the *Write Prescription* tab (see [Figure 3-12](#)), and Attendants (or other participants) view these prescriptions from the *View Prescription* tab (see [Figure 3-13 on page 3-16](#)). Either can print the prescription.

Writing a Prescription

To write a prescription:

1. Click the *Write Prescription* tab.

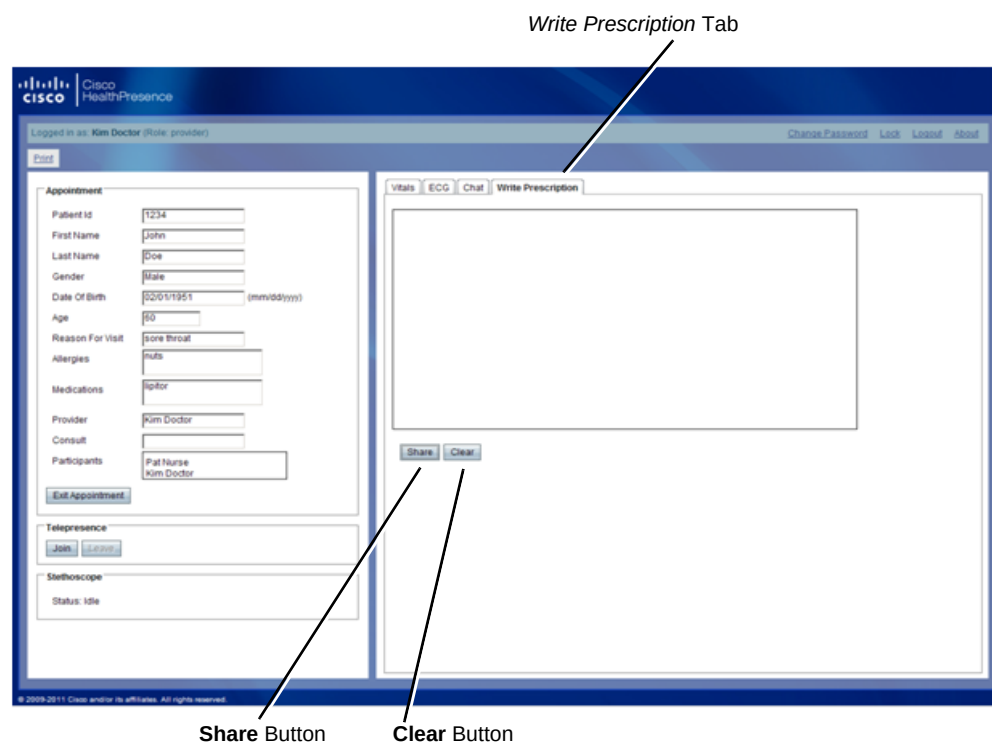
You see a screen similar to the one shown in [Figure 3-12](#).

2. Use the E-Pen to write the prescription.

If you need to erase what you have written, click the **Clear** button.

3. When you have finished, click the **Share** button to share the prescription with the Attendant and any other participants in the appointment.

Figure 3-12 *Writing Prescriptions*

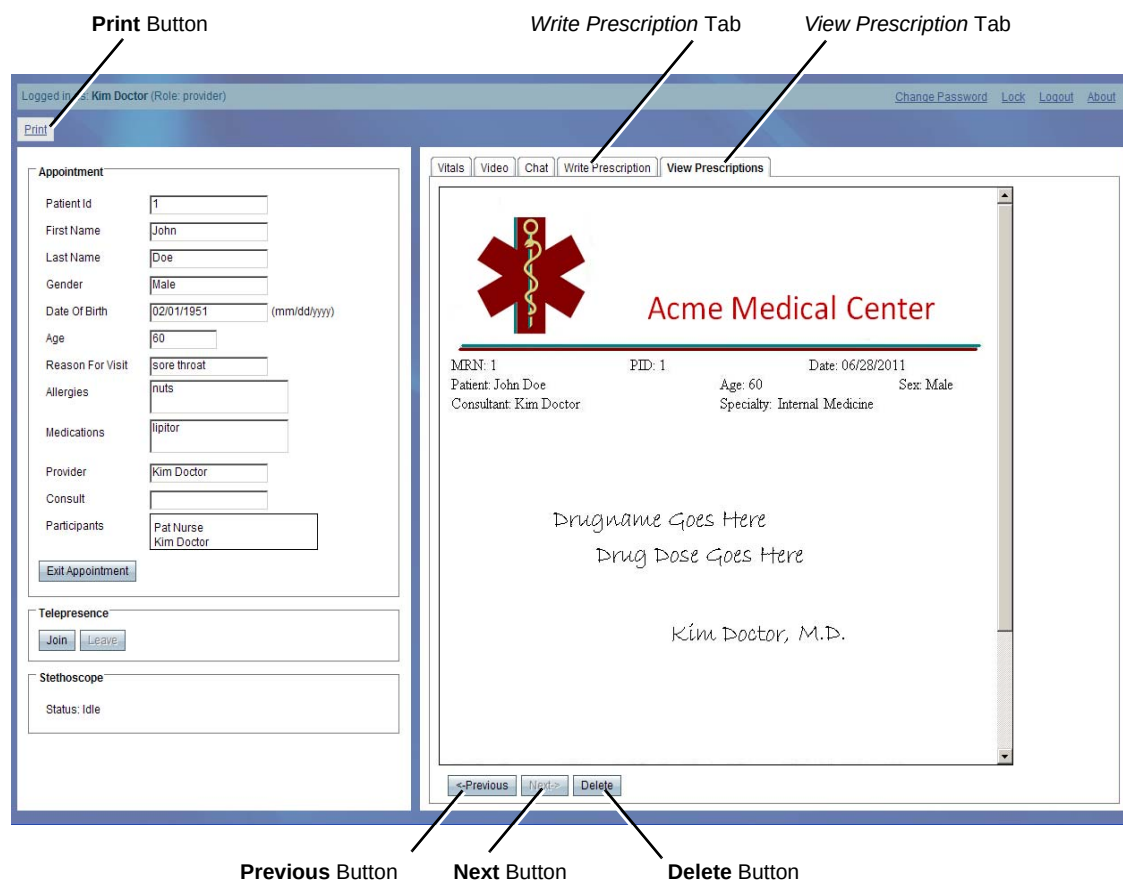


Viewing a Prescription

When the Provider shares the prescription, the system adds a header (often a business name and logo) and a data section to the top of the prescription, and a trailer (often an address) at the bottom, and then saves the prescription with the appointment data. The example shown in [Figure 3-13](#) shows the header, the data section, and the prescription, but the footer is not visible without using the scroll bar.

The *View Prescription* tab is displayed at the Provider station only if a Provider has written a prescription for this appointment. If there are multiple prescriptions, any of the participants can click the **Next** and **Previous** buttons. Only the Provider who wrote the prescription has a **Delete** button.

Figure 3-13 Viewing Prescriptions





CHAPTER 4

The Medical Conferencing Feature

Revised: January 2, 2012, 78-20625-01

This chapter describes the Cisco HealthPresence medical conferencing feature. This feature allows you to bring teleconferencing out of the meeting room and into a medical environment.

The conferencing capability is based on Cisco HealthPresence appointment teleconferencing, which is discussed elsewhere in this manual. If you are not already familiar with how Cisco HealthPresence appointments work, you should take a few minutes to read the Introduction to this manual to acquaint yourself with the terminology and to see how the shared workflow is managed.

- About Conferences in General
- Types of Conferences
 - The Players and Their Roles
 - Ending a Conference
 - Possible Scenarios
 - Controlling the Audio Volume
- Starting or Entering a Conference
 - Starting a Conference
 - Entering a Conference
- Starting or Entering a Business-to-Business Conference
 - Starting a B2B Conference
 - Entering a B2B Conference
- Presenting a Conference
 - To Share Patient Vitals
 - To Start a Teleconference
 - To Share Live Video or Audio

About Conferencing in General

This section provides an overview of the Cisco HealthPresence conferencing concept. More specific information, including step-by-step instructions based on conference type, is provided in later sections.

Types of Conferences

You can schedule a Cisco HealthPresence conference with the Presenter and all of the Participants in the same Business entity. This may be a hospital, a physicians office, or even a corporation. These entities may or may not be under the same roof, or even in the same city.

You can also schedule a Business-to-Business (B2B) conference, which involves more than one Business entity; however, all of the business entities must be in the same B2B Group. For an illustrated explanation of the Business-to-Business model, see [“Understanding the Business-to-Business Concept” on page 2-7](#).

The Conference Environment

If your installation has the multi-party feature (see [“Choosing a Call Type” on page 2-6](#)), you can schedule a “medical” conference (that is, one that includes the medical instrumentation) for up to three people – one Presenter and two Participants. If your installation does not have the multi-party calling capability, you can have one Presenter and one Participant.

If your installation has the multi-party feature, and if the conference that you want to host does not include using the medical equipment, the number of people that you can invite to participate will depend on how your system was configured when it was installed.

You can participate in a conference from either an Attendant station or a Provider station. You can also be a Presenter from either an Attendant station or a Provider station. However, if you want to be able to collect and share patient data from any of the medical equipment, you must use an Attendant station. To see how each of these types of stations is equipped, see [“Details of the Components and Equipment” on page 1-3](#).

The Players and Their Roles

There are two primary roles in Cisco HealthPresence conferences: the Presenter and the Participants. These two roles are described here.

The Presenter Role

The person who starts the conference is the Presenter. The Presenter's responsibilities include:

- Creating an alphanumeric Conference ID. This ID may have up to thirty characters, and should be unusual enough that it is probably unique.
- Choosing whether this is to be a local conference or a B2B conference.
- If this is a B2B conference, choosing which Business Group is to be invited.
- Deciding on the nature of the conference, and arranging for the appropriate Cisco HealthPresence station(s) to be available at the scheduled time.
- Deciding whether to use the exam and/or scope cameras and the medical devices as part of the conference.

In addition, the Presenter must also make sure that these administrative tasks are taken care of:

- Inviting the participants (this can be done by email, bulletins, or whatever seems appropriate).
- Making sure that each invited participant has the date, time, and Conference ID, and, if this is a B2B conference, the name of the B2B Group and the individual Business entity that is sponsoring the conference.

The Participant Role

The people who attend the conference are the Participants. Their responsibilities include:

- Knowing the date and time of the conference.
- Obtaining the Conference ID, and, if this is a B2B conference, the B2B Group and the individual Business entity that is sponsoring the conference.
- Reserving a Cisco HealthPresence station at the appropriate date and time.

Ending a Conference

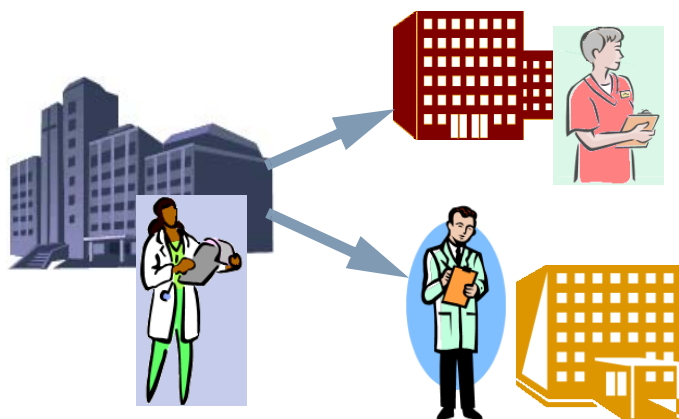
If you are a Participant, you can leave the conference at any time by clicking **Exit Appointment** on the Appointment window.

If you are the Presenter, you end the conference by clicking the **End** button.

Possible Scenarios

This section lists some of the ways that your installation could use the conference feature.

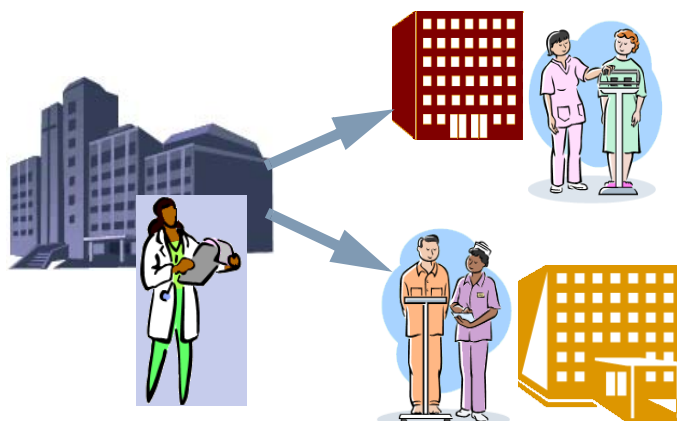
Figure 4-1 *Presenter to Colleagues*



Your installation could use the conference feature as a training session for other medical professionals. In this scenario, the Presenter could be a specialist who is demonstrating a new technique to colleagues (see [Figure 4-1.](#))

Figure 4-2 *Presenter to Patients*

Your installation could use the conference feature as a training session for patients. In this scenario the Presenter would be someone who is explaining techniques for managing a disease that all of the Participants (patients) have in common (see [Figure 4-2.](#))



Controlling the Audio Volume

The phone at the Cisco HealthPresence station may be one of several types. The types of phones and their volume controls are described in [Appendix B, “Types of Audio Equipment”](#).



Warning

Some video systems use an integrated IP phone to connect video conference calls and to control the volume of conference calls. Depending on how your system was configured, if you have one of these IP phones, outside calls may or may not be supported. This includes 911 calls.

Starting or Entering a Conference

You can participate in a conference either as a Presenter or as a Participant. If you are the Presenter, you will *Start* the conference; if you are one of the Participants, you will *Enter* the conference.

Starting a Conference

Normally, you will begin your sessions from the Cisco HealthPresence *Login* screen (see [Figure 1-6 on page 1-9](#)); however, if you don't see that screen, see “[Gaining Access to the System \(If Necessary\)](#)” on [page 1-8](#).

When the *Login* screen is displayed:

1. Type your *Username* and *Password* in the spaces provided.
2. Click the **Login** button.

Once you have logged in, if you have a Presenter role, the *Start Conference* screen displays (see [Figure 4-3](#)). (If you have other roles as well, you may need to click on the screen name to display it.)

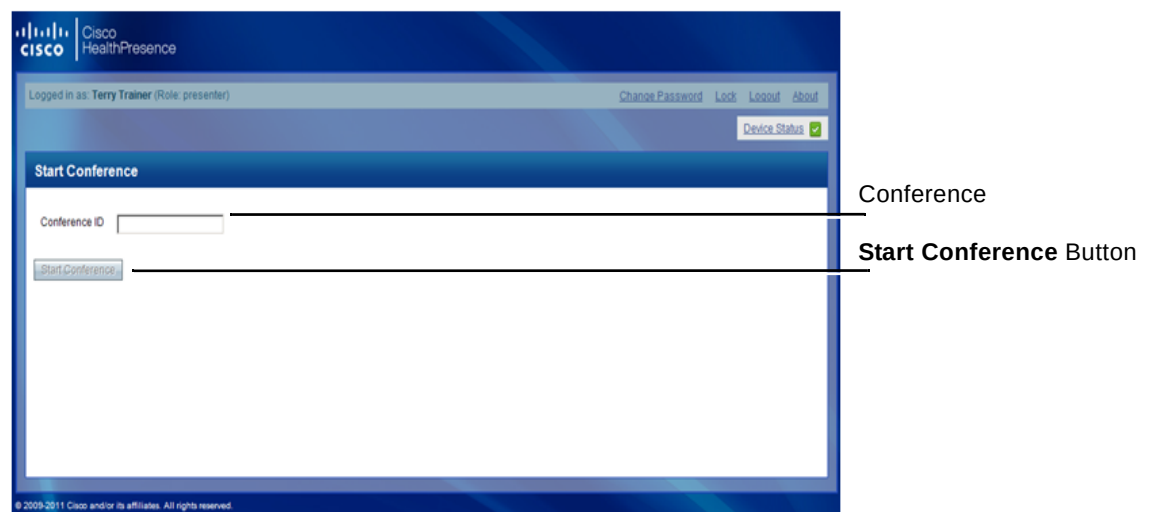
3. Type in an alphanumeric *Conference ID*.
4. Click the **Start Conference** button.

You will see the *Start Appointment* window (see [Figure 2-1 on page 2-3](#)). You can add patient data to this screen or leave it blank.

5. If necessary, optimize the volume (see [Appendix B, “Types of Audio Equipment”](#)).

Your next step will depend on what type of conference you are presenting. (See “[Presenting a Conference](#)” on [page 4-9](#).)

Figure 4-3 **The Start Conference Screen**



Entering a Conference

Normally, you will begin your sessions from the Cisco HealthPresence *Login* screen (see [Figure 1-6 on page 1-9](#)); however, if you don't see that screen, see “[Gaining Access to the System \(If Necessary\)](#)” on [page 1-8](#).

When the *Login* screen is displayed:

1. Type your *Username* and *Password* in the spaces provided.
2. Click the **Login** button.

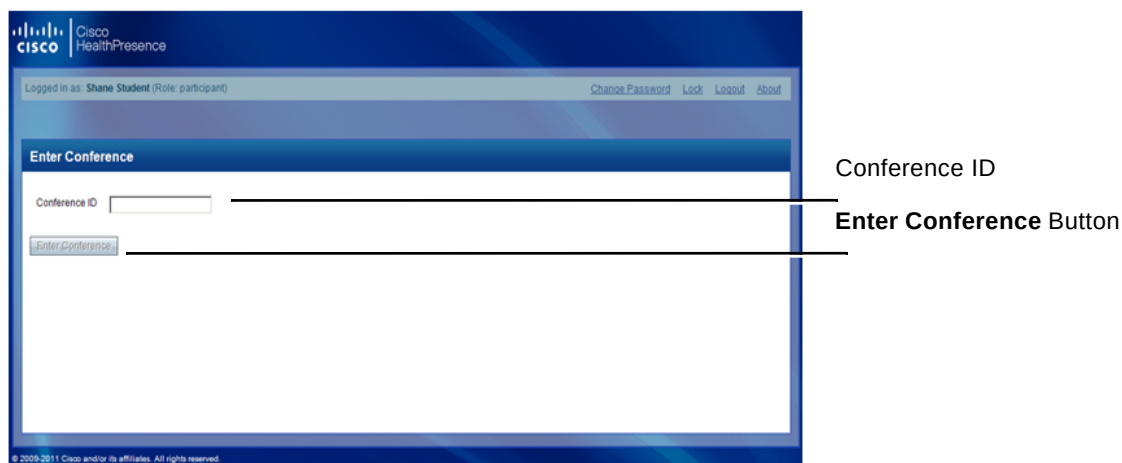
Once you have logged in, if you have a Participant role, the *Enter Conference* screen displays (see [Figure 4-4](#)). (If you have other roles as well, you may need to click on the screen name to display it.)

3. Type in the alphanumeric *Conference ID* in the space provided.
4. Click the **Enter Conference** button.

You will see the *Appointment* window (see [Figure 3-2 on page 3-3](#)). The conference Presenter may have entered some data, or the fields may be empty.

5. If necessary, optimize the volume (see [Appendix B, “Types of Audio Equipment”](#)).

Figure 4-4 **The Enter Conference Screen**



Tip

The teleconference microphone can transmit ambient noise in the surrounding area, such as audible conversations in or near the same area. If this seems to be a problem, ask the Presenter to try to reduce or eliminate background noise before continuing.

Starting or Entering a Business-to-Business Conference

You can participate in a B2B conference either as a Presenter or as a Participant. The Presenter *Starts* the conference, and the Participant(s) *Enter* the conference

Starting a B2B Conference

Normally, you will begin your sessions from the Cisco HealthPresence *Login* screen (see [Figure 1-6 on page 1-9](#)); however, if you don't see that screen, see “[Gaining Access to the System \(If Necessary\)](#)” on [page 1-8](#).

When the *Login* screen is displayed:

1. Type your *Username* and *Password* in the spaces provided.
2. Click the **Login** button.

Once you have logged in, if you have a Presenter role, the *Start Conference* screen displays (see [Figure 4-3](#)). (If you have other roles as well, you may need to click on the screen name to display it.)

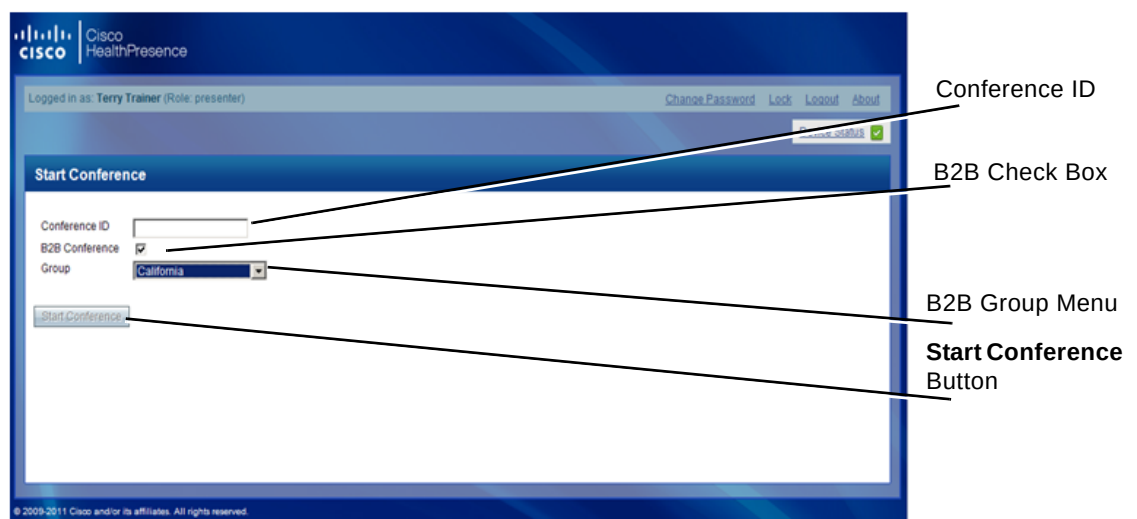
3. Type in an alphanumeric *Conference ID*.
4. Indicate that this is a B2B conference by clicking the check box.
5. Use the drop-down menu to select the B2B Group that is sponsoring this conference.
6. Click the **Start Conference** button.

You will see the *Start Appointment* window (see [Figure 2-1 on page 2-3](#)). You can add patient data to this screen or leave it blank.

7. If necessary, optimize the volume (see [Appendix B, “Types of Audio Equipment”](#)).

Your next step will depend on what type of conference you are presenting. (See “[Presenting a Conference](#)” on [page 4-9](#).)

Figure 4-5 **The Start Conference Screen (B2B)**



Entering a B2B Conference

Normally, you will begin your sessions from the Cisco HealthPresence *Login* screen (see [Figure 1-6 on page 1-9](#)); however, if you don't see that screen, see [“Gaining Access to the System \(If Necessary\)” on page 1-8](#).

When the *Login* screen is displayed:

1. Type your *Username* and *Password* in the spaces provided.
2. Click the **Login** button.

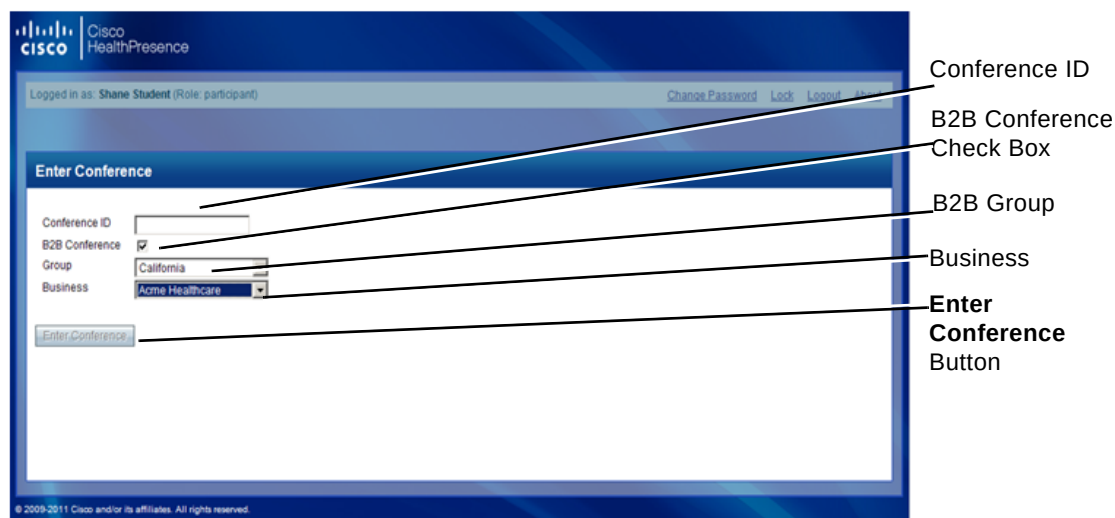
Once you have logged in, if you have a Participant role, the *Enter Conference* screen displays (see [Figure 4-4](#)). (If you have other roles as well, you may need to click on the screen name to display it.)

3. Type in the alphanumeric *Conference ID* in the space provided.
4. Click to put a checkmark in the *B2B Conference* box.
5. Select the appropriate B2B Group.
6. Select the Business entity that is sponsoring the conference.
7. Click the **Enter Conference** button.

You will see the *Appointment* window (see [Figure 3-2 on page 3-3](#)). The conference Presenter may have entered some data, or the fields may be empty.

8. If necessary, optimize the volume (see [Appendix B, “Types of Audio Equipment”](#)).

Figure 4-6 The Enter Conference Screen (B2B)



Tip

The teleconference microphone can transmit ambient noise in the surrounding area, such as audible conversations in or near the same area. If this seems to be a problem, ask the Presenter to try to reduce or eliminate background noise before continuing with the conference.

Presenting a Conference

You can use the conferencing feature for several different types of conferences. As part of the setup process, the Presenter needs to decide which type of conference to present, and which equipment to use.

Once you have clicked the **Start Conference** button you will see the *Start Appointment* window (see [Figure 4-7](#)).

1. Click the **Ready** button to begin.
2. What you do next will depend on what type of conference you want to present. See the instructions in the following sections.

Figure 4-7 Start Appointment Screen for Presenters

To Share Patient Vitals

If your presentation includes a patient, and you want to gather and share that patient's vital signs, see [“Gathering and Sharing Patient Vitals” on page 2-9](#).

The directions given in Chapter 2 for an Attendant working with a Provider also apply to a Presenter working with Participants. The only difference is that you click the **Share** button to share the vital signs with the conference Participants, not with a Provider.

To Start the Teleconference

After you have clicked the **Ready** button, to start the teleconference, click the **Join** button. (See [“Step 5 – Join the Teleconference” on page 2-13](#).) The instructions in Chapter 2 apply to a Presenter communicating with Participants as well as to an Attendant communicating with a Provider.

To Share Live Video or Audio

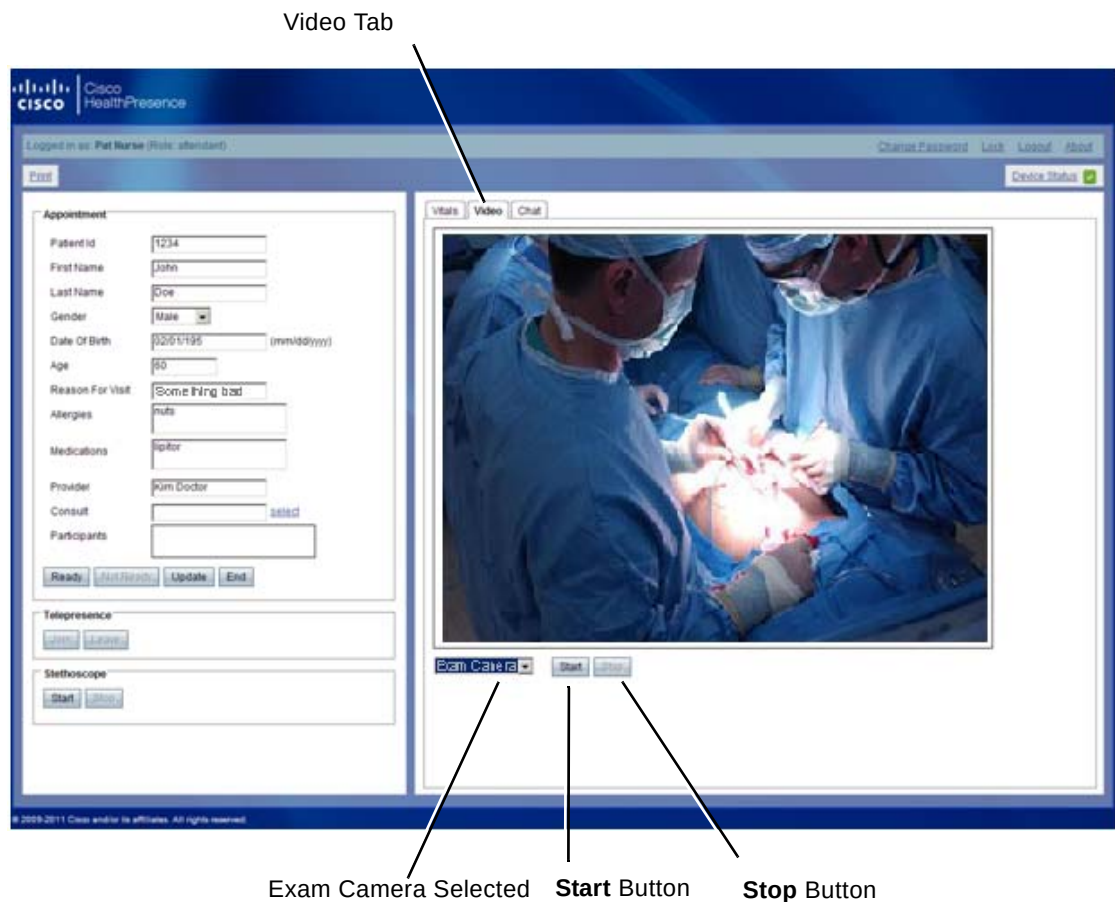
If you want to share live video or audio with conference Participants, see [“Conducting the Examination” on page 2-14](#).

In [Figure 4-8](#) the Presenter is sharing live video from the operating theater.

**Tip**

If you are using the Scope Camera, you might find it useful to know how to pause the image. (See [“Pause the Scope Image” on page 2-23](#).)

Figure 4-8 *Sharing Video Images from the Exam Camera at a Conference*





APPENDIX A

Maintaining the System

Revised: January 2, 2012, 78-20625-01

This appendix lists the tasks that need to be performed each morning before the first Cisco HealthPresence appointment or conference. It lists ways to keep your equipment at its best throughout the work day, and, finally, it lists the tasks that need to be performed at the end of each day.

Morning Maintenance Tasks

Normally, you will begin your sessions from the Cisco HealthPresence *Login* screen (see [Figure 1-6 on page 1-9](#)); however, if you don't see that screen, see [“Gaining Access to the System \(If Necessary\)” on page 1-8](#).

-
- Step 1** When the *Login* screen is displayed:
- Type your *Username* and *Password*.
 - Click the **Login** button.
- Step 2** When the *Start Appointment* screen is displayed (see [Figure 2-1 on page 2-3](#)):
- Click the **Start Appointment** button.
 - If necessary, set up the VSM equipment for testing.
- Step 3** Test the Welch Allyn Vital Signs Monitor (VSM).
- Turn on the VSM. Check for a green status light at the top right-hand side of the window. If you see a green light, test the Vitals telemetry. If you do not, contact your system administrator.
 - Test the VSM using yourself as a patient. Put the oximeter on your index finger, attach the blood pressure cuff, and check your temperature. Start the blood pressure test by pressing on the blood pressure button on the VSM. Wait for your blood pressure to register on the VSM screen.
 - Remove the oximeter from your finger and the thermometer from your mouth. The readings for these devices on the VSM will be blinking. Wait for the blinking to stop.
 - Click **Get** and verify that the vitals appear on the Cisco HealthPresence screen.
 - Click **Ready**.
- Step 4** Test the scopes.
- Connect the scope body to either the ENT scope or the Dermoscope.
 - Turn on the AMD 400; focus the ENT scope in your fist.

- c. Set the white balance by holding the scope ½ inch from a white surface for five seconds.
- d. Select **Otoscope** in the drop-down menu, and click **Start** in the video partition of the Telemedicine window.
- e. Verify that the video image appears on the Cisco HealthPresence screen.
- f. Click **Stop**.

Step 5 Test the exam camera.

- a. Turn the exam camera power on.
- b. Turn the exam camera light on.
- c. Set the white balance by holding the camera five inches from a white surface for five seconds.
- d. Select **Exam Camera** in the drop-down menu.
- e. Click **Start** in the video partition of the Telemedicine window.
- f. Verify that the camera image appears on the Cisco HealthPresence screen.
- g. Click **Stop**.

Step 6 Test the stethoscope.

- a. Put the headphones on.
- b. Put the stethoscope on your chest.
- c. Click **Start** in the Stethoscope window.
- d. Verify that you can hear your heartbeat; adjust the volume using your PC's volume controls.
- e. Click **Stop**.

Step 7 Click **End**.

Throughout the Day

To ensure that your Cisco HealthPresence equipment remains in optimal working condition:

- Turn off the cameras when they are not in use.
- Replace protective covers on lenses.

Evening Maintenance Tasks

At the end of every work day, these tasks need to be performed at every Cisco HealthPresence station:

1. Log out of the Cisco HealthPresence system.
2. Leave the power strip turned on.
3. Leave the system powered on.
4. Turn off the exam camera and the ENT scope (Attendant's station only).



APPENDIX B

Types of Audio Equipment

Revised: January 2, 2012, 78-20625-01

Supported Audio Equipment

The phone that you use with your Cisco HealthPresence system will be one of the ones listed in the table below. This table tells you whether or not the phone you are using is one of the IP phones, and how to control the volume.

Table B-1 Phones Used with the Cisco HealthPresence System

Telephone	IP Phone?	Description	Volume Control	Illustration
Cisco TelePresence System 500 (CTS 500)	Yes	Consists of an integrated 37" display, camera, microphone, speakers, a Cisco Unified 7975G IP phone, and the Cisco TelePresence codec.	Use the volume control on the phone.	
Cisco Unified Video Advantage	Yes	Adds video to your communications by adding video telephony functionality to the Cisco IP Communicator.	Use the volume button on the IP Communicator screen, or use the up and down arrows on your keyboard.	
Cisco Unified IP phone 7985G	Yes	A desktop video phone, which includes a camera, LCD screen, speaker, keypad, an integrated codec, and a handset.	Use the volume control on the phone.	

Telephone	IP Phone?	Description	Volume Control	Illustration
Cisco TelePresence System EX90	No	Video conferencing systems with fully integrated units including a codec, display, camera, microphone, and loudspeakers.	Use the volume control on the touch pad.	
Cisco TelePresence System EX60	No			
Cisco TelePresence C20	No	Fully interoperable with standards-based video conferencing or telepresence systems.	Use the remote control (shown) or the touch pad to raise or lower volume.	
Cisco TelePresence System C40	No			

Using the Phone for Other Purposes

You may not be able to use your phone to access outside lines; this includes 911. The signage at your site should indicate whether or not you can use this phone for purposes other than Cisco HealthPresence tasks.



Warning

Some video systems use an integrated IP phone to connect video conference calls and to control the volume of conference calls. Depending on how your system was configured, if you have one of these IP phones, outside calls may or may not be supported.

You can, if necessary, use this phone to communicate with another Cisco HealthPresence station using only the audio portion of the system. However, you should only do this if the video is not available, because you will not be able to start a video conference if you are in the middle of an audio call. As soon as you pick up the receiver, you will be making an audio-only call and the video portion of the system will not work.



GLOSSARY

Revised: January 2, 2012, OL-25041-01

A

- Attendant** The licensed health care professional who attends the patient. This role includes greeting the patient, taking the patient's vitals, and using the medical devices to assist the Provider in evaluating the patient. An Attendant can be a medical technician, a nurse, a nurse practitioner, or a physician.
- Attendant Station** The place where the patient and the Attendant meet. This area contains the medical device(s) used by the Attendant, the video conferencing system, and the Cisco HealthPresence Attendant Appliance. It may also contain special furniture offered by Cisco. See [“Components at the Attendant Station” on page 1-3.](#)

B

- B2B** Business-to-Business. The Cisco HealthPresence system allows communication between stations in the same Business Entity, or from one Business Entity to another (B2B).
- Browser** A computer application that connects your computer with the Internet. The Cisco HealthPresence solution uses *Internet Explorer* as its browser.
- Business Entity** The Attendant and Provider stations managed by a single Cisco HealthPresence Application Server.

C

- Chat** A feature that allows appointment participants to communicate using text messages. See [“Chat with the Provider\(s\)” on page 2-19.](#)
- Cisco HealthPresence Solution** The system that combines audio, video, telemetry, computer networking, and a graphical user interface to enable physicians to offer services to patients in locations throughout the world.
- Conference** A teleconference using the Cisco HealthPresence solution. Can be a regular conference (between members of the same Business Entity), or a B2B Conference (between members of the same B2B Group). See [“Types of Conferences” on page 4-2.](#)

E

E- Pen	Electronic Pen. Allows physicians to write online prescriptions.
EMR	Electronic Medical Records. If your system includes the necessary software and is configured to enable an EMR interface, then you can save data from the appointment to EMR. See “Step 1 – Save the Patient Data” on page 2-17.

H

Hosted	A software delivery model in which the Cisco HealthPresence software and associated client data reside in a central location managed by a hosting service, and are accessed by clients using a web browser.
---------------	---

M

Medical Devices	Collection of medical devices used with the Cisco HealthPresence system. See “Supported Medical Devices” on page 1-4.
Medical Telemetry	The technology that allows the Attendant to measure and report medical information remotely.
Multi-Party	An appointment option that allows you to include more than one Provider in an appointment. If your system is configured to support multi-party calls, the Attendant chooses whether the call is going to be a two-party call (a point-to-point call) or a multi-party call (a bridge call). See “Step 3 – Select Appointment Options (if Applicable)” on page 2-6.

P

Participant	The user role for the user who joins in a conference initiated by a Presenter.
Presenter	The user role for the user who initiates a conference.
Provider	The licensed medical professional who provides medical evaluations from a remote site. Most often this will be a physician, a physician’s assistant, or a nurse practitioner.
Provider Station	The place where the Provider sits during the teleconference. This area contains the video conferencing system and the Cisco HealthPresence Provider Appliance. It may also contain special furniture offered by Cisco. See “Components at the Provider Station” on page 1-4.

S

Site Admin	Site Administrator. The person who maintains user accounts on the Cisco HealthPresence system.
-------------------	--

T

Telehealth Appointment	A Cisco HealthPresence medical appointment in which the Attendant can share patient vitals, video streams, and audio streams, with a Provider in a different location.
Telemetry	The technology that allows a health care professional to measure patient medical data locally, and report the information to a physician in a different location.

U

URL	Uniform Resource Locator. An address on the World Wide Web. When you click a URL, your web page is redirected to that location
User Role	Your user role determines which screens you see, and which functions you can perform. User Accounts are configured so that users with a particular role (or roles) see only the screens and options appropriate to that job description. Any given user can have from one to five roles within one User Account. The Site Administrator configures the User Accounts. See “The Importance of User Roles” on page 1-5 .

V

Vitals	Patient data that includes temperature, blood pressure, and pulse. Collected using the Welch Allyn VSM, and transmitted to the Cisco HealthPresence system. See “Step 2 – Gather the Patient’s Vitals” on page 2-9 .
---------------	--

W

Windows	The operating system used by your Cisco HealthPresence system. If your system has been powered off, either deliberately or accidentally, you will need to enter the Windows password for your installation. See “Gaining Access to the System (If Necessary)” on page 1-8 .
----------------	---

