Cisco Unified Attendant Console Standard - Installation and Configuration Guide

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Cisco Unified Attendant Console Standard - Installation and Configuration Guide
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Cisco Unified Attendant Console Standard - Installation and Configuration Guide

About This Guide

This guide describes how to install and configure Cisco Unified Attendant Console Standard.

Who Should Read This Guide

This guide is for deployment engineers, system administrators, and anyone else who installs or configures Cisco Unified Attendant Console Standard. You should have a knowledge of how to configure the Cisco Unified Communications Manager used by the application.

How This Guide is Organized

This guide contains the following sections.

Section	Contains
Chapter 1, "Introduction to Cisco Unified Attendant Console Standard"	Introduction to Cisco Unified Attendant Console Standard
Chapter 2, "Installing Cisco Unified Attendant Console Standard"	Preparing Cisco Unified Communications Manager and installing Cisco Unified Attendant Console Standard
Chapter 3, "Starting Cisco Unified Attendant Console Standard"	Starting Cisco Unified Attendant Console Standard and configuring operator details
Chapter 4, "Configuring Cisco Unified Attendant Console Standard"	Configuring Cisco Unified Attendant Console Standard, including managing sign in devices
Chapter 5, "Directories"	Using and controlling directories
Chapter 6, "Keyboard Shortcuts"	Setting up keyboard shortcuts
Appendix A, "Configuring Logging"	Configuring application logging
Appendix B, "Import/Export File Formats"	Formats of import and export files
Appendix C, "Phones Supported by Cisco Unified Attendant Console Standard"	List of supported Cisco phones

Document Conventions

The following textual and typographic conventions are used in this document:

Convention	Usage
bold font	Commands, keywords and user-entered text appear in **bold** type.
italic font	Document titles, new or emphasized terms, and arguments for which you supply values are in *italic* font.
[]	Elements in square brackets are optional.
{x | y | z}	Required alternative keywords are enclosed in braces and separated by vertical bars.
[x | y | z]	Optional alternative keywords are enclosed in square brackets and separated by vertical bars.
string	A non-quoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
`courier` font	Terminal sessions and information the system displays appear in `courier` font.

Note Means *reader take note*.

Tip Means *the following information will help you solve a problem.*

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

Timesaver Means *the described action saves time*. You can save time by doing what is described in the paragraph.

Warning **Means *reader be warned*. In this situation, you might do something that could result in bodily injury.**

Obtaining Documentation and Submitting Service Requests

For information on obtaining additional documentation and submitting service requests, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

Introduction to Cisco Unified Attendant Console Standard

Cisco Unified Attendant Console Standard is a Microsoft Windows-based operator attendant console application for use with Cisco Unified Communications Manager (CUCM). For details of the supported versions, see Cisco Unified Communications Manager Compatibility, page 2-3. Cisco Unified Attendant Console Standard supports up to 5000 contacts on a single instance.

Cisco Unified Attendant Console Standard enables you to do the following:

- Control calls on your local IP Phone, XMPP client (such as Jabber), or Cisco IP Communicator
- Make, answer and end calls
- Hold and resume calls
- Blind/consult transfer calls to directory contacts or voicemail, or any other valid number
- Direct transfers
- Join calls
- Set Call Forward and Do Not Disturb on the operator phone
- Park calls
- Create and manage conference calls
- Import custom directories of contacts not in your Cisco Unified Communications Manager directory
- Create custom directories (directory groups) and export them to share with other operators
- Synchronize Cisco Unified Attendant Console Standard's corporate (main) directory with a CUCM or CSV file source directory
- During synchronization with your source directory:
  - Map the fields from your source directory to the ones in the corporate directory
  - Filter contacts, so that only certain ones are added to the corporate directory
  - Modify contact numbers using BLF rules
- See the line state and presence of each contact
- View call history
- Specify the devices used to sign in to the application
- Log in to a hunt group when you sign in to the application.

Online help on the application is available. For how to display the help, see Accessing Help on the Application, page 1-3.

Accessibility for Users with Disabilities

The Cisco Unified Attendant Console Standard user interface and controls are described in Cisco Unified Attendant Console Standard User Interface, page 1-2.

Cisco Unified Attendant Console Standard incorporates the following features to make it easier for blind and visually impaired people to use it:

- Most functions can be accessed using either the mouse or keyboard. You can define keyboard shortcuts for the most frequently used functions. For more information, see Chapter 6, "Keyboard Shortcuts".

- You can set the size of call and directory text in the interface.

- A tooltip is displayed for each graphical interface control when you point to it

For more information on the Cisco Accessibility Program visit
http://www.cisco.com/web/about/responsibility/accessibility/contact.html.

Cisco Unified Attendant Console Standard User Interface

You use the Cisco Unified Attendant Console Standard interface to do all the standard operator tasks, including making calls, putting calls on hold, and conferencing calls.

An example of the user interface is shown below:

The legend is on the next page.

Legend

#	Name	Contains
1	Main menu	Controls for using and configuring the application. Many of the controls here are also available when you right-click specific parts of the interface. For example, controls relevant to the directories are displayed when you right-click in the directory pane.
2	Current console extension	The extension used to sign in to the application. Click this to display a menu that you use for signing out and for logging into and out of hunt groups.
3	Call Control pane	Active call information on *any* line on the console phone. The calls in progress are displayed here, along with their status, duration, and controls for frequently used actions, such as transferring or ending the call.
4	Parked Calls pane	Active parked calls, by default displayed in the order in which they were parked. This pane shows the park extension used, the identities of both the caller and the DN that parked the call, and how long the call has been parked.
5	Call History pane	Completed calls in the current session, by default listed in reverse chronological order. You can change the order in which completed calls are listed. This pane is not displayed by default; use **View > Show Call History** to display it.
6	Search box	Tool in the header bar of the Directory pane for finding contacts by last name, first name, department and number.
7	Set search preferences	Control how searches are conducted.
8	Add new directory group	Control for creating a new directory group.
9	Add contact	Only available for directory groups. Control for adding contacts to directory groups.
10	Directory pane	Displays the synchronized directory, directory groups and search results. Includes Search box and controls for creating directory groups. Contact information includes line state and presence. For more information, see Chapter 5, "Directories".

You control the interface using both your mouse and keyboard. Many things that you can do with the mouse you can also do using your keyboard, provided that the application interface is selected.

Accessing Help on the Application

You can display help about Cisco Unified Attendant Console Standard by doing one of the following:

- In the main menu, choose **Help > Cisco Unified Attendant Console Standard Help**.
- Press **F1**.

The Help contains the following to make it easy to find what you need to know:

- Text search tool

- Index

- Contents list.

CHAPTER 2

Installing Cisco Unified Attendant Console Standard

To install Cisco Unified Attendant Console Standard you must do the following:

1. Ensure that the PC running it satisfies the minimum hardware and software requirements. These are described below.

2. Within Cisco Unified Communications Manager, create an Application User with associated phones. If you intend to use the presence facility within Cisco Unified Attendant Console Standard, you must also set up an End User. For instructions, see Configuring Cisco Unified Communications Manager, page 2-5.

3. Install the Cisco Unified Attendant Console Standard software. For instructions, see Installing or Upgrading Cisco Unified Attendant Console Standard, page 2-8.

PC Hardware and Software Requirements

The PC running Cisco Unified Attendant Console Standard has the following minimum hardware requirements:

- 2.4 GHz Core 2 Duo
- 4 GB RAM
- 10 GB available hard drive space
- 100 Mbps network card, connected to the same network as Cisco Unified Communications Manager using TCP/IP
- Monitor with 1024x768 resolution (recommended: monitor with 1440x900 resolution, plus headset)
- Keyboard with 10-key number pad.

Operating System Support

Cisco Unified Attendant Console Standard is supported under the following operating systems:

- Windows Vista Professional with SP2 (32-bit or WoW64)

- Windows 7 (32-bit or WoW64) – integration with Cisco Unified Communications Manager versions 7.1(5) or 8.0(x) is not supported under this operating system

- Windows 8 (32-bit or WoW64) – you can integrate only with Cisco Unified Communications Manager version 10.0(1) or 10.5(1) under this operating system

- Windows 8.1 64-bit – you can integrate only with Cisco Unified Communications Manager version 10.0(1) or 10.5(1) under this operating system

Note The following points:

- Cisco Unified Attendant Console Standard is *not* supported under the following operating systems:
  - Windows XP
  - Windows 2000
  - Windows 2003
  - Windows 2008 R1 (32-bit)
  - Windows 2008 (64-bit)
  - Windows 2012

- If your machine uses a 64-bit operating system, you *cannot* run Cisco Unified Attendant Console Standard against Cisco Unified Communications Manager version 7.1(5), as this does not support the 64-bit TSP required for the systems to be able to communicate with each other.

Citrix Support

Cisco Unified Attendant Console Standard is not supported within a Citrix environment.

Jabber Support

Both standard Jabber installations (locally installed on the operator computer) and VXME installations (installed in a VXME environment) are supported as operator devices and end points.

Network Requirements

The computer running Cisco Unified Attendant Console Standard must be able to access the Cisco Unified Communications Manager and the Cisco Unified Presence (CUP) Server. By default, these use the following two-way TCP ports:

- Cisco Unified Communications Manager – Port 443

- Cisco Unified Presence (CUP) Server – Port 5222

If you have a firewall on your computer, you must configure firewall exceptions for these ports or for any alternatives you may use in your installation.

Scalability

Cisco Unified Attendant Console Standard supports up to 5000 contacts on a single instance

Directory Synchronization

Although the recommended maximum Cisco Unified Attendant Console Standard directory size is 5000 contacts, there is no theoretical limit to the number that can be stored. However, if many users (say 500) with large directories (say 50000 contacts) simultaneously try to synchronize with Cisco Unified Communications Manager it would struggle to cope.

> **Note**   Cisco Unified Communications Manager's User and CTI (TSP client) resources are perfectly adequate to support this many concurrent Cisco Unified Attendant Console Standard users.

If you do have many concurrent Cisco Unified Attendant Console Standard users who are synchronizing more than the recommended maximum number of contacts, we recommend that these users:

- Configure Cisco Unified Attendant Console Standard to sync the directory infrequently; for example, once a day when they launch the application

- Stagger the times at which they synchronize or launch the application.

Presence

Cisco Unified Attendant Console Standard uses its user's personal Jabber credentials to enable presence indicators in its directory. So long as hundreds of users are not sharing the same Jabber credentials, the load on the presence server will be distributed, and there will be no problems with presence.

Cisco Unified Communications Manager Compatibility

Cisco Unified Attendant Console Standard is supported with the following Cisco Unified Communications Manager versions:

- 7.1(5) – not supported when running under Windows 7 32-bit, or under 64-bit operating systems. Cisco Unified Presence 7.1(5) is not supported.

- 8.0(1) – not supported when running under Windows 7 32-bit, or any 64-bit operating systems

- 8.0(3) – not supported when running under Windows 7 32-bit, or any 64-bit operating systems

- 8.5(1) – supported on SU1 and above

- 8.6(1)

- 8.6(2)

- 9.0(1)

- 9.1(1)

- 9.1(2)

- 10.0(1) – only supported under 64-bit versions of Windows 8 or Windows 8.1
- 10.5(1) – only supported under 64-bit versions of Windows 8 or Windows 8.1

If you are using Cisco Unified Communications Manager Release 8 or later, the TSP and New Cisco Media Driver are automatically installed and activated when you install Cisco Unified Attendant Console Standard. However, Cisco Unified Communications Manager Release 7.1.5 does not support this *silent* TSP installation, and you must manually download and install the appropriate TSP and Cisco TAPI Wave driver according to the instructions in Installing and Configuring the Cisco TSP for Cisco Unified Communications Manager 7.x, page 2-10.

Note   The following:

- The 32-bit version of TSP is required when running Cisco Unified Attendant Console under a 32-bit operating system. The 64-bit version of TSP is required when running Cisco Unified Attendant Console under a 64-bit operating system. Consequently, 64-bit installations are supported only in conjunction with Cisco Unified Communications Manager versions later than 8.0(3).

- If the installation wizard is unable to download the TSP, you can fix the problem by doing the following:

   a.   In your web browser, under **Tools**, choose **Internet Options**.

   b.   In the dialog box, select the **Advanced** tab.

   c.   Under **Security**, deselect (uncheck) **Check for publisher's certificate revocation**.

   d.   Under **Security**, deselect (uncheck) **Check for server certificate revocation**.

   e.   Click **OK**.

Cisco Unified Attendant Console Standard also integrates with the Cisco Unified Presence Server.

The operating system and Cisco Unified Communications Manager (CUCM) version compatibility is summarized below:

CUCM Version	Windows Vista 32-bit and Wow64	Windows 7 32-bit and WoW64	Windows 8 32-bit and WoW64	Windows 8.1
7.1(5) [1]	Supported	Not supported	Not supported	Not supported
8.0(1)	Supported	Not supported	Not supported	Not supported
8.0(3)	Supported	Not supported	Not supported	Not supported
8.5(1) [2]	Supported	Supported	Not supported	Not supported
8.6(1)	Supported	Supported	Not supported	Not supported
8.6(2)	Supported	Supported	Not supported	Not supported
9.0(1)	Supported	Supported	Not supported	Not supported
9.1(1)	Supported	Supported	Not supported	Not supported
9.1(2)	Supported	Supported	Not supported	Not supported
10.0(1)	Supported	Supported	Supported	Not supported
10.5(1)	Supported	Supported	Supported	Supported

1. CUP 7.1(5) not supported.
2. CUCM 8.5(1) supported on SU1 and above.

Configuring Cisco Unified Communications Manager

Cisco Unified Attendant Console Standard must be able to communicate with the Cisco Unified Communications Manager, which it does using Cisco Unified Communications Manager TSP. Consequently, before you install Cisco Unified Attendant Console Standard you must first perform the following steps:

1. Depending on the version of Cisco Unified Communications Manager you are using, either:

   – Creating a User Group (CUCM 7.x and 8.x), page 2-5 – instructions for users of Cisco Unified Communications Manager 7.x or 8.x.

   – Creating an Access Control Group (CUCM 9.x and 10.x), page 2-5 – instructions for users of Cisco Unified Communications Manager 9.x, 10.0(1) or 10.5(1).

2. Assigning Roles to a User Group or Access Control Group, page 2-6

3. Creating and Assigning an Application User, page 2-7.

4. End User Account Required For Presence, page 2-8.

Creating a User Group (CUCM 7.x and 8.x)

If you are using Cisco Unified Communications Manager 7.x or 8.x you must create a User Group. If you are using Cisco Unified Communications Manager 9.x, 10.0(1) or 10.5(1) you must create an Access Control Group, as described in Creating an Access Control Group (CUCM 9.x and 10.x), page 2-5.

User groups define the roles and permissions available to the Application Users who are members of that group.

To create a User Group, do the following:

Step 1   Use your internet browser to access Cisco Unified CM Administration, and then log in.

Step 2   In the main menu, choose **User Management > User Groups**.

Step 3   Click **Add New** to create a new User Group.

Step 4   Type a **Name** for the new User Group.

Step 5   Click **Save** to save the User Group.

Step 6   Assign roles to the user group, as described in Assigning Roles to a User Group or Access Control Group, page 2-6.

Creating an Access Control Group (CUCM 9.x and 10.x)

If you are using Cisco Unified Communications Manager 9.x, 10.0(1) or 10.5(1) you must create an Access Control Group. If you are using Cisco Unified Communications Manager 7.x or 8.x you must create a User Group, as described in Creating a User Group (CUCM 7.x and 8.x), page 2-5.

Access Control Groups define the roles and permissions available to the Application Users who are members of that group.

To create an Access Control Group, do the following:

Step 1 Use your internet browser to access Cisco Unified CM Administration, and then log in.

Step 2 In the main menu, choose **User Management > User Settings > Access Control Group**.

Step 3 Click **Add New** to create a new Access Control Group.

Step 4 Type a **Name** for the new Access Control Group.

Step 5 Click **Save** to save the Access Control Group.

Step 6 Assign roles to the user group, as described in Assigning Roles to a User Group or Access Control Group, page 2-6.

Assigning Roles to a User Group or Access Control Group

Roles define what the members (Application Users) of a User Group or Access Control Group can do.

To add the roles to a User Group or Access Control Group required to enable Cisco Unified Attendant Console Standard to work properly, do the following:

Step 1 On the **Find and List User Groups** page, **Find** the User Group/Access Control Group you just created.

Step 2 In the **Search Results**, click **Roles** for the User Group/Access Control Group.

Step 3 Click **Assign Role to Group**.

The roles that can be assigned are listed.

Step 4 Select the following roles:

- **Standard AXL API Access**
- **Standard CTI Allow Calling Number Modification**
- **Standard CTI Allow Call Park Monitoring**
- **Standard CTI Allow Control of All Devices**
- **Standard CTI Allow Reception of SRTP Key Material**
- **Standard CTI Enabled**

Step 5 If you are using phone models 69xx, 7931, 7965, 89xx and 99xx, you must also select:

- **Standard CTI Allow Control of Phones supporting Connected Xfer and conf**
- **Standard CTI Allow Control of Phones supporting Rollover Mode**

Step 6 Click **Add Selected** to assign the roles.

Step 7 Click **Save**.

Creating and Assigning an Application User

An Application User connects Cisco Unified Attendant Console Standard to the Cisco Unified Communications Manager using Cisco TSP and AXL.

- One operator requires a single Application User with all required devices assigned to it.
- Multiple operators using the same devices require a single Application User with all devices required by all operators assigned to it.
- Multiple operators using different devices require multiple Application Users, each with the required devices assigned to it. Operators requiring identical devices can use a single Application User.

To create an Application User and then assign it to the User Group (CUCM 7.x or 8.x) or Access Control Group (CUCM 9.x or 10.x), do the following:

Step 1   Use your internet browser to access Cisco Unified CM Administration, and then log in.

Step 2   In the main menu, choose **User Management > Application User**.

Step 3   Click **Add New**.

Step 4   Enter information in the following fields:

- **User ID** (a name of your choice)
- **Password**
- **Confirm Password** (this must match the Password)

Step 5   Depending on the version of Cisco Unified Communications Manager you are connecting to, do one of the following:

- If you are installing against Cisco Unified Communications Manager 7.x or 8.x, scroll down to the **Permissions Information** section and click **Add to User Group**.
- If you are installing against Cisco Unified Communications Manager 9.x or 10.x, scroll down to the **Permissions Information** section and click **Add to Access Control Group**.

Step 6   Click **Save** to save the Application User.

Assigning Devices to Application Users to Enable Directory BLF

To be able to see your contacts' line state in the directory you must assign their devices to be controlled by the relevant Application User.

To assign controlled devices to an Application User, do the following:

Step 1   Use your internet browser to access Cisco Unified CM Administration, and then log in.

Step 2   In the main menu, choose **User Management > Application User**.

Step 3   Find and then select your Application User.

The **Application User Configuration** page appears.

Step 4   Under **Device Information**, select the relevant **Available Devices** and then add them to the **Controlled Devices** list. To add many devices you will probably find it easier to click **Find more Phones**, and then find, select and Add the devices using the dialog box displayed.

Step 5   Click **Save**.

End User Account Required For Presence

The presence facility within Cisco Unified Attendant Console Standard requires that each Attendant has an End User Account with Presence enabled on the Cisco Unified Communication Manager, so that Cisco Unified Attendant Console Standard can communicate with the Cisco Unified Presence (CUP) server. The User ID defined in the CUCM End User profile is used to obtain the presence information for a contact.

In most cases the Attendants will already have an End User Account on the Cisco Unified Communication Manager. If they do not, ask your telephony system manager to set them up for you.

Installing or Upgrading Cisco Unified Attendant Console Standard

These instructions apply to both installing Cisco Unified Attendant Console Standard from scratch and upgrading your installation. When you upgrade your software the installation Wizard offers you details of your current installation, which you can accept or change, as required. You do not need to uninstall the old version before installing the new software.

Cisco Unified Attendant Console Standard requires .NET framework 4 to run. If .NET framework 4 has not been supplied or configured before installation, the installation wizard installs and configures it for you.

Note   To be able to install the software you must have administrator rights.

To install Cisco Unified Attendant Console Standard, do the following:

Step 1   Browse to the installation location and run *CUACS_Setup.exe*.

The installation wizard appears.

Step 2   In the Welcome page, click **Next**.

Step 3   In the **Cisco Unified Communications Manager Connection Details** page, type the following:

- The **Cisco Unified Communications Manager Host Name**, Fully Qualified Domain Name (**FQDN**) or **IP address**

- The **Cisco Unified Communications Manager Application User ID** to use

- The **Password** that corresponds with the Cisco Unified Communications Manager User ID.

and then click **Next**.

If you are upgrading your Cisco Unified Attendant Console Standard software, this page will contain your current details.

Note   The following:

- Port 443 is used by default. You can change the Cisco Unified Communications Manager configuration after you have installed Cisco Unified Attendant Console Standard. For instructions, see Connecting to a Different Cisco Unified Communications Manager, page 4-4.

- Connecting to the Cisco Unified Communications Manager also populates the Primary CTI Manager. If you want to use a different node as the Primary CTI Manager, you can do this through the Cisco TSP configuration after installing Cisco Unified Attendant Console Standard.

Step 4   In the two **Security Alert** messages, click **Yes**.

> ✎
> **Note**   During installation the Cisco Unified Communications Manager TSP appropriate to the Cisco Unified Communications Manager you intend to use is downloaded. If you intend to use Cisco Unified Communications Manager release 8.0(1) or later, the TSP is also automatically installed. If you intend to use Cisco Unified Communications Manager release 7.1(5) you must manually install the compatible Cisco TSP, as described in Installing and Configuring the Cisco TSP for Cisco Unified Communications Manager 7.x, page 2-10.

Step 5   In the **Language Information** page, select the language you want to use, and then click **Next**.

If you are upgrading your Cisco Unified Attendant Console Standard software, this page will contain your current details.

Step 6   In the **Cisco Unified Presence Server Connection Information** page, type the following:

- The **Server Address**
- The **Domain** containing the server
- The **Cisco Unified Presence User Name** to use
- The **Cisco Unified Presence Password** appropriate to the User Name

and then click **Next**.

If you are upgrading your Cisco Unified Attendant Console Standard software, this page will contain your current details.

> ✎
> **Note**   Port 5222 is used by default. You can change the Presence configuration after you have installed Cisco Unified Attendant Console Standard. For instructions, see Connecting to a Different Presence Server, page 4-3.

Step 7   In the **Choose Destination Location** page, either accept the default folder (recommended) or **Browse** to the folder in which to install the application, and then click **Next**.

Step 8   In the **Start Copying Files** page, if the details are correct, click **Next**. If not, click **Back** and correct the information.

Cisco Unified Attendant Console Standard is installed.

Step 9   In the **InstallShield Wizard Complete** page, select **Yes, I want to restart my computer now**, and then click **Finish**.

Installing and Configuring the Cisco TSP for Cisco Unified Communications Manager 7.x

The Cisco TAPI (or Telephony) Service Provider (TSP) enables Cisco Unified Attendant Console Standard to communicate with the Cisco Unified Communications Manager CTI Manager service, which provides call control.

Cisco Unified Attendant Console Standard installation also automatically installs the Cisco TSP appropriate to your Cisco Unified Communications Manager—unless you are using Cisco Unified Communications Manager Release 7.x, in which case you must manually install the Cisco TSP for that release.

This appendix describes the following steps:

1. Downloading and Installing the TSP.

2. Configuring the TSP, page 2-11.

3. Installing the Cisco TAPI Wave Driver, page 2-11.

If you need to uninstall the Cisco TSP, follow the instructions in the file *C:\Program Files\Cisco\CiscoTSP.txt*, which is created when the TSP is installed. This file also includes instructions for installing the Cisco TAPI Wave driver.

Downloading and Installing the TSP

To download and install the Cisco TSP, do the following:

Step 1   Use your internet browser to access Cisco Unified Communications Manager Administration, and then choose **Application > Plug ins**.

Step 2   Find the Cisco Telephony Service Provider using the search field (Figure 2-1).

Figure 2-1   ***Find and List Plugins Search Options***

Step 3   In the **Search Results**, click **Download** on the Cisco Telephony Service Provider line.

Step 4   Save **CiscoTSP.exe** on your desktop.

Step 5   Double-click the **CiscoTSP.exe** icon on your desktop and follow the instructions.

Step 6   During installation, you are asked if you want to install multiple instances of TSP; click **No**.

Step 7   After a successful installation, restart your system for the changes to take effect.

.

Configuring the TSP

To configure TSP, do the following:

Step 1 Click the **Start** button, and then in the **Start** menu, choose **Settings > Control Panel > Phone and Modem Options**.

Step 2 Select the **Advanced** tab.

Step 3 Select *CiscoTSP001.tsp*.

Step 4 Click **Configure**, and then select the **User** tab.

Step 5 In **User Name**, type the User ID of the Cisco Unified Communications Manager Application User created in Configuring Cisco Unified Communications Manager, page 2-5.

Step 6 Type the **Password**, and then again in **Verify Password**.

Step 7 Select the **CTI Manager** tab.

Step 8 Under **Primary CTI Manager Location**, select and then type either the **IP Address** or **Host Name** of the CTI Manager to connect to. If a second CTI Manager is available, you can optionally specify a **Backup CTI Manager Location**.

✎

Note   The CTI Manager service runs on each CUCM node in a cluster. Your primary CTI Manager should be on the Cisco Unified Communications Manager publisher, and your backup CTI Manager on the subscriber.

Step 9 Select the **Wave** tab.

Step 10 Type the **Desired number of possible Automated Voice lines**. Specify sufficient to allow *all* your CTI Ports to be monitored by this TSP. You can specify a larger number to cater for future expansion. To change the number in the future, you will have to uninstall and reinstall the Cisco TAPI Wave driver.

Step 11 Click **OK**.

Step 12 Select the **Advanced** tab.

Step 13 In **Provider Open Completed Timeout (secs)**, type **300**.

Step 14 Click **OK**.

Step 15 Reboot the machine.

You now need to install the Cisco TAPI Wave driver.

Installing the Cisco TAPI Wave Driver

To install the Cisco TAPI Wave driver, do the following, or the equivalent for your operating system:

Step 1 In Control Panel, double-click **Add/Remove Hardware**.

Step 2 In the **Add Hardware** wizard, click **Next**.

Step 3 Select **Yes, I have already connected the hardware**.

Step 4 Select **Add a New Hardware Device**, and then click **Next**.

Step 5 Select **Install the hardware that I manually select from a list**, and then click **Next**.

Step 6   From the list of hardware types, select **Sound, video and game controller**, and then click **Next**.

Step 7   When prompted to select the device driver, click **Have Disk**.

Step 8   In the **Install From Disk** dialog box, **Browse** to *C:\Program Files\Cisco Systems\Wave Drivers*, select the file *oemsetup.inf*, and then click **Open**

Step 9   Click **OK**.

Step 10   In the **Select a Device Driver** page, select the **Cisco TAPI Wave Driver**, and then click **Next**.

Step 11   In the **Start Hardware Installation** page, click **Next**.

Step 12   If prompted for **Digital signature Not Found**, click **Continue Anyway**.

Step 13   If prompted **The file avaudio32.dll on Windows NT Setup Disk #1 is needed**, browse to *C:\Program Files\Cisco\Wave Drivers*, and then click **OK**.

Step 14   Click **Yes**.

Step 15   Click **Finish**.

Step 16   When prompted, click **Yes** to restart your computer.

Licensing Cisco Unified Attendant Console Standard

This section describes how to license your Cisco Unified Attendant Console Standard software under these scenarios:

- Installing Cisco Unified Attendant Console Standard from scratch. For more information, see Licensing New Installations, page 2-12.

- Upgrading an existing Cisco Unified Attendant Console Department Edition installation to Cisco Unified Attendant Console Standard. For more information, see Licensing CUAC Department Edition Upgrades, page 2-14.

> **Note**   You do not need to relicense Cisco Unified Attendant Console Standard version upgrades.

This section also describes:

- Activating Purchased or Upgraded Software, page 2-15
- Relicensing Software, page 2-17

Licensing New Installations

When you install Cisco Unified Attendant Console Standard onto a new system (not an upgrade) you may need to use the following procedures:

- Activating Evaluation Software
- Activating Purchased or Upgraded Software, page 2-15

Activating Evaluation Software

You can use downloaded software for 10 days before you must license it. Licensing the software enables you to activate the software for 60 more days of evaluation. If you do not activate the download, you will be unable to use it after the tenth day.

To activate the evaluation software, do the following:

Step 1   Sign into each instance of Cisco Unified Attendant Console Standard that you want to license and activate, and then do the following:

    a.   Choose **Help > About Cisco Unified Attendant Console Standard**.

    b.   In the information box, click **Register**.

    c.   Note the **Machine Code**. This is the *registration code* for that instance.

    Tip   Keep these codes safe, as you require them to activate the 60 evaluation period *and* to license purchased software.

Step 2   Use your internet browser to go the *Cisco Unified Attendant Console Downloads and Licensing* website.

Step 3   Enter your **User Name** and **Password**, and then click **Log In**.

Step 4   In the navigation bar, click **ACTIVATE EVALUATION SOFTWARE**.

Step 5   Select your **Reseller**, then select your **Customer**, and then select your **Customer Site**.

    Note   If your reseller, customer or site are not available, choose the options to add them.

Step 6   Select the **Version** and the **Product** that you have installed, and then click **Next**.

Step 7   Enter the **Registration Codes** collected in Step 1, and then click **Next**.

    Note   Click ✚ to create new fields for additional codes.

Step 8   Enter any additional email addresses to receive the registration file, and then click **Submit**.

If the registration codes are valid, a registration (.RGF) file is e-mailed to you. The .RGF file contains activation keys and serial numbers for the 60 day evaluation period. The .RGF file can hold licensing information for multiple instances, but each license needs to be individually applied.

Step 9   Open the email and save the .RGF file to a location that can be browsed by Cisco Unified Attendant Console Standard.

Step 10   In Cisco Unified Attendant Console Standard, do one of the following:

    •   In the main menu, choose **Help > About Cisco Unified Attendant Console Standard**.

    •   Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

Step 11   In the message box, click **Register**.

Step 12   In the License dialog box, either:

    a.   Select **File Registration**.

    b.   Type the name of or browse to the .RGF file.

    c. Click **Validate**.

or – if you know details of the license for the specific instance you are licensing

    a. Select **Key Registration**.

    b. Type an activation key **Serial Number**, which is included with the license in the .RGF file.

    c. Type the corresponding **Registration Code**.

    d. Click **Register**.

Arc Solutions Software Procurement ADMINISTRATION web site

Licensing CUAC Department Edition Upgrades

If you have an upgrade agreement, you can upgrade any Cisco Unified Attendant Console Department Edition (version 8.x or 9.x) installations to Cisco Unified Attendant Console Standard. To do so, you need to obtain the necessary number of Cisco Unified Communications Software Subscription (UCSS) licenses: one per instance.

If you have the necessary rights, you can obtain the licenses through the S+ Admin Website, where you can generate licenses one at a time or in groups.

Generating Single Licenses

To generate a single license:

Step 1   User your internet browser to go to the *Arc Solutions Software Procurement ADMINISTRATION* web site and choose **Licenses > Generate License**.

Step 2   In **Product Family**, select **Cisco Unified Attendant Console Standard**.

Step 3   In **Product Name**, select **Console Selection - CUACS**.

Step 4   In **Version**, select **10.x**.

Step 5   In **License Type**, select **UCSS**.

Step 6   Click **Add**, and then type the license order details:

- **Sale Order Number** (mandatory)
- **Note**
- **Ship Set**
- **Line**
- **Unit Number**

Step 7   Click **Generate Single License**.

The License Code (LAC) is displayed.

Step 8   Save the LAC for future use.

Generating Bulk Licenses

To generate a group of licenses:

Step 1   Use your internet browser to go to the *Arc Solutions Software Procurement ADMINISTRATION* web site and choose **Licenses > Bulk Generate**.

Step 2   In **Product Family**, select **Cisco Unified Attendant Console Standard**.

Step 3   In **Product Name**, select **Console Selection - CUACS**.

Step 4   In **Version**, select **10.x**.

Step 5   In **License Type**, select **UCSS**.

Step 6   Type the **Number of License Codes** to create (one per instance of Cisco Unified Attendant Console Standard).

Step 7   In File Format, select **Excel Workbook (.xls)**.

Step 8   When prompted open or save the XLS file.

Activating Purchased or Upgraded Software

You can purchase the software at any time in the evaluation period, giving you unlimited use. When you purchase the software Cisco provides you with a 27-digit license activation code (LAC) for each instance of the application you have purchased. After activating the software, you cannot revert to the trial version. If you upgrade your software from Cisco Unified Attendant Console Department Edition, you must activate it before you can use it.

Note   When you upgrade using UCSS licenses you can convert Cisco Unified Attendant Console Department Edition license instances into the same number of Cisco Unified Attendant Console Standard instances. You can upgrade either:

- All the Cisco Unified Attendant Console Department Edition seats into Cisco Unified Attendant Console Standard at once.

- Some of the Cisco Unified Attendant Console Department Edition seats and then upgrade the remainder later.

For example, if you had a Cisco Unified Attendant Console Department Edition LAC with 10 seats, you can either activate all 10 LAC codes at once to obtain 10 Cisco Unified Attendant Console Standard licenses, or you can, say, obtain 5 Cisco Unified Attendant Console Standard licenses today and the remainder later. Once you have generated at least one license against the Cisco Unified Attendant Console Department Edition LAC, it becomes disabled and can't be reset.

To activate your purchased or upgraded software, do the following:

Step 1   Use your internet browser to go the *Cisco Unified Attendant Console Downloads and Licensing* website.

Step 2   Enter your **User Name** and **Password**, and then click **Log In**.

Step 3   In the navigation bar, click **ACTIVATE PURCHASED SOFTWARE**.

Step 4   Select your **Reseller**, then select your **Customer**, and then select your **Customer Site**.

> **Note**   If your reseller, customer or site are not available, click the control to add them.

Step 5   Select the **Version** and the **Product** (CUAC Standard Edition) that you have installed, and then click **Next**.

Step 6   Enter a unique **Registration Code** (one of the machine codes collected on page 2-13) and **License Activation Code** pair for each instance, and then click **Next**.

> **Note**   Click ✚ to create new fields for any additional pairs of codes.

Step 7   If all the License Activation Codes are UCSS codes for Cisco Unified Attendant Console Standard, enter details of the previously used Cisco Unified Attendant Console Department Edition Registration Code and License Activation Code pairs that you wish to upgrade to Cisco Unified Attendant Console Standard.

Step 8   In the License Request Confirmation page, optionally enter an additional e-mail address and click **Submit**. If you want to change the codes you entered in Step 6 before proceeding, click **Back**.

A registration (.RGF) file is e-mailed to you, and license request confirmation information is displayed in the web page.

Step 9   Open the email and save the registration file to a location that can be browsed by Cisco Unified Attendant Console Standard.

Step 10   In Cisco Unified Attendant Console Standard, do one of the following:

- In the main menu, choose **Help > About Cisco Unified Attendant Console Standard**.
- Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

Step 11   In the message box, click **Register**.

Step 12   In the License dialog box, either:

   a.   Select **File Registration**.

   b.   Type the name of or browse to the .RGF file.

   c.   Click **Validate**.

   or – if you know details of the license for the specific instance you are licensing

   a.   Select **Key Registration**.

   b.   Type an activation key **Serial Number**, which is included with the license in the .RGF file.

   c.   Type the corresponding **Registration Code**.

   d.   Click **Register**.

Resetting License Codes

The registration codes you gather when activating software incorporate information about the system that will be running Cisco Unified Attendant Console Standard. If the system changes - for example, because it has been rebuilt - the parameters will change and the corresponding LACs will no longer work.

You can reset (recreate) LACs to work on new systems in the following way:

Step 1   Use your internet browser to go to the *Arc Solutions Software Procurement ADMINISTRATION* web site and choose **License Management**.

Step 2   Click **Verify and Reset LAC**.

Step 3   Search for Cisco Unified Attendant Console Standard LAC details using the LAC Code, or look up the LAC using one of the following:

- Cisco SO Number
- Registration Code
- User Name
- Email Address

The Cisco Unified Attendant Console Standard LAC detail is displayed.

Step 4   If the LAC has been activated (used), select it and then reset it.

Relicensing Software

If you do any of the following you must re-license the software with a new registration code:

- Reinstall the operating system on the same hardware
- Install a different operating system on the same hardware
- Add or remove certain hardware (such as an NIC card)
- Change the machine name
- Perform a major upgrade of the Cisco Unified Attendant Console Standard software

And within a VM Environment:

- Copy the VM image
- Perform a major upgrade of the Cisco Unified Attendant Console Standard software

All these cause the license to expire, and the System and User Configuration menus to disappear from Cisco Unified Attendant Admin.

To re-license Cisco Unified Attendant Console Standard, contact Cisco TAC and request a re-host. You will need to provide them with either the original license activation codes or the SO number of your purchase.

Starting Cisco Unified Attendant Console Standard

To start Cisco Unified Attendant Console Standard, do the following:

Step 1   Double-click the desktop icon.

In the sign in screen, beneath the banner, a field contains either:

- The extension number of the attendant phone last used to sign in
- The instruction, *Enter Extension Number*

Step 2   To use an existing number, proceed to Step 6.

Step 3   To use a new extension number, type the number.

As you type, the application lists those devices defined for signing in that match (for more information on defining devices, see Managing Sign In Devices, page 4-6). If devices have not been defined, the Cisco devices assigned to the TSP user on your computer are listed. The more you type, the shorter the list becomes. The list contains the name, extension number and line for each matching device.

> **Note**   If a list of devices has been configured you can *only* sign in using one of the numbers in the list.

Step 4   To select a number, highlight it in the list and either press **Enter** or double-click it. You can close the list and clear the selection by pressing **Esc**.

Step 5   If the sign in extension is part of one or more hunt groups, and you want the application to log you into them during sign in, select **Log in to hunt groups at sign in**.

> **Note**   The following:
>
> - If you are already logged into your hunt groups, you do not need to set **Log in to hunt groups at sign in**.
> - You cannot log in to a hunt group using an extension that is already being used by another Cisco Unified Attendant Console Standard user.
> - You can also log in or out of hunt groups as described in Logging In to Hunt groups, page 3-2 and Logging Out of Hunt groups, page 3-2.

Step 6   Click **Sign In** or press **Enter**.

The main application user interface appears, ready for you to use.

If there was no device list and you entered the extension number of a valid Cisco device, that device and all its lines is added to the device list.

While the application is running, you can change the attendant console operator directory number and whether it is remembered.

Signing Out

To sign out from your current attendant console session, do either of the following:

- In the main menu, click the extension number at the top right of the interface, and then select **Sign out of application**.
- Use the **Ctrl+S** keyboard shortcut.

The sign in screen is displayed, and the application continues to run and any synchronization currently in progress continues. When you sign out you are automatically logged out of any hunt groups to which you belong.

To resume using the application, sign in as before.

Logging In to Hunt groups

A *hunt group* is a group of extensions configured so that an unanswered call to any extension gets forwarded to one of the other lines in the group. Cisco Unified Communications Manager supports hunt groups, and Cisco Unified Attendant Console Standard enables you to sign in using a device that is part of one or more hunt groups, so that calls to the groups can be received through your operator phone.

If you are logged out from any hunt groups you will not receive any calls through the groups.

If you are not logged in to the hunt groups of which your extension is part, you can either log in to them when you sign in to the application (as described on), or you can click the extension number at the top right of the interface, and then select **Log in to hunt groups**.

While you are logging in to the hunt group (which may take a few seconds) you will not be able to receive any new calls, but current calls will continue unaffected, and you will be logged in at the end of the current call.

Logging Out of Hunt groups

If you are logged in to a hunt group, to log out do either of the following:

- Click the extension number at the top right of the interface, and then select **Log out of hunt groups**.
- User the **Ctrl+I** keyboard shortcut.

Also, when you sign out you are automatically logged out of any hunt groups to which you belong.

While you are logging out you cannot take calls, but current calls will continue unaffected. You will be logged out at the end of the current call.

Exiting Cisco Unified Attendant Console Standard

To exit Cisco Unified Attendant Console Standard, do one of the following:

- In the main menu, choose **File > Exit**.

- Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

- Click the window close button.

Exiting Cisco Unified Attendant Console Standard

Configuring Cisco Unified Attendant Console Standard

This chapter describes how to configure Cisco Unified Attendant Console Standard.

All the configuration functions are contained within tabbed pages of the **Options** window, which you access by choosing **File > Options**. The following Options tabs are password protected:

- Configuration
- Directory Filters
- Directory Mappings
- BLF Rules
- Device List
- Logging

which means that you must know a valid password to be able to access them. How to set and manage this password is described in Setting the Options Password, page 4-2.

This chapter also describes the following configuration procedures:

- "Setting Operator Details" on page 4-3
- "Connecting to a Different Presence Server" on page 4-3
- "Connecting to a Different Cisco Unified Communications Manager" on page 4-4
- "Setting the Operator Voicemail Prefix" on page 4-4
- "Configuring Alerts" on page 4-5
- "Managing Sign In Devices" on page 4-6

For details of configuring synchronization with Call Manager, see Configuring Synchronization, page 5-4.

For details of moving, stretching and hiding parts of the interface, see the Cisco Unified Attendant Console Standard online Help.

Setting the Options Password

In its default state, all the Options tabs are accessible by any user.

When you set the Options password you prevent access to the Options tabs listed on .

To set the Options password, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

Step 2   Click the **Options Password** tab.

Step 3   Type the **Password**, and then type it again in **Confirm Password** (case-sensitive).

Step 4   Select a **Security Question**.

Step 5   Type the **Security Answer**. If you forget your password, you will be unable to change it without supplying this answer exactly as typed here (case-sensitive).

Step 6   Click **Apply**.

If you have entered any incorrect information, the corresponding field is highlighted.

Step 7   Close the Options window.

The Options tabs are now inaccessible.

Note   If you leave the **Password**, **Confirm Password** and **Security Answer** fields all empty, you make all Options tabs accessible.

Resetting the Options Password

When you reset the Options password you gain access to the Options tabs listed on . You can only reset the Options password if you have already set it.

To reset the Options password, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

Step 2   Click the **Options Password** tab.

Step 3   In **Enter Password**, type your password (case-sensitive). If you do not remember your password, click **Reset Password**, and then type your **Security Answer** (case sensitive).

Step 4   Press **Enter** or click **Apply**.

If you have entered any incorrect information, the corresponding field is highlighted.

Step 5   You can now set your password and security question as described above; all Options tabs are enabled, and remain so until you close the Options window.

Setting Operator Details

You set your operator details either when you start Cisco Unified Attendant Console Standard or while it is running.

To set the operator details while Cisco Unified Attendant Console Standard is running, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

Note   You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2   Click the **Operator Details** tab.

Step 3   Under **Operator Details**, type the **Extension** of the attendant console operator.

Note   If a *Device List* is defined (see "Managing Sign In Devices" on page 4-6), the same restrictions as on the sign in extension apply, but the list is not displayed when you start typing.

Step 4   Click **Apply**.

Connecting to a Different Presence Server

Once Cisco Unified Attendant Console Standard is installed, you can connect to a different Presence Server than the one you specified during installation. The Presence Server provides the presence status of directory contacts; you need to have a valid User and Password to communicate with the server.

To connect to a different Presence Server, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

Note   You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2   Click the **Operator Details** tab.

Step 3   Under **Presence Details**, edit the following as required:

- The Presence **Server Address**.
- The Presence Server **Port** number. By default, this is 5222.
- The **Domain** containing the Presence Server
- The Presence Server **User** name.
- The **Password** that corresponds with the User name.

Step 4   Click **Apply**.

The application validates the connection. If this fails, it prompts you for the correct connection details.

Step 5   Exit and then restart Cisco Unified Attendant Console Standard for the change to take effect.

Connecting to a Different Cisco Unified Communications Manager

✎
Note   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

Once Cisco Unified Attendant Console Standard is installed, you can connect to a Cisco Unified Communications Manager different from the one you specified during installation, and so use a different source directory. However, the new Cisco Unified Communications Manager must be the same major revision as the one specified during installation; you cannot upgrade to a later revision using this method.

To connect to a different Cisco Unified Communications Manager, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

✎
Note   You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2   Click the **Configuration** tab.

Step 3   Under **Call Manager Detail**, edit the following as required:

- The Cisco Unified Communications Manager **Server Address**.
- The Cisco Unified Communications Manager **Port** number. By default, this is 443.
- The Cisco Unified Communications Manager **Application Username**.
- The **Application Password** that corresponds with the Username.

Step 4   Click **Apply**.

If the new CUCM version does not match the currently configured CUCM version a message appears.

Step 5   Exit and then restart Cisco Unified Attendant Console Standard for the change to take effect.

Setting the Operator Voicemail Prefix

✎
Note   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

If your operator uses a separate voicemail number, you define its prefix.

To set the operator voicemail prefix, do the following:

Step 1 In the main menu, choose **File > Options**.

The **Options** window appears.

> **Note** You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2 Click the **Configuration** tab.

Step 3 Under **Transfer to Voicemail Option**, type the attendant console operator **Voicemail Prefix**.

Step 4 Click **Apply**.

Configuring Alerts

Cisco Unified Attendant Console Standard alerts you when the following events occur (listed in order of precedence):

1. Call is ended (not by console)

2. Device is in service (the console device)

3. Call is ringing at primary device

4. Call is ringing at secondary device

5. Device is out of service (the console device)

6. A system error has occurred

If two or more alerts occur simultaneously, you are alerted about the one with the highest precedence.

Cisco Unified Attendant Console Standard can produce the following visual alerts:

- If the application is not the active window, it becomes the active window and is placed in front of any other open window, ready for you to interact with it.

- If the application is not the active window, then in the Windows taskbar the application icon flashes.

Procedure

To configure alerts, do the following:

Step 1 In the main menu, choose **File > Options**.

The **Options** window appears.

> **Note** You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2 Click the **Alerts** tab.

Step 3 Under **Alerts Detail**, for each event, do the following:

- Select the **Taskbar** check box if you want the application icon in the Windows taskbar to flash and be overlaid with an alert symbol when that event occurs.

- Select the **Pop-to-Front** check box if you want the application window to be displayed in front of the other windows if minimized to the taskbar when the event occurs.

Step 4   Click **Apply**.

Managing Sign In Devices

Attendants can only sign in to Cisco Unified Attendant Console Standard using a valid Cisco device, with a device name, extension and line number. For attendants to be able to make calls, the device must also be associated with the Application User/End user configured in the Cisco TSP.

System administrators define which devices are available for attendants to use; these devices constitute the *Device List*, which is accessible using **File > Options > Device List**. At start-up and during execution, the application checks whether the devices in the Device List are associated with the Application User/End User configured in the Cisco TSP.

- If they are not, they are marked as *invalid*. These have a lighter color in the list, and attendants cannot make calls using them.

- If they were previously marked as invalid, but are now associated with the Application/End user, they are marked as valid, and attendants can make calls using them.

Administrators can either manually add devices to the list, or import them from CSV files.

While importing sign in devices from a CSV file, the application checks that each device is associated with the Application/End User configured in the Cisco TSP. If a device is not associated, it is shown as invalid in the Device List.

If additional lines are later associated with a sign in device (using Cisco Unified Communications Manager), they get added to the Device List. After these changes, attendants will still be able to sign in using the old extension.

Manually Adding Sign In Devices

> **Note**   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

To manually add devices:

Step 1   Choose **File > Options > Device List**.

The Device List appears.

Step 2   Under **Device List**, click **Add Devices**.

Step 3   In **Search Devices**, type a device name. All devices matching what you type are listed; and the more characters you type, the shorter the list becomes. Non-Cisco devices are not listed.

Step 4   For each device you want to add, select the **Add** checkbox.

> ✎
> **Note**   If there are multiple lines on the selected device, all the lines are selected and added to device list.

Step 5   Click **Apply**.

The devices are added to the Device List.

Importing Sign In Devices

> ✎
> **Note**   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

You can import sign in devices from a CSV file with the format described in CSV Files for Importing Sign In Devices, page B-3.

To import devices from a CSV file:

Step 1   Choose **File > Options > Device List**.

Step 2   Under **Import From CSV**, click **Browse** and select the file to import.

The file name and path are displayed under *File Location*.

> ✎
> **Note**   If you click **View Sample** you can view the required format of the CSV file for importing login devices.

Step 3   Click **Import Devices**.

The file format is validated, and if any devices in the file are non-Cisco, you are informed that they will no be imported, and then you are prompted to continue. To import the Cisco devices from the file, click **Yes**. To abort the process, click **No**.

The devices are imported and added to the Device List. As the devices are imported, they are checked against those already listed and any matching devices are ignored.

Deleting Sign In Devices

> ✎
> **Note**   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

To remove devices:

Step 1   Choose **File > Options > Device List**.

In the Device List, click the corresponding **X** in the **Delete** column.

Note   If a device has multiple lines, all are deleted from the list. The device remains in the database.

Step 2   In the confirmation message, click **Yes**.

CHAPTER **5**

Directories

Cisco Unified Attendant Console Standard displays one or more directories of contacts. Always displayed is your *corporate directory* (shown in the interface as **Directory**), which is copied from one or more of the following sources:

- Cisco Unified Communications Manager
- A comma-separated-variable (CSV) file. CSV file names have the *.csv* extension.

Note   The CSV file can be on any shared network location to which Cisco Unified Attendant Console Standard has read and write access. However, it the file does not include a unique identifier (Primary Key) for each contact, it needs to be on the machine running Cisco Unified Attendant Console Standard.

Cisco Unified Communications Manager is the usual source of your corporate directory. Up to date contact information is copied from the source into Cisco Unified Attendant Console Standard by the *synchronization* process. For a description of this, see Directory Synchronization, page 5-3.

Directory Groups

You can also view and connect to contacts that are not in your synchronized directory but which you want to be able to select quickly. These *directory groups* can contain any combination of the following:

- Contacts *imported* (copied) from sources other than those listed above. These sources are either CSV files or Extensible Markup Language (XML) files. For more information, see Importing Contacts Into Directory Groups, page 5-12.
- Contacts you enter yourself. For more information, see Manually Adding Contacts To Directory Groups, page 5-13.

As well as importing contacts into directory groups, you can also *export* (copy) directory groups to CSV files, so that they can be used by other attendants or even in other applications.
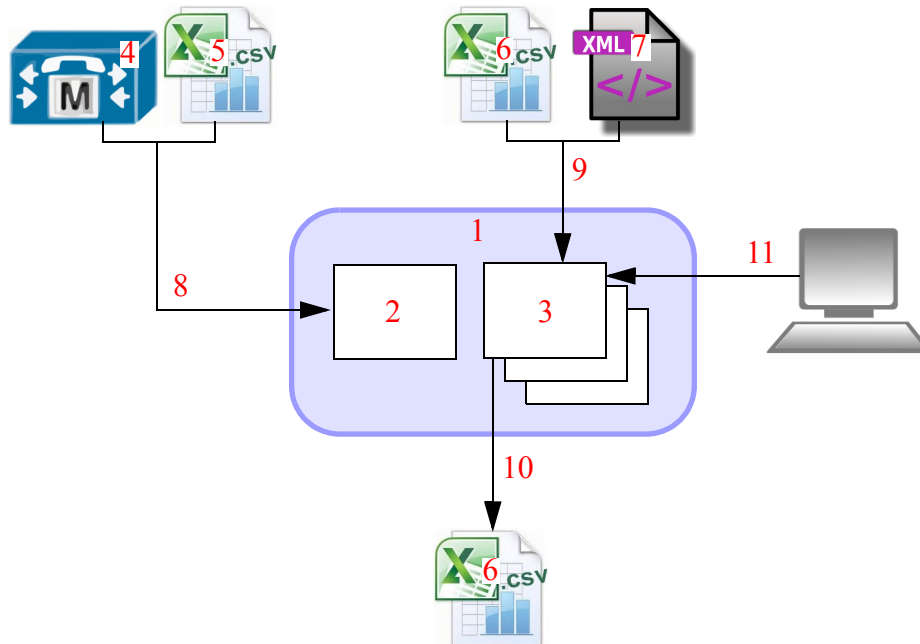
Note   The format of CSV files imported/exported is different from that of CSV files used for synchronization.

You cannot amend contact records in the corporate directory. By contrast, directory groups are *not* updated by synchronization; and you *can* amend the contact details they contain.

For more information, see "Directory Groups" on page 5-11.

The relationships between directories and external information is summarized below.

Legend

1. Cisco Unified Attendant Console Standard.

2. Corporate directory.

3. Directory groups.

4. Cisco Unified Communications Manager.

5. CSV file for synchronization. For details of the format, see CSV File Formats, page B-2.

6. CSV file for importing and exporting. For details of the format, see CSV File Formats, page B-2.

7. XML file.

8. Synchronize contacts. Includes applying Directory Filter, Directory Mapping Rules and BLF rules.

9. Import contacts.

10. Export contacts.

11. Manually entered contact.

Directory Synchronization

The process of copying contacts from your source directories into Cisco Unified Attendant Console Standard is known as *synchronization*, because the information in the source and internal directories is identical at the instant of copying. When synchronization occurs, the contacts from both the Cisco Unified Communications Manager *and* the CSV file (if you specify one) are copied into Cisco Unified Attendant Console Standard. The actual data that is displayed in your corporate directory depends not only on what is in your sources but also on any directory field mappings, directory filters or BLF rules you have configured.

If synchronization detects that a contact it is copying is already in Cisco Unified Attendant Console Standard, it first validates the information (checks that it is correct) and then updates Cisco Unified Attendant Console Standard with any information that has changed since the last synchronization. If a synchronization fails mid-process – for example, because of a network failure – it starts again from the beginning.

The synchronization process needs to know what contact data to copy from the source to your corporate directory, and it gets this information from *directory field mappings*; for more information, including how to set the mappings, see Directory Field Mappings, page 5-6.

You can choose to copy only certain contacts to Cisco Unified Attendant Console Standard by applying a *directory filter*, this ensures that only those contacts that have the characteristics you specify in a series of *directory rules* are added to the corporate directory. For example, you can synchronize the contacts from only a specific department. For more information, see Directory Filtering, page 5-5.

During synchronization you can modify the first part of your contact telephone numbers, so that the numbers in your corporate directory differ from those in your source directory. For example, you might have telephone number stored in Cisco Unified Communications Manager as 01189728567, but in the corporate directory you want to see it as 8567. You achieve this number conversion by creating *BLF Rules*, which are applied during synchronization. For more information, see BLF Rules, page 5-7.

Note   The following:

- The converted numbers must match the DNs monitored in TAPI, otherwise the line state will not be displayed in the directories.

- These converted numbers are used by Cisco Unified Attendant Console Standard when it dials. If you set up BLF Rules, you also need to set up translations in Cisco Unified Communications Manager to convert the numbers in Cisco Unified Attendant Console Standard back to the originals, so that you can call those numbers.

Directory synchronization takes place at regular intervals that you define; and you can configure Cisco Unified Attendant Console Standard to synchronize with the source directory when you start it (this is actually the default situation). For more information, see Configuring Synchronization, page 5-4.

Synchronizing From a CSV Source File

When you synchronize from a CSV file, the file structure is first validated. For more information on valid CSV file formats, see CSV File Formats, page B-2. The first column of the CSV file must contain a unique identifier, known as a GUID, which identifies that contact as unique. If it does not, Cisco Unified Attendant Console Standard adds a first, GUID, column.

If your CSV file does not have a GUID column, and you intend storing it in a shared location that does not have write access, then before you put it there, you should place it locally and provide read-write access so that Cisco Unified Attendant Console Standard can add the GUID column.

Configuring Synchronization

Note Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

When you install Cisco Unified Attendant Console Standard, a set of default synchronization parameters are created, which should work for your installation. However, you can change these parameters to the values you require.

To configure synchronization, do the following:

Step 1 In the main menu, choose **File > Options**.

The **Options** window appears.

Note You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2 Click the **Configuration** tab.

Step 3 Under **Sync Detail**, do the following:

    a. To synchronize when the application starts, select the **Auto Synch Startup** check box.

    b. In **Sync Interval (In Hours)**, type the interval in hours between automatic synchronizations. The default is zero.

Step 4 If you do not want to specify a different Cisco Unified Communications Manager, skip this step. Otherwise, under **Call Manager Detail**, edit the following as required:

- The Cisco Unified Communications Manager **Server Address**.
- The Cisco Unified Communications Manager **Port** number. By default, this is 443.
- The Cisco Unified Communications Manager **Application Username**. The application user must have the roles described in Assigning Roles to a User Group or Access Control Group, page 2-6.
- The **Application Password** that corresponds with the Username.

Step 5 If you do want to synchronize to a CSV file source, under **CSV Detail**, **Browse** to the **File Location** of your CSV source, and either type its name or select it, and then click **OK**.

If you specify a CSV file source, the application synchronizes to both it and any specified Cisco Unified Communications Manager when you restart the application.

If you do not have a CSV source, click **Clear** to clear this field.

To view a sample CSV file, click **View Sample**.

Step 6   Click **Apply**.

Directory Filtering

A directory filter consists of a series of *directory rules* that are applied during synchronization to ensure that only certain contacts are copied to the corporate directory.

Each directory rule can compare one of the following contact details to a text string:

- Department
- Telephone
- Location

The rule makes the comparison according to one of the following conditions:

- Begins with
- Contains
- Is exactly
- Ends with

So, for example, you might only want to copy contacts whose *Department Is exactly Sales*. This would, however, exclude anyone whose department is *Sales America*, for example. Or maybe you want to synchronize those contacts whose *Department Ends with ing*, which would copy the contacts from both Marketing and Engineering (and any other department ending in those letters).

Directory filters can consist of any number of directory rules, combined using these logical operators:

- AND
- OR

So, for example, you might have a rule that synchronizes only those contacts whose *Department Is exactly Sales* AND their *Location Ends with America*, so that your corporate directory contains all the new world sales staff. When you use more than two rules, the AND operator has precedence over OR; so a rule with the structure X AND Y OR Z is equivalent to (X AND Y) OR Z.

Creating Directory Filters

✎
Note   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

To create a directory filter, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

Note You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2 Click the **Directory Filters** tab.

Step 3 Do the following, as many times as required until your filter is complete:

a. If this is *not* the first rule in the filter, select the **Link** (Logical Operation) to apply between the previous rule and the one you are about to define.

b. Select the contact **Field** to compare.

c. Select the **Condition** to use in the comparison.

d. In **Value**, type the text to compare with the Field.

e. Click **Add**.

Step 4 Click **Apply**.

The next time you synchronize with your source, the filter is applied and only those contacts satisfying the filter are copied to the corporate directory.

Directory Field Mappings

Before you synchronize contacts into Cisco Unified Attendant Console Standard the application needs to know which contact data fields (*source fields*) to import from Cisco Unified Communications Manager or a CSV file, and what *destination fields* within the application to populate with the data. This is called defining the *directory field mappings*.

You can specify separate directory field mappings for the data from your Cisco Unified Communications Manager and from a CSV file; so, for example, you could import your sales contacts from Cisco Unified Communications Manager, and your marketing contacts from a CSV file.

When you install Cisco Unified Attendant Console Standard default directory field mappings are defined for you. You can, however, change these mappings or define your own. How to do these is described in Setting Directory Field Mappings, page 5-7.

Destination Fields

Cisco Unified Attendant Console Standard supports the following contact destination fields:

- Department
- Directory URI
- Email
- First Name
- Home Phone
- Last Name
- Location
- Manager
- Middle Name

- Mobile
- Telephone (automatically mapped from source)
- User Field 1
- User Field 2

Source Fields

By default, Cisco Unified Attendant Console Standard has mappings set up for synchronizing contacts from Cisco Unified Communications Manager (CUCM) and CSV files. However, you may wish to change the default mappings, or define your own.

Setting Directory Field Mappings

> **Note** Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

To set the directory field mappings, do the following:

Step 1 In the main menu, choose **File > Options**.

The **Options** window appears.

> **Note** You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2 Click the **Directory Mappings** tab.

Step 3 Select a **Directory Source**: **CUCM** or **CSV**.

Step 4 Do the following, as required:

To *add a mapping*, select the **Source Field**, **Destination Field**, and then click **Add**.

To *delete a mapping*, click the corresponding **Delete** symbol, and then in the confirmation message, click **Yes**.

Step 5 Click **Apply**.

The next time you synchronize with your source, the mappings are applied.

BLF Rules

BLF rules are applied during synchronization to convert directory numbers to a different format by searching for and replacing specific number prefixes. You can define sets of multiple rules to be applied one after the other during synchronization, and you can define different sets of rules for synchronizing from Cisco Unified Communications Manager and CSV files.

BLF rules are applied in the order they are listed in the BLF Rules List. For example, if the first rule modifies the number from 01189597895 to 8957, the next rule is applied to the modified number. By moving rules up or down in the list, you change the order in which they are applied.

Adding BLF Rules

Note   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

To add a BLF rule, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

Note   You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2   Click the **BLF Rules** tab.

A list of all existing BLF rules is displayed. By default, no rules are defined.

Step 3   Click **New Rule**.

The **BLF Rule Detail** page appears.

Step 4   Type a **Rule Name**.

Step 5   In **Begins With**, type the digits to search for at the start of the number.

Step 6   In **Length**, type the number of digits in the original contact number.

Step 7   In **Number of Digits to Remove**, type the number of digits to remove from the start of the contact number.

Step 8   In **Prefix**, type the string of digits to replace the ones removed.

Step 9   If you want to remove non-digit characters (such as +) from the number, specify any *not* to remove by typing them (with no separators) in **Ignorable Characters**.

Step 10   To remove non-numeric characters from the number – except any you specified in **Ignorable Characters** – select the **Remove Non-digit Characters** check box.

Step 11   Select the **Directory Source**: **CUCM** or **CSV**.

Step 12   You can test your rule by doing the following under **Test BLF Rule**:

a.   In **Enter a number to test the Rule**, type a number, and then click **Run Test**.

b.   Check that the number displayed in **Test Results** matches your expectations. If not revise the rule settings.

Step 13   Click **Apply**.

Editing BLF Rules

> **Note**   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

To edit an existing BLF rule, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

> **Note**   You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2   Click the **BLF Rules** tab.

A list of all existing BLF rules is displayed.

Step 3   Select the rule to edit.

Step 4   Click **Edit Rule** to display the **BLF Rule Detail** page.

Step 5   Edit the fields, as required. These are described in Adding BLF Rules.

Step 6   Test the rule, as required.

Step 7   Click **Apply**.

Deleting BLF Rules

> ✎ **Note**   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

To delete a BLF rule, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

> ✎ **Note**   You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2   Click the **BLF Rules** tab.

A list of all existing BLF rules is displayed.

Step 3   Select the rule to delete.

Step 4   Click **Delete Rule**.

Step 5   Click **Apply**.

Reordering BLF Rules

> ✎ **Note**   Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

To change the order in which BLF rules are applied during synchronization, do the following:

Step 1   In the main menu, choose **File > Options**.

The **Options** window appears.

> ✎ **Note**   You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2   Click the **BLF Rules** tab.

A list of all BLF existing rules is displayed.

Step 3   On each rule to move, do the following, as required:

a.   Select the rule.

b.   To move the rule towards the top of the list, click **Move Up**.

c.   To move the rule towards the bottom of the list, click **Move Down**.

Step 4   Click **Apply**.

Directory Groups

Directory groups contains special contacts – including contacts not in your source directory – that you want to be able to select quickly. You must create your directory group before adding contacts to it. For details of how to do this, see Creating Directory Groups, page 5-11.

You add contacts to directory groups by either of the following methods:

- Importing contacts from CSV files or XML files, as described in Importing Contacts Into Directory Groups, page 5-12.
- Manually creating contacts, see Manually Adding Contacts To Directory Groups, page 5-13.

You *can* amend the name of a directory group, and the details of any contact in the group. You can also *export* the contacts from directory groups to CSV files,

Creating Directory Groups

You need to create directory groups before you can import data to them.

To create a directory group, do the following:

Step 1   Do one of the following:

- Click the **Add new directory group** (**+**) control.
- In the main menu, choose **Edit > Add directory group**.
- Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

The **New Directory Group** dialog box appears.

Step 2   Type a **Directory Group Name**, and then either click **Save** or press **Enter**.

The directory group is added as a new tab in the directory display.

Deleting Directory Groups

Note   You cannot delete directory groups while synchronization is in process.

To delete a directory group, do one of the following:

Step 1   Right-click the directory group tab.

Step 2   Select **Delete Directory Group**.

Step 3   In the confirmation message, click **Yes**.

or

Step 1   Select the directory group, and then do one of the following:

- In the main menu, choose **Edit > Delete directory group**.
- Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

Renaming Directory Groups

To rename a directory group, do the following:

Step 1   Right-click the directory group tab.

Step 2   Select **Edit Directory Group**.

Step 3   In the dialog box, type the new group name, and then click **Save**.

or

Step 1   Do one of the following:

- In the main menu, choose **Edit > Edit directory group**.
- Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

Step 2   In the dialog box, type the new group name, and then click **Save**.

Importing Contacts Into Directory Groups

You can import contacts from the following types of file into an existing directory group.

- XML – for example, one previously exported from Cisco Attendant Console (CAC)
- CSV

For details of the formats of these files, see Appendix B, "Import/Export File Formats".

Note   The following points:

- You cannot import contacts into a directory group while the application is synchronizing to the corporate directory.

- When you import from these types of file, no checks are made to see if the contact information duplicates that in any directory group, including the one that you are importing the data into.

At the start of the import process Cisco Unified Attendant Console Standard validates the file structure and format. If either is incorrect, you are alerted to the fact and the process is aborted.

You can only import contacts into an existing directory group – either one that already contains contacts, or a new one created especially for the purpose. See Creating Directory Groups, page 5-11.

To import contacts into a directory group, do one of the following:

Step 1   Do one of the following:

- In the main menu, choose **File > Import contacts**.

    or

    a. In the main menu, choose **File > Options**.

    b. In the **Options** window, click the **Import/Export** tab.

    or

- Right-click in any directory group, and then select **Import Contacts**.

    or

- Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

Step 2   Under **Import CSV/XML**, do the following:

    a. In **File Name**, click **Browse** and select the file to import.

Note   You cannot type a file name or edit the name of a selected file.

    b. Select the **File Type**.

    c. If the **Directory Group** to receive the contacts is not correct, select the correct one.

    d. Click **Import Contacts**.

    The import progress is displayed.

Step 3   When the import is complete, close the dialog box.

Manually Adding Contacts To Directory Groups

You can manually add contacts to directory groups.

Note   You cannot manually add contacts to your corporate directory.

To add a contact to the displayed directory group, do the following:

Step 1   Do one of the following:

- Right-click the directory group contact listing, and then select **Add Contact**.
- Select the directory group and do either of the following:
  - In the main menu, choose **Edit > Contacts > Add contact**.
  - Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

The **Contact** dialog box appears.

Step 2 Type the contact information, which is described in Destination Fields, page 5-6. You can also enter a contact **Note**.

Step 3 Click **Save**.

Step 4 In the confirmation message, click **OK**.

Step 5 When you have finished adding contacts, close the **Contact** dialog box.

Alternatively, you can drag (copy) contacts from the corporate directory or another directory group, and then drop them into the target directory group.

✎ **Note**   This creates a duplicate contact in the directory group. Take care not to create multiple duplicates.

To drag contacts into a directory group:

Step 1 Display the directory containing the contact to copy.

Step 2 Select the contact and then, holding the mouse button, drag the contact over the appropriate directory group tab to list its contents.

Step 3 Drag the contact into the list, and then drop it.

Deleting Contacts From Directory Groups

You can delete contacts from directory groups.

✎ **Note**   You cannot delete contacts from your corporate directory.

To delete a contact from the displayed directory group, do the following:

Step 1 Select the contact to delete.

Step 2 Do one of the following:

- Right-click and then select **Delete Contact**.
- In the main menu, choose **Edit > Contacts > Delete contact**.
- Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

Step 3   In the confirmation message, click **Yes**.

Editing Contacts In Directory Groups

You can edit the information belonging to a contact in a directory group.

Note   You cannot edit contacts that have been synchronized into the corporate directory.

To edit a contact in a directory group, do the following:

Step 1   Open the relevant group and display the contact.

Step 2   Do one of the following:

- Right-click the contact, and then select **Edit Contact**.

- In the main menu, choose **Edit > Contacts > Edit contact**.

- Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

The **Contact** dialog box appears.

Step 3   Edit the contact information, which is described in Destination Fields, page 5-6.

Step 4   Click **Save**.

Step 5   In the confirmation message, click **OK**.

Exporting Contacts From Directory Groups

You can export a directory group into a preexisting CSV file.

To export a directory group, do the following:

Step 1   Do one of the following:

- In the main menu, choose **File > Export contacts**.

    or

    a. In the main menu, choose **File > Options**.

    b. In the **Options** window, click the **Import/Export** tab.

    or

- Right-click in any directory group, and then select **Export Contacts**.

    or

- Use the keyboard shortcut you have defined, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

Step 2   Under **Export CSV** do the following:

a. In **File Name**, click **Browse** and navigate to the target folder.

b. Either type a file name (to create a new CSV file) or select an existing file to export to. If you select an existing file you are prompted to overwrite it; click **Yes** to overwrite the file.

c. Select the **Directory Group** to export.

d. Click **Export Contacts**.

The export progress is displayed.

Viewing and Using Directories

The bottom part of the interface consists of the directories and their associated controls. For example:

Legend

1. Search – type details of the contact to search for.

2. Search Preferences – define which contact information to search.

3. Directory tabs – select the directory to display. Includes both corporate directory and directory groups.

4. Create a new directory group.

5. Column headings – identify the data and enable you to change the column order and the contact sort order. These are described below.

6. (Visible *only* when viewing a directory group) Add contacts to the group.

7. Phone state – the state of the contact's phone, such as Ringing, On hook, and Do not disturb.

8. Presence state – this mimics a Jabber or CUPC client, where a symbol indicates the real-time status of the contact, such as Available, Do not disturb, and Away. All other contacts have their subscriptions opened only when displayed in the Directory pane.

The following columns of information are displayed for each contact:

• Last Name – the contact's last name.

• First Name – the contact's first name.

- Telephone – the contact's telephone number.
- Department – the contact's department.
- Notes – about the contact.

If the contact was imported or manually entered into Cisco Unified Attendant Console Standard you can edit this information.

Changing the Directory View

You can change the order of the columns by using your mouse to select a column heading and then dragging it to another place in the table.

When the data is first displayed it appears in its default order, as copied from the Call Manager. You can change the alphanumeric sort order of the table rows by clicking any column heading – the table will be sorted according to the data in that column. The small arrowhead at the top of the cell shows the direction in which the column is sorted: an up-arrow for ascending (normal alphanumeric) order, a down-arrow for descending (reverse) order, and no arrow for default order. Repeatedly clicking the column heading toggles you through these sort modes.

Searching For Contacts

You can search for contacts in any open directory (the corporate directory and any directory groups you are displaying). Details of matching contacts are shown under the **Search Results** directory tab.

You can search any of the following contact detail fields:

- First Name
- Last Name
- Directory Number
- Department

You can disable the ability to search any of these fields by setting the Search Preferences. These are described in .

You do not need to specify which field you want to search: the string you type in the Search field is matched against *all* of them. So, for example, if you have a *Sales* department, and a staff member with the last name *Saunders*, searching for the characters **Sa**, will display all the matching last names (and first names) and list everyone in Sales.

Searching begins as soon as you start typing; and the more characters you type, the fewer contacts will match. When the contact you require is displayed, select it and then use the controls interface to communicate with that contact.

Search Preferences

The Search Preferences enable you control what fields are searched and what contacts are displayed.

You can restrict which contact detail fields are searched using the **Searchable Fields**. De-select (clear) any you do not want to search:

- **First Name**
- **Last Name**

- **Telephone**
- **Department**

You can also limit which contacts are displayed in the search results using these **Filters**:

- **Has Telephone** – Display only those contacts with a directory number (DN) assigned. All other contacts are filtered out (excluded) from the search results.
- **Has Emails** – Display only those contacts with an email address assigned. All other contacts are filtered out (excluded) from the search results.

Setting Search Preferences

To set the search preferences, do the following;

Step 1   Click **Search Preferences**.

Step 2   In the **Search Preferences** dialog box, select the required check boxes.

Step 3   Click **Save**.

Step 4   In the confirmation message, click **OK**.

Viewing Contact Information

The directory display contains basic information about each contact. You can view more information about a selected contact by viewing their contact details. How you view contact details depends on whether the contact is in the corporate directory or a directory group.

To view a contact's details, do the following:

Step 1   Display the directory containing the contact.

Step 2   Right-click the contact.

Step 3   Do one of the following, as appropriate:

- If the contact is in the corporate directory, click **View**.
- If the contact is in a directory group, click **Edit Contact**.

The **Contact** dialog box is displayed.

If you are viewing the details of a contact in a directory group, you can also edit the details, as described in Editing Contacts In Directory Groups, page 5-15.

Step 4   When you have finished viewing the information, click **Cancel**.

Contact Notes

You can add notes to any contact record in the main directory, the search results, or any directory group. The notes are text containing additional information about the contact. Notes are stored in the database and are available whenever you sign in. If you delete a contact - for example by applying BLF rules - any contact notes are also deleted. If you export a contact, their notes are also exported, and if you import a contact with notes, they are visible in the application.

Adding Contact Notes

To add contact notes:

Step 1   Select the contact to add notes to.

Step 2   Either:

- Right-click the contact, and then choose **Contact Notes**.
- Choose **Edit > Contacts > Contact Notes**.

The Contact Notes dialog box appears.

Step 3   In the text box, type the notes and then either click **Save** or tab to the control and press **Enter** to add the notes to the contact.

> **Note**   You must enter some text for you to be able to save it.

The notes appear in the contact's **Notes** column.

Editing Contact Notes

You can edit existing contact notes. To do so, follow the Adding Contact Notes procedure, but edit the existing notes.

Deleting Contact Notes

To delete existing contact notes:

Step 1   Select a contact with notes to delete.

Step 2   Either:

- Right-click the contact, and then choose **Delete Notes**.
- Choose **Edit > Contacts > Delete Notes**.

> **Note**   These menu options are disabled if there are no notes to delete.

Step 3   The notes are deleted from the contact **Notes** column.

Keyboard Shortcuts

Keyboard shortcuts enable you to quickly do things in the interface without needing to use the mouse or menus.

The application comes configured with the following keyboard shortcuts.

Action	Shortcut
Dial	Ctrl+D
Answer	Ctrl+A
End Call	Ctrl+H
Hold Call	Ctrl+L
Transfer Call (Blind transfer)	Ctrl+X
Consult Transfer (speak to destination before transfer)	Ctrl+T
Direct Transfer	Ctrl+R
Join Call	Ctrl+J
Park Call	Ctrl+P
Start Conference	Ctrl+N
Access Voicemail	Ctrl+O
Sign out of application	Ctrl+S
Log out of hunt groups	Ctrl+I
Open Help	F1

In addition, you can define shortcuts for the following actions:

- Resume Call
- Retrieve Parked Call
- Email
- Options
- Import contacts
- Export contacts
- Exit
- Keyboard Shortcut Options

- View Contacts
- Add Contact
- Edit Selected Contact
- Delete Selected Contact
- Add Directory Group
- Edit Selected Directory Group
- Delete Selected Directory Group
- View Contact
- Open Call Control Pane
- Open Parked Calls Pane
- Open Call History Pane
- Open Directory Pane
- Lock Pane Layout
- Revert to Default Layout
- Load Saved Layout
- Save Current Layout
- Open Text Size Options
- Open About Box

Note You cannot use the same keyboard shortcut for more than one action.

Defining and Editing Keyboard Shortcuts

To define or edit a keyboard shortcut, do the following:

Step 1 Do either of the following:

- In the main menu, choose **Edit > Keyboard Shortcuts**.

or

a. In the main menu, choose **File > Options**.

b. The **Options** window appears.

c. Click the **Keyboard Shortcuts** tab.

Step 2 Select the Action to define. This can be an action that already has a shortcut.

Step 3 Click **Set Shortcut**.

Step 4 Type the shortcut you require. For example, to set an action to Ctrl+Y, simply type **Ctrl+Y** (press and hold the **Ctrl** key and then press the **Y** key).

Step 5 Click **Apply**.

Removing Keyboard Shortcuts

To remove a keyboard shortcut, do the following:

Step 1   Access the Keyboard Shortcuts page, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

Step 2   Select the action from which to remove the keyboard shortcut.

Step 3   Click **Clear Shortcut**.

Step 4   Click **Apply**.

Resetting Shortcuts to their Default Values

To reset keyboard shortcuts to their default values, do the following:

Step 1   Access the Keyboard Shortcuts page, as described in Defining and Editing Keyboard Shortcuts, page 6-2.

Step 2   Do one of the following, as appropriate:

To reset all keyboard shortcuts to their default values, click **Reset All Shortcuts to Default**.

To reset a single keyboard shortcut to its default value:

    a.   Select the action to reset.

    b.   Click **Reset Shortcut**.

Step 3   Click **Apply**.

Configuring Logging

Note Access to the functions described in this section may be restricted by your system administrator, and you may need a password to access the necessary Options tab. For more information, see Setting the Options Password, page 4-2.

Cisco Unified Attendant Console Standard can keep a log of all event that occur within the application. This information can be used to gauge the application's configuration and performance, and to help troubleshoot any errors. You can control which application subsystems are monitored, which events are logged, and the size and number of the log files.

To configure logging, do the following:

Step 1 In the main menu, choose **File > Options**.

The **Options** window appears.

Note You can configure a keyboard shortcut to do this. For instructions, see Chapter 6, "Keyboard Shortcuts".

Step 2 Click the **Logging** tab.

Step 3 Set the following, as required:

- Type the **Max Size RollBackups**, which is the maximum number of log files to store before you re-use (overwrite) the first one. This works in conjunction with **Maximum File Size (In MBs)**.

- Type the **Maximum File Size (In MBs)**. When the file gets this size it is closed and a new log file is opened. Works in conjunction with **Max Size RollBackups**.

- Select the **Logging Level**. This is the default amount of detail that will be written into the log file. Detail decreases in the following order:

  – DEBUG

  – INFO

  – WARN

  – ERROR

  – FATAL

  The level you set is applied to all the modules grouped below.

- Under **Modules Setting**, set the logging level for each module to override the default value.

Step 4   Click **Apply**.

APPENDIX **B**

Import/Export File Formats

Cisco Unified Attendant Console Standard can handle contact directory files in the following formats:

- XML File Format, page B-1
- CSV File Formats, page B-2

It can also import login devices from CSV files, with the format described in CSV Files for Importing Sign In Devices, page B-3.

XML File Format

XML files that you import into Cisco Unified Attendant Console Standard must have the following format:

```
<SpeedDialUsers>
    <G n="Sample Group">
        <E>
            <N>Jim Kathirine</N>
            <T>25421</T>
            <M>Jim@cisco.com</M>
            <D>Jim@cisco.com</D>
            <O>This is a sample entry</O>
            <P>00443454332</P>
            <H>0044556634</H>
            <S>Reading</S>
            <A>IT</A>
            <R>Jason Rumsey</R>
            <U>Software Engineer</U>
            <V>Management</V>
        </E>
    </G>
</SpeedDialUsers>
```

Tags

- <SpeedDialUsers> = the file contains XML data for import into Cisco Unified Attendant Console Standard.
- <G> = Directory group name
- <E> = Individual contact
- <N> = Name
- <T> = Telephone number
- <M> = Email address

- <D> = Directory URI

- <O> = Note

- <P> = Mobile

- <H> = Home phone number

- <S> = Site

- <A> = Department

- <R> = Manager

- <U> = UserField1

- <V> = UserField2

CSV File Formats

Cisco Unified Attendant Console Standard handles two types of comma-separated value (CSV) files:

- CSV Files for Synchronization

- CSV Files for Directory Import and Export

These files differ in the number of data fields they contain in each contact record.

All CSV files used by Cisco Unified Attendant Console Standard must have the following format:

- Each contact is on a single line.

- Empty comma-separated values are valid.

- Lines starting with **#** or **;** are comments and are ignored. Empty and blank lines are also ignored.

CSV Files for Synchronization

In a CSV file for synchronization, the data for each contact must be in the following order:

```
Last Name, First Name, Telephone Number, Department, User Field 1, User Field 2, Site,
Building, Directory URI.
```

For example:

```
#     * Copyright (c) 2014 by Cisco Inc.
#     * All rights reserved.
#
# Here is a sample corporate directory file. It should contain
# comma separated entries, one line per user in the directory
# The values should in the following format:
#
# Last Name, First Name, Telephone number, Department, User Field 1, User Field 2, Site,
Building, Directory URI
#
# Empty values are legal (no department etc.)
#
# Lines starting with '#' or ';' are treated as comments
# and ignored. Empty or blank lines are ignored as well

Kathirine,Jim,25421,Marketing,,,,,Jim@cisco.com
Martha,Bryan,87952,Support,,,,,martha@cisco.com
Luce,Richard,2548,Marketing,,,,,luce@cisco.com
Meriall,Thomas,8763,Marketing,,,,,meriall@cisco.com
```

```
Harye,Walter,5563,Marketing,,,,,harye@cisco.com
```

CSV Files for Directory Import and Export

In a CSV file for directory import or export, the data for each contact must be in the following order:

```
Last Name, First Name, Telephone Number, Note, Group Name, Email, Directory URI, Middle
Name, Mobile, Home Phone, Site, Department, Manager, User Field 1, User Field 2.
```

For example:

```
#     * Copyright (c) 2014 by Cisco Inc.
#     * All rights reserved.
#
# Here is a sample import file. It should contain
# comma separated entries, one line per user in the directory
# The values should be in the following format:
#
# Last Name, First Name, Telephone Number, Note, Group Name, Email, Directory URI, Middle Name, Mobile,
Home Phone, Site, Department, Manager, User Field 1, User Field 2
#
# Empty values are legal (no email etc.)
#
# Lines starting with '#' or ';' are treated as comments
# and ignored. Empty or blank lines are ignored as well

Kathirine,Jim,25421,This is a sample entry,Sample Group 1,Jim@cisco.com,Jim@cisco.com,Maid,
00443454332,0044556634,Reading,IT,Martin Taylor,Support Engineer,Senior
Martha,Bryan,87952,This is a sample entry.,Sample Group 1,martha@cisco.com,martha@cisco.com,Aryan,
00443454335,0044556635,Reading,IT,Martin Taylor,Support Engineer,Junior
Luce,Richard,2548,This is a sample entry,Sample Group 2,luce@cisco.com,luce@cisco.com,Tace,
00443454339,0044556636,Reading,R&D,Jason Rumsey,Software Engineer,Management
Meriall,Thomas,8763,This is a sample entry,Sample Group 2,meriall@cisco.com,meriall@cisco.com,Kate,
00443454331,0044556637,Reading,R&D,Jason Rumsey,Software Engineer,Junior
Harye,Walter,5563,This is a sample entry,Sample Group 2,harye@cisco.com,harye@cisco.com,Heather,
00443454333,0044556638,Reading,R&D,Jason Rumsey,Software Engineer,Senior
```

CSV Files for Importing Sign In Devices

You can import devices that operators use to log into Cisco Unified Attendant Console Standard, as described in .

These CSV files have the data for each device in the following format:

```
Device name, Extension, Line number
```

For example:

```
#     * Copyright (c) 2014 by Cisco Inc.
#     * All rights reserved.
#
# Here is a sample device list file. It should contain
# comma separated entries, one line per device in the device list.
# The values should in the following format:
#
# DeviceName,Extension,LineNumber
#
# Empty values are not allowed (no DeviceName etc.)
#
# Lines starting with '#' or ';' are treated as comments
```

```
# and ignored. Empty or blank lines are ignored as well

SEP2893FE130280,5868,1
SEP2893FEA2D22A,5873,1
SEP000C299DA714,5870,1
SEP88AE1DB0F66C,5869,1
SEP00141C48DDD9,5859,1
SEP00141C48DDD9,5870,2
```

Note   Any devices in the file that lack one or more of the fields Device name, Extension, or Line number are considered non-Cisco devices and will not be imported.

Phones Supported by Cisco Unified Attendant Console Standard

Cisco Unified Attendant Console Standard supports the following phones:

Phone Type	Supported
3905	Not as Console and cannot support BLF, but can transfer.
3911	
3951	
6901	Not tested
6911	Yes
6921	Yes
6941	Yes
6945	Yes
6961	Yes
7821	Yes
7841	Yes
7861	Yes
7902	Not tested (Obsolete)
7905	Yes
7906	Yes
7910	Yes
7911	Yes
7912	Yes
7920	Yes
7921	Yes
7925	Yes
7925G	Yes
7925G-EX	Yes
7926	Yes
7931	Yes

Phone Type	Supported
7940	Yes
7941	Yes
7941G-GE	Yes
7942	Yes
7942-G	Yes
7945	Yes
7945G	Yes
7960	Yes
7961	Yes
7961G-GE	Yes
7962	Yes
7965	Yes
7965G	Yes
7970	Yes
7971	Yes
7975	Yes
8941	Yes
8945	Yes
8961	Yes
9951	Yes
9971	Yes
Cisco CSF	Yes
DX650	Yes
IP Communicator	Yes
Jabber	Yes - standard Jabber installations (locally installed on the operator computer) *and* VXME installations (installed in a VXME environment) are supported as operator devices and end points.

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